

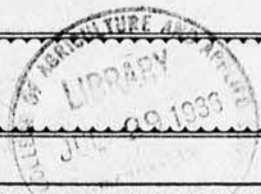
KANSAS FARMER

CONTINUING
MAIL & BREEZE

Volume 74

August 1, 1936

Number 16



Co-ops That Click

COMBINED efforts of farmers, with the help and interest of local townspeople, enable them to "put over" many a worthwhile undertaking. Here is what some of the good Kansas communities have been doing:

The Bushton Grain & Supply Company, located in Rice county, is one of the oldest co-operative grain elevators in Kansas. Each year's statement of assets and liabilities since the organization in 1905, lies under the manager's glass desk cover and any visitor can see here a tale of unbroken, successful management. F. J. Habiger, president, said they had sensed the wolves at their door a number of times but a practice of keeping the business in the hands of a large number of farmer-members and the policy of "every tub shall stand on its own bottom" has resulted in a safe condition today, with a cash reserve fund of \$12,383.17 and a de- [Continued on Page 7]

The Pictures:

- 1—Midway and race track of the North Central Kansas Free Fair, Belleville. At left background is the hall for floral and household exhibits.
- 2—Roomy new office of the Bushton Co-op, with grain elevator in background. There also is an oil business and a retail coal supply.
- 3—Headquarters and force of the Arkansas Valley Dairy Co-op. The workers are Ruth Ralston, stenographer; Frank Shipley, assistant buttermaker; Charles Gordon, manager; Sid Hughes, buttermaker, and H. R. Manges, office manager.
- 4—The Farmers' Equity Union is firmly established at St. Francis. Here is the grocery of the local exchange which handles a good line of supplies. In addition the St. Francis Equity sells gas and oil, lumber and machinery and buys grain, cream and eggs. John Zimbelman, a substantial Cheyenne county farmer, is president of the local exchange.
- 5—The Smith County Fair Association has confined activities to the 4-H club show for the last 2 years. Howard Vernon, Hill City, is judging the Poland China litter class, in which Buddy Bolten, Smith Center, won first on a litter from the sow bred by Lee Bolten. Second place went to David Rice, Athol, whose sow was bred by Jess Rice, a breeder of purebred hogs for the last 25 years.

Double and Triple Wheat Yields—See Page 3



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YOUR WHITE EAGLE AGENT
IS A GOOD MAN TO KNOW



From a Marketing Viewpoint

HOMER J. HENNEY

(Probable feed and carrying costs and price changes considered)

1—I have some 400 to 500 pound calves on oats and corn. Would you sell or feed dollar corn?—W. F., Kincaid, Kan.

About 9 chances out of 10 that these calves will pay for dollar corn if they are sold on the best market between August and January. Fewer than the usual number of calves will be grain fed which will put a premium on finish. The big problem will be in knowing when there will be the highest premium. Calves the weight of yours could go any time.

2—Wouldn't it be better to hold wheat this year?—C. G., Manhattan, Kan.

About 9 chances out of 10 that it will not pay to hold wheat for an October or January rally this year. Business conditions still are improving. World wheat prices still are working higher. On the other hand, the wheat market usually discounts a crop failure at the time of the disaster.

3—I have some choice 800-pound White Face heifers that have been on feed 90 days. I can sell, buy dollar corn, or cheapen the ration with ground hay and oats. Which will be the most profitable program?—W. A. D., Simpson, Kan.

About 9 chances out of 10 that your second or third program would be more profitable than selling now. There are about 8 chances out of 10 that continued feeding for 30 to 50 days, with a bulkier ration, will net more.

4—I have some fleshy, well-wintered steers on grass. Would it be better to bring to the feed lot now, cake on grass, or sell? They are beginning to shrink.—A. A. F., Little River, Kan.

About 8 chances out of 10 that a program of caking on grass 30 days and then starting on grain feed in the lot will be more profitable than the other

two programs. With steers already fleshy, one will have to be careful not to have the steers too fleshy and too heavy before the market is ready. In drouth years it usually takes 3 to 6 months after the drouth is at its peak for the fat cattle market to be ready or, in other words, approach its seasonal peak.

5—I want to buy some thin cattle to winter over. When do you think the low time will be? Would it be better to buy now or wait until November?—F. H., Clay Center, Kan.

About 7 chances out of 10 that the average price of choice stocker calves or yearlings will be lower from July 15 to August 15, than any time later this fall. If cheap cattle get lower in November than in August, then one would be a little safer in buying some.

6—Do you think it will pay to keep pullets? I can sell as fries now or buy high priced feed.—D. H., El Dorado, Kan.

About 7 chances out of 10 that egg prices in November, December and January will be high enough to pay for the higher feed costs. Advancing feed costs this year have come early enough to give the poultry producer a choice of selling as fries or keeping as pullets. In such years, he usually liquidates the flock below normal numbers. This reduces egg supplies by fall.

7—I have just bought some good stock pigs on the break. What is the best market to head for?—E. A. S., Kingsdown, Kan.

About 4 chances out of 10 that these pigs will show a profit above corn costs unless they are small enough to carry along now and finish later for the February-March market. If that can be done, your chances for a profit will increase to about 8 out of 10. So long as corn prices stay high, the cost of pigs will decrease. Profits in hogs after a drouth usually occur 12 to 18 months later rather than 3 to 6 months later.

Another Cut in Number of Cattle

THIS summer's drouth will reduce further the cattle population from the all-time peak of 1933. Heavy marketings of cattle this year are reported by the Bureau of Agricultural Economics. Continuation of the drouth would greatly increase this movement.

How much the livestock population may be reduced this year the bureau cannot say, but points to the 1934 drouth record when the number of all cattle and calves on farms was reduced about 6 million head.

On January 1, 1934 there were 74 million cattle and calves on farms. This was an all-time peak, and represented the culmination of an expansion movement which had begun in 1928, when the total was about 57 million head.

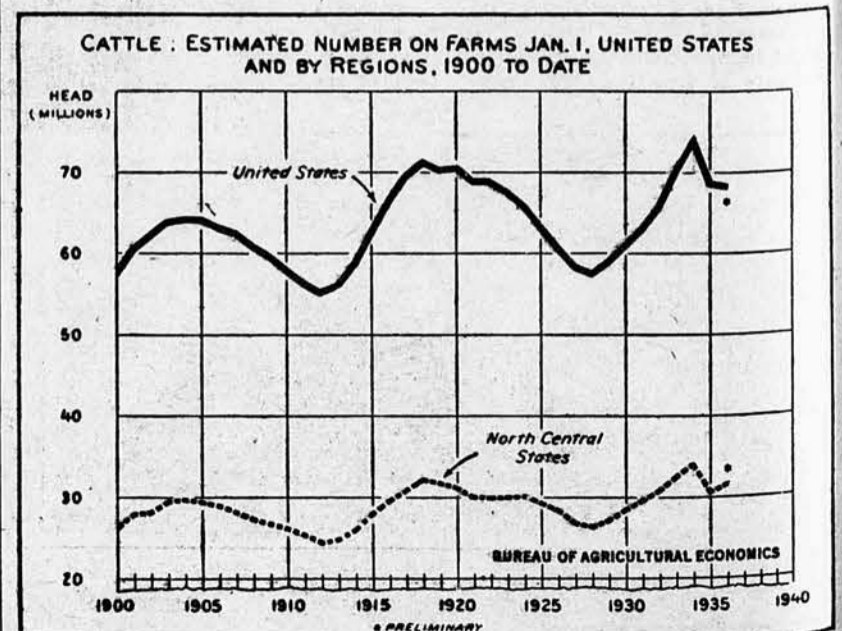
On January 1, 1936 there were 68 million cattle and calves on farms.

Officials of the bureau considered this number "relatively large," despite the heavy liquidation in 1934 caused by the drouth.

Despite the decrease in 1934 and 1935, the number of cattle was 11 million more than the total estimated for January 1, 1928.

The accompanying chart shows that the cattle population increases and decreases in long swings; that 7 or 8 years of increase usually is followed by a similar period of decrease.

Of the 68 million cattle and calves on January 1 this year, nearly 32 million were in the North Central states, about 11 million in the Western states, about 9 million in the South Central states excluding Texas, about 7 million in Texas, 5 million in the South Atlantic states, and 5 million in the North Atlantic states.



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ARTHUR CAPPER, Publisher
 MARCO MORROW, Assistant Publisher

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T. A. McNEAL,
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RAYMOND H. GILKESON,
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August 1, 1936

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Double and Triple Wheat Yields

TUDOR CHARLES

NEVER has there been stronger argument for summer-fallow than now. Hope for one of those never-to-be-forgotten years when wheat seeded in dry soil or nearly so, bursts into a green mat and makes a record wheat yield, has just about worn itself out. This season there were too many examples of double yields in Central Kansas and triple yields in Western Kansas for many of us to disagree with summer-fallow.

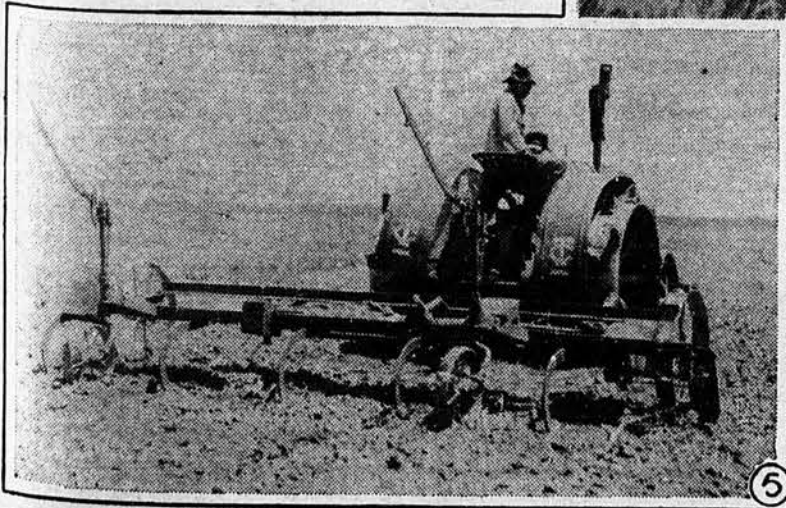
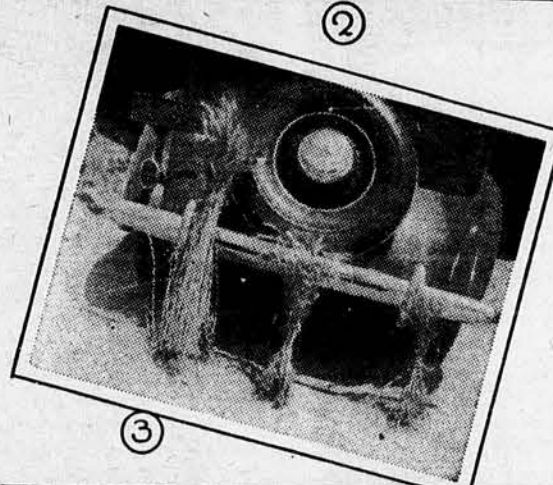
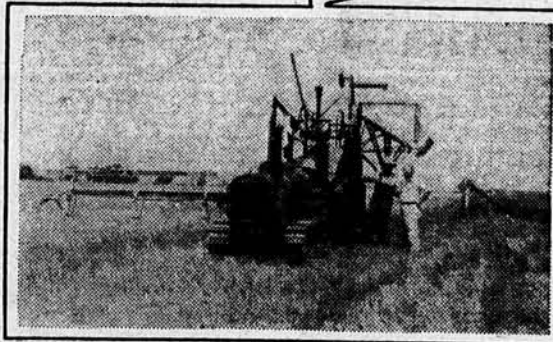
Crop specialists of the Department of Agriculture at the Hays, Colby and Garden City branch experiment stations have worked out a simple rule by which a farmer can judge with considerable accuracy at seeding time his chances of raising a wheat crop. The only equipment needed is a post-hole digger and, if one wishes to know his exact historical odds, the results of wheat yield records for the last 25 years.

It is definitely known that summer-fallow will pay bigger dividends in the Colby and Garden City sections than farther east in Central Kansas. For this reason summer-fallow of all wheat land has become virtually a rule in many Western sections, while it is practiced on only a part of the land of any one farm in Central Kansas. In other words, rainfall is normally sufficient in Central Kansas to justify seeding every fall. But if it isn't, the soil moisture rule may be followed and wheat not seeded on this soil which lacks moisture.

Depth to which a soil is wet easily can be found with a post-hole digger. This simple method is more practical for farm use, and nearly as accurate, as the more complicated one of weighing and drying soil, say crop specialists of Kansas State College.

As you will see by the moisture chart in this issue, wheat planted in a nearly dry soil was a failure 71 per cent of the time, produced as much as 10 bushels an acre only 18 per cent of the time, and in no case yielded as much as 20 bushels to the acre. If rains should fall under such seeding conditions and make a bumper wheat crop the price probably would be too low for fair profit. So in this case the "long chance" pays the least "odds."

When the soil was wet well into the first foot, the chance of getting a yield of more than 10 bushels to the acre increased to 43 per cent. There also was one chance in 5 that a yield of 20 bushels might be had. Thus the presence of only enough moisture to give the wheat a start doubled the



chance of obtaining a yield of 10 or more bushels to the acre. That wheat was a failure 34 per cent of the time indicates that wheat planted when the soil is wet in the first foot only, needs to be closely watched and abandoned in the spring if conditions after seeding continue unfavorable.

Many striking examples of this fact could be seen this year. Dan Ray, Ulysses, left wheat for harvest in a rather low portion of a 110-acre field in the spring of 1935. The remainder was plowed and fallowed. The ground had contained very little moisture at seeding. From the portion of the field harvested, only a 3-bushel yield was taken. Last fall the entire field was seeded and the moisture was much deeper on the portion which had been abandoned and fallowed. This summer the entire field made grain, but the wheat from the fallow land was double that from the soil which had produced only 3 bushels the year before.

J. N. Martin, Ulysses, had a similar experience. A low patch of wheat was left for harvest in 1935 and produced a yield of 5 bushels to the acre. At seeding time last fall there was 16 inches of moisture in the soil which raised wheat and 24 inches in the remainder of the field that had been fallowed. At 2 weeks before harvest Mr. Martin and his neighbors estimated the fallow land would produce 20 bushels or better to the acre, while the soil which had raised 5 bushels the year before "wouldn't go over 7 bushels."

With the soil wet to a depth of 2 feet, the chance of failure dropped to 15 per cent, and the chance of a 20-bushel yield increased to 29 per cent. The additional moisture not only came nearer assuring a crop but enlarged the yield, also.

When moisture had pene- (Continued on Page 15)

The Pictures:

- 1—Frank Dale, Coldwater, harvesting summer-fallow wheat which made from 15 to 20 bushels to the acre. The average yield on all of his 600 acres, which included considerable wheat after wheat, was estimated at 12 bushels.
- 2—Robert and Ralph Essmiller, Great Bend, are telling County Agent Hoar that wheat on the stubble at right, which was summer-fallowed in 1935, made 25 bushels to the acre. Wheat after wheat at left made half this yield.
- 3—At left is some wheat taken from summer-fallow land on G. D. Hammond's ranch, St. John. In center is wheat planted in nearly dry soil, and at right wheat from land in continuous crops which had little moisture at seeding.
- 4—J. E. Taylor, Grant county agent, standing in short wheat on J. N. Martin's farm near Hickok, where a 5-bushel yield was harvested in 1935. At the left is wheat twice as tall and yielding 3 times as much where the land was summer-fallowed in 1935.
- 5—Operating John Pratt's new rod weeder, on the farm near Colby, is young Mr. Pratt. Both he and his father believe this is a fine summer-fallow tool. It is low in cost and requires little upkeep. It breaks off or pulls every weed and brings clods to the surface.

Thinks I Am All Wrong—Maybe I Am

Passing Comment by T. A. McNeal

A GOOD lady out in Central Kansas writes me an eight page letter, the second sentence of which is as follows: "I should hate to be responsible for that last remark in your article about the perfect earth."

The remark referred to occurs in the issue of May 23, commenting on a letter written by Mr. Gray, of Alamosa, Colo., and reads as follows: "If Mr. Gray could imagine what he would consider a perfect world, or if I could imagine what I would consider a perfect world, and if the world imagined by either of us should be put into operation it would fail, because it would not be a perfect world. It would lack what each of us lacks in perfect conception, which at least so far as I am concerned, is quite considerable. But it does occur to me that if I were both almighty and all-wise I would not deliberately turn out a botch job, such as our present world seems to be."

I might say, if it will in any degree relieve the mind of the lady who writes me, that she does not have to assume any responsibility for anything I may say. I would not for a moment either ask or expect her to feel any responsibility for my utterances. I also may say in passing that I certainly would "hate to be responsible" for what she says or believes.

Here are a few sentences gleaned from her letter: "We were ordained from the first to a life of activity. Since it is He who has ordained the conditions of existence, both angelic and human, and since He is supreme in wisdom and love, the perfect happiness of each of us must depend upon His guidance."

That seems to admit that the world and all that it contains is just as God wishes it to be for this lady says that He "has ordained the conditions of existence both angelic and human."

Here is another: "God has permitted a reign of evil in the sense that he has not put an end to it."

And here is one of the most astonishing statements in this letter: "Satan's world, which ended in 1914, was indeed a botch job."

Now just compare that statement with the statement previously quoted: "Since it is He who has ordained the conditions of existence both angelic and human." The writer becomes responsible for a far more reprehensible statement than any I have made. In short, it is an admission that God is responsible for the "botch job" which she says ended in 1914. Now I do not make any such charge as that against God.

The thing that astonishes me most is the assumption on the part of most religionists that they know what was the original purpose of the Creator of the world and that they also know what his future intentions are.

It seems to me utterly preposterous to assume that the finite mind can know the mind of the infinite or that imperfection can comprehend perfection. Neither Mrs. H. nor Dr. Rutherford or any other mortal of limited understanding knows what purpose lies behind the making of this world of ours. All this assumption of understanding of the purposes of an omniscient and omnipotent God is to my mind illogical drivel.

It Must Be the Heat

WHEN he turned his typewriter loose to write me a four-page, unspaced letter treating of things in general, W. E. Ruff, of Ness City, probably was suffering from the heat. His opening paragraph follows:

"I will mostly discuss the idiocy of us people. We were forced by the inventors into a higher civilization, the automobile or machine age, but we were not willing or too stupid to adjust ourselves to the higher civilization. And it seems we still do not wish to adjust ourselves, or business methods to the machine age, but wish to carry on by illogical business methods or by jungle methods."

At the time that was written the temperature at Ness City was around 109 in the shade, and under such conditions a man's natural tendency is to be pessimistic.

Mr. Ruff next brings both the press and public officials under the gun. Read this:

"There is much raving about the freedom of the press; some idiocy. If newspapers and magazines would agitate certain facts then they would lose most of their subscribers; and if they would agitate some other certain facts, then they would lose all of their advertising. About all newspapers and magazines are permitted to do now is to ridicule public officials, which is idiocy of a vile order. And the reason public officials can be ridiculed is because

we carry on by two governments, Democrats and Republicans, and the two governments racketeer with one another, one overthrows the other every few years. And we are so stupid or idiotic that we have the concept that we carry on under a real government, but we have nothing but racketeering."

A little further along Mr. Ruff takes a crack at religion which I have no doubt will stir the anger of a large number of our orthodox subscribers, and which is open to the same objections that can be fairly made to the opinions held by many religious people; viz: a cocksure intolerance which assumes a knowledge of what seems to me to be the unknowable. But here is Mr. Ruff's opinion:

"We demonstrate our idiocy in the ancient bunk we teach to children and young folks. We teach a fabled heaven, fabled hell and a fabled deity to children and young folks: some teach it who know better, for the sake of racketeering and to subdue the people. We teach the ancient Jewish system and call it Christianity; but we do not teach Christianity; what we teach is confused Christianity. Eighty per cent or more of the people believe in a fabled heaven, or in a fabled hereafter. And all of them believe it because they were taught to believe it while young, or the first thing taught. Education is what one is taught, whether right or wrong; but enlightenment is when one discovers what he was taught is not correct. Educational institutions are not permitted to teach the scientific facts about things or about nature. Newspapers and magazines cannot, or are not permitted to agitate scientific facts about nature. Of course highly educated persons and not enlightened do not know what are scientific facts."

Now there may be, and no doubt are, educational institutions where the teaching of scientific facts, or scientific theories, is prohibited. But certainly that is not true about the leading colleges and universities of the country. Neither is the press muzzled so far as I know, and it seems to me I would know if there is a general muzzling.

Finally Mr. Ruff tells what the people need. It is really astonishing how many people know just what people need and how little attention is paid to this vast amount of diversified wisdom which is freely offered. But you may be interested in knowing what this Ness City philosopher says about what the people need. Here it is:

"What the people need in the automobile or machine age, or higher civilization, is intelligence and the intelligence must be presented to them by intelligent persons, not by fogey politicians. The people must institute an intelligent or scientific system. The people must institute real Christianity, then they can carry on sanely or intelligently."

School Board Was Wrong

When a school board hired the teacher, last May, for the coming school year they signed a contract agreeing to pay him \$5 a month more than they allowed for wages on the budget they posted the same time they did the school meeting notice. Have they any right to do that? They didn't ask, or vote, at school meeting to see whether it was all right with the people but just went ahead after the meeting and did it themselves. I thought they had to stay within their budget. If not, what are those budgets for?—Subscriber.

Before the adoption of the budget law in 1933, the law providing for the annual meeting of the voters in the various school districts, and for special meetings, outlined the powers vested in the voters at such meetings. Among these powers was the following:

"To vote a sum annually, not exceeding the limit fixed by law as the meeting shall deem sufficient, for the various school purposes and for the payment of any floating indebtedness of the district, and distribute the amount as the meeting shall deem proper in the PAYMENT OF TEACHERS' WAGES . . ." The capital letters are mine.

This very clearly gave the voters at the annual

More or Less Modern Fables

A female who labored under the impression that she could sing, was imposing her voice upon the guests at an evening party. When she had finished her first selection the host politely invited her to sing again. Whereupon a Thomas cat making his toilet nearby, remarked to himself: "Now just the other night I sat upon the backyard fence and yowled just like that female and the old man opened the window and swore and threw things at me, but he asks HER to sing again." Those who bestow compliments often are durned liars.

Mr. Grasshopper

ED BLAIR
Spring Hill, Kansas

Mr. hopping Old Grasshopper
You are welcome here,
I am taking pen in hand,
To send this word of cheer.
We're preparing feasts for you
In our fields, yes! Something new!
Free to all, just come and chew
There's plenty, do not fear!
Specially prepared, this food
From the choicest wheat
Served at sunrise or before
Hop right to it! EAT!
Bring your friends and see that they
Get a part, 't'will last all day;
Do not crowd your friends away
Tell 'em it's your treat.
If tomorrow there should be
Others still unfed
Do not worry; we will bring
These, another spread.
Pass the word along the line
"All come early," ain't that fine?
Why should hopping hoppers whine?
Why should they turn "Red"?

school meeting the power to determine how much shall be paid for teachers' wages and how it should be distributed; that is in case more than one teacher is employed. The voters would not only have the authority to say how much should be appropriated but how it should be distributed among the teachers employed.

The budget law enacted by the legislature of 1933, did not take from the voters at the annual or at special meetings the power they previously had, but added certain additional powers.

The new law merely provides that the governing body of the common-school district or rural high-school district—that is the directors—shall prepare and post, with the notice of the annual school meeting, a proposed budget of expenditures for the ensuing school year for the guidance and information of the electors at such annual school meeting.

The school board had no authority to contract to pay teachers more than the electors at the annual meeting had voted.

Who Would Get the Estate?

A widower with no children, the owner of 160 acres of land, married a widow with two children. Three children were born to this union. A, the original widower, died in 1913. B, the wife, died in 1932. All the children are living. Do A's own children inherit his half and share in B's half, or is the estate to be divided among all of the children equally? There was no will.—L. B.

So far as the question discloses the wife, B, had no property of her own at the time of her marriage to A. A, dying without will, half of his property, personal and real, would descend to his surviving wife, B. The other half would descend to his children by B. B's two children by a former marriage would not inherit anything at the time of A's death. When B died without will, all of her children, the two by the former marriage and the three by her marriage with A, would inherit her property equally.

Depends on the Contract

I have decided to change farms for rent this year. Do I have to cut the sunflowers and cockleburs in the field from which I harvest my small grain crop this year?—D. A. W.

That will depend on what kind of contract you have with the owner of the land you have been renting. If in your contract you agree to keep the farm free from weeds, so far as that is possible, then you would be required to cut the sunflowers and cockleburs. If you made no such agreement you are not required to cut them.

For an answer to a legal question, enclose a 3-cent stamped self-addressed envelope with your question to T. A. McNeal, Kansas Farmer, Topeka. Questions answered only for subscribers.

Farm Matters as I See Them

Will Not Neglect Farmers

I AM GLAD to note that in his speech accepting the Republican nomination for the presidency, Governor Alf M. Landon, of Kansas, devoted considerable attention to agriculture and to definite plans for protecting the interests of agriculture and of farmers.

No sound national policy looking to the national welfare, he said, will neglect the farmer. The wealth of the soil must be preserved.

"We," he said, referring to the Republican party, "shall establish effective soil conservation and erosion control policies in connection with a national land use and flood prevention program—and keep it all out of politics."

I am for that. It is just good common sense. And I never have taken a partisan position myself in dealing with any program affecting agriculture. Nor will I do so.

Governor Landon also declared that—
"Our farmers are entitled to all of the home market that they can supply without injustice to the consumer."

That also is good common sense. Any injustice to consumers in any line of business works injury to the producer. I sincerely hope that the farmer's interests as a consumer will be equally protected. At the bottom of much of our grief in the Farm Belt is the fact that the farmer, as a consumer, has been compelled to buy on a high domestic price level protected by tariffs and other price-lifting devices, while as a producer he has had to sell at the low world price level. No industry can stand that kind of merchandising without going broke.

I wish to say that I am for a free competitive system, but I want it to apply to all. We cannot afford in this country to sell our products in free competition while we buy manufactured products, the prices of which are protected by monopolies and under monopolistic conditions fostered by government.

Governor Landon promises, and he has the backing of the party platform in this promise, that cash benefit payments will be continued to those producers of surplus products who have been deprived of their normal export markets by world disturbances. I say that is only fair.

Conservation payments and benefit payments mentioned are to be limited to the production of the family-size farm. That size will vary in different sections of the country. This is the

statement of a general principle, the workings of which will have to be worked out.

I have great confidence in Alf M. Landon and in his sincere interest and good understanding of the farm problem. I suggest that you read his acceptance speech.

Eat More Graded Meat

THERE is growing demand for quality grading of meats. I think it is a good sign. About 400 million pounds of beef, lamb, pork, veal and sausage products were graded and stamped by the Bureau of Agricultural Economics during the year ending June 30, 1936, as compared with 284 million pounds the previous year. Graders at 23 leading shipping and consuming markets grade carcasses for quality at wholesale plants, and stamp the grade on the sides so that retail cuts carry a government label. This label tells consumers whether the meat grades "choice," "prime," "good," "medium," or "plain." Costs are paid by packers or dealers requesting the grading.

The service has expanded rapidly since it was started at New York in 1924, in response to demand by the trade and by consumers. A recent development has been the increasing use of the service by city governments in buying meats for hospitals, schools and other institutions. Many steamship companies, hotels, chain restaurants and other private businesses which contract for large quantities of meats, specify government grading. The Army and Navy and other Federal institutions purchase government-graded meats only.

This report from official figures indicates the importance, I believe, the buying public is placing on quality. It makes the job of buying much simpler for the public, and it makes these folks feel sure they are getting their money's worth, to which they are entitled. It also shows us that farm progress in the future must be based on quality production and all that goes with it.

Good Judgment

WE are given a good deal to heroics in this country. That is, extravagant expression, or bombastic action, or severe treatment or remedies. This side of our nature shows up in an emergency more than any other time.

Right now we are facing a serious situation brought on by dry weather. We have been thru it before. It will confront us again in the future. In view of present conditions, we find those who throw up their hands in despair. They admit defeat. Failure.

A few years ago, when good times were at their peak, I heard more than one person remark that "prosperity and good times are here to stay." We had, in their opinion, whipped depression and hard times forever.

Here are life-size examples of both extremes—neither one good for us. They should teach us not to go "haywire" on either occasion. I am sure I have found, out on our farms, folks who know how to strike the right balance between over-confidence and pessimism.

In good times they didn't plunge too far. They went ahead with good farming practices, conserving their soil fertility and moisture, fitting all crops and livestock into a reasonable balance, and obtaining such economical production that with severe price drops there still was a margin of profit. They bought needed equipment, improved their homes and farm buildings and laid something aside for a rainy—or a rainless—day.

Now, after hard years, these same folks still are in business. Their crops are better because they have saved their soil, caught and held all possible moisture on their land, returned fertility to the soil, followed good systems of crop rotations and handled satisfactory numbers of livestock.

This isn't luck. It simply is the result of good, sane judgment by folks who know their job. Good judgment isn't a stranger, by any means, in our farm homes.

Farm Taxes Head Upward

THE farm real estate tax bill in 1935 was 365 million dollars, the smallest in 16 years, official figures show. That total compares with a peak of 567 million dollars in 1929, with 393 million dollars in 1919, and with 218 million dollars in 1913.

Now that might look encouraging. But Dr. Eric Englund, of the Bureau of Agricultural Economics, reports that the downward trend since 1929 probably has hit the low point. He expects little change in the next year or two, and then an upswing should farm income continue to rise.

Looking back in the records you will find that farm taxes increased annually with few exceptions for nearly 40 years thru 1929, when the average tax to the acre was about six times that in 1890. The depression broke this long upswing, yet last year the tax was 3½ times that in 1890. Taxes eat up too much of the farm income.

Arthur Capper

Eggs and Poultry to Fall Peak

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	\$ 8.75	\$11.00
Hogs	10.70	10.55	10.85
Lambs	10.10	9.50	8.40
Hens, Heavy	.15½	.15½	.14½
Eggs, Firsts	.19½	.20	.22
Butterfat	.31	.26	.19
Wheat, Hard Winter	1.14½	1.02	1.10
Corn, Yellow	.99	.70½	.89
Oats	.40	.38½	.36½
Barley	.69	.54	.50
Alfalfa, Baled	19.50	13.50	14.50
Prairie	14.00	9.50	7.00

and the prospects for reduced supplies of feed will tend to limit the increase.

On July 1, there were 11 per cent more young birds in farm flocks than on that date a year ago, but drouth is expected to prevent a comparable increase in numbers of layers kept this fall. Therefore, earlier expectation of a marked gain in egg production probably will not be fully realized. Market men point out that higher poultry and egg prices usually follow quickly on the heels of a liquidation of birds, while the peak in heavier livestock comes several months after the heaviest selling.

Butterfat Price Going Up

Butterfat supplies will be shorter this fall than in 1935 and several previous years, reports the Bureau of Agricultural Economics. "Even if the drouth is broken in the near future, it seems probable that prices during the last half of 1936 will average much higher than in the corresponding period of 1935, and probably since 1930," a bureau release declares.

Corn Over Tariff Wall

Argentine corn is somewhat of a factor in our corn prices because our principal

corn imports come from that country. When corn becomes scarce in this country and feeders are willing to pay around a dollar a bushel, it begins to move over the tariff wall. But the Argentine yield also makes quite a difference in the amount of corn shipped here, because it governs the price in that nation, and only when corn is cheap enough can feeders afford to ship it to the United States.

The Argentine Crop

Argentine corn is being husked now. The forecast is for 381,750,000 bushels compared with the record crop of 451,943,000 bushels last season. This will not allow too great imports by American feeders, but unless our present drouth is broken soon and completely, the domestic price will be high enough to attract all the Argentine corn we need. Of course, little such corn is fed in the Corn Belt. It is consumed on the seaboard, but this leaves Corn Belt cribs for feeders in that section.

AAA Accepts Cattle Bids

If cattle are bought by the government this summer, it will be thru packing companies at the larger stockyards. Already the AAA has accepted bids of Armour, Cudahy and Swift to buy cattle at market price for a commission of 20 to 25 cents a head, and process them for 15.7 cents to 22.7 cents a hundredweight. The latter figure includes chilling and shipping the carcasses, too.

Market Barometer

Cattle—Higher for better grades, lower on inferior kinds.

Hogs—May be a peak soon, but lower by October.

Sheep and Lambs—Wide spread between common and choice slaughter lambs.

Wheat—Not much change. Little chance for higher prices.

Corn—May crowd wheat if drouth isn't broken.

Butterfat—Should be highest since 1930.

Eggs—Higher from now on. Poultry higher after market shortage begins.

Names Emergency Counties

Twenty-seven Kansas counties were the first to be placed on the government's national drouth list, which entitles them to receive aid thru emergency grants of relief funds for V/PA work. Kansas was one of the last states in the Midwest to be included.

ONE of the important market prospects to poultry keepers is advancing prices of their products this fall. A sharp increase in farm marketing of young chickens the last 2 weeks of June was reported last week by the Bureau of Agricultural Economics. Farmers had been building up their poultry flocks, but the drouth

A 50-Bushel Increase in Spuds

IRRIGATION scored a 50-bushel-to-the-acre increase in potatoes on the Kelsey farm, in Shawnee county, this season. Scott Kelsey said a 12-acre field yielded 250 bushels to the acre, and the increase under irrigation amounting to 600 bushels of extra fine quality potatoes paid for the pump outfit which was installed in January, 1935. In addition to the potatoes, 50 acres of corn also are being watered and a Sweet clover pasture is under irrigation. In addition to the plant on Kelsey's home farm at Topeka, they are putting down a well at Rossville to irrigate corn.

Many farmers in the Kaw Valley and other river valleys of Kansas put down wells or started to pump from open streams as hot weather threatened their feed and grain crops. Sometimes a small acreage under irrigation will make it possible for a farmer to



It was no trick to pick up spuds which weighed from 1 pound to 1 1/4 pounds in M. L. Kelsey's irrigated potato field near Topeka this summer. Here are a few samples which the boys selected at random along the row at digging time.

reap as many dollars as he would if the whole farm produced well in a year of abundant crops.

40 Cows Paid for It

One of the finest dairy plants in Central Kansas is operated by Ernest Reed, Lyons. Mr. Reed and his family milk a herd of about 40 Holsteins and deliver fresh milk to town in a bright new milk truck. The herd is milked with an electric milker. One of the features of the Reed farm is a modern milk house. It is equipped with electric cooling apparatus, bottler and washing equipment. The 40 high grade cows are grazed most of the summer on Sudan grass and Sweet clover pasture.

Tires on Farm Tools

Tire manufacturers who are paying attention right now to more rubber on farm implements may force some changes in machinery design. They realize the secret of their success will be the standardization of wheel sizes so that a front tractor tire may be interchangeable with a wagon tire, a drill tire interchangeable with a sulky rake tire and so on. Such would mean the tires for implements not in use could be put on other implements as season demanded.

But if tires are the same on machines as on motor cars, the young Romeos on the farm may have still another chore besides milking before setting out for an evening call. Imagine getting all dressed up with some place to go to find that Dad had put the tire of the family bus on the front wheel of the tractor!

A Good Hopper Kill

Poison scattered along headlands and in the cornfields on F. R. Dannefer's farm, Rossville, resulted in a heavy kill of hoppers. Walking thru the corn a week later one could see countless dead ones. They had crawled primarily into cracks in the surface of the soil and under weeds. At least half of the dead hoppers were partly eaten by other hoppers which no doubt met the same fate.

The cornfield had been irrigated. Mr. Dannefer said the hoppers left during

the irrigation process and then came back. The question came up as to whether the excellent kill of hoppers he obtained was due to some effect of the irrigation, but no definite proof of this could be established. He started distributing this poison at 3:00 A. M.

Keep Record of Tested Cows

Plans have been completed by the U. S. Bureau of Dairy Industry to maintain a permanent record of the identity, family history and production performance of all animals in dairy-herd-improvement association herds. The various state extension services will co-operate with the bureau in establishing and recording the identity of all animals, both registered and grade, in their respective associations. Special uniform DHIA ear tags will be used to fix the identity of all grade and non-registered purebred animals that are not otherwise satisfactorily tagged or numbered. The association testers will report all production records, also the identification of new-born calves and replacements.

There are roughly 405,000 cows with records of production, and 17,000 herd sires, enrolled in the 900 dairy-herd-improvement associations at present. While most of these herd sires are registered and can therefore be traced thru the breed herd books, fewer than 75,000 of the 405,000 association cows are registered. Under the bureau's new permanent-record filing system, the identity of the other 330,000 association cows, and of all cows enrolled hereafter, can be recorded along with their records of production. This will act as a key to further progress.

To Start 5-Year Farm Plan

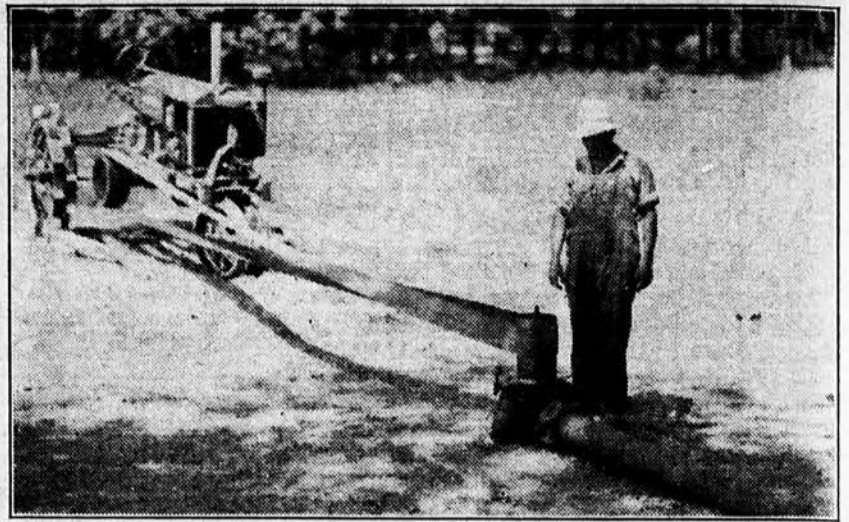
The first system of terraces built in Kingman county were constructed in 1932, on the Frank Albers farm, Nashville. These terraces are still in operation and are doing a good job of saving fertility, soil and moisture. Results obtained following construction of these terraces were so satisfactory that Mr. Albers was among the first to join the Kingman county Soil Conservation Association. This farm of 240 acres now is under a 5-year co-operative agreement and has been completely surveyed for soil type, degree of erosion and slope and for land use. The result of this survey has determined a proper 5-year cropping rotation to start this fall and the construction of 6,200 feet of additional terraces in

This Corn Beat Dry Weather

A FIELD of 50 to 60 acres on F. R. Dannefer's farm, Rossville, can be irrigated from Cross Creek. The land slopes away from the creek so water will follow ditches clear across. On July 17, this summer Mr. Dannefer had irrigated only 15 acres, but a new set-up was going in which would supply water to cover a much larger acreage. The lift from the creek is 35 to 40 feet, but no well is required.



F. R. Dannefer, Rossville, with A. S. Farr, vocational agriculture teacher, and County Agent Hale, examine budding ears on big corn which has been irrigated on Dannefer's farm.



A vertical centrifugal pump installed on the M. L. Kelsey farm, in Shawnee county. The well is 45 feet deep with perforated irrigation casing near the base. The pump is about 20 feet below the surface. This is a permanent and satisfactory installation. It cost \$700 installed, but this year's increase in the potato crop paid for it.

1936. About 775 feet of terrace outlet channel have been constructed.

According to F. B. Cromer, assistant county agent, Mr. Albers has been using Sweet clover as a soil-building crop with definite improvement in soil conditions and crop yields. He harvested from this land, 113 acres of wheat, which averaged a yield of 24 1/2 bushels an acre. Nine acres of a good stand of Sweet clover which had reached a height of 5 1/2 feet has been plowed under as a spring green manuring crop. In order to treat his entire

cultivated acreage with green manure, Mr. Albers plans to plant 28 acres of Sweet clover every year. A method of seeding Sweet clover with which Mr. Albers has been quite successful is to seed in the fall by broadcasting and covering with a harrow. This method may encourage the land to blow slightly but it allows the seed to come up readily and lowers the chances of being covered up by heavy rains, but under real dry conditions he thinks drilling may prove more successful. Firming the seedbed is important.

Zero Didn't Kill Winter Barley

TUDOR CHARLES

WINTER barley has established its own record in Kansas from year to year. Up until the winter of 1935-36 it was given one chance in 3 of living thru the winter in Northern and Western Kansas, a little better chance in Central Kansas, while crop specialists had found it would survive nearly 3 years in 4 in Southeastern counties.

Last winter was generally conceded to be extremely cold, but the weather was rather constant and quite dry so grain crops seemed to be damaged less than folks expected. Anyway winter barley came thru successive days of zero weather without any snow cover-

ing and losses were not heavy. Ben McCammon, Tecumseh, had a 20-acre field which made slightly more than 40 bushels to the acre. James G. Tomson, Wakarusa, said their barley came thru the winter in fine condition and none of it died until dry weather of March and April when spots were thinned out. I spent the night at Tomson's Shorthorn farm one stormy January night and made the chores with Mr. Tomson the next morning. The thermometer was hanging around 8 degrees below zero and the "real" winter weather had scarcely begun.

Seed of winter barley should be easy to buy in Eastern Kansas this year. It will be safest to buy seed from the farmer where its performance is known or from a dealer who knows about the seed, so that real winter barley will be obtained. It is impossible to tell the seed of winter and spring strains apart except by performance.

Seeding is done earlier than for winter wheat if fall pasture is desired, but later seeding also will come on and make fall grazing quicker than any other grain. Any time from late August until the middle of October is satisfactory. Winter barley makes its most abundant pasture in the fall and early winter months when contrasted with wheat and rye which provide a relatively greater amount of feed toward spring. For safety from smut barley needs to be treated the same as wheat.

If you want good fall pasture and are willing to take a chance, try some winter barley. You will have good grazing and may harvest a big feed grain crop besides.

Do It to Improve Herd

A. C. RAGSDALE

Inbreeding is a means of fixing characters and increasing uniformity in a herd. The offspring are more like the parent than the average animal. The most common form of inbreeding is line-breeding. Line-breeding really is a form of inbreeding in which matings are made to increase the relationship to one animal or a very small number of animals. It is most commonly practiced when a very outstanding animal, closely approaching the ideal for production, type and other desired characters has been obtained. Inbreeding never should be practiced in a herd that is composed of mediocre or average females, unless it is a form of line-breeding to a superior sire.

Co-ops That Click

(Continued from Page 1)

preciation reserve of \$5,317.69, in addition to a surplus of \$6,000.

The present board of directors includes F. J. Habiger, president; William Besthorn, vice president; George R. Sturn, secretary; John P. Heinz, treasurer; M. L. Shonyo, Henry Schmidt, William Poppelreiter, P. F. Wiens and John Bredfeldt. James Megaffin is the manager.

Business and Membership Increased

The Arkansas Valley Co-operative Dairy Association started operation on a small scale on December 17, 1935. Farmers of the area around Hutchinson are entirely responsible for this new addition to the fine group of successful Kansas co-operative creameries. The first month the "Ark Valley" did business 5,555 pounds of butter were made. By April the volume had jumped to 27,541 pounds. Membership had grown from 75 to 265 farmers. The organization is proceeding on a modest, conservative scale. N. L. Anderson, Partridge, is president. Claude Dressler, Reno county, is secretary-treasurer. The manager is a successful local dairyman, Charles Gordon.

Creamery trucks pick up cream at the farm twice a week. There are five routes. Membership is not limited to any certain area but there is a limit to the distance the trucks can make pick-ups. The authorized capital stock of the organization is \$30,000 common shares and \$10,000 preferred. The common stock must all go to farmers. Each member gets one vote in the government of the creamery. At last report the butter from the Ark Valley had been scoring 91 and 92. The trade has not been specialized as yet; all shipments going to larger creamery distributors.

Third Largest Kansas Fair

In 1920, the Republic County Fair Association was having "tough sledding." It had been started in 1905 as a stockholders association and had a large number of stockholders, many of whom were farmers. Thru the efforts of Dr. W. R. Barnard, Belleville veterinarian, and a number of local farmers and townspeople, a measure was passed by the Kansas legislature authorizing counties to conduct a free state fair. The North Central Kansas Free Fair, now Kansas' third largest, was organized. The fair property was turned over to the Republic County Commissioners and a board of directors which consists of 40 farmers was appointed. The fair is supported by a county levy which has ranged from \$5 to .4 of a mill. Annual cost has been less than \$10,000. It is distributed equally among county taxpayers. Two state appropriations of \$5,000 each have been awarded the fair. The present valuation of property now included \$40,000.

Special attention is given to 4-H club work. About 300 boys and girls exhibit their products each year. The best judges from Kansas and Nebraska colleges are used in the livestock ring. Homer Alkire, Belleville, has been president of the fair for a number of years. He also exhibits his Poland China hogs each year. Dr. Barnard served as secretary for 14 years. T. J. Charles, Republic, is the present secretary.

Ready for Next Year's Flax

Early preparation of soil is the first step in getting a good flax crop. Right now after flax harvest is not too early to begin. Small grain stubble or Sweet clover ground may be plowed for flax. Soybeans make a good seedbed for flax, but it is best to plow the land as soon as the crop is removed and get the soil packed because beans leave ground loose and flax requires a firm seedbed. Plowing corn stalk land or stubble as soon as possible in the fall is another method followed by successful flax growers.

Escaped the Hoppers

A new field of alfalfa on the C. J. Eyer farm, Miltonvale, has been saved by the use of poisoned bran mash. This and other favorable reports lead to the belief that no one should say "it's no use" until he has given the poisoned "breakfast food" a fair trial.

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PLYMOUTH BUILDS GREAT CARS

Drouths in the United States

J. B. KINCER
Chief, U. S. Weather Bureau

DROUTHS in the United States may be divided into two general classes. In one class are those of a transitory nature, affecting usually a relatively small area and of comparatively short duration, frequently lasting only a single year; in the other those general drouthy conditions that have a tendency to persist for comparatively long periods. Smoothed weather records show long-time trends in precipitation, covering a good many years, alternately above and below normal. The short period drouths are not usually definitely related to these more general long-time trends. When a minimum phase of precipitation obtains, such as is now being experienced, there occur at short intervals what may be called families of drouths, in contradistinction to the transitory, or short period, ones that fall in the first group.

Prior to the minimum phase of precipitation responsible for the present family of drouths, so to speak, the last general condition of this kind occurred in the latter part of the 80's and the early 90's of the last century. At that time, following a series of years with rather abundant rainfall, widespread scanty moisture began in 1886, and, while interrupted in 1892 by fairly abundant moisture, there was a marked tendency generally for sub-normal rainfall from 1886 up to 1895, culminating in severe drouths in 1894 and 1895, and driest years of that minimum phase. The year 1896 had fairly good precipitation, but 1897 was deficient in moisture between the Mississippi River and the Rocky Mountains.

Following this general long-time drouth, there were several belonging to the transitory class—short-lived and often affecting seriously only comparatively small areas. Among these may be mentioned that of 1901 in the

AAA Allows More Forage

Modified rulings of the soil conservation program, to encourage production of forage crops, have been applied to Kansas. They now include every state west of the Mississippi river, with the exception of Louisiana and Texas.

The new ruling provides that crop land may be used for production of emergency forage crops, such as Sudan grass, sorghums, spring grains, or millet for hay or pasture without affecting prior classification of this land under the program.

They further provide that farmers in all states in the Western region who have planted soil-conserving crops with a nurse crop may now harvest the nurse crop for hay if they have a good stand of the soil-conserving crop, without affecting their eligibility for payments under the program.

Interior valleys and the Southwest. The following year, 1902, had plenty of moisture in most states. Another transitory drouth occurred in 1910, principally in the Central and Northern states and the South, but this again was largely a one-year affair. Another one in 1917 affected principally the Southwest and Northern Plains, and still another, in 1925, was severe in the South and Southeast. Thus, for some 60 years up to 1930, there were a number of short-period drouths, but only one persistent and markedly dry phase of United States climate, that of 1886-1895, lasting in general, about 10 years. Some years, of course, were better than others.

The present dry phase began in 1930 and has continued, with a few inter-spersions of fairly good years, such as 1935, up to the present time. There have been in this period three extremely dry years—1930, 1934, and 1936.

The few available precipitation records, covering 100 years or more, indicate that a general dry phase, some-

what comparable to that of 1886-95, and the more recent one of 1930 to date, obtained in the 30's of the last century, or about 100 years ago.

The outstanding wet phase of the United States climate in the last century was from about 1865 to 1885, with a secondary maximum during the first two decades of the present century, altho several transitory drouths were interspersed. All of the foregoing statements refer specifically to that part of the country east of the Rocky Mountains.

Some tree ring records of the far Northwest indicate that there probably was a major minimum precipitation phase, at least in that area, soon after the middle of the 18th century, within the period 1755-80, with a succeeding maximum phase culminating about the beginning of the 19th century.

While study of long weather records has not as yet disclosed a law to justify a forecast of future drouths, such study does give an historical background, which warns us that drouths in future may be expected, just as severe as those of the past. For example, the records show that in the early nineties, or some 40 years ago, there was a drouth in the so-called "dust bowl" just as severe as that recently experienced. Doubtless, when the present drouth definitely comes to an end, there will be a period of years with comparatively heavy rainfall, just as before, and little will be heard about dust storms and the like. But, in planning a permanent farm program for such areas, the basic consideration should include the practical certainty that dry climatic phases, at least as severe as in the past, will recur.

The Cause of Drouths

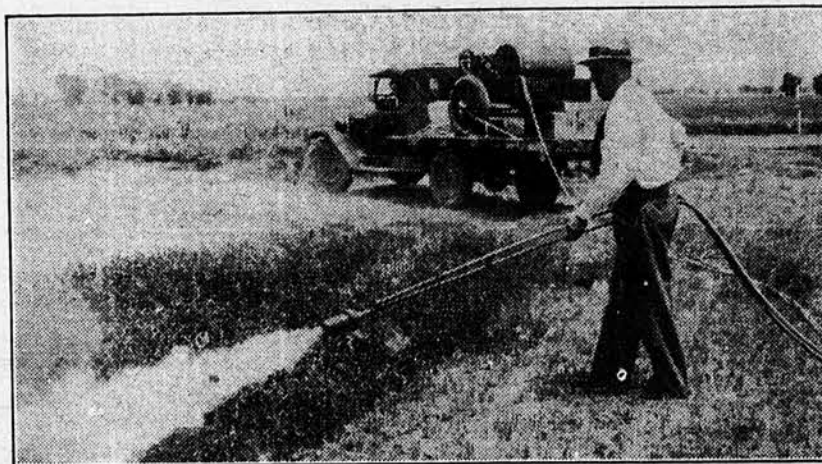
There is much loose talk these days about changes in climate due to human activity, and various suggestions that man should do this, that, or the other thing to prevent drouths. Most of such talk is utter nonsense. But here we must distinguish between preventing drouths as such and doing certain things to modify the unfavorable conditions when the drouths do occur. These two things are separate and practically non-related.

There are two basic principles in rain production—getting moisture into the air thru evaporation and getting it out again, thru condensation, in the form of cloud and rain drops. The first is important, but the latter much more so as related to the matter of drouths. The only way to produce rain in appreciable amounts is by cooling the air containing the invisible vapor of water.

Fighting Hoppers With Fire

OIL BURNERS which are used to kill weeds have been found useful also for burning grasshoppers. The burners as used on farms and along highways have a truck on which the supply of oil and the mechanism for pumping it to the fire nozzle are mounted. The hose is about 50 feet long and at its end is a special burner with a control handle. The operator

carries this just as he would a spray nozzle and turns the searing flames on weeds or hoppers. The blast is like that from a blow torch, except that it is larger. Successful kills of hoppers have been obtained by cutting all but a narrow strip of vegetation, as in an alfalfa or cornfield. Then this strip is burned. As the flame strikes the hoppers they kill almost immediately.



Killing grasshoppers in a strip of alfalfa. After this spot was burned, 82 dead mature hoppers were picked up in 1 square yard. No attempt was made to count the little ones that perished, but they far outnumbered the adults.

Save Native Grass for Dry Years

THE pasture that means most is the one which provides feed when others fail. Temporary pastures such as clover, small grains, lespedeza, or Sudan grass once were considered emergency pasture also, and were used when other grass became short. But a new idea is growing up among stockmen. It is to use these pastures as their regular source of grazing and turn stock in on native grasses when weather is too dry—or wet—to get much good from temporary pasture. The idea will work in Kansas. A field of nutritious grass which has grown up in a dry summer may not be the most palatable, but stock will do well on it and they can fill up in short order. It might be worthwhile trying this idea next year.

The reason why cooling causes condensation is the fact that warm air can hold more moisture—water vapor—per unit volume than cool air. The capacity of air, or rather of space, for holding invisible moisture doubles with each increase of 20 degrees in temperature. Thus, a cubic foot of saturated air at 80 degrees, if cooled down to 60 degrees, must lose, by condensation, half of its water content, which appears as cloud and rain. The details of these processes, while interesting, are too long to give here.

Air cools most rapidly when rising; the normal fall in temperature for an ascending column of air is 1 degree for each 183 feet of rise. Nature affects this method of cooling in a number of ways and usually on an immense scale. Air moves from place to place over the earth's surface in mass formation. These masses come from two main regions—polar and tropical. Those from the Poles are dense, heavy, and relatively cold; those from a tropical direction are warmer and lighter.

When polar and tropical air masses—one from the north, the other from the south—meet, the tropical air, being lighter, naturally flows up over the opposing dense air, just as it would flow up a mountainside. As it ascends it expands and cools, and thus the water vapor is cooled enough to condense and fall as rain. This illustrates Nature's method of producing rain in appreciable amounts. It is the only effective way. When the normal courses of these opposing air masses are disrupted for a considerable period, abnormal conditions, such as drouths result. These processes have a worldwide relation. In other words, Nature's weather factory is of enormous dimensions—the whole world—and some of its operations have not yet been discovered. Just how and why these abnormal conditions establish themselves and persist so long meteorologists have not determined. Enough is known, however, to make ridiculous any suggestion that man can basically change the order of things.

A New Machine for Wheat Farms

TUDOR CHARLES

A NEW style of farming equipment has been introduced into the Wheat Belt this year. It is a combination field cultivator, drill, lister, blade weeder, and row-crop planter. The basic principle of the machine is the detachable nature of the different tools and the wide range of uses for which it will work.

There is a wide draw-bar which fits to the tractor draw-bar. On this may be clamped spring-tooth cultivator shanks which may be equipped with any kind of shovel. This is meant to be used immediately after harvest to loosen the ground and hold moisture. A little later small listers are clamped to the draw-bar. These make small

20-inch furrows. They destroy weeds and hold moisture if run on the contour.

Under ordinary conditions another cultivation will not be necessary before wheat seeding time, but if it should be, weeder blades or cultivators may be used on the ridges.

The drill combination consists of the lister bottoms, spaced at 20 inches, with seed boxes fastened to a secondary bar above. Each seed box is separate. This drill puts the seed down in moist earth in furrows which are about half as large as ordinary lister furrows. If weeds start in the wheat any time after seeding, even the following spring, the field may be cultivated with the weeder blades. These may also be used to level down the ridges to permit easier harvesting or to loosen the soil.

For row-crop planting the listers are spaced any width desired—usually 36 to 44 inches. Corn or sorghums may be planted. Cultivation may be done with the regular weeder blades. If a combination system of wide-spaced rows and fallow are desired, the seed box may be attached to only one lister and a space up to 13 feet in width left between each single row. This space can be cultivated with the machine and then drilled to wheat. The row crop may produce grain or at least will check blowing.

Again, Sudan Poisoning

Few cases of Sudan grass poisoning have come to attention this year, largely perhaps because much of the early planted Sudan has made very little growth, and the late-planted Sudan didn't come up. However, the poison in this crop, when green, during an excessively dry year makes it wise to keep livestock off of it until a few days after good rains arrive. There is no danger in the hay made from Sudan, however, if it is well cured. Where the crop may be knee-high or higher and prudence forbids pasturing, a hay crop should be mowed. If rains come, the second growth will be available for pasturing or another hay crop.

A fellow shook hands with me in town yesterday who never bothered to do that before in 20 years. He's a candidate for county office, this year.

Kansas Farmer for August 1, 1936

New Facts About Spray Residue

JAMES SENTER BRAZELTON
Echo Glen Farm, Doniphan County

THE question of spray residue removal from apples having received such wide publicity the last few years perhaps has done more real harm to the apple raising industry than any other one thing. People have read so much on the subject that the general consuming public now has the idea that sprayed fruit is injurious. Such widespread belief has, of course, resulted in decreased demand and consequently in a big crop year like last year it seemed like there was an over-production. Many medical and scientific men have held to the idea that lead accumulates in the body of humans where it remains dormant, to be released with vigorous and disastrous results at some time when the normal functioning of the body is disturbed.

A Theory Proved Wrong

Recent research work done in Kettering Institute, University of Cincinnati Medical School, disproves this entire theory and is conclusive that lead does not remain in the body. The Kettering Institute was founded by industries in whose factories men work under heavy lead exposure, such as white lead mills, tetra-ethyl gasoline plants and battery factories. Investigators here have made certain discoveries which have led them to the conclusion that there is a certain amount of lead naturally taken into the body in all foods. It has been scientifically determined that the amount of lead given off by the body is virtually the same as that consumed. It also has been found that there is no significant difference in the amount of lead given off by persons living in the country and those in the city.

Will Apple Growers Investigate?

Observations made on both adults and children have led to the conclusion that there is a natural occurrence of lead in the tissues, most of it in the teeth, bones and cartilage. Where persons have a normal intake of lead there is no appreciable accumulation of this chemical. An investigation now is in progress to see whether the apple growers of the country would be willing to finance a study, at Kettering Institute, of the effects on humans of eating fruit that had been sprayed with solutions containing lead.

Impossible to Lower It

At a meeting of the American Pomological Society, held recently at Cincinnati, growers and professional workers were unanimous in declaring that with the present equipment available it will be impossible to meet a tolerance lower than that now imposed. These men were from all sections of the country and represent a general opinion. They feel that if a lower tolerance were in force it would be impossible to market apples.

All Kinds of Trees Suffer

If the trees continue to die at their present rate, in a few years we cannot boast that we live in the fruit basket of the world. The series of successive droughts is beginning to tell. The effect of these dry summers is seen everywhere, not only in the orchards but among the forest trees as well. There is nothing one can do about it but watch them die.

So Trees Have "Fever"

Thermometers inserted into tree trunks reveal the fact that even trees

More Moisture Here

A terraced field 3 miles south of Montezuma, on the Earl Lupton farm, had moisture down 4 feet deep in the soil halfway between the terraces when tested in early summer. This condition also prevailed just above the terraces. An unterraced field across the road was moist only 12 inches down.

run temperatures these hot days. An internal temperature of 85 degrees has been found to be the point at which trees begin to lose their foliage. If rains do not come at the proper time this danger point is reached rapidly and some trees have been known to run a temperature as high as 108. Moisture available to the roots is more of a controlling factor than the air temperature, because a tree keeps itself cool thru its transpiratory functions. Shallow rooted species begin to show the effects of increased internal temperatures first. Some trees are smart and try to protect themselves by turning their leaves edgewise to the hot sun.

Coming Into Its Prime

Some of the best orchards are off the regular beaten paths of the annual orchard tours and consequently are seen by few visitors from afar. Such a place is the 35-acre orchard owned by W. A. Gurwell, about 3 miles north of Troy, Kan. This orchard is 18 years old and now is coming into its prime. It has been in the present owner's hands 13 years and he exhibited a deserving pride as he walked with the writer down the long rows, pointing out the different varieties, their shortcomings and their good points. The three popular varieties, Jonathan, Delicious and old-fashioned Winesap, are grown in this orchard.

Always Ready for Business

That Mr. Gurwell has been successful there can be no doubt. The general appearance of the place proves that. At harvest time the apples are washed, graded and packed in a handily arranged packing shed which is equipped with running water to supply the new, modern washer he installed last year. Wagons bringing apples from the orchard drive alongside a wagon-level dock to unload. This dock will hold more than 150 barrels at one time. From here they are dumped into the washer which sets a little lower than the dock so no lifting has to be done. On the opposite side of the building is another dock built truck-level for convenient loading of outgoing trucks. In the few years since his orchard has been bearing Mr. Gurwell has, thru courteous dealing and honest practices, built up an enviable truck trade on which he depends to absorb his entire crop. "I manage to keep my overhead expense down to the minimum," said Mr. Gurwell, "and for this reason I find I can afford to sell a nickel or so under what the truckers would have to pay a bushel elsewhere." Besides apples, grapes are raised on this 40-acre farm and this year there are 6,000 tomato plants.

We Have a Visitor

W. H. Baggs, president of the International Apple Association, was in this part of the country recently, visiting with some of the apple men and getting a bird's eye view of the apple situation. The International Apple Association meets for its 41st annual convention this year at Boston from August 11 to 14.

The superintendent of the poultry division of Echo Glen Farm left the family and her 1,400 young chickens to shift for themselves while she took in the annual convention of the International Baby Chick Association at Kansas City. More than 4,000 people attended the 4-day conference and exposition which was held in the new Municipal Auditorium where on Wednesday night, Mrs. Brazelton heard the address by Henry A. Wallace. This is the first time in the history of the poultry industry that a member of a President's cabinet has attended a poultry meeting of any sort.

Come to Fall Potato Show

All Kansas farmers are cordially invited to attend the 14th Kansas Potato Show in the Armory, at Lawrence, on November 19 and 20. The show is fostered by the Kaw Valley potato growers, the agricultural college, county Farm Bureaus, and city commercial organizations.

New exhibitors are particularly welcome to bring their displays and get acquainted. There will be an outstanding group of potato growers at the show. Cash premiums and ribbons are given as prizes. In addition to the growers' division there is a division for women and one for 4-H club members. There is a potato judging contest for each of these classes. A catalogue telling all about the show will be sent free on request if you write E. H. Leker, extension division, Kansas State College, Manhattan; Deal Six, county agent, Lawrence; or any other county agent in the Kaw Valley.

Suggestions for selecting and storing show potatoes are to select them at digging time or shortly afterward. Do not wash them. Wrap each potato in paper and store in a cool, dark place. Cold storage is best but a cool cave will do quite well. When the samples are taken out of storage, unwrap each potato carefully and remove the dust with a soft brush or cloth.



The BEAR CAT
Combination
GRAIN and ROUGHAGE MILL
Also ENSILAGE CUTTER
Grinds any feed—green, wet or dry. This feeder really takes in loose roughage, bundles or bale flakes and no monkey business about it. Large capacity guaranteed with ordinary farm tractor. Grinds grain, ear or snapped corn with roughage or separate. Has cutter head and swing hammers. Get full information on this real honest-to-goodness Grinder. Write Western Land Roller Co., Box 135 Hastings, Neb.

LAME HORSES
The safe reliable liniment, counter-irritant or blister successfully used for over 60 years to relieve sprains, swellings, lameness, muscular pains and other horse ailments.
IN ORANGE COLORED CARTON, \$2.00
SCHNABEL MEDICINE CORP. - NEW YORK
GOMBAULT'S CAUSTIC BALSAM

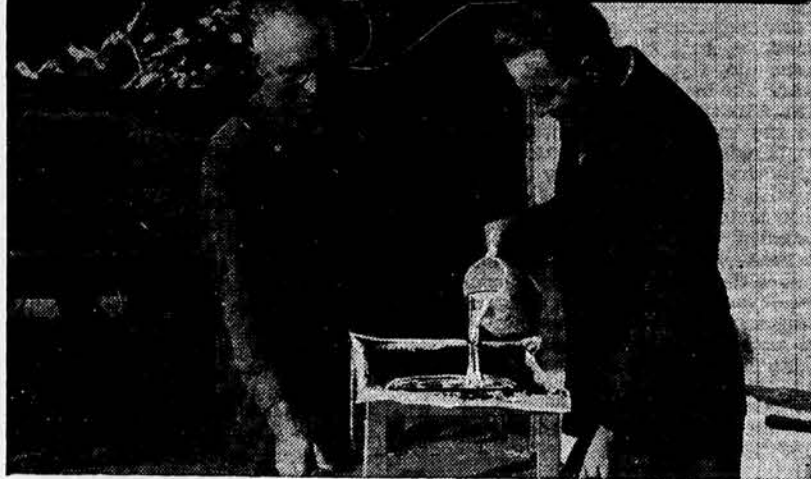
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Will attach to any car or truck in five minutes. No holes to bore. Will do the work of two teams. Write for particulars and price list.
Stockwell Hay Tool Co.
Larned, Kansas



"Rutland Roof Coating made this handkerchief as watertight as it made my Roofs"



Says Geo. F. Long, Canal Winchester, Ohio

"I've used Rutland Roof Coating for a good many years," says Mr. Long, "and it's the best brand I ever found. But this handkerchief test sure shows how well it plugs up every pin hole. There wasn't anything on the handkerchief you see here except Rutland Roof Coating. Yet it shed water like a duck's back. A roof coating like that is worth going out of your way for."

Rutland Wears Longer Because 25% More Material Stays on the Roof
The less a roof coating evaporates, the better it waterproofs—the longer it wears. That's why it pays to demand genuine Rutland No-Tar-In Roof Coating. Actual tests show that evaporation causes ordinary roof coatings to lose one-third of their weight within a few hours. *One-third of your money blows away!*
Of course all roof coatings contain some oil that later evaporates. Otherwise they would be so hard and stiff you couldn't

apply them. But Rutland contains just enough oil to make it flow evenly. It's not artificially "loaded" with oil. When the oil dries out, you have a heavy, tough film of pure asphalt bound together with asbestos fibres. Every gallon of Rutland leaves 25% more material on your roof than ordinary products. Also, there's no tar in Rutland. It does not crawl, crack or peel.

You may pay a trifle more per gallon for Rutland—but far less per year of service. 1½¢ to 2¢ a square foot is all it costs to Rutlandize your roof.

Rutland No-Tar-In Roof Coating is ideally suited for all roofs except shingles. If your local dealer does not handle Rutland products, mail coupon below. Rutland Fire Clay Co., Rutland, Vermont. Also makers of Rutland Patching Plaster, Asphalt Paint, Furnace Cement, Stove Lining and other Rutland Repair Products.

★ For Badly Worn Holes—Around Flashings, etc. ★
Use Rutland No. 4 Plastic Cement.

Buy the 5-gal. can. Economical. Convenient. Apply right from can to roof.

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Please send full information on how I can obtain Rutland Roof Coating.

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Kansas Farm Family "Loops" the East

MANY times I have heard my mother quote the old saying, "Anticipation is greater than realization." So when appointed a delegate to the International Convention of the Associated Country Women of the World, which met in Washington, D. C., my anticipation was great, especially with the added thrill of extended travel in the East accompanied by my husband and two little daughters, aged 14 and 11 years, for whom this was to be an educational trip.

"How can you leave your farm thru June?" was asked, and the answer became a reality when friends living in town said, "You go, and we'll come out to your farm and take care of things while you are away." So the anticipation grew with preparations for departure, including plans for operations on the farm, by the Mister; some last-minute canning, sewing and preparing of clothes, what wardrobe to take, for the Mistress.

The problem of traveling lightly must be considered. This was partly solved by using common suit boxes which could easily be replaced and which fitted nicely in our car trunk, one for clothes of each individual—labeled respectively—saved much rummaging. Two other pieces of luggage containing frequent needs for overnight stops, made mostly at tourist homes and cabins, the latter of which we found most satisfactory and more to our liking, completed our equipment.

Visit Home of Abraham Lincoln

Leaving home on May 26, we drove east across Missouri and Illinois to Springfield, where we visited the historic home of Abraham Lincoln and the wonderful tomb where rest the remains of this illustrious man and his family.

After a night's rest we continued to Indianapolis, Ind., then turned south to Louisville, Ky., the land of bluegrass and the home of race horses and darkies. Attractive white board fences divide the many small pastures of the purebreds, on each plantation, and a distinctive horse cemetery is unusual with its monuments of horses made in memory of their likeness.

Eastward thru Lexington the tobacco fields were being prepared and planted with plants raised in special canvas-covered beds. The tobacco planting machine was interesting: A barrel mounted on two wheels, pulled by a mule, driven by a colored man sitting astride the cask, while two piccaninies seated in low spring seats at the rear, dropped the plants in holes watered from the barrel.

Thru the Kentucky Foothills

We were soon in the heart of the Kentucky hills and supposing them to be foothills, I asked a filling station attendant the name of these mountains. "Oh! lady," he replied, "these are not mountains, they are just the Kentucky hills, where you tap the side of one and the moonshine runs out, then go over the top and you'll find a family feud."

Along the very good but only highway, with few sideroads, around the curves, over the hills, and down the dips, one is reminded of the popular song "The Music Goes 'Round and 'Round," and we read along the way the sign, "Legal Whiskey." Virtually no schools were seen. The pitiable condition of the mountaineers was evidenced by the shacks; these tumble-down cabins combined with the ragged and dirty urchins, and in contrast the modern homes of the plantation owners making a varied picture in this land of beautiful white daisies.

The soil in the Virginias is a red clay about the color of our wild Indian Paint Brush. The village streets are narrow, the houses extending to the curb line giving the appearance of foreign towns. Here pedestrians have little regard for traffic, which combined with the badly damaged highways thru the Ohio river valley due to the spring floods, seriously retarded our progress.

Crossing the Allegheny mountains and down into the fertile Shenandoah valley, passing the birthplace of Woodrow Wilson and many other monuments, was keenly interesting, but climaxed on Memorial Day morning, our fourth day from home, by the 35-mile Skyline Drive, three lanes wide

MRS. HARLAN DEEVER
Sabetha, Kansas

along the backbone of the Blue Ridge mountains, giving a view for 75 miles away to the Allegheny range across the Shenandoah river valley—a view which resembled a huge crazy quilt with its fields of red soil, shades of green and yellow, with towns scattered in between.

Eight Days in Washington, D. C.

Eight wonderful days in the Nation's Capital attending the sessions where 23 nations of rural women convened, meeting the President and First Lady, visiting the many interesting places in and near Washington, D. C.—Mount Vernon, Arlington Cemetery, Smithsonian Institution, the Franciscan Monastery, the Senate and House in session, the Congressional Library, the new marble Supreme Court Building. A trip to Annapolis Naval Academy for Commencement Day was a privilege, seeing the old custom of the "Middies" tossing their caps into the air after receiving their diplomas and the ensuing stampede for a souvenir, followed by many touching scenes as sweethearts pinned the new insignias on the shoulders of their lovers. We also were fortunate to be permitted to go aboard the United States Destroyer Babbitt, which lay at anchor in the harbor of Chesapeake Bay to examine the guns and torpedoes.

Here may we express many thanks to Senator Capper and Representative Lambertson for their many thoughtful acts in making our visit enjoyable and instructive.

Continuing East we visited the home and burial place of Barbara Frietchie at Frederick, Md., then Gettysburg battlefield, in Pennsylvania, covering

2,000 acres with 2,000 monuments, shafts and cannon marking the battle lines and vivifying that terrible battle of the Civil War.

To our surprise, much of the highway in the East is oiled mat or macadam instead of slab, but is very smooth and from three to six lanes wide with no-chuck holes.

History again is emphasized in Philadelphia, where we touched Liberty Bell in Independence Hall, stood where the Declaration of Independence and the Constitution of the United States were written and signed, saw where George Washington was inaugurated, and sat in the pews where the Washington family, Benjamin Franklin, William Penn, and Betsy Ross worshipped in Christ's church. Such contacts make one's patriotism run high.

Hustling, Bustling New York

Our first realization of the magnitude of the Industrial East came at Camden, N. J., where as guests of R. C. A. we were guided thru their radio laboratory, covering a floor space of 80 acres, and employing 12,000 men and women; and saw R. C. A. Victor Radios in every detail of construction from sheet steel and rough lumber to the finished product.

Man's accomplishments are ever in increasing evidence as such engineering feats as the Sky-Way bridge spanning Jersey City, N. J., lifted us above buildings, heavy traffic, and two rivers, then immediately brought us down underneath the Hudson river thru the wonderful Holland Tunnel into the largest city in the world.

The vast scale of everything seems to be predominate, with New York City as the chief example; crowds of people rushing by; a never ending procession of autos and busses; tall

Rules for Living

Do not worry, eat three square meals a day, say your prayers, be courteous to your creditors, keep your digestion good, steer clear of biliousness, exercise, go slow and go easy. Maybe there are other things that your special case requires to make you happy, but, my friend, these I reckon will give you a good lift.
—Abraham Lincoln.

sky-scrapers reaching 70, 80, and 100 stories into the blue; speeding subway or under-ground trains filled with humanity; the vast Atlantic extending beyond the horizon and mighty ocean liners plowing the never ending waves. Here we again appreciated the courtesy shown us by the N. B. C. while in their 70-story building in Radio City. A favorite pastime, as we looked from the office windows of R. C. A., was to count, as we towered above them, the Pent Houses, many of them built in bungalow style, surrounded by lawns, flowers, fountains and gay umbrellas, atop neighboring sky-scrapers. From here men and autos on the streets below looked like ants and beetles, respectively, crawling along in incessant procession, and then, we drew back with the realization of our own elevation.

Historic Old New England

Historical and literary settings surround us, as we travel on viewing where the first British fell in the Revolutionary War at Concord, Conn.; and passing the homes of Louisa May Alcott and Nathaniel Hawthorne we come to the famous battlefield of Lexington where the first Americans fell.

(Continued on Page 11)

Just See What Ten Dollars Will Buy

RUTH GOODALL

IT MAY sound as if a ten-dollar bill would have to be made of elastic instead of green paper to be stretched to cover the front porch, but really it isn't the magician's trick it might seem. With \$10 in her summer white purse or in her scuffed and shabby old black handbag, the woman who knows values and where to spend her money so it will do the most good, can buy everything she needs to transform her front porch into a summer living room. She can furnish it, too, so the neighbors will be green-eyed in their envy.

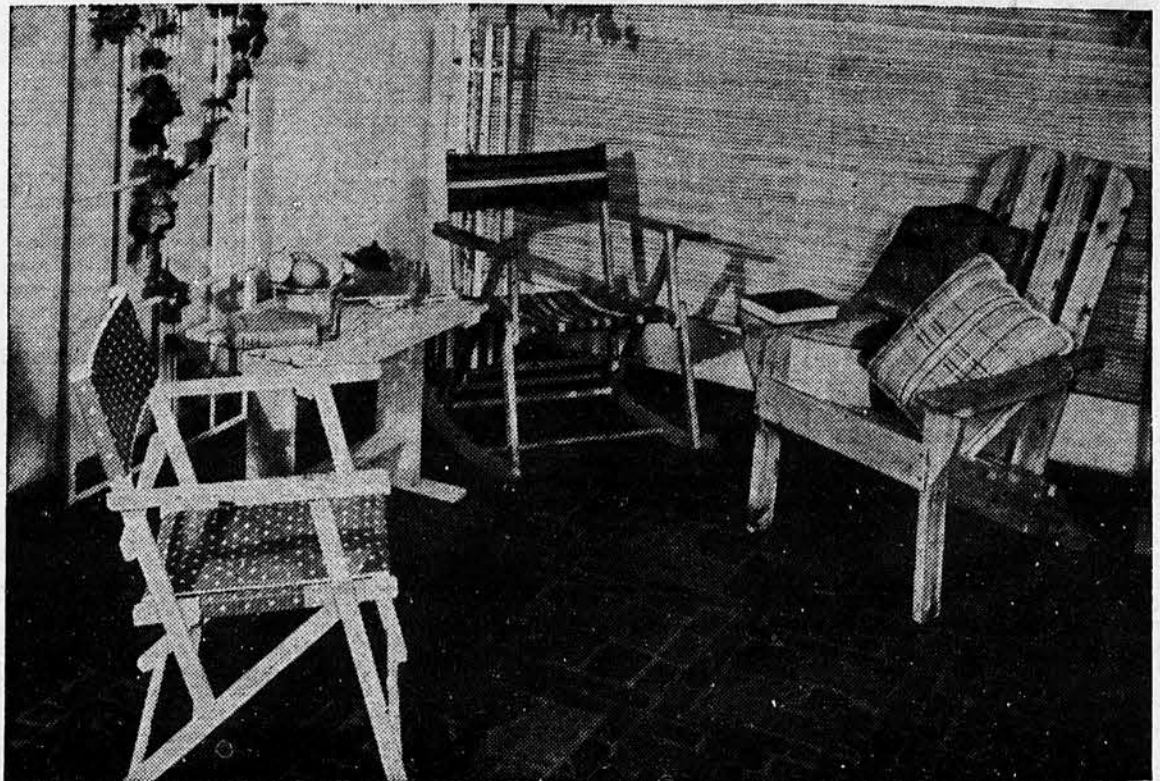
The manufacturers have done themselves proud this year in their production of inexpensive, durable porch furniture that is at the same time pleasing to the eye. They've given thought to comfort, wear-and-tear—

even space-saving. Many of the chairs and tables—and they're not the least bit flimsy either, can be folded flat, making it easy to move them from the porch to the lawn and back. And with a thought for next winter, this same furniture will take the least possible storage space.

Just what \$10 can and will do toward furnishing a porch is illustrated. The grouping includes: One slat-backed arm chair—and my it's comfortable—one rocker; one chair with canvas back and seat; a lawn table large enough to hold a tray for refreshments as well as magazines and books. The cost of the chairs and table was less than \$10, leaving money enough to buy chintz or

cretonne, gingham or denim for chair pads and cushions. Both tables and armchair are of unfinished pine, intended to be used just as they are, altho if you prefer, they may be painted or varnished. Don't forget, too, while doing the transforming to do some transferring of ferns or vining plants from the garden onto the porch. I'm especially partial to the vines, they are so homey.

Maybe you won't have to spend a whole \$10. Maybe you already have chairs and a table and a comfy swing that need only a coat of paint and a set of new cushions to "tie them together." Anyway, whatever you spend, I'll wager the family will vote it money well invested, paying big dividends in contentment and comfort.



A comfortable arm chair and utility table of unfinished pine; the rocker and the chair in the foreground which belong to the "folding" family; with enough money left over for gay-colored pillows and chair pads.

Fill Those Empty Jelly Glasses

RUTH GOODALL

IMITATING the squirrels, wise housewives are storing away goodies on cupboard and cellar shelves—jams and jellies and preserves to be eaten with the Christmas goose and on a cold January morning's hot cakes. No doubt you have favorite recipes you follow each year, but here are several you may like to try. Maybe they will delight your family, just as they do mine.

Peach Jam

6 cups peeled peaches
5 cups sugar
4 tablespoons lemon juice
2 teaspoons cinnamon
1 teaspoon cloves
1/2 teaspoon nutmeg
1/2 teaspoon salt

Mix ingredients, cook slowly and stir frequently until jam becomes thick. It will require about 45 minutes of slow cooking. Pour into sterilized jars and seal.

Ripe Apricot Jam

3 1/2 cups ripe apricots
7 cups sugar
1/2 cup liquid pectin

Wash, but do not peel the ripe apricots. Pit the fruit and put through the food chopper. Measure the fruit and sugar into a large kettle. Bring the

mixture to a boil over a hot flame or heat, stirring constantly before and while boiling. Boil hard for one minute. Remove from the stove and add the liquid pectin. Skim and pour quickly into clean glasses. Cover the hot jam with paraffin and again when cool.

Carrot Jam

1 1/2 pounds carrots, weighed after grating
3 1/2 cups of sugar
3 lemons
1 large orange
1-3 teaspoon salt

Scrub the carrots, blanch in boiling water 10 minutes, scrape off the skins and grate the carrots—enough to make the amount designated. Combine with the lemon rind, grated, and the salt. Add 1/2 cup of water and cook until tender in a double boiler. Then add the orange rind, shredded and scalded, orange and lemon pulp and sugar. Simmer over a direct heat until thick. Transfer to sterilized glasses, cool and seal with melted paraffin.

Peach and Plum Jelly

3 cups (1 1/2 pounds) prepared juice
4 cups (1 3/4 pounds) sugar
1 box powdered pectin

To prepare fruit, cut up and crush 2 pounds fully ripe peaches and 1 pound plums. Do not pit or peel. Add 3/4 cup water and simmer, covered 10 minutes. Place in jelly cloth and squeeze out juice.

Measure prepared fruit into large kettle and place over hottest fire. Add powdered pectin, mix well and bring to a boil, stirring constantly with wooden spoon. As soon as mixture boils hard, pour in sugar, stirring constantly. Continue stirring and bring



Liquid or powdered pectin eliminates much of the "stirring" from jelly-making.

to a full rolling boil; then boil jelly 1/2 minute by the clock. Remove from stove, skim rapidly with metal spoon, and pour at once. Cover immediately. Makes about seven 6-ounce glasses.

Spiced Apple Jelly

1/2 peck apples
3 pints vinegar
1 pint water
1 ounce stick cinnamon
1/2 tablespoon whole cloves
1/2 tablespoon mace blades
Sugar

Tie spices in a muslin bag. Cook apples, cut in quarters but not peeled, vinegar, water and spices together until apples are soft. Turn into a jelly bag and let drip. Boil the juice 20 minutes. Measure. Add 3/4 cup of sugar to each cup of juice. Boil 20 minutes or until sirup sheets from the side of the spoon. Pour at once into hot jelly glasses. Cover with paraffin.

Gay Pair of Aprons

ONE PATTERN MAKES THEM



Pattern KF-9947—Here are two delightfully crisp, practical "cover-all" aprons which may be quickly and easily made up from one simple pattern! Choose dimity or dotted swiss for the demurely ruffled style. You're sure to love the ruffle outlining the scalloped yoke. Trimly tailored is the second version, and perfect in pre-shrunk percale. There never was a more practical apron for cheerful "kitchen duty." Sizes small, medium and large. Small size, untrimmed apron, requires 1 1/2 yards 36-inch fabric; trimmed apron, 2 yards.

Patterns 15 cents in coin. Our new Summer Fashion book filled from cover to cover with glamorous summer clothes, 10 cents extra. Address Fashion Service, Kansas Farmer, Topeka.

Plant Madonna Lilies in August

MRS. C. G. PAGE

WERE you gardening when Madonna lilies—*Lilium Candidum*—were called August lilies? If you were, then you know they were so called because they were planted in August, not because of their season of bloom. We no longer hear them called August lilies but we should continue to plant them in August.

The bulbs become dormant soon after blooming in June, and do not begin active growth until September. No lily should be moved except in its dormant state. The Madonna lily, unlike other lilies, makes its root and leaf growth before cold weather and remains green thru the winter. If set out late in the fall, even if the bulbs were dug while dormant in August, there is a danger of them not having time to make sufficient growth to winter well.

Madonna lilies should not be planted deep, 2 inches of soil over the bulb is all that is required. Have the hole for the bulb well spaded, so the soil is loose, put in about a quart of sharp, clean sand, and set the bulb slightly on the side in planting. The sand will provide drainage. This is very necessary if the garden soil is heavy, and tilting the bulb will prevent it from holding water, which often will cause the bulb to decay.

When transplanting Madonna lily bulbs, save every loose scale that falls off. These are potential bulbs. These scales should be planted in a box of sand, kept watered and soon growth will start. Protect them with a mulch thru the winter months. In late spring these tiny bulblets should be transplanted. The following spring the bulblets have grown into bulbs and the next spring the garden is provided with June beauty at no expense and with very little labor.

No garden is complete without Madonna lilies. They are absolutely hardy and are almost completely free from disease and insects. They may be bought quite cheap and they multiply rapidly. One word of warning should be given, do not plant them in a bed where the flowers are watered regularly thru the summer, as they should be allowed to ripen naturally after the blooming period. If kept watered while dormant, they may rot and be lost. This word of warning is given to those gardeners who complain that they

can't raise Madonna lilies as they die during the summer. This is usually the trouble. So if a hose is used during the summer, place Madonna lilies to themselves and let Nature take care of them.

Since they grow quite tall, it is best to put them in the background of the border. Frequent division is not advised, as a few large clumps make more show than many small clumps here and there thru the garden. When the bulbs seem to be crowded and do not bloom so well, dig them carefully and divide.

Madonna lilies are cheap, they are hardy, they require very simple culture, and they are beautiful. If your garden does not contain them, do plant some this August!

Kansas Farm Family "Loops" the East

(Continued from Page 10)

All thru verdant New England the roads wind in and out following the contour of the hills instead of marking the section lines as we are accustomed to in Kansas. The hills and dales are densely covered with beautiful forests—evergreens, birch, poplar and elm predominating, while the ground is carpeted with ferns; broken here and there by many natural lakes, clear and sparkling, which form the water supply for the towns and cities. The scenery is wonderful, a great blessing to those who live in the crowded districts. The timber is full of wild flowers such as rhododendrons and mountain laurel but the ground is sandy and rocky, a poor place for a Kansas farmer to make a living, but ideal for the homes and estates of the wealthy.

Again in Massachusetts, where my husband had his first reunion with his army buddy since days in France, we witnessed the immensity of industry as worsted and cotton cloth was produced before our eyes, from raw material to finished fabric, America's largest textile mill in Lawrence, Mass., where a thousand looms, each weaving a different piece of cloth, are in action and where 8,000 men and women are

employed in textile manufacturing.

Many enjoyable days were spent along the shore of the old Atlantic. At Salem, Mass., famous for its witches of old, the shore is rocky and rugged and the waves break in ever increasing turmoil as the tide comes in. In contrast the beach at Hampton, N. H., is long, sloping, wide and sandy and wading the surf and breakers is great sport. A collection of sea-shells, stones and star fish from here will decorate a new Kansas bird bath. All kinds of sea food is abundant, so instead of hamburgers everyone eats fried clams.

The Famous Boston Harbor

The very narrow streets of historic old Boston were unique, only one-way traffic being possible on them, but they finally led us to the famous Naval Yards, where we all, especially the girls, enjoyed a trip thru two famous ships anchored at the wharf; the Frigate "Constitution" or "Old Ironsides" which hasn't iron sides at all, but is so-called because she was never conquered in battle; the other, Admiral Byrd's ship, "The Bear of Oakland," very much weather beaten by her trips to the South Polar regions but anticipating another cruise to that land of ice.

The speech of the New Englander is fascinating and we finally discovered it is caused by omitting and adding the letter "r"; for example, the word "dear" drops the r and is pronounced "dea" and the word "idea" adds the r becoming "idear."

At Cambridge, the men of our party went thru that famous old seat of learning, Harvard University, that is, they went in one way and out another, while we women sat in our cars, as women are not permitted to enter Harvard.

Niagara in All Her Glory

Crossing the Berkshire mountains by the scenic Mohawk Trail we came to Central New York, where great cherry orchards, bending beneath their weight of luscious, ripe, red fruit, made a tempting and gorgeous display; followed by acres and acres of vineyard with grape juice for sale by the gallon along the roadside. Thus we arrived at Niagara Falls, the haven of hundreds of honeymooners, especially in this month of June. It truly is a romance-provoking place, particularly at night when from the Canadian side one views the grandeur of the falls with flood lights of rainbow colors thrown upon them. Some people are disappointed in the falls, but to me they portray the power and handiwork of God as no other one, individual element of Nature has ever done.

Hand in hand industry and history march on side by side down into Ohio. The great coal mining district with its sister industry of clay mining which fosters the great pottery works giving us our "oven tested" bowls and non-checking china are some of the largest in the world.

We Answer Landon Inquirers

At Marietta in the fertile Muskingum River valley we found one of the largest collections of antiques anywhere displayed, in the museum which has been built surrounding the old home of General Rufus Putnam; this is part of the original "Block House", the picket inclosed first settlement of white men that far West. Here also we visited the boyhood home of our own Alfred M. Landon.

All thru the East we were frequently questioned about our Kansas governor, even the "Cops" stopped us along the way, making us think we had run a red light or broken some other traffic rule, only to inquire about Landon and wish him luck—when they saw our Kansas auto tag. Also officials of great concerns proved themselves his staunch allies.

Thus we returned after five weeks in the East to the Jayhawker state, proud we live in the geographical center of these great United States, where there are broad fields of waving grain, where our roads are straight with the section lines and are called "highways" and not "pikes," and our small streams are "creeks" instead of "runs"; and having a firm conviction that this time "Realization is greater than anticipation," altho we were just in time to cook for threshers.

(I find the home page of Kansas Farmer, as well as others, very interesting.—Fern White, R. 2, Lincoln.

PLAY SAFE! WORM NOW With DR. SALSBUARY'S Worm Caps

● Don't run the risk of reduced egg production next winter! Play safe! Worm your flock now with Dr. Salsbury's Worm Caps—a line of caps that really gets the worms! Their effective, worm-removing drugs assure best results: Nicotine for round worms; Kamala for tapes.

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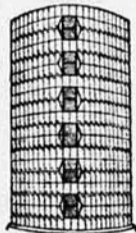
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But Not too Many Visits, Doctor

CHARLES H. LERRIGO, M. D.

WE ARE poor folks. We believe in having the doctor look after us when illness comes but not too many visits. I call doctor on the phone and he tells me all kinds of things to do and asks me about temperature. And what then?"

A good clinical thermometer costs \$1. Any person able to read this letter can read a thermometer. There is no mystery about it. Any nurse or doctor can teach you in 5 minutes. When you suspect illness, take the patient's temperature. It is helpful information for your telephone call to the doctor.



Dr. Lerrigo

If there is no fever, no vomiting or diarrhoea and no unusual pain you can wait and watch for a time. Do not bother about the pulse. It means very little to an untrained observer.

The mere act of lying down is helpful to a sick person. See that sheets and pillow case are clean and fresh. Choose the quietest room in the house, preferably one handy to toilet. It is nice to have a sunny room, but do not permit the glare to shine into the patient's eyes. If the patient is likely to have a long spell of illness and you are cook as well as nurse, try to arrange a suitable room down stairs.

Often your doctor will telephone to give the sick person an enema, or he may say "rectal injection." Both mean the same. For \$1.50 or \$2 you can buy at any drug store a 2 quart "combination hot water bag and fountain syringe." You should own one and keep it in good condition. For a child, 1 pint of plain or soapy water is enough for an injection. An adult needs 2 or 3 pints. Before using be sure to oil the hard rubber tube that forms the nozzle. Then it goes into the rectum easily. Never use force; change position until you find easy passage. To guard against water being too hot or too cold allow some to run out of the nozzle as a test before seeking to insert it. Have the patient lie on left side with knees drawn up. Do not hold the bag containing fluid more than 2 or 3 feet above the patient, for it is desirable to have water enter slowly, thus favoring retention. The enema has better effect if the patient can retain it from 10 to 30 minutes.

If you have a patient who must be bathed while in bed, better get a nurse to show you just how to do it. Never give a bath when patient is very tired. Do not let the patient become chilled. Do not get the bed wet. All this is important and a few minutes' instruction from one who knows will help tremendously.

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.

Not a Dangerous Remedy

If a patient has been very ill with diabetes, and also has tuberculosis, would it be safe to give the Insulin treatment?—H. G. A.

I think the opportunity would be too good to miss. Such a combination of disease is very serious, but I know of at least one case in which the use of Insulin arrested the tuberculosis and reduced the diabetes to a stage where it is under control. The patient gained in weight from 108 to 164 pounds. I do not consider Insulin a dangerous remedy, but it must be used by a competent doctor.

Ask Your Doctor

I am a girl 16 years old and I have some periodic trouble that keeps me from being strong. Should I go to a doctor for an examination? How is an examination of this kind held? In my home or at the doctor's office?—Mae.

Doctors can be consulted freely in such cases, and you need have no hesitation in the matter. It is just as well for you to go to his office, but in such a case the doctor prefers that your

mother or some other mature person, preferably a woman, accompanies you. It is part of a doctor's business to explain such matters to people, and there need be no embarrassment on your part.

Depends on the Kind

I have several small scars on my face which followed sores that came several months ago. How can I remove them?—J. R. B.

If the scars go thru the true skin, they are permanent. They can be removed only by a surgical operation which may involve skin grafting. Scars that are superficial will gradually improve without any help but cleanliness.

Boils Are Contagious

What causes boils? My boy 19 years old has had them for 2 or 3 years in the fall. Is it a skin disease or in the blood?—J. S.

Boils are from skin infection but most doctors think the resistance of the blood also is a great factor. It must be remembered that boils are contagious. A boil in one part of the skin may spread its infection to other parts that are in contact. This shows

Can't Board Hens 6 Months Free

MRS. HENRY FARNSWORTH

A DOLLAR saved is a dollar earned." Important for us to remember in these years of drouth when feed is high in price and little grain is raised on the farms. It makes one think more seriously perhaps about culling the flock severely so that all feeds used may be given to hens that will use it for production and not merely for maintaining their bodies. August is an important month to begin culling from the standpoint of present production. Of course, every month we should watch for the hen that is not up to our standard.



Mrs. Farnsworth

How About Contest Winners?

If hens are starting to molt that are on a good diet and they do not give indications of being good layers we certainly should not board them for 6 months in order to get a few eggs next year. Hens that make a yearly record of 200 eggs and up in our national egg laying contests do not molt early. They produce virtually every month in the year. It has been customary for many poultry authorities to say that it takes a hen 60 to 90 days to complete the molt and get back into production. However, so much depends on the egg breeding and laying ability of the hen. Many hens that start to molt in late summer take plenty of time to slowly drop their feathers and rest; in fact, many of them do not lay another egg until the days begin to lengthen. At this time when we start culling we can tell these hens that are slackening in production by observing the yellow pigment coming back into their beaks and shanks, and they probably are dropping a few feathers.

In sharp contrast is the busy hen, with her white shanks, skin and beak that continues to lay thru the summer days and on into the fall. Then one frosty morning on going into the poultry house we find madam hen shivering in a corner with half her feathers gone. In a few weeks, before she gets her full new coat, she again is starting to lay.

There's a lot of difference in the income from a flock of hens that takes 4 or 5 months to molt and those that take 6 to 8 weeks. We might as well get busy culling now for "a dollar saved in feed is a dollar earned." There's no use making the hard worker support the 6 months' loafer.

At this season of year it isn't necessary always to catch every hen in the

the value of antiseptic dressings. A patient who had boils as soon as cold weather came found the cause in an infected winter cap. A diet including green vegetables and fresh fruit helps. Perhaps your boy should take a vitamin compound.

Many Older Than You

I am 42 years old and never have been married. If I should marry now could I have children? There is no sign yet of the change of life. I always thought a woman could have children until the change was past, but some tell me now that a woman does not have children after 40, even if she has not had the change.—D. A. R.

You pay too much attention to what "some tell you." I have personally attended at childbirth many women older than you. Women of 45 and 46 frequently bear children. Some older ages are on record.

See Ear Specialist Soon

What causes roaring in the ears? I am 18 years old and have much trouble of this kind, left ear worse than right.—S. G. K.

In a young person of your age the trouble is most likely due to onset of middle-ear catarrh. This often leads to incurable deafness, hence it is of the greatest importance that you have the attention of an ear specialist without delay. The roaring in itself is just an annoying symptom, but the condition that follows it may make or mar your whole career.

flock. One usually can "spot" those hens that are not laying well by the color of their beak, shanks and skin. A catching hook will easily get the hen away from the flock for further examination. However, if the entire flock is to be handled build a catching crate by all means. Hens in production at this time of year should not be chased about and frightened. Work with them easily and quickly or we may throw many into a molt. The best kind of catching crate we have used was made of poultry netting nailed to four corner posts and onto a frame, and covered over the top with light lumber so the fowls could not see out the top. A door was in the top to allow taking the hens out for looking them over. A small door in the end fitted up against the small exit door in the poultry house. The size was about 2 feet wide, 2½ feet high and 4 feet long.

The hens should be looked over to see whether they are showing much yellow pigment in shanks, beak and vent. Note whether the vent and abdomen are shrunk in size and feel hard and dry to the touch. Feel to see whether the pin or pelvic bones are close together.

The comb of the non-layer becomes dried looking, a whitish powder forming on it, the eye is dull looking. In sharp contrast is the hen that is laying well—bright red comb full of blood and waxy, eyes alert, face full, faded shanks and beak, vent and abdomen large, soft and moist, pin bones wide apart and pliable. For a complete culling guide we may write our College of Agriculture, Manhattan, Kan. You may be sure culling will pay you.

His Handy Hen House

A convenient poultry house is used by Mr. and Mrs. Walter Kruckenberg, Great Bend. It is a straw-loft type. The only change from recommended plans made by Mr. Kruckenberg was to put the feed bins between the two compartments of the 20 by 40 foot house. From each side of the door in the feed bins, Mr. Kruckenberg ran a low grain-tight partition to the back side, bringing the two partitions almost together at the far end. These partitions make a smaller bin at each side of either main bin. More different kinds of feed may be kept separate and the person feeding can walk between the bins.

A pump was sunk to shallow water in front of the house, and makes watering handy. Mr. Kruckenberg said these things are mighty fine, especially on bad days. Over the waterers are 4-sided rollers made of slats. These keep the hens from sitting on them, and the floor beneath is kept perfectly dry.

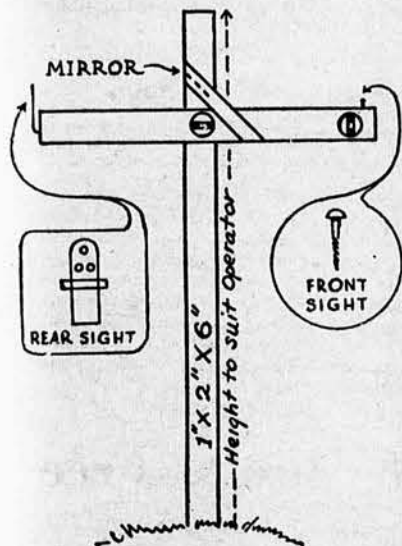
Ideas That May Come in Handy

BY FARM FOLKS

Mules Can't Get Out

Mules are wise animals and are difficult to keep in a field where the gate is not securely latched. I find that by having two latches, I can easily keep the gate shut. For when the mule leaves one latch to lift the other, the first one falls down and locks the gate. A person has two hands and can lift both latches at once. I have found this idea very useful.—S. N.

A Home-Made Level



A home-made level that is useful in laying out guide lines for contour furrows has been developed by the Extension Division of Kansas State College. Costing only \$1 or \$2, depending on the price of the ordinary carpenter's level, it makes determining of proper contour a simple matter.

After the first point at which the contouring is to begin is marked, the operator places the level at this spot, while the helper who is to make the marks, or guide, moves ahead to a spot about at the same level. The operator lines up the sights—the rear one made of a hinge and the front one is a screw—with his helper, and by glancing at the mirror over the spirit

glass can tell whether the instrument is level. By motioning the person ahead up or down the slope until the spirit-glass bubble is level, the proper point for the marker can be quickly located.

The instrument will come in handy for several farm operations in which it is necessary to determine several points level with one another. Its use in terracing is discouraged by its inventors, as it is not considered sufficiently accurate for this type of work. Sights should be limited to 100 feet.—John A. Bird, Manhattan

Play Pen of Crib

Baby's crib can easily be converted into a play pen for day-time use. We bought a piece of wallboard the right size to fit in the bottom of the crib, and covered it with oilcloth, pasting it down with wallpaper paste. This new "floor" is easily kept clean and is removed at night to make the baby's bed.—Mrs. Fred Schugart, Rush Co.

Handy for a Lantern

A safe and handy device for hanging a lantern in the barn is made by fastening a wire under the joists in the driveway. Then attach a strap with a ring on the wire end and a snap on which to hook the lantern. This then can be moved or slid along the wire to any part of the barn.—G. E. Adams.

Use Fence-Post Signs

If bothered with hunters shooting up your notices, try this: Dress down one side of a fence post and paint your notices on post set in ground and nail to fence. Touch the lettering up every year with red paint and the job is done.—M. N.

Hot Dose for Moles

When moles begin to bother, open a small hole in the run now and then, and put about 1/4 teaspoon of lye in the hole, adding a few drops of water to the lye and close hole over with a board.—M. T. M.

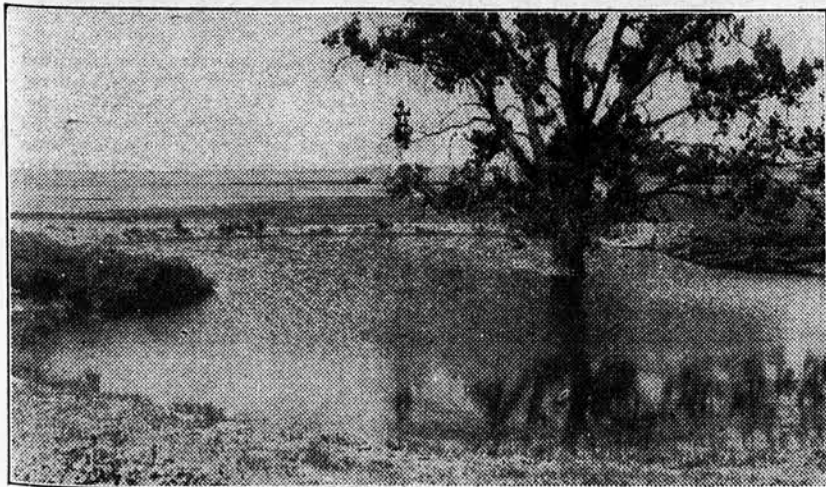
A Community Dream Comes True

WHEN a community improvement project was started in Kansas in 1934, the Sunnyside Farm Bureau Unit, of Coldwater, was one of the very first to start planning. Their plan which won fourth in the state in 1934, is so organized that every member has a definite place to fill in the project which includes all phases of rural life. Improvement of the two district schools, community recreation thru "Community Sings," and May Day Frolic, also magazine and book exchanges are only a few of the activities.

For several years the community has planned for a Community House to use as a center of its many activities. That dream now is taking form

with the help of the local 4-H club and one-hundred per cent co-operation of the men. A. L. Beeley, Coldwater, is donating a real beauty spot near his farm pond for the site. Part of the money for material already has been raised by the women's unit cookbook edited by all members. Community subscriptions and ice cream suppers also are financial means to the end. Labor for construction is all donated by the men of the community.

The house, which is to be ready for use in early August, will then be the center of the many activities now held in the much-too-small school houses. Thru this project this rural Kansas group is reaching a more interesting and useful home and community life.



Site of the Sunnyside community headquarters is near this pond, on land donated by A. L. Beeley, Coldwater. This and another pond will be joined by raising the dams. Several acres of young trees on nearly every side soon will make this an ideal vacation and meeting spot.



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HENRY HATCH
Jayhawker Farm, Gridley, Kansas

THERE is no need of recounting dry years of the past and comparing conditions of the present with whatever there may have been. Our job must deal with what is ahead of us, to be ready to make the right shifts at the right time. For instance, should fall rains break up this drouth in time, we can yet greatly relieve our short feed situation with fall-sown crops especially for pasture. Experience indicates for this there is nothing better than oats. And this fall the cost of the seed will be less if oats is used, for 2½ bushels cost about the same as a bushel of wheat and will make quicker, better and more abundant pasture until the heavy freezes of winter come. If good growing conditions come soon enough, we can cut off a lot from our feeding by seeding a good acreage to oats just to use for pasture. This is one of our plans that may help to keep down our feeding costs, if the weather will permit it to be carried out.

It Would Be a Revelation

On the day when the thermometer registered 120 at many points, I rode, after 3:30 p. m., from Wichita home, driving thru the far-famed cattle counties of Butler and Greenwood. While dry, there still is grass in the well-kept pastures, grass that has become cured. It would be a revelation to a man from the tame pasture section of our nation to see how well the cattle are doing on this dried native grass. When tame grass dries there is nothing left to it. But when our native bluestem dries and properly cures on the ground there seems to be retained in it the richness of all that was yet to come had the growth been normal. While dry and hot, fat cattle stood on the hillsops of the finer pastures of Butler and Greenwood counties, undisturbed by the flies because the heat already had put them away. Until eaten very short, cattle will continue to do well on our cured bluestem.

Ready for the Silo

Altho gone only 2 days from the farm, I was surprised at the effect on the corn, already just breaking the wrong way from the critical point the morning I left. It made the 20 acres planted on alfalfa sod ready for the silo. July is a hot month to make silage, but this corn bending earthward made it necessary that the job be started or soon the binder could gather little of it. We shall use plenty of water, piping it with an engine pump to the top of the silo, there turning it into the silage stream as it enters the "gooseneck." Where one can do it this way, it is better than to turn it into the fan below, as more water can be used with no danger of clogging the blower pipe. Fodder is drying so quickly there is going to be the need of using more water than usual to make silage, and it probably will be a good plan to keep the top well wet down daily for some time after filling to prevent a rapid dry-out. All this is in the event there is no quick shift to opposite weather conditions.

More Ponds Are Needed

Emergency wells brought into existence in 1934, are being revived and are popular places—they have engine pumps. It is one of the best community projects ever undertaken, and if we are to be harassed with many returns of abnormal drouths, it is a relief project that well might be enlarged. In this locality, too, a few community ponds were completed. Where good wells capable of supplying a lot of water from day to day cannot be had, the large pond is the right idea, and most of our present relief labor might well be turned to the public-benefiting task of building ponds for use in future emergencies. Stock drinks an abnormal amount of water when the thermometer registers around 100 and all feed eaten is dried to a crispness. The water need is greatest when there is the least supply. There is no better way to prepare a community for an assured future water supply than by building in that community a very

large pond, one so large no individual would feel he could afford to build it for his own farm use.

A Well-Soaked Cornfield

Some irrigation again has been done by pumping water from the Neosho river, which courses this county from northwest to southeast. While most of it is used for watering "truck," one farmer has used a 6-inch stream with telling effect on his cornfield. He must lift this water thru a 6-inch pipe to the top of a 30-foot bank, from which his field conveniently slopes gently away from the river. He runs this stream down the middle of six corn rows at a time, and the way that corn responds to that soil-soaking drink is almost marvelous to behold. The good corn this water is going to produce for this farmer will be in demand by the rest of us for seed.

Our Best Tomato Crop

A most successful watering experiment this year has produced wonderful crops of cabbage and tomatoes for us. We have been enjoying the best tomatoes we ever have grown, despite drouth and burning heat. Old gunny sacks, ripped open and sewed together, supported by binder twine strung tightly from stage to stake have provided the shade necessary to nicely ripen the fruit without scalding. And an occasional run of water beneath this shade apparently has created a tomato heaven. Potted plants were set rather early in the season, and around each plant, after setting, a 2-pound can filled with triple acid phosphate was worked into the soil. A row of cabbage plants was set alongside the tomato row, close enough to absorb about the right amount of moisture from the one run of water made at about weekly intervals. So there are ways of keeping the effects of drouth from our door.

Tips to Inventors

What would you, as a farmer, like to have invented to add to these two suggestions recently sent us by a reader? Here is what he wants:

A cheap but tough paper stack cover. A combine that will catch the weed seed instead of scattering them back on the land.

Must Eat on the Run

Prairie dogs apparently do a poor job of chewing their food. Stomachs of 544 prairie dogs studied by the U. S. Bureau of Biological Survey contained whole flowers, fruits, pods, seeds and insects, along with many unmastered parts of plants. But what worries western cattle and sheep raisers is the amount of vegetation these rodents eat

Trench Silos Will Save Feed

DROUTH conditions may justify the use of a large number of emergency silos this summer. Altho there are several types that have given good results, the trench silo is considered one of the most practical for emergency use in saving damaged crops. Trench silos especially are adapted for use on rented farms where neither the tenant nor the owner feels justified in erecting a tower silo. The trench silo also may be completed on short notice and with ordinary farm labor and equipment.

A trench 8 feet deep, 50 feet long and averaging 10 feet wide will hold about 100 tons of silage. It can be dug by 3 men, using 6 horses on wheel or slip scrapers and a plow, in about 5 days. Ordinarily, no cash outlay for material is necessary and the labor cost should not exceed 75 cents for each ton of capacity.

A trench silo should be located on well-drained ground. By digging back into a hillside and providing a little slope to the bottom, good drainage can

be obtained. Such a location also is best for removing both the dirt when digging and the silage for feeding. The sides are smoothed and tapered, the angle depending on the soil's resistance to caving. Ordinarily, a silo 8 feet wide at the bottom and 8 feet deep should be about 12 feet wide at the top.

Such silos can be filled cheaply as a blower is not required. Tramping of the silage may be done with horses. If a silage cutter cannot be obtained, whole bundles of corn may be ensiled in a trench silo. Close packing, heavy tramping, somewhat greener corn, laying the bundles crosswise, and tight sealing are especially important in making silage of bundle corn.

The most inexpensive and practical seal for a trench silo consists, generally, of about 1 foot of wet straw overlaid with a few inches of dirt. As the silage settles much after filling, the trench should be heaped high with silage—2 to 3 feet above the ground level before the straw and dirt are put on. Thoro packing helps to keep air out.

Hoppers Pass Up Sorghums?

"I have seen grasshoppers eat corn, jump to hedge and strip the leaves, then attack a peach orchard, take the leaves there, then attack the fruit and leave nothing on the peach tree except stripped branches and peach stones," asserts F. L. Wigle, whose ter-

Alfalfa Thru the Wringer

With new methods of putting up hay constantly being devised and tried, it is interesting to hear from Colorado where they find that running freshly mown alfalfa between rollers, just enough to mash the stems, hastens curing. Also that the cured leaves do not drop off as easily in slowly cured hay as in quickly cured hay. That may be another good reason why the side delivery rake and windrow curing are so popular.

ritory for a farm equipment manufacturing company is Missouri and Kansas, "but at the same time, nearby in adjoining fields, the sorghum crop was untouched."

Mr. Wigle wonders whether those suffering from hopper troubles this year have noticed the work of the hoppers on sorghum crops. If they will not eat sorghum, it is reasonable to assume they will not bother Sudan grass.

Saving 6 More Inches of Rain

RECENT experience with drouth has called our attention to sod crops or pasture farming as a means of escaping these disasters. Soil moisture studies during these years show that under grass farming the soil moisture supply was higher during the drouth and recovery in that supply was more rapid and greater with the return of rains. Grass crops are effective in this way because they increase the water supply that goes into the soil with every rain.

In recent erosion experiments grass land took up about 6 inches more of the annual rainfall than did land growing corn regularly. Thus, the grass crop is a more certain crop in drouth by 6 inches of rain than is corn. Likewise the sod crop builds up in the deeper soil layer a moisture reserve that is not generally appreciated. This moisture reserve in the deeper soil layers, passed to the corn crop during the summer of the following year, may be a partial reason for so much better corn following sod pasture.

and their burrowing in grazing lands. Forage crops and plants made up three-fourths of the food eaten by the 544 prairie dogs of the white-tailed, black-tailed and Gunnison varieties. Ninety-seven per cent of their food was vegetation and the remainder mainly cutworms and grasshoppers.

Wheat grasses and goosefoot plants were favorite foods. The prairie dogs also ate large quantities of salt sage and Russian thistle. Nightshades and loco weeds, both poisonous to cattle, were on their diet.

Mr. Wigle believes that the greater use of sorghum crops is much worth our while, even when the hoppers do not threaten. This observation is borne out over many parts of Missouri, but except in a few sections sorghum or fodder cane has not come to be considered a crop as it is considered in Kansas.

There still is time to grow sorgho for hay if rain arrives by August 1. At that time, if the hoppers are still here and their appetites haven't changed in the meantime, this will be a crop safe from their ravages.

Erosion Harms Town, Too

There is considerable alarm around Jewell City about the city reservoir which is silting in until its capacity is threatened. The queerest thing about the situation is that every time a big rain falls the shortage becomes more acute. This is because during May and June of last year, for instance, 3 tons of soil for each acre in the drainage area was deposited in the reservoirs. The U. S. Geological Survey found that for every 12.1 tons of soil washed into the reservoirs from an acre of drainage area, only 8.4 tons were being removed at the spillway.

Residents of Jewell now are trying to interest farmers in the Buffalo creek watershed in terracing and farming on the contour. They feel this is the only way to protect their water supply. As erosion on farm lands progresses it becomes more severe due to the removal of humus which retards erosion in the early years of cultivation.

Hoppers Meet Poison, Fire

Wheat growers who make a practice of burning their straw-stacks still don't have much of an alibi from a soil fertility conservation standpoint. But many this year who harvested with a combine found one good excuse—that millions of hoppers went up in smoke with the straw and stubble and fertility it contained. Several farmers report to us that this has helped stem the flood of the pests that were rapidly moving toward the corn.

We'll Feed Grass Better

Fertilization of pasture lands was forecast by John B. Abbott, pasture specialist, at a meeting of the National Fertilizer Association this summer.

"Will plant foods reclaim exhausted pasture lands?" he asked. "Yes and with surprising speed. Will it pay? Yes. I know of no other crop that when fertilized is attended with so great a certainty of immediate profit as pasture in feed-deficient regions. Furthermore, there is no type of farming which so well conserves the soil and offers the stability, security and permanence that goes along with properly managed grassland and good livestock on a fertile soil."

More fertilizer is going to be used on pasture in Kansas and present interest in better pastures will speed this forward step in grass production.

Wooden Horses Her Hobby

The outstanding pastime of carving little wooden horses belongs to a Kansas farm girl, Dorothy Hittle, Leavenworth. She is 23 years old and has developed her talent for carving until the horses she turns out are particularly lifelike. Miss Hittle sells these.

Double and Triple Wheat Yields

(Continued from Page 3)

trated to 3 feet, or deeper, chances of failure dropped to 10 per cent, and the expectancy for 10 bushels at least went up to 84 per cent, with 20 and 30-bushel yields occurring often.

Summer fallow must be kept in condition to absorb moisture. L. L. Compton, crops specialist of the state extension service, relates an observation made in Haskell county after heavy rains earlier this year. Two fields lay side by side. One was covered with a heavy growth of pigweed and Russian thistles. The soil in this field was moist to a depth of only slightly more than a foot. In the other field, which had been kept free of weeds and as open and cloddy as possible, moisture had gone down more than 3 feet. These Western Kansas soils will hold moisture for long periods if weeds don't take it away from them.

James Winkleman, Bloom, harvested 18-bushel wheat from his summer-fallow land this year, while his wheat after wheat made only 5 acres. Harold McCune, Ford county, fallowed part of his land according to recommendations, which call for working the soil after light rains and keeping it cloddy. The fallow-land wheat was estimated at harvest to make 25 bushels to the acre, while his wheat after wheat reached only 4 bushels.

One of the surest signs of dust storms is use of the one-way disc in dry soil. The one-way can be used successfully for fallowing if it is not operated when the ground is dry. It will turn the soil over in rough condition if used after rains. Better implements are the field cultivator or duckfoot and the rod weeder. Farmers can afford to use the best equipment for fallowing. Trostle Brothers, Johnson, are two farmers who have well demonstrated this fact. They use rod weeders and duckfoots, two wheel tractors and two track-layers. They get out and work the soil whenever it is in condition and it pays dividends. This year their crop of 800 acres averaged about 10 bushels.

Summer fallowing is getting to be more popular as a crop insurance plan for farmers to use on part of their wheat acreage in Stafford county. G. D. Hammond's Tenmarq wheat on fallow soil averaged close to 30 bushels this year. This soil had 3 feet of moisture at seeding, while much of the wheat-after-wheat land was wet down only a foot or so.

A story is related by C. R. Wheaton, Lewis. Three fields were seeded side by side last fall. All conditions of date, variety and method were the same. George Sidwell, Edwards county agent, determined the moisture depth at seeding. One field was dry, another had a trace of moisture and the third was wet down 4 feet. This was the summer-fallow land. The first two fields were scarcely worth harvesting while the other was freely estimated at 20 to 30 bushels just before harvest.

Where soil is covered by stubble many farmers will not wish to disturb it until next spring. This is getting to be an accepted manner of beginning fallow, particularly when weather has been as dry as this summer and weeds haven't grown. Next spring the stubble can be listed on the contour to hold all the rainfall, then worked down by summer and handled with proper fallowing tools until seeding time.

It seems desirable to limit wheat acreage in years when wheat must be planted in dry soil, even in Central Kansas. Seeding usually can be delayed well into October without materially decreasing yields, and except where acreages are very large, it is better to wait for rain than to plant "in hopes" of rain. One thing certain, more wheat usually will be produced by one crop planted on fallow than

Coming Soon

Watch early issues of *Kansas Farmer* for a complete story of how Kansas farmers are handling their fields to conserve every possible bit of moisture in their soil. Our moisture conservation plan is based on the actual practices of Kansas' most progressive farmers.

would have been produced by the crop seeded in dry soil and the crop the following year. The cost is considerable less on this one crop, too—enough to take care of fallowing costs and the expense of waiting an extra year for the income.

Plans for Basin Lister

Word has been received from L. C. Aicher, director of the Fort Hays Experiment Station, Hays, that they are now in a position to supply complete sets of blue prints for "dam" or basin listers if farmers wish to make their own attachments for either style of lister. The complete set is available for 50 cents. This charge covers cost of mailing and the cost of making the blue prints.

Results With Poison Bran

Two men in Doniphan county who have been successfully using poison bran mash in controlling grasshoppers are Dr. A. E. Cordonier, Troy, and E. E. Shields, Wathena. Dr. Cordonier said he has been able to hold the hoppers in check in the portion of the orchard that has been treated with mash.

He mowed the alfalfa in every other middle in his orchard, expecting to spread the poison in the portion that had been mowed. He found, however, that the hoppers remained in the alfalfa that had not been mowed and when the poison was scattered in these strips satisfactory results were obtained. Mr. Shields has been on the job in controlling hoppers in the vicinity of his grape vineyard. He has started to spread poison as early as 2 o'clock in the morning in order to have it on the ground by daylight.

Enough Self-Feeder Space

In figuring the size of self-feeders for hogs, it is likely that a two-way feeder 8 feet long will provide ample space for 100 head, both corn and supplement being placed in the same feeder. If two separate feeders are used, these should include a 6-foot feeder for corn and a 3-foot feeder for supplement.—L. A. Weaver.

Highlights of the Drouth

Kansas has its best year since 1931, reports J. C. Mohler, secretary of the state board of agriculture. Income already has exceeded every year since 1931.

Grasshoppers, cutworms, drouth, heat and high winds have damaged grains, pasture and forage crops in Prairie Provinces of Alberta, Saskatchewan and Manitoba, in Canada; and is moving into the eastern provinces of Ontario and Quebec.

Iowa reports the bulk of new seedings of Red clover, Sweet clover and alfalfa in the Western counties has been killed by dry weather and grasshoppers.

Your Chances of Raising a Wheat Crop

Depth of moisture at seeding time	Chances Out of 100 of Obtaining Specified Yields				
	Failure	5 to 10 bushels	10 to 20 bushels	20 to 30 bushels	30 or more
Soil dry	71 chances	11 chances	18 chances	0 chance	0 chance
Wet 1 ft.	34 chances	23 chances	24 chances	19 chances	0 chance
Wet 2 ft.	15 chances	23 chances	33 chances	20 chances	9 chances
Wet 3 ft.	10 chances	6 chances	14 chances	47 chances	23 chances

This chart will show your chances of obtaining a wheat crop after you know the depth of moisture in your soil. The figures were determined by the Division of Dry Land Agriculture, at Hays, Colby and Garden City stations.

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Last year Zenith first introduced the Farm Radio with Frepower from the air... for unwired homes. Today homes without power lines all over America are enjoying their Zenith Radios... many of these sets have been in use for over a year. Their owners now all about Zenith performance.

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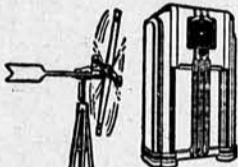
has proven itself. Folks right in your section can tell you the facts right out of their own Zenith experience.

As a result of Zenith's unparalleled success in this field, numerous imitations are on the market... claiming of course to be "just as good."

Today they offer you "experiments"... Zenith offers you "experience"... the experience of your own neighbors—your friends.

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The above simple guarantee has appeared in Zenith national advertisements for over two years—and to date Zenith has not been called upon to return a single penny.



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Get city performance with the Zenith Farm Radio... and never forget—you can run your Zenith Farm Radio day and night, year in and year out, without sending the battery out for recharging. 50c a year is a high estimate of power operating cost.

Make sure of the genuine... look for and insist upon the name Zenith on the radio set you buy... they don't cost more but they do give you more for your money.

SEE THE ZENITH DEALER IN YOUR LOCALITY... or... mail the coupon below for prices, information and dealer's name

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ZENITH RADIO CORPORATION, Chicago, Ill. for 21 years makers of fine radios

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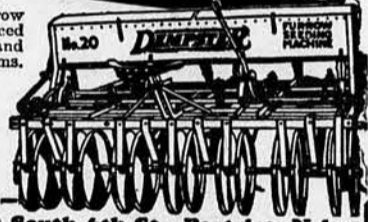
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Sow wheat to withstand winter-kill, soil-blowing and drought! Plant seeds the safe, correct way—down next to the firm and moist soil. Do it with the remarkable

DEMPSTER LISTER TYPE No. 20 FURROW SEEDING MACHINE

This dependable machine is a genuine deep furrow drill. It is equipped with 9-in. lister-type shoes, spaced 14-inches apart, which open up a deep furrow and scatter the seeds uniform over the flat furrow bottoms. It can also be used to prepare seed beds or when equipped with 16-in. duck foot sweep, makes a very satisfactory summer fallow tool. It can be equipped with 9-in. standard lister bottoms for seeding a row crop 28 inches apart, or a side row crop attachment may be had to seed a row of row crop the width of the drill in summer fallow land. Don't overlook its many uses.



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Please send me further information on the Dempster Furrow Seeding machine as checked below:

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HELP US END IT!

\$100.00 for a Rhyming Line!

We want your help on this big political problem so we will pay you \$100.00 for an outstanding rhyming line to finish the verse given below. The last word in your line should rhyme with "meet" or "compete." Some of the rhyming words that may be used are "eat," "greet," "feet," "seat," "beat," "defeat," etc.



A donkey and elephant meet
Like the tortoise and hare, they'll compete
But if Jumbo's too slow
And the donkey won't go



A total of \$150.00 will be given for the 18 best lines we receive. \$100.00 will be given for the outstanding line. \$25.00 will be awarded for Second Prize. Third Prize will be \$10.00 and in addition there will be 15 more prizes of \$1.00 each. Full duplicate prizes will be given in the event of ties. All entries must be mailed before Election Day—Nov. 3, 1936. Regardless of how the election goes, the cleverest last lines will be the winners. It costs nothing to send a line.
Be sure to mail your last line within the next 5 days as we are going to give an extra \$50.00 in cash to the winner of First Prize just for promptness.

ELECTION LIMERICK
8 Capper Bldg., Topeka, Kansas

Start This Interesting Story Now . . .

Taming Fierce Elton

WELL—what?" Elton demanded, reserving judgment till he found out what Dorothy really meant. Something about his expression put her in the position of a culprit.

"I should think a man with your strength would learn to use it decently," she said hotly.

"I should think a woman that looks like a lady would act like one," he replied, slightly imitating her.

Elton was coming into his own again. This fine, exquisite girl had made him feel cloddish and common. She was assuming too much. She was meddling. She was trying to tell him what was "what."

If she had reproved him with the finer forces of her femininity, he would have been silent in abject embarrassment. But her red-hot indignation seemed to him just a bad substitute for physical strength. "What do you mean?" she asked unwillingly.

"It's up to you to tell what you mean," he said, with the calm of complete self-possession. "I'm mindin' my own business. Yours is in that shack. It's a rule round here that every feller keeps so busy 'tendin' to his own affairs that he ain't got time to butt into anybody else's."

"If you want your chance like you say you do—want it like a man—suppose you take that way. I know how to treat men. I'd be mighty proud to know how to treat a lady, but I'll be hanged if I want to find out how to treat someone that ain't neither one."

Dorothy could only gaze silently at the big barbarian. Words were beyond her.

"If you'll just confine your attention to what you're here for, I'll keep on runnin' myself and this camp as per custom. Come on, chink!"

HE GRABBED the little Chinaman by the seat of his loose trousers and the neck of his torn shirt and started toward the cookhouse.

"Don't—don't you ever dare speak to me again!" Dorothy cried in silly impotence.

The cave man laughed. Her childish anger ministered to his pride, which had stood a good many blows from her. To have brought this girl, so much better equipped than himself with subtleties of speech and manner, to a place where she could do nothing but cry out in pointless anger was a triumph.

"Now, chink, get some breakfast," he ordered as he landed the cook in his proper place.

Elton swung off down the trail toward the camp of the men. It was his habit to see them start to work. The men greeted him with easy freedom, but no familiarity. They were evidently aware of his dominance and willing to acknowledge his right to it.

"Elton's luck," those who had never worked for him called his remarkable success. "Elton's pluck," these men named the force which had made him fight steadily and turn to use the very disasters he encountered.

So far, he had known life as a conqueror. There was a new flavor to his enjoyment of his own capacity when this last little victory in an absolutely new field came to him.

He stood on a rock projecting over the dam he had built. A glittering sheet of water spread out back of the restraining barrier. They were liquid riches he had gathered. Already his own mine and three others were operated by power he supplied.

He had put the electric lights in the town. He was planning telephone service for his mine and the others about in the mountains.

He had definite enterprises already well under way for the making of the town between the mountains into a little city where the large industries of the surrounding country should focus.

But his pride in his work and his intention to carry it to greater utility and perfection was suddenly disturbed. He watched the water drupe its sparkling torrent over the dam, and he thought new thoughts that had never occurred to his very busy mind before.

He thought about his manners. He thought about his uncouth language. Then he thought of Dorothy. She was the woman who associated with the kind of men whose business interests and his own were identical.

ALREADY he was in communication with Eastern capitalists. He had no fear of his ability to meet and cope with them in business, but his pride had waked in regard to other things.

They would listen to him and look at him with that same haughty curiosity that she had shown.

Suddenly he laughed and, turning, ran back down the trail. His recent victory tingled in him. He would secure the assistance of the lady doctor in training himself for polite society.

He would not let her know how she was serving him, but he would manage to be with her as much as possible. He had the faith that has proved itself in his ability to assimilate what he wished to acquire.

He passed the cookhouse and saw the cook toss an omelet with the skill and concentrated attention of an artist. He paused while the delicacy was being put on a plate. An idea came to him.

"I'll carry that to the doctor," he said.

The Chinaman saved the plate from his eager grasp. It was put on a battered tray where paper napkins were artfully arranged to cover the scars of rough usage.

Fourth Installment

By KATHARINE EGGLESTON
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Elton knew he had never intentionally passed a bill for paper napkins. If he had paid for them, it was under another name. But he was intent upon something more important at the moment than ferreting out the mystery of table luxuries.

He started toward Ferguson's shack, grinning at himself in the role of waiter and secretly hoping none of the men would see him. He remembered that he had had his orders not to speak to the lady doctor, and his grin stretched.

DOROTHY barely looked at him when he entered. She thanked him when he set the tray down.

Elton knew that she meant the brief words to dismiss him, but he was absorbed in writing on a little pocket-pad. He laid it before her.

"How is Ferguson?" she read.

Her face glowed; he was carrying out her order literally just to provoke her.

"He's very sick," she said shortly. "It's a fever case, where nursing counts more than medicine. I shall be grateful to you if you'll make it as easy as possible, as the strain on me will be severe."

"I'm yours to command," Elton said, instantly suppressing his boyish disposition to irritate her. "I'll put a man on duty to go to town whenever you need anything; an' if there's anything in the nursin' line that me or the men can do, you must just tell me."

"Has he any people?" Dorothy asked.

"None I know of," Elton answered, more fully realizing his engineer's condition. "We ain't got luxuries like that out here. But he's a stranger come here to work 'bout six months ago. We haven't chummed much."

Elton tried with whole-souled interest and quick resourcefulness to provide for everything she suggested. His manner was as kindly as that of a big brother.

He told her how important it was to his work that Ferguson should pull thru.

He made her see with what willingness and capacity he was ready to help. She kept getting side-lights upon the strength of his character and the keenness of his mind: she began to think she had misjudged him.

But, as he turned to go, she remembered his treatment of the cook.

"Mr. Elton!" she called.

He came back.

She found it hard to ask her question.

"What were you going to do to the cook?"

"I was goin' to carry him back where he belonged and make him explain why he's been stealin' from me."

"You weren't going to— to beat him?" she ventured.

"Not unless he's been beatin' me. I'll have to find out."

He walked off toward the cookhouse, leaving the lady doctor even more puzzled.

"Look here, chink, where did you get that fodder under the waterfall?" he questioned the cook.

"Mistee Fergee—" the cook began.

"Shut up about Ferguson. He's got nothing to do with it!" Elton warned, determined to keep the cook to the point at issue.

"Me run after man. He stealee my butter."

"What man?" Elton asked, watching the excited little man.

"Man spoilee my coat!" the Chinaman cried, twisting about to show the rents in his garment.

"What do you mean?" Elton scolded. "What are you talkin' about?"

"Man come see Mistee Fergee. He eatee my clackers. He fightee my shirt to makee holes!"

Elton wanted to shake something intelligible out of the cook; but he knew the uselessness of trying. Did he mean that he had been chasing the thief when his employer thought he was dodging the preparation of breakfast?

If he meant that the thief and the man who had visited Ferguson the day before were the same, then the stranger had hung about the camp all night. He must have hidden in the rocks near the waterfall to have known where a breakfast was procurable.

It was decidedly irritating to feel that someone beside the men in his employ was lurking about the camp. What was the motive of the secret visit and the watch?

The first was certainly in some way related to Ferguson. Was the man watching for a chance to get near to that trunk with its gold-bags?

Ferguson's having so much money was a mystery in itself; but since he had, and was entirely unable to guard it, Elton felt it his duty to see that no prowler should have a chance to relieve him of it.

He made up his mind not to leave the shack and the lady doctor unguarded for a moment during the day or night. This settled, his mind reverted to the way in which his cook had acquired the delicacies which never graced his plain table.

"Where did you get that food, chink?"

"Come in box," the Chinaman replied, pointing to a pine box on which his sack of flour stood.

"Who ordered it?"

The Chinaman pretended not to hear.

Elton seized the flour-sack and pulled it off the box. The name—George Ferguson—stared up at him.

Elton recalled that the cook had started to say something about Ferguson, but he had silenced him.

"The things were sent up for Mr. Ferguson?"

The cook nodded.

"Does he get a good many boxes?"

The Chinaman pointed to bundles of pine sticks piled neatly under the table.

"Makee my fire allee time."

Elton had the Westerner's big hospitality. It surprised him to find that his engineer had ordered the food and had never extended him an invitation to share it.

NOT that he over-estimated at all his standing with Ferguson any more than he credited himself with any fondness for the engineer's society, but it seemed shabby and close for Ferguson never to have made an effort to be agreeable with his cakes. Particularly as he had enlisted Elton's cook in the preparation and care of the delicacies.

Naturally, a man with a trunk-bottom covered with bags of gold could indulge in herrings to his heart's content; but it strengthened Elton's aversion to his engineer to find him secretive and close in so small a matter.

Another somewhat trivial circumstance added to the mine-owner's disgust. The pine box bore the name of Mike Callahan. Its contents had come from The Dump. Elton and Callahan had done everything but actually fight to show their dislike for each other.

Despite his rough rearing, Fierce Elton appreciated the constructive forces of law and order. He meant the town he was building to have the advantage of them. Sometimes he used rather extraordinary methods to enforce his ideas; but they were the kind that were easily understood by the men with whom he dealt.

For years Callahan had harbored the worst men and taken more than sympathetic interest in the blackest schemes that the country suffered. He did it for money; money was his god.

A coward, he could be brave if his pocket-book profited. Naturally when Fierce Elton, with his positive methods and the enormous influence of his wealth and meaning to the community, began to fight against Callahan, the men who wanted the town's best interests protected sided with him. There was in time a distinct line drawn between Elton's friends and the supporters of Callahan.

Men in Elton's employ knew enough to keep away from The Dump. Callahan did not like them; and Elton was perfectly clear in his explanations about the choice they could make between working for him and loafing at The Dump.

It angered him that the highest paid man in his force was on somewhat friendly terms with Callahan. He remembered, however, that he had never discussed The Dump keeper with Ferguson, and he knew that the engineer had little to do with the men in the camp, so it was possible that the feud between the Phoenix Mine and Callahan's Dump was unknown to him.

"Look here, Jake," he said when he found the foreman, "I want you to watch closer. Gettin' Ferguson well means more to me just now than anything. Yesteryday someone came up and went to the shack without you seein' him."

"Who said so?" Jake asked.

"The cook."

"That chink's crazy," Jake exclaimed.

"He ain't crazy enough to see men that ain't there. You watch hereafter. Where'd you find Ben when you took the horse back to town?" Elton asked.

"Callahan's," Jake replied, not without a slight

hesitancy which indicated his knowledge of the existing coldness between his employer and the proprietor of The Dump.

"Anybody ask who was sick up here?"

"Yep. Ben did."
"Well, mind your job. I'll go down an' see Spud."

Elton started off down the trail. Its steepness had necessitated the building of a rude garage just where it turned into the stage-road. Here the motor-truck was kept.

"You goin' to send down fur some-thing?" Jake called.

Elton nodded.

"Jes' tell Pete to go 'round by The Dump. Callahan wanted to send up a present to Ferguson, but I couldn't bring it a hossback."

Elton turned sharply on the trail.

"Know what it was?" he asked.

"Yep. One of them boxes of grub he's been sendin' frequent," Jake responded.

So they were presents! Callahan of The Dump was in the habit of sending delicacies to Ferguson. It was a strange state of affairs. What possible interest, what congeniality, could exist between a coarse-fibred, uncouth creature like Callahan and the engineer whose somewhat finicky ways had frequently irritated Elton? It was a question he could not answer.

Knowing Callahan's grasping nature, his over-weening love of money, it was difficult to believe that he sent his expensive goods to Ferguson without reward.

Elton recalled that the two men had seemed like strange s, altho Ferguson had been "trusted" at The Dump for the three days he stayed there before he entered the service of the Phoenix Company.

Could Callahan have known that Ferguson was really a rich man? Could he have suspected that he possessed bags of gold?

A Man's Got to Live!

Dorothy had no time to think of the extraordinary individual with whom coming to the Phoenix Camp had brought her in contact. Her whole energy was absorbed in caring for the sick man. He became steadily worse. And his delirium and his unexhausted strength gave her all she could manage.

"A man's got to live!" he kept crying in angry self-defence. "I've got a right to life and the good things! And I'll have them! I will! I will!"

Dorothy pressed her cool hands on his forehead. For a second he would yield to the comfort of them and sink back on his pillow, staring at her as if he tried to place her—to account for her beneficent presence.

But in a moment the wildness would repossess him, and it was only gradually that the calm and soothing tones of her voice, the positive control of her efficient hands and the indescribable influence of her will on his began to be apparent.

As time went on, Dorothy grew pale, and her eyes shone with a luster too

brilliant for beauty. But her whole being was gathering and fixing itself for a grapple with death. A stern calm came to her, husbanding her strength, exerting its effect on her patient.

Ferguson sank finally into the lethargy of exhaustion. Dorothy called Jake to watch and went out into the sunlit glory of the early evening. Already the bracing coolness of the coming night was fanning up the canons.

Suddenly she saw the gigantic spectacle of the sunset spread and lift before her. She had rounded a rock that loomed high against the orange splendor.

Nature seemed to say: "Have you lost that for which this is not restitution? Had you riches like these? Was there a picture in the galleries you regret to rival this? Across the grey-green miles of prairie, up the cool sides of these high mountains, my welcome comes to you. In the arm of my glory I take you tenderly."

That was Dorothy's rock of transfiguration. On it was born a love and understanding of the new country and its promise. There she built her hopes for the days that were to be. She turned back with courage and interest strong and new.

As she moved along the ledge she saw a man staring up at her.

"Excuse me, miss, but ain't you the doctor lady?"

She nodded down at him from her lofty perch.

"Is Ferguson goin' to croak?"

The Man Is Very Sick

"Not if I can help it!" Dorothy replied instantly; and the determination in her voice told what she had gained from her visit to the rock.

Ferguson stood for a moment; she meant to make the most of it.

"Say, miss; if I was to come and ast 'bout him, would it be all right?"

"Of course," Dorothy said cordially, glad that the sick man had a friend.

"Do you know his people—anyone who ought to know that he is a very sick man?" she asked.

"Yessum, I know someone that ought to know that. They ain't no relation to him though. They're jes' friends."

"Tell them he is very sick, but the doctor means to do all she can to pull him thru."

"Will you watch by him days—and nights both?" he asked with an eagerness that touched her as a sign of his concern for his friend.

"There will always be someone with him, you may be sure," she promised him. "I'll be with him in the daytime, and one of the men at night, probably."

The man slid away among the rocks, blending with them so quickly and so perfectly that she almost wondered if she really had seen him.

She stopped at her own shack. The bundle in the bunk attracted her attention. She opened it, discovering the oilcloth "splasher" with its hideous rose. She knew it was the parcel which had bobbed at the rear of Elton's saddle.

Save the Roughage

Where there are permanent upright or pit silos it is best to fill them first, with drouth corn if necessary. Later the regular silage crops, which may be sorghums or corn, can easily be stored in temporary or trench silos. Sorghums which are ensiled at frost time and fed out in early winter will show very little spoilage as silage in temporary silos made of netting and building paper. A roughage crop may be turned into cash by feeding to livestock this winter.

Her mood was kindly, and she blamed herself for thinking him less considerate than he evidently could be. He had certainly bought the odd ornament for her enjoyment.

With smiles about her lips she pinned it up behind the box on which a tin wash-basin and an earthen pitcher had been placed. She hoped he might see that she had accepted and was using it.

She bathed quickly, redressed her brown hair, and went back to her patient.

"How is he, Jake?" she asked, addressing the man by his name for the first time.

"Oh! he's—he's jes' so-so. Ye'd think he'd committed murder the way he's been begging someone not to tell on him, miss."

"Doctor, please," she corrected, smiling the edge from the reproof.

"He's been ravin' bad, Miss Doctor," Jake observed obediently.

"No, just doctor—not Miss Doctor, Jake."

"All right—but it seems kinder impertite."

In a less positive way he felt the same objection to stripping her of her feminine perquisites that Elton experienced. But it did not stir his antagonism to have her insist.

It was night when Jake made a round of the plateau obedient to Elton's instruction. Dorothy heard him and called. She asked him to watch by Ferguson while she snatched a little rest. Jake looked into her tired eyes and deserted his post of duty.

He had been sitting quietly in the shack for an hour when a figure suddenly appeared in the door.

"Elton here?" the man asked.

"Can't you see?" Jake replied roughly.

"I ain't looked, but I can!"
(To Be Continued)

Trench Silos Successful

WALTER J. DALY

Trench silos were successful last winter on the farms of Otto Bruce and Harold Holmes, Prescott. There was little spoilage, the silage was easy to feed, and there was no difficulty in filling. Both silos are made in the slope of hills so there is drainage at the lower end. Mr. Bruce used a tractor and scraper in constructing his silo. The trench was made 4 to 6 feet deep with boards on the sides to give more depth. When filled, the silage was about 8 feet deep. The loose silage was packed by running a tractor over it until solid. The silage after packing was covered over with wet straw and about 4 inches of dirt.

The silage was good clear to the ground on the sides and bottom. On the top there was just a little mold, but not enough to prevent the cattle from eating it. Holmes and Bruce both agree that the trench silo is the cheapest and best temporary silo. It can, of course, be used for several years.

Grain for Weaned Lambs

Helping the weaned lambs may prove quite profitable this year, in view of short pastures and the fact you may wish to grow them out. A lamb will not put on much fat in hot weather, but a good frame can be developed for fall feeding, or the lamb improved if to be retained as a breeder.

A grain mixture that has given excellent results is composed of 6 parts oats, 3 parts bran and 1 part linseed oilmeal. Feeding a half pound of this mixture to each lamb daily generally is sufficient to keep them growing and holding what weight they have put on up to hot weather.

SIMPLICITY



as you'll find it only in a John Deere Tractor

"That's a simple mechanism." This phrase has always meant the highest praise. You can well apply it to the John Deere Tractor. For the John Deere is a simple tractor : : : simple in its two-cylinder engine design : : : in its accessibility : : : in its straight-line transmission : : : in the way it is handled, started, cared for.

The result—A tractor that is truly economical to operate, that gives you years of trouble-free service, that you can maintain right on the farm. Hundreds of complicated parts have been made unnecessary. Parts are heavier, sturdier, better able to stand up under continuous hard work.

And, due to its two-cylinder engine design—the foundation of John Deere's simplicity—the John Deere Tractor successfully burns the money-saving fuels that cost less and are more powerful.

Among the eleven models of John Deere Tractors there is one time-tried and field-proved, to fit your needs and with a complete line of equipment. See your John Deere dealer. Use coupon for more information.

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TWO-CYLINDER
ECONOMY · SIMPLICITY · DEPENDABILITY
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Please send me complete literature on the tractors I have checked:

Model D Models AR, BR Models A and B
 3-4 Plow Standard Tread General Purpose
 Models AN and BN Models AO and BO
Garden Orchard

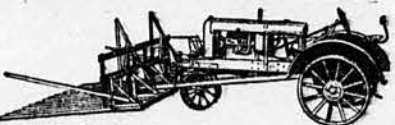
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A most worthy and effective philanthropy. Work limited by no boundary lines and discriminating in favor of no race or creed. No solicitors, no salaries; supported by purely voluntary contributions. Address: CAPPER FOUNDATION FOR CRIPPLED CHILDREN 20-A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

Unmistakable Signs of Better Times

DEAN H. UMBERGER

ONE encouraging sign of improved farm conditions is the number of freshly painted buildings, newly-shingled roofs, and well-repaired fences that are noticeable in most rural sections of the state. Such investments in appearance have been badly needed on Midwestern farms for many years. The fact that they now are beginning to be made indicates a joint revival of funds and of confidence.

There are other signs. The extension service this year has started a new project in landscape gardening, and the interest shown makes clear that farm people have a genuine desire to make their homes more attractive. Transplanting of native trees and shrubs to the desired location about the house and grounds and laying out of a long-time plan for beautifying the farmstead may seem like a far cry from drouth and mortgages, but there are many phases to this farm problem.

Certainly the child who grows up on a farm where the buildings are unpainted, the weeds uncut and the hedge untrimmed, and where the mother's view of the kitchen window is a pigpen or corral—that child is not equipped to enjoy life as fully or serve his community as constructively as a child from a family which takes pride in keeping the farm attractive.

The farm woman who plants hollyhocks to screen an unsightly object serves agriculture as does her husband in conserving soil fertility. In fact, the two—beautification and conservation—must always go together. Both are products of progressive minds and eager souls. Both serve society.

TABLE OF RATES			
Words	One time	Four times	One time
10.....	\$.80	\$2.40	\$1.44
11.....	.85	2.55	1.52
12.....	.90	2.70	1.60
13.....	1.04	3.12	1.68
14.....	1.12	3.36	1.76
15.....	1.20	3.60	1.84
16.....	1.28	3.84	1.92
17.....	1.36	4.08	2.00

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FARMERS MARKET

RATES 6 cents a word if ordered for four or more consecutive issues, 8 cents a word each in minimum. Count abbreviations and initials as words. But your name and address as part of the advertisement. When display headings, illustrations, and white space are used, charges will be based on 50 cents an agate line; 5 line minimum, 2 column by 150 line maximum. No discount for repeated insertion. Display advertisements on this page are available only for the following classifications: poultry, baby chicks, pet stock and farm lands. Copy must reach Topeka by Saturday preceding date of publication.

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We believe that all classified advertisements in this paper are reliable and we exercise the utmost care in accepting such advertising. However, as practically everything advertised has no fixed market value, we cannot guarantee satisfaction. In cases of honest dispute we will endeavor to bring about a satisfactory adjustment, but our responsibility ends with such action.
PUBLICATION DATES: Every other Saturday. Forms close 10 days in advance.

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BOOTH'S FAMOUS CHICKS: STRONG, healthy, quick growing. Excellent layers. From one of America's greatest breeding institutions. 10 varieties. Low prices. Free catalog. Booth Farms, Box 612, Clinton, Mo.
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CHICKS, THOROBRED, BLOOD TESTED. ALL varieties. Ship prepaid. Reasonable. Superior Hatchery, Newport, Kan.

PULETS AND COCKERELS
PULETS - COCKERELS, WHITE GIANTS, Buff Minorcas. The Thomas Farms, Pleasanton, Kan.

TURKEYS
WHITE HOLLAND POULTS FOR AUGUST 28c. Mrs. R. A. Plamann, Route 3, Hiawatha, Kan.

BABY BIRDS
CASH CROP EVERY WEEK RAISING ROYAL Squab Baby Birds. Orders waiting for hundreds of thousands. You get your money for them when only 25 days old. Particulars and picture book for three cent stamp. PR Company, 319 Howard, Melrose, Massachusetts.

POULTRY PRODUCTS WANTED
EGGS, BROILERS, HENS, WANTED. COOPS loaned free. The Copes, Topeka.
2000 OLD LIVE COMMON PIGEONS WANTED. R Hendricks, Rutledge, Mo.

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FARM MACHINERY
"BEST EVER" HARVESTER CANVASSES. roller canvas slides; tractor saw frames; Baldwin repairs and improvements. Windrow pickups, mechanical pinto bean vine pilers. Richardson, Cawker, Kan.
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RICHMAN'S CORN HARVESTER. POOR- man's price. Only \$25 with bundle tying attachment. Free literature showing harvester pictures. Process Company, Salina, Kan.
FOR SALE—JOHN DEERE D TRACTOR; CON- dition exceptionally good; price right; worth looking over. Don Bacon, Lyons, Kan.
WINDMILLS \$19.25. WRITE FOR LITER- ature and special prices. Currie Windmill Co., Dept. KF, Topeka, Kan.
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FARM LIGHT SUPPLIES
STATE DISTRIBUTOR FOR WAGG MASTER 10 year Farm Lighting Batteries, wind plants, used engine plants. Write Langlois Electric, 421 N. Poplar St., Hutchinson, Kan.

WATER WELL CASING
THOMPSON PERFORATED WELL CASING produces more water because it has a greater perforated area. Supplied in all diameters and gauges, both perforated and plain, and in riveted, lock seam or welded construction. Thompson also manufactures steel pipe, metal flumes, measuring flumes, water gates, steel tanks, smoke stacks, etc. Prices and catalogs on request. Write us today. Established 1878. The Thompson Manufacturing Co., 3011 Larimer Street, Denver, Colo.

IRRIGATION SUPPLIES
IRRIGATION HOSE—CHEAPER THAN ditches. Beatrice Tent & Awning Co., 113 North 3rd St., Beatrice, Nebr.

SILOS
INCREASE PROFITS, FEED MORE SILAGE. Store in Sisalkraft Silos. Built by yourself quickly and easily. 50 ton capacity. Cost: less than \$40.00 first year, \$10.00 second year. 28,000 built in 1935. Write for samples, information. Sisalkraft Company, 210 West Wacker, Chicago.
RIBSTONE CONCRETE STAVE SILOS. A PER- manent and superior silo priced reasonable. Big discount for early orders. Write for circular. The Hutchinson Concrete Co., Hutchinson, Kan.

KODAK FINISHING
IMMEDIATE SERVICE, NO DELAY. ROLL fully developed, carefully printed and two beautiful, full-size 5x7 double weight professional enlargements, (or one tinted enlargement) all for 25c coin. The Experts' Choice. Reprints 3c each. The Photo Mill, Box 629-5, Minneapolis, Minn.
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ROLLS DEVELOPED 116 SIZE OR SMALLER, eight enlargements. Yes Sir, eight, no mistake. No small prints, only 25c. Satisfaction guaranteed or your money refunded. LaCrosse Photo Company, LaCrosse, Wis.
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FINEST PHOTOS GUARANTEED. ROLLS DE- veloped professionally, 8 Velox prints, 2 Bromide enlargements, 25c coin. Finerotos, Box 898-2, Minneapolis, Minn.
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TWO BEAUTIFUL DOUBLE WEIGHT PRO- fessional enlargements, 8 guaranteed never fade prints 25c coin. Century Photo Service, LaCrosse, Wis.
LOOK! COLORED ENLARGEMENT AND 8 Monex Art prints from every roll only 25c. Comet Photo Service, Box 266-7, Minneapolis, Minn.
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BEAUTIFUL COLORED ENLARGEMENT with each film, 25c (coin). LaCrosse Film Company, LaCrosse, Wis.
FILMS DEVELOPED, 8 PRINTS AND 2 EN- largements, 25c. Gopher Film Service, Box 349, Minneapolis, Minn.
ROLL DEVELOPED, SIXTEEN BEAUTIFUL prints, free snap shot album, 25c. Photoart, Mankato, Minn.
20 REPRINTS 25c. FILM DEVELOPED, 2 sets prints 25c. Skrudland, 6970-63, George, Chicago.
GLOSSY COLORED ENLARGEMENT WITH each roll 25c. Arbor Photo Service, Joliet, Ill.
ROLL DEVELOPED, PRINTED 15c. RE- prints 1c. Howard's, 2947 Jarvis, Chicago.
ONE DIME (AND THIS AD.) FINISHES YOUR trial film roll. Fifico, (25) Yale, Okla.

EDUCATIONAL
No school advertising under this heading has any connection with the government.
\$135 MONTH PAID GOVERNMENT ASSIST- ant Lay (Meat) Inspectors at start. Age 18-45. No experience required. Common education. Want to qualify for next entrance test? Details free. Write, Instruction Service, Dept. 187, St. Louis, Mo.
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AUTO MECHANICS. DIESEL, BODY-FENDER repairing, welding, electric refrigeration. Low rates. Stevinson's 2008-L Main, Kansas City, Mo.

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TRUCK LINE FRANCHISE AND FIRST class equipment, short haul on paved road which is most profitable, easy to operate, no experience necessary. W. F. Leonard, 1120 College, Topeka, Kan.

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INSURE YOUR PROPERTY WITH THE BEST for less. Kansas' largest and strongest fire and tornado insurance company. Standard policies give you 100% protection. May we give you further information on your farm or city insurance? Write the Farmers Alliance Insurance Co., of McPherson, Kansas. Resources over a million dollars. Time tested since 1888.

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SPECIAL \$35.95 BREECING HARNESS, steel hames, long reins. Hillmer, 115 East 6th, Topeka.

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"HOW TO BREAK AND TRAIN HORSES"— a book every farmer and horseman should have. It is free; no obligation. Simply address Beery School of Horsemanship, Dept. 278, Pleasant Hill, Ohio.

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GRAVE MARKERS
\$9.90 FREIGHT PREPAID. LETTERED, Grave markers, monuments. Catalog. Art Memorials, Omaha, Nebr.

QUILT PIECES
100-20c; 200-35c; FAST COLOR, GUARAN- teed; postpaid. Union Mills, Centralia, Ill.

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1936 EXTRA QUALITY CLOVER HONEY, 60 pound can \$4.75; ten pound pail 90c; bulk comb \$1.00. Fred Peterson, Alden, Iowa.

MALE HELP WANTED
WANTED: SALESMEN TO SELL FARM TRAC- tor tires. Write Kansas Farmer, Box 100.

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INQUIRIES, ERRANDS, PROBLEMS OF FARM or home given careful attention. Make us your city contact. Universal Service, 3119 McGee, Kansas City, Mo.

REAL ESTATE SERVICES
SELL YOUR PROPERTY QUICKLY FOR cash no matter where located; particulars free. Real Estate Salesman Co., Dept. 510, Lincoln, Neb.
Mention Kansas Farmer when writing to ad- vertisers—it identifies you and insures service.

LAND—KANSAS
FARM BARGAINS. WE HAVE SOME REAL bargains in farm lands in Marion, Morris and Dickinson counties, Kansas. We offer good farms with payments down as low as \$1,000.00. See, or write us at once. Mott & Lydick, Herington, Kan.
CHOICE 80 ACRES NEAR BURLINGTON, Kansas. Fine location, well improved. A bar- gain at \$3,200. For details write M. DeMoulin, Hastings, Nebr.

LAND—MISSOURI
HIGHWAY FARM, 36 ACRES, INCLUDES 3 cows, horse, poultry, orchard tools, farm equip- ment; mile school, church, 3 miles market town, depot, high school, creamery, cannery, etc.; 30 acres cultivated, hog wire fenced pasture, 200 apple trees, also peaches, plums, pears, apricots; neat house, 30x30 barn, outbuildings; a real fu- ture here. \$1200, only \$500 cash. Free August catalog. United Farm Agency, KF-428 B. M. A. Bldg., Kansas City, Mo.

LAND—MISCELLANEOUS
FARMS THAT PAY IN THE GREAT NORTH- ern Railway Agricultural Empire. Minnesota, North Dakota, Montana, Idaho, Washington, Oregon. Fertile black soil, high producing crops, grain, fruit, vegetables, feed and live- stock. Many kinds of farms for selection. Write for lists and Zone of Plenty book. E. C. Leedy, Dept. 802, Great Northern Railway, St. Paul, Minn.
NEW FARM OPPORTUNITIES: WASHING- ton, Idaho, Montana, North Dakota, Oregon, Minnesota. Farm income is up. Good land still at rock bottom prices. Literature. Specify state. J. W. Haw, 81 Northern Pacific Ry., St. Paul, Minn.

Grain Sorghums Beat Corn
LEROEY E. MELIA
Coldwater, Kan.

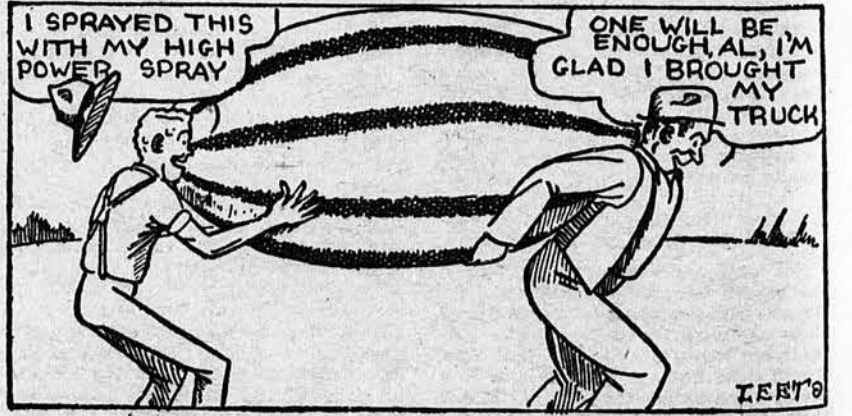
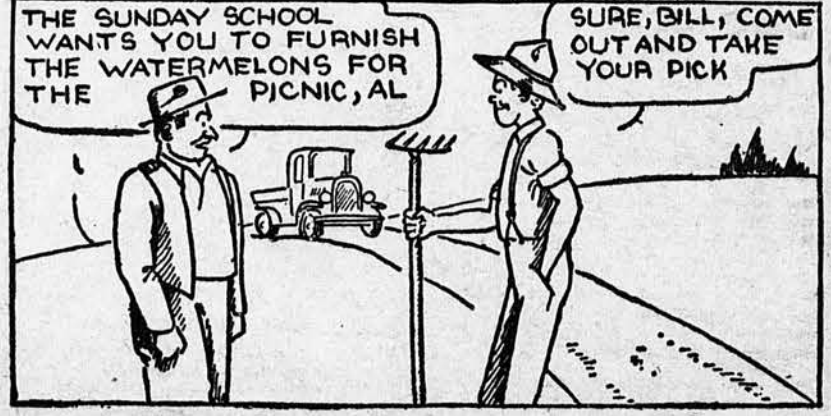
It usually is more practical to feed ground grain sorghums than corn to hogs in this locality. This is indicated by results of a class project recently completed by the vocational agricul- ture boys of the Coldwater high school. This generally is true in the western half of Kansas where the grain sorghums not only out-yield corn but are a much surer crop. The boys purchased 12 good quality feeder pigs February 1, 1936. They were self-fed a ration of mixed ground kafir and milo in one compartment of the feeder, and a pro- tein supplement of tankage 3 parts, alfalfa meal 1 part, in the other section of the feeder.
The project was financed by the lo- cal chapter of Future Farmers of America. The vocational agriculture II class managed and cared for the pigs. There were 11 boys in this class. Each boy had an opportunity to buy a share of the project for 1-11 of the estimated amount to finance feeding out the pigs. Seven of the boys pur- chased a share at a cost of \$7 apiece. At the end of the project, each boy who had purchased a share received \$11, or a profit of \$4. This amounted to 204 per cent interest on his investment.
The hogs made a satisfactory gain and were well finished at the end of 105 days. They weighed 80 pounds on February 1, and 214 pounds on May 15. The feed cost of gain—\$4.91 a hun- dred—was quite reasonable and left a good margin of profit. I do not believe this figure could be approached by farmers in the western half of the state who fed corn worth from 75 cents to 80 cents a bushel.

[I enjoy Jane Aiden's style chats in Kansas Farmer so much.—Mattie Dil- lon, Las Animas, Col.]

Activities of Al Acres—

We Hope It Hasn't Many Seeds, Al

—By Leet



Why Conviction Becomes Easy

J. M. PARKS

Manager Kansas Farmer Protective Service

FOLLOWING the theft of chickens from J. W. Rohrbaugh, R. 1, Rose, an investigation was started to find the guilty persons. Here's a part of Mr. Rohrbaugh's report, after he gathered some clues: "The sheriff, a Yates Center poultry dealer, and I went to a produce house in Council Grove. I was shown some chickens that had been brought to the Yates Center dealers the Saturday night before and from them picked out and identified the seven chickens which had been stolen from my hen house, because they had my Capper mark on them. That night, April 6, the sheriff and undersheriff of Woodson county arrested James Gilbert Williams, who confessed to the theft."

In several cases, similar to this, no definite action could be taken until the stolen property was identified by the owner, all of which shows that one of the surest ways of effecting conviction of thief is to be prepared to prove ownership in case property is stolen. Williams was given a 1 to 5-year sentence in the state industrial reformatory. The \$25 reward, paid by Kansas Farmer, was distributed among Service Member Rohrbaugh, a Yates Center poultry dealer, and Sheriff Carl Harder, who made the arrest.

But They Sold Chickens

In checking up sales at several poultry markets, after Tracy Harshman, R. 2, LaCygne, missed some chickens, it was found where some had been sold by Vernon Hightower and Wayne Wier. Looking into the matter further, Mr. Harshman found that neither of these men owned chickens which strengthened evidence that they might have done the stealing. At first, Hightower denied having anything to do with the stealing. But additional questioning brought a confession from him, and a statement that Wier had assisted. Each is serving an indefinite term in the state reformatory. A Protective Service reward was divided between Harshman and Deputy Sheriff George West, LaCygne, who made the arrest.

Tracked Him; Called Sheriff

Certain articles, including a large grease gun and a radiator, were stolen from the farm of George R. Carrithers, Syracuse, May 24. The family was away from home at the time. On returning, Mr. Carrithers found tracks of a strange car near his house, took up the trail and followed it for several miles. This quick action and prompt report to the sheriff brought results. The thieves, who proved to be Joyce Morgan and Emery Cammaon, were arrested the same day with a part of the stolen property in their possession. A little delay might have meant an escape. An early capture before a defense could be built up caused a plea of guilty on the part of each. Punishment was set at 60 days in the Stanton county jail. A Protective Service reward of \$25 was divided between Carrithers and Sheriff Chas. R. Winger, Stanton county.

Rustler Stole Far and Wide

Another cattle rustler, in the person of Charles Mayhew, has been given a penitentiary sentence. Not, however, until he had stolen cattle from at least three Protective Service members in two different counties. They were D. F. Murphy, Argentine, Wyandotte county; William Geiger, R. 2, Kansas City, and Earl Wendel, R. 2, Elmont, Shawnee county. Some of Mayhew's operations had extended as far west as Emporia. The facts in the Wendel case were not brought out until after the capture, so the reward was divided equally between Geiger and Murphy.

Fooled the Sheriff Once

Not long ago, a report was made to the sheriff of Labette county, Tom Hogan, that a suspicious car was seen along the highway and several chickens were loose in the back seat. The sheriff, who had received no notice of theft, questioned the driver, Frank Hall, only to be informed that the

chickens belonged to Hall's wife. The sheriff had no evidence to the contrary and let Hall go free. A little later, tho, Robert Back, R. 2, Oswego, a Kansas Farmer Protective Service member, well trained as to the necessity of a prompt report in case of theft, discovered some chickens had been stolen from him and immediately got in touch with the sheriff. It was an easy matter, then, to connect up the two incidents. Hall was convicted and sentenced to the Reformatory at Hutchinson.

The Bath Was Worth \$25

In addition to the ordinary sanitary benefits, a bath netted Earl Garrison, Howard, just \$25 in cash. Here's how it happened: A stranger knocked at the Garrison door. At that particular minute, Garrison was in the bath tub and, therefore, did not respond to the call. The stranger, thinking no one was at home, helped himself to some of Garrison's fine Wyandotte hens. Garrison, however, dressed hurriedly and came out just in time to witness the theft. With the aid of a gun, Garrison marched his man, Henry Smith, to town and turned him over to the officers. A 60-day jail sentence resulted. Garrison believes if he could have gone to the door immediately, Smith, perhaps, would have given some excuse for calling and would have gone elsewhere to do the stealing. Garrison's inability to go to the door, tho, made it possible for him to collect a \$25 reward from the Protective Service, besides recovering chickens that were about to be stolen.

Anyway, He Had Warning

A little closer observation might have saved Leslie Lowe, charged with stealing a Ford V-8 car, from M. C. Veley, R. 3, Neodesha, a 5-to-15-year sentence in the state penitentiary. The car was not stolen from Mr. Veley's posted farm, but was taken from in front of the Wilson county hospital. There was something on the car, tho, that should have been sufficient warning to the thief. It was a Protective Service windshield sticker, announcing that a reward would be paid for the conviction of anyone who stole the car, regardless of where it may be located. The sticker didn't prevent Lowe from stealing the car, but it did enable Service Member Veley to collect a \$50 reward from the Protective Service.

To date, Kansas Farmer Protective Service has paid a total of \$23,975 in rewards for the conviction of 946 thieves.

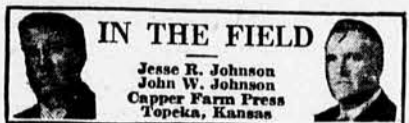
Like Cream Improvement

A report of the national creamery organization reads: "George Hine, secretary of the Kansas Cream Quality Improvement Campaign, reports with respect to grading progress, that results thus far indicate public opinion has changed from an apathetic 50 per cent to between 90 and 95 per cent who now definitely favor a differential in price, a recognition of quality in money returned to the producer." He goes on to give some highly encouraging statistics and an outline of the means being employed for quality promotion. Here, too, the policy of keeping everlastingly at it is being followed, and regular meetings are being held.

Enough Serum for Hogs

To insure an adequate supply of anti-hog cholera serum and hog cholera virus, the Department of Agriculture, in co-operation with the serum industry, has developed a serum-marketing agreement. The plan is authorized by a recent Act of Congress which established as a national policy the use of serum in combating hog cholera. The act specifically empowers the Secretary of Agriculture to consult with manufacturers of anti-hog cholera serum and hog cholera virus with respect to the commercial handling and distribution of such products that move in interstate or foreign commerce. The plan

provides for methods of stabilizing the volume and marketing conditions for vaccines. A high quality of anti-hog cholera serum and hog cholera virus already is insured by the system of Federal licenses and supervision that has been in effect since the passage of the virus-serum-toxin act in 1913.



Walter J. Barr, Larned, Kan., is advertising under Herefords in the livestock department of this issue of Kansas Farmer 19 high class registered horned Hereford cows with calves and all abortion tested. They are also bred to the Polled bull, Perfection's Boy. He is also offering for sale some Holstein and Guernsey cows and heifers that are to freshen soon. This is a big opportunity to start in the Hereford business right and prices will suit.

Here is another of those opportunities for the breeder looking for a worthwhile tried sire. Virgil Smith, Fairbury, Nebr., is advertising in this issue of Kansas Farmer under Milking Shorthorns, his four year old herd sire, registered and a vigorous sire of quality Milking Shorthorns. Tried sires like this are often hard to find and when they are they are almost always priced below their real proven value. If you can use a bull like this, weight, 1800, write at once to Virgil Smith, Fairbury, Nebr. Look up his advertisement in this issue of Kansas Farmer.

If you are in the market for a registered Shropshire ram, a nice, type fellow of the well wooded kind you had better write today to Clarence Lacey & Sons, Meriden, Kan., for prices and full descriptions, etc. They have some for sale. The Lacey's are veteran Hampshire breeders and exhibitors, having shown Hampshires at the Topeka state fair for a quarter of century without missing a year. They breed the kind that will strengthen any herd. Their farm is about a mile and a half northeast of Meriden, Kan., which is about 12 miles northeast of Topeka.

We have received instructions from Hans E. Regier, Whitewater, Kan., sales manager for the Southern Kansas Shorthorn breeders association's semi-annual sales to claim, in the Kansas Farmer sale date column, October 14, 1936, for their annual fall show and sale at the stock yards, Wichita, Kan. These semi-annual Shorthorn events at Wichita are growing in popularity because of the high standing of the Shorthorn breeders who are the consignors and because of the class of cattle selected for these sales. The sale will be advertised in the Kansas Farmer as usual.

If you live in southern Kansas and are interested in Shorthorn cattle you are sure to be interested in the big annual southern Kansas Shorthorn picnic and field day at the John Regier farm (Alfalfa Leaf Farm) a short distance northeast of Whitewater, next Wednesday, August 5. The big event of course will be the big basket dinner at noon. Ed Markee, chairman of arrangements committee, says bring enough for your own family and one extra. At 10:00 a. m. the judging contest will take place and at 1:00 o'clock games and at 2:00 special program. These picnics, where breeders meet each other with time and opportunity to discuss their livestock problems are very profitable as well as entertaining. Remember it is next Wednesday, August 5, at the John Regier farm near Whitewater, Kan.

Public Sales of Livestock

- Poland China Hogs
 - Oct. 28—C. R. Rowe, Scranton, Kan.
- Poland China Hogs
 - Oct. 12—Geo. Gammell, Council Grove, Kan.
- Polled Shorthorn Cattle
 - Oct. 15—J. C. Banbury & Sons, Plevna, Kan. Annual sale.
- Jersey Cattle
 - Oct. 20—Lloyd W. Markley, Randolph, Kan.
- Ayrshire Cattle
 - Oct. 31—Kansas Ayrshire Club sale, Hutchinson, Kan. Fred Williams, Hutchinson, Kan., chairman sale committee.
- Holstein Cattle
 - Oct. 28—Holstein consignment sale at Abilene, Kan. H. E. Engle, Abilene, Kan., manager.

SHROPSHIRE SHEEP
Registered Rams
 Extra good yearlings. Correct type, well wooded rams. Price \$20 to \$35 each. Clarence Lacey & Sons, Ph. 5420, Meriden, Kan.

Valuable Booklets Free!

- Many of our advertisers have prepared valuable illustrated catalogs and educational booklets at considerable expense which are available to our readers without charge. We are listing below the booklets furnished by advertisers in this issue of Kansas Farmer and to obtain any of these fill in the advertiser's coupon and mail, or write direct to the advertiser. K.F.8-1-36
- Booklet—Watch Your Overhead (page 9)
 - Roughage Mills & Ensilage Cutters (page 9)
 - Western Gilder Sweepake (page 9)
 - Book—First Aid to Growing Chicks (page 12)
 - Silo Catalogs (page 12)
 - Oliver Farm Implements Catalog (page 13)
 - Free Electricity (page 13)
 - Zenith Radio Catalog (page 15)
 - Dempster Farm Implements Catalog (page 15)
 - John Deere Tractor Catalog (page 17)
 - Sweepake and Stacker Catalog (page 17)

POLLED SHORTHORN CATTLE
Clippers and Browndales
 Choice bred bulls and heifers. 20 registered Polled Shorthorn Bulls. Some show type. Halter broke. J. C. BANBURY & SONS, PLEVNA, KAN.

MILKING SHORTHORN CATTLE
Offering My Herd Sire
 Registered Milking Shorthorn, just 4 years old. Weight 1,800 lbs. Dam's record, 10,816—454 and beef galore. Dark roan, vigorous breeder. Glenside breeding. Also offer 14 mo. old bull by this sire. VIRGIL SMITH, FAIRBURY, NEBR.

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 659 lbs. fat. H. A. DRESSLER, LERO, KAN.

BROWN SWISS CATTLE
Young Brown Swiss Bulls
 Choice individuals and good breeding. Out of cows with D. H. I. A. records. Inspection invited. G. D. SLUSS, ELDORADO, KAN.

AYRSHIRE CATTLE
Cows, Heifers and Bulls
 carrying the blood of Man O War and other high producing Pennhurst strains. J. F. WALZ & SONS, HAYS, KAN.

REGISTERED AYRSHIRES FOR SALE
 To reduce herd quickly we offer heavy producing bred cows, some in milk and young bulls. Best of breeding. Henderson Dairy King and Pennhurst Tb. and blood tested. W. J. SMITH, EMPORIA, KAN.

JERSEY CATTLE
For Sale—Jerseys—\$400.00
 Four Yearling Heifers and a Bull. Trace six times to Sophy 19, greatest cow of the breed. W. J. YEOMAN, LA CROSSE, KAN.

HEREFORD CATTLE
Fairfield Farm Herefords
 19 high class registered horned Hereford cows with calves, abortion tested. Bred to the Polled Bull, Perfection's Boy. A good start in registered Herefords for someone. Also for sale Holstein and Guernsey heifers and cows to freshen soon. Priced to sell. WALTER J. BARR, LARNED, KAN.

HAMPSHIRE HOGS
Quigley Hampshire Boars
 A few choice, well grown Fall boars ready for service for your fall breeding. QUIGLEY HAMPSHIRE FARM, Williamstown, Kan.

CHESTER WHITE HOGS
We Offer Bred Gilts
 A nice selection bred for September and October. Best of breeding and good individuals. Priced right at public sale. VANDIE RICHIE, SEARVILLE, KAN.

DUROC HOGS
10 GREAT HERD BOARS in service. 30 years a breeder of heavy boned, shorter legged, earlier feeding medium type Durocs. 50 bred sows and gilts for sale. Also boars. Catalog. Shipped on approval. Pedigreed. Come or write me. W. R. HUSTON, AMERICUS, KAN.

BELGIAN HORSES
Reg. Belgian Stallions
 Two, three and four-year-old sorrels, chestnuts and strawberry roans in good breeding condition and not high in price. 177 miles above Kansas City. FRED CHANDLER, CHARITON, IOWA

AUCTIONEERS
C. W. COLE
 Live Stock Auctioneer
 The right kind of salesmanship is more important now than ever before. Write or phone at my expense for date and terms. WELLINGTON, KAN.

BERT POWELL, AUCTIONEER
 (Your year round Salesman.) Ask any breeder I ever sold for. Write or wire me. McDonald, Kan.

MIKE WILSON AUCTIONEER
 Available for purebred livestock and farm sales. HORTON, KANSAS

Livestock Advertising Copy
 Should Be Addressed to
Kansas Farmer
 Livestock Advertising Dept.,
Topeka, Kansas

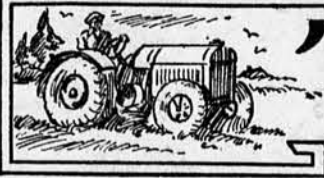
Kansas Farmer is published every other week on Saturday and copy must be mailed to reach the Kansas Farmer office not later than one week in advance of publication date.

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 this fall or winter write us immediately for our

SPECIAL PUBLIC SERVICE

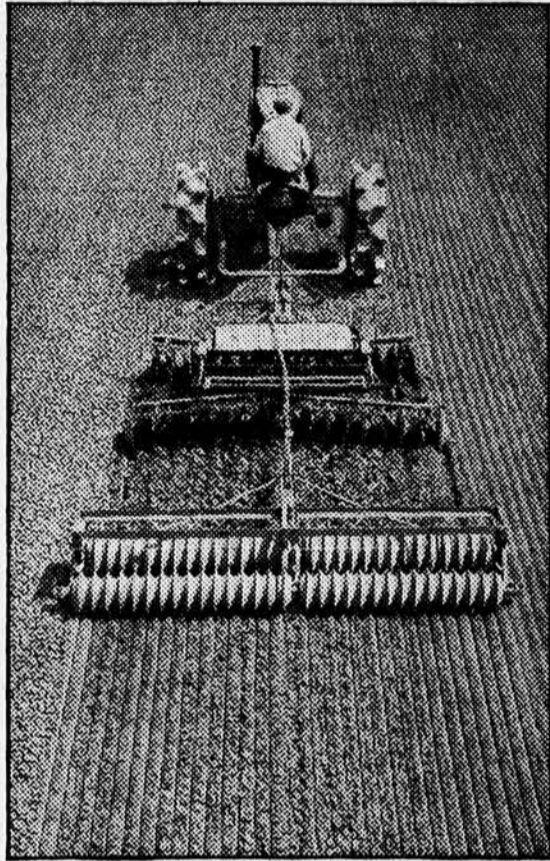
KANSAS FARMER
 Topeka, Kansas
 John W. Johnson, Manager,
 Livestock Advertising Department



The Tank Truck



News from your Conoco Agent about Farm Fuels and Lubricants



No Rest for TRACTORS They Need Good Motor Oil to Keep Going

One advantage of power farming is that tractors never need to rest up.

But they do need lubricating oil that guards against motor wear and keeps them in good mechanical condition so that they are ready to go when you need them.

Harvesting, plowing and disking mean a lot of hard work over long periods of time for your tractor. It certainly is worthwhile to use oil that keeps wear at a minimum, not only because repairs cost money but because you want your tractor in good running order to do field work when conditions are just right.

One of the best and most economical oils you can use in tractors is Conoco Germ Processed Oil, sold by Conoco Agents. It is not like any other oil, and it is made by a patented process that alloys the oil, much as steel is alloyed. It has lubricating properties that surpass any plain mineral oil.

A peculiarity of this alloyed oil is that it bonds itself to the surfaces of working parts and actually oil-plates the metal. That oil-plating gives you the utmost protection against wear. It will not burn up, rub off or drain away. You know that a tin bucket will rust, but a galvanized bucket will not, as long as the galvanized "plating" is unbroken. Germ Processed oil-plating works the same way.

Germ Processed Oil can carry a bigger load on the bearings than plain mineral oils. And you need the strongest oil when you do hard tractor jobs like plowing alfalfa land to turn it back to wheat.

There is another saving you make with Germ Processed Oil. Farmers who use it tell us they get far more hours with Germ Processed Oil in tractors than they get with other oils. Many say they also use less fuel.

Now, when you are getting ready to put new crops in the ground, is a good time to give this alloyed oil a trial. Your Conoco Agent can supply Germ Processed Oil in barrels, in handy 5-gallon buckets and in 1 and 5-quart dust-proof cans. Talk to him about it.

AVOIDING TRACTOR REPAIR EXPENSE

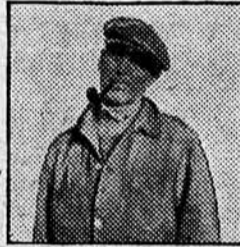
How a Boone, Colorado, Farmer Did It

TO THE TANK TRUCK: I want to tell you of the success I have had for the past several years using your Conoco Germ Processed Motor Oil.

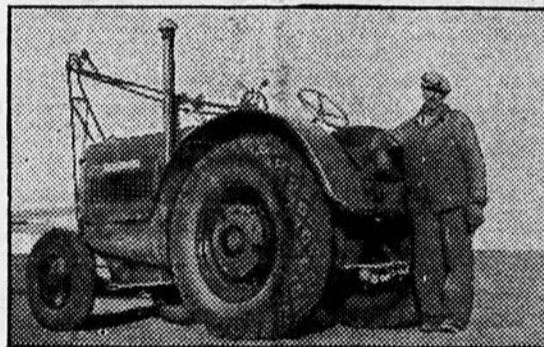
I operate two McCormick-Deering Tractors as well as the other usual farm equipment found in this section of Colorado. I have used your oils exclusively ever since you first put Germ Processed on the market. Much of the time my tractors have been in practically constant use, sometimes doing heavy plowing and at other times operating threshing machines and the like. I have at times been amazed at the protection and safety furnished by your lubricants.

I farm about 700 acres in my own operations besides doing considerable custom work. During the past Spring I decided that my equipment should be overhauled as a matter of routine. I was very pleasantly surprised on taking down one of the machines to find that all bearing surfaces were in practically as good condition as they were when the machine was new, seven years ago. This was the first time that the pistons had ever been taken out.

I certainly appreciate this kind of lubrication for my machinery and assure you that I expect to continue using Germ Processed Oil indefinitely. J. C. Neely, Boone, Colo.



J. C. Neely, Boone, Colo.



Mr. Neely and one of his big McCormick-Deering Tractors, equipped all around with rubber tires.

Did You Know?

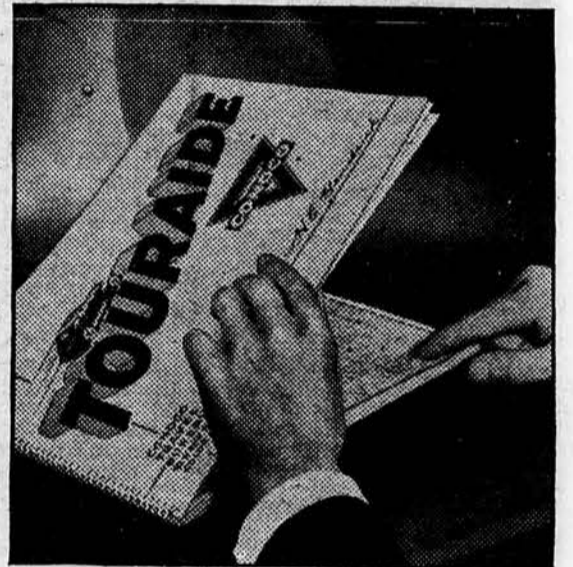
- That there are 6,812,049 farms in the U. S. A.?
- That the yearly crop loss in the United States caused by insects amounts to more than the value of the entire corn crop?
- That Continental Oil Company owns more than 3,500 producing oil wells, from which the best crudes for gasoline and motor oils are carefully selected?

Free Travel Service

Conoco Offers Farmers Complete Trip Plans for Motor Tours

How would you like to know the best routes to take, the latest road conditions and have a list of places to stay—before you leave on your next car trip?

That is only part of the friendly travel service the Conoco Travel Bureau offers you free of charge. The Bureau will send you road maps for your entire trip and travel experts will mark on each map your best routes and up-to-the-minute road conditions. With each map is a directory of tourist camps and hotels



This is the Conoco "Touraide" book that will be made up especially for you. All road maps, directories and travel literature are bound in it. Handiest thing you ever saw for motor travelers.

along your route, with locations and rates shown. On each map you will find descriptions of the country through which you are driving and the most interesting things to see.

This complete, accurate trip plan is compiled especially for your trip and bound into a handy book with all the material arranged in the order in which you will need it on your trip. This book, the Conoco "Touraide," is spiral bound so that you can open it at any point and fold it flat. It frees you from troublesome unfolding and folding of maps.

With your Touraide, you will receive a large road map of the United States and a Conoco Passport, including an identification card and pages for recording expenses. Information on fishing, sports and health resorts will be sent if you request it.

You do not have to be a Conoco customer to get this free service. Your Conoco Agent will be glad to take your application. Or you can write Dept. E, Conoco Travel Bureau, Denver, Colorado. Just tell when and where you plan to go. The service will be sent to you prepaid.

CONOCO PRODUCTS HELP KEEP FARM EXPENSES DOWN

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LUBRICANTS
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