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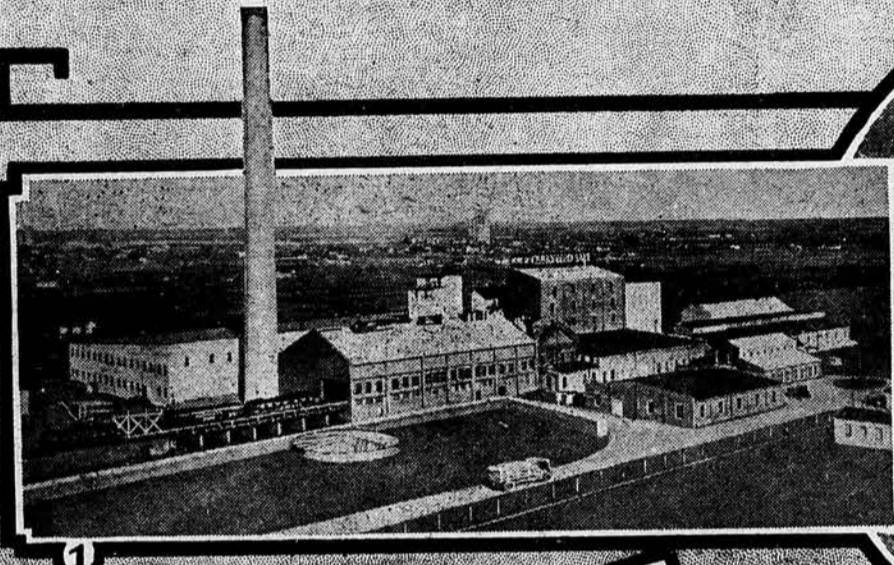
# KANSAS FARMER

MAIL & BREEZE

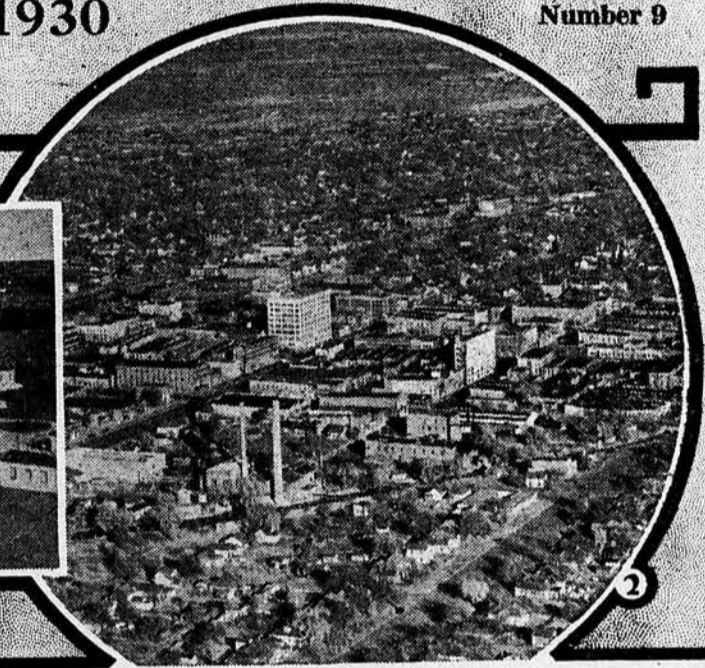
Volume 68

March 1, 1930

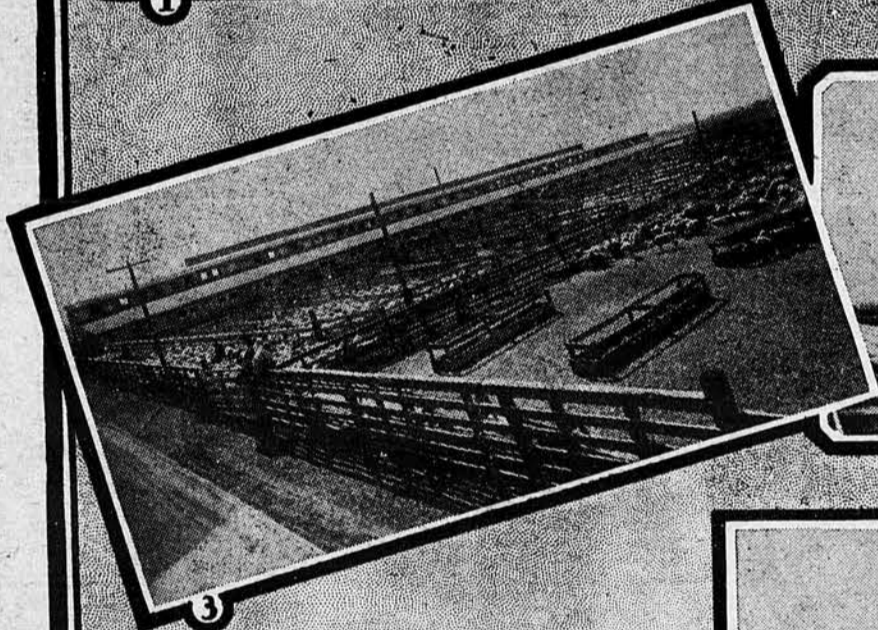
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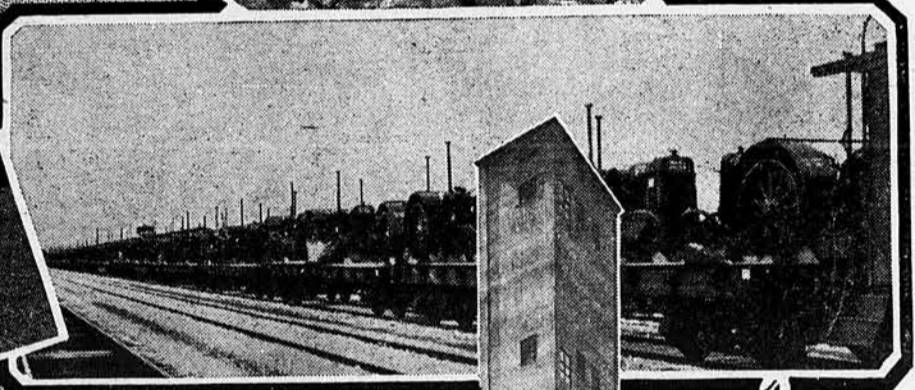
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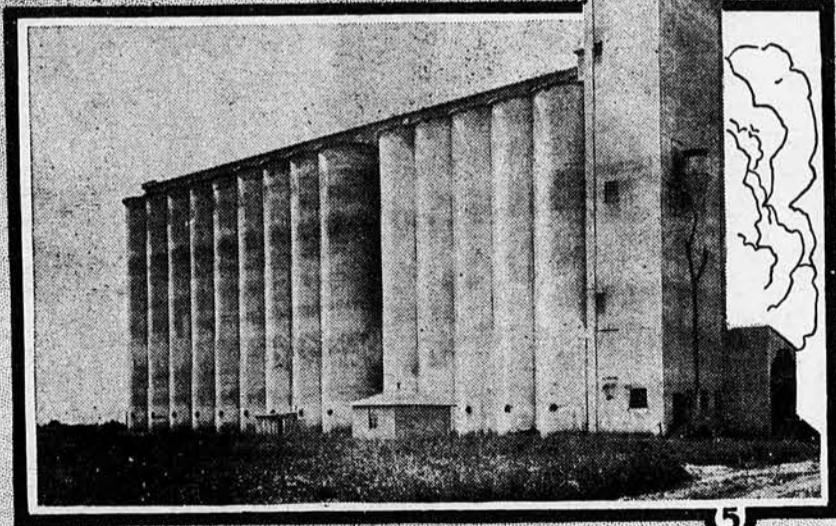
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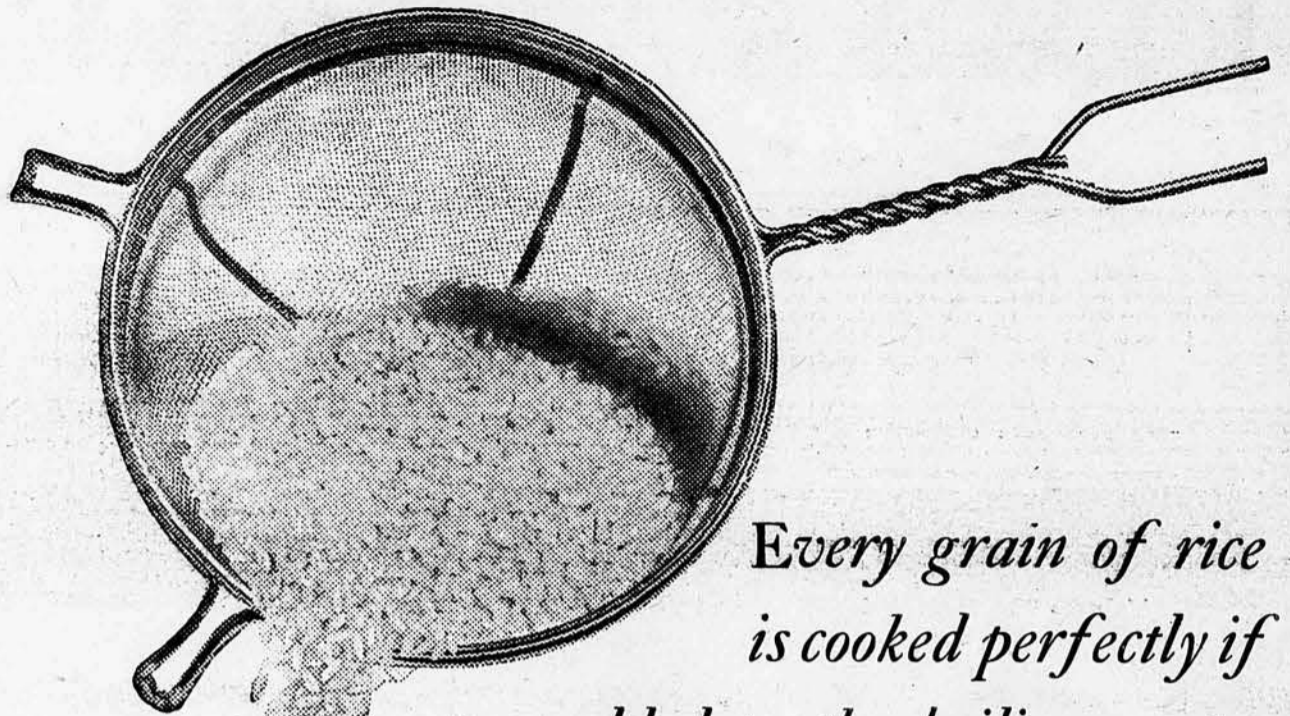


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- 1. Carey Salt Co. Plant
- 2. Airplane View of City
- 3. Hutchinson Stockyards
- 4. Tractors for Hutchinson Trade Territory
- 5. A Hutchinson Elevator

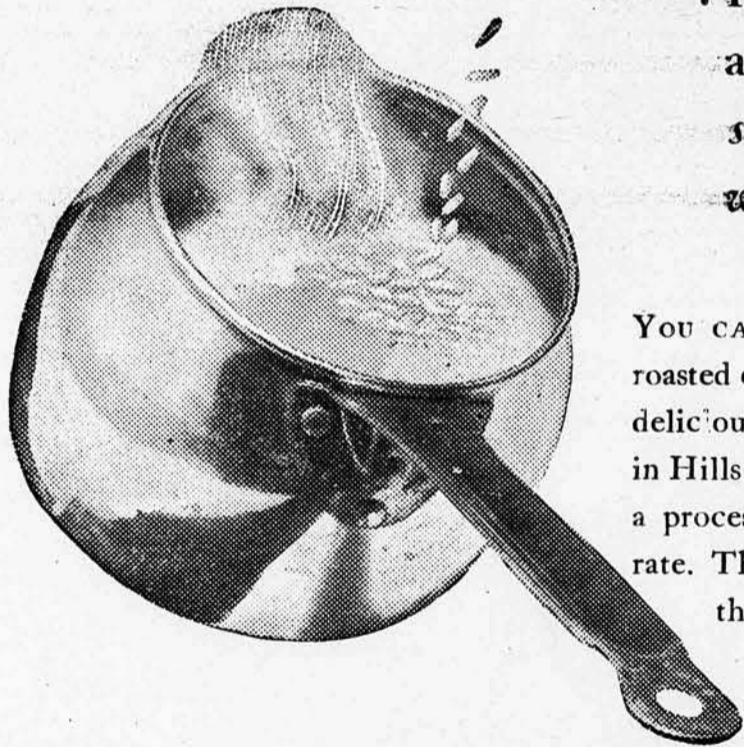
## Hutchinson—Fourth Largest City

(See Page 32)



*Every grain of rice  
is cooked perfectly if  
added to the boiling water*

# A Little at a TIME



*Hills Bros roast coffee a few pounds  
at a time by a continuous process  
so that every berry  
will be roasted evenly*

You CAN never expect bulk-roasted coffee to have the same delicious flavor that you taste in Hills Bros. Coffee. For such a process is not always accurate. The flavor varies because the coffee berries cannot be roasted evenly.

By roasting coffee a few pounds at a time instead of in bulk, Hills Bros. have exact control of the flavor. No wonder this patented, continuous process is called Controlled Roasting.

The delicious, fragrant goodness produced by Controlled

Roasting comes to you intact because Hills Bros. Coffee is packed in vacuum tins. Ask for Hills Bros. Coffee by name and look for the Arab—the trade-mark—on the can.



LOOK FOR THE ARAB ON THE CAN

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# KANSAS FARMER

By ARTHUR CAPPER

Volume 68

March 1, 1930

Number 9



## Livestock Men Will Meet in Topeka

*Their Industry Provided a Solid Foundation for the State's Growth*

By Raymond H. Gilkeson

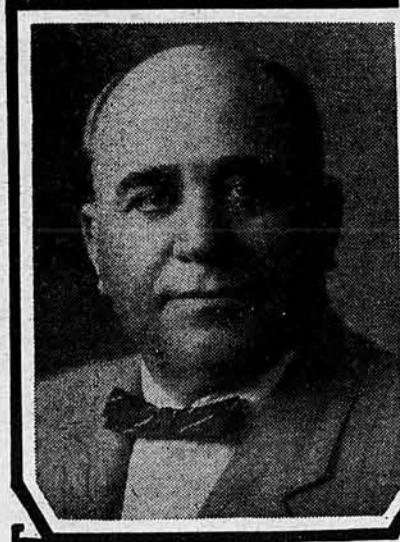
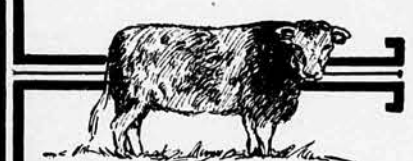
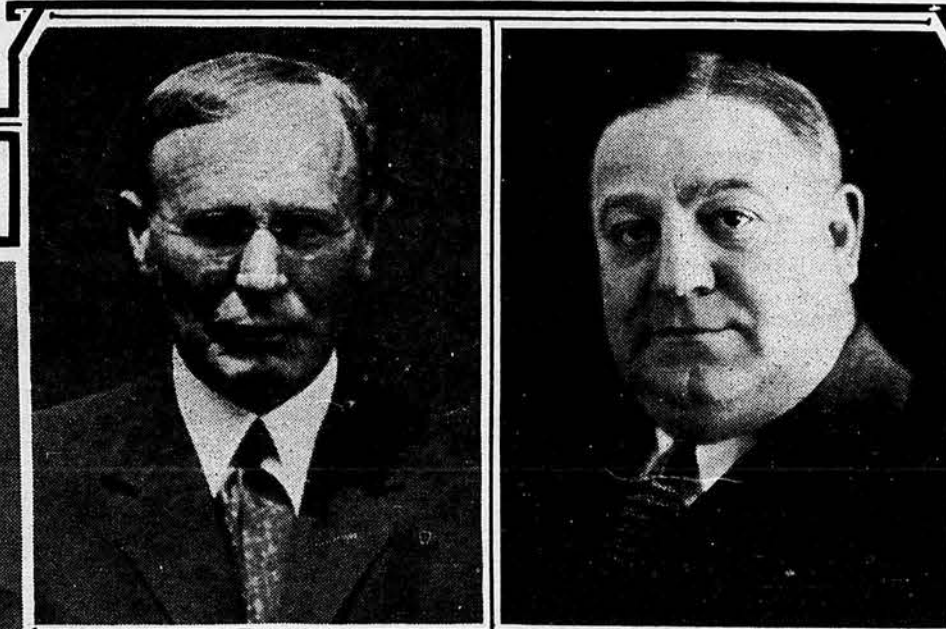
**T**HERE is no more important industry in Kansas than the production, feeding and marketing of livestock. Fundamentally this is the foundation on which our state has been built and on which it will continue to grow. For when we speak of livestock we mention something that affects every other farming operation, for good. Nor is there a more important organization than the one which champions the cause of livestock men, endeavoring to further and protect their interests, as does the Kansas Livestock Association.

Attention will be focused on livestock interests when this organization holds its annual three-day meeting in Topeka, March 12 to 14 inclusive. At that time individual and association problems will be discussed, and the speaking program will include, among other nationally-known figures, Alexander Legge, chairman of the Federal Farm Board, and C. E. Denman, Missouri, the livestock member of the board by virtue

president; H. B. Miller, Osage City, vice-president; George Plumb, Emporia, secretary, and W. P. Martin, Cottonwood Falls, treasurer. One man from each of a dozen counties represented in the organization formed the executive committee. Legal service was obtained and the rate case continued. "After several days of this hearing," according to Mr. Mercer, "the railroad board finally issued an order directing the carriers to return to the old carlot rating. Thus was the initial service of the Kansas Livestock Association to stockmen and farmers of the state accomplished, and from that time until the present this organization continuously has fought, with varying degrees of success, excessive freight rates and other problems."

stock men gathered in Topeka for what was called the first annual convention. A constitution and by-laws was accepted and more definite plans were laid for activities of the organization. Arrangements were made for the secretary to give his entire time to the work, and the following year an office was established. From the start those few pioneers made the association has grown until the records now list 10,000 active members. In 1909 the Legislature of Kansas passed a law giving the Kansas Livestock Association the power to select the Livestock Sanitary Commissioner, and make such recommendation to the Governor for appointment. Mr. Mercer has held this office, with the exception of two years, ever since.

We have made the statement that nothing is more important than our livestock industry. By way of proof let's look at the proposition from the national angle first of all. Among the 48 states Kansas ranks first in acres operated by



These Men Will Have Prominent Parts in the Annual Convention of the Kansas Livestock Association, to be Held in Topeka, March 12 to 14 Inclusive. The Two Center Photos Are of Alexander Legge, Left, Chairman of the Federal Farm Board, and Will J. Miller, President of the Kansas Association. At Extreme Right Is C. E. Denman, Missouri, Livestock Member of the Farm Board; at Extreme Left Is J. H. Mercer, Secretary of the Kansas Association

of his being a producer and for many years connected prominently with progressive livestock organizations.

In the history of the Kansas Livestock Association we may read of the struggles and successes of the industry in the state; and things that have been done here have been of such great importance that their effects were reflected throughout the entire Southwest. "Like many another valuable organization, the Kansas Livestock Association owes its origin to stern necessity," Secretary J. H. Mercer, Topeka, points out. "And it was such a situation which some years ago prompted a comparatively small number of aggressive and sincere men to combine their individual efforts in behalf of the livestock industry of Kansas."

Back in 1894 livestock men of the state bumped into their first big problem of freight rates. By that time "trail herds" were passing into history, inasmuch as fewer cattle were being driven to market. Railroads were pushing into cattle territory, contributing their share to the progress of the country by speeding up transportation. In that year the system of rate charges was changed from a carlot rate to a hundred-pound rate. Cattlemen protested. A hearing was held in Topeka which was attended by shippers from all over the state. Shortly thereafter, and before this rate question was settled, a number of prominent stockmen decided that organized effort would be of great value in all problems they were sure would come. A meeting was held in Emporia, according to records of the present organization, in May of 1894, and the Kansas Livestock Association took form.

J. W. Robison of El Dorado, was made the first

Thirty-six years of faithful service to members have found the organization active in many fields. Some of the things considered include freight rates on livestock and farm products, railroad service and accommodations, agricultural finance, taxation, farm legislation, including tariff on livestock and livestock products; meat publicity, service charges against the producer, settlement of association members' claims, boosting better livestock, sanitation and disease control, and sponsoring livestock shows and meat displays.

### Is an Organization of Leaders

"The association undoubtedly has done more effective work in fighting excessive freight rates than any other organization in America," Mr. Mercer believes. "And it is a matter of record that the association saved shippers some 2 million dollars a year over a period of 15 years by holding the railroads to a reasonable rate. Its entire history is one of efficient service, action and achievement on behalf of the livestock industry of the state. The men prominently identified with the association always have been leading citizens, leaders in farm thought and men who have unselfishly devoted their time and energies to the betterment of the agricultural interests of Kansas and the Southwest. The association enjoys the distinction in Washington of being a dependable and stable organization. It co-operates actively with the United States Department of Agriculture and the Kansas State Agricultural College in all matters pertaining to the advancement of agriculture."

An organization of such great need was bound to grow. On December 10, 1913, some 300 live-

owners, according to I. D. Graham of the Kansas State Board of Agriculture. That is an enviable record, and hundreds upon hundreds of Kansas farmers have explained to us that livestock is the most essential factor on their farms. This position of ownership could not have been reached without livestock, nor maintained now without it. And Kansas is third in number of beef cattle of all breeds, third in purebred Hereford cattle, fifth in purebred Shorthorns, sixth in value of livestock products, eighth in purebred Ayrshires, ninth in swine of all breeds, ninth in purebred Poland Chinas and tenth in purebred Jerseys. Now, let's add a few similar facts, that are so in part because of livestock: Kansas stands second in number of tractors on farms, third in value of cereal crops, third in grain sorghums, and third in farm-owned automobiles. Kansas stands head and shoulders above most of the states agriculturally, and livestock is in no small measure responsible.

We also should view the proposition from the Kansas angle. What is livestock worth to us? Here we must deal in huge figures. Last year the value of livestock produced in Kansas amounted to \$169,980,127. But that doesn't tell the whole story by any means. To this we must add \$39,393,551 for livestock products marketed. Then if we are to get the complete picture of the livestock industry of the state we still must consider the total value of livestock on hand at any one time, which amounted to \$229,609,027 on March 1, 1929. For some time authorities have used this assessment valuation as a measure of the investment in the livestock industry, and it likely is the most accurate obtainable.

(Continued on Page 33)

**DEPARTMENT EDITORS**  
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 FRANK A. MECKEL...Agricultural Engineer  
 HARLEY HATCH.....Jayhawker Notes  
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 H. C. COLGLAZIER...Grain View Farm Notes

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## Passing Comment

By T. A. McNeal

**ED BLAIR**, a poet and philosopher of Spring Hill, Kan., comes nobly to my defense as follows: "I read that ox-team story you told at Washington and can verify it if anyone questions it. I don't know what year it was, but evidently it was the same year in which my father settled in Bourbon county on the prairie. A pond of water was at one corner of the claim, with no trees around it. The water in that pond started boiling on account of the sun's heat along in July. Along in the latter part of August that cold snap came. It froze so quick and so hard that when the thaw came the next spring with a rush, father caught several catfish out of that pond which were too hot to handle with his bare hands from the heat of the summer before." That, of course, settles it. Ed Blair has been known all over Kansas for many years as a poet, story writer and successful business man.

### Not Buying Oleomargerine?

THE following letter has just been received from a Medicine Lodge subscriber, H. A. Tedrow: "In answer to your relay telegram from the American Creamery Association concerning the overproduction of butter, I will say that statistics show that the estimated surplus of butter in the United States is less than 1/2 pound per capita. Yesterday I took 100 pounds of butterfat to town and received \$27 for it. Now that 100 pounds of butterfat would make 120 pounds of creamery butter, which is selling for 45 cents a pound at Medicine Lodge. One hundred pounds of butterfat brought me \$27; 120 pounds of butter retailed for \$54. You can see readily that the creamery is making 100 per cent for churning and placing the butter on the market.

"It made me sore to see the statement that the producers of butterfat were taking their produce to town and bringing back butter substitutes for the use of their families. I have produced butterfat on this farm for 15 years and there has never been a pound of imitation butter in the house, and I believe that 90 per cent or more of the producers of butterfat could testify to the same thing. The trouble with the creameries in my opinion is that they never have learned to take a loss. I would advise them to try to make money producing butterfat at 27 cents a pound. I would like to see the producers of butterfat organized as well as the Associated Creameries are today. Heretofore I have sold butterfat for 45 cents a pound when creamery butter was selling at 50 cents a pound. Now with a surplus of 50 million pounds in the United States, should the Associated Creameries have a profit of 100 per cent for making and distributing creamery butter? If the creameries are not satisfied they might send out an S. O. S. call for every family in the United States to eat pancakes for breakfast served with creamery butter, however stale it might be. That would take care of the surplus provided that all the people could be persuaded to eat pancakes every morning spread with creamery butter. Or if the flapjack business doesn't work, if the producers of butterfat will give all the milk to the hogs for one week, that will take care of the surplus and help the butterfat producers, even if it does not help the creameries."

Having been acquainted with Mr. Tedrow for a good many years, I can vouch for him. I never did take any stock in the statement that the farmers were selling their butterfat and eating oleomargerine themselves. Possibly there are some rare exceptions of that kind, but I have never tasted oleomargerine at a farmer's home.

### The Brookhart Bill

**SENATOR BROOKHART** of Iowa, has introduced a bill in the Senate which proposes to transfer all the functions of the Federal Farm Loan Board to the Federal Farm Board. In answer to a letter directed to him by Senator McNary, Chairman of the Senate Committee on Agriculture, in reference to this bill, the Hon. Arthur M. Hyde, Secretary of Agriculture, writes as follows:

In my opinion, this bill is not desirable for the following reasons:

- 1—There is a great difference in the field which the two institutions are designed to occupy. The Federal Farm Loan Board is a permanent and well established institution designed to deal with the financing of the farm itself, and, only incidentally, thru the Intermediate Credit Banks, with the products of the farm. The Federal Farm Board is designed to deal with the marketing problems of the farm, and loans its money, not upon the farms, nor even in most cases upon the crop, but to the co-operative associations which are marketing the crop. Its procedure is in the formative stage.
- 2—There is a difference in the financial service rendered by the two institutions. To some extent the difference is pointed out in paragraph one. Loans from the Federal Farm Loan Board are made, thru banks controlled by it, directly to individual farmers. Loans from the Federal Farm Board are made directly by the board to co-operative associations controlled by the farmers.
- 3—There is a difference in the objective of the two institutions. The Federal Farm Loan Board aims to assist in the long time financing on the land. The Federal Farm Board aims to build up co-operative marketing associations developed by the farmers for purposes of self-help.
- 4—On account of these differences in the field, in service and objective there is a different administrative viewpoint in the Federal Farm Loan Board as compared with the Federal Farm Board. It is my judgment that each board will render greater service to



agriculture if they are operated independently, but with sympathetic co-operation between them.

The funds of the Federal Farm Loan system are obtained from the sale of bonds and debentures. The funds of the Federal Farm Board are derived from the Federal Treasury and obtained by taxation. The combination of the two systems under one board might affect adversely the marketability of the bonds and debentures of the Federal Farm Loan system; such a combination probably would create confusion and thus impair the usefulness of the system.

The Federal Farm Board is confronted with a multitude of problems of great variety. It would be unfair and unwise to add the additional duty of administering the Federal Farm Loan system. Improvement in the service, which might be rendered by these two institutions, can better be made by separate administrations of the laws under which they severally operate, than by a merger of their functions and organizations.

### In the Early Days

**W. P. HARRINGTON** writes some interesting history of Gove county and the early struggles and failures there, partly because of climatic conditions over which the early settlers had no control and partly because these early settlers brought with them certain ideas about farming which worked all right in the localities they came from but which did not work in Western Kansas. Seeds the farmers brought with them did not grow well in the new prairie country, and methods of cultivation which were successful in localities where there is abundant moisture did not bring good results in this semi-arid land. Fully half of the first settlers gave up in discouragement and left the county. Most of early settlers were poor, but after all, the ones with almost no money were as well off as those who were better fixed. The more money the early settler had the more he lost if he followed the usual plan of cultivation. Those who stuck and the second crop of settlers tried a different system. They knew that the native grass was fine

for stock, so they tried to get hold of a few cattle. They also discovered that sorghum crops would withstand drouth and make a fair crop when corn was a failure. So they began to plant more and more cane and kafir. Then came settlers from Russia, who brought in a new kind of wheat which they had grown on the steppes of Russia where the climate is as dry as in Western Kansas. This hard wheat, which at first was rejected by the millers, became finally the most popular wheat in the United States, and has revolutionized agriculture in Western Kansas.

Gove county, along with all of Western Kansas, has become part of the greatest wheat country in the world, and instead of that part of the state calling for aid it is today the most prosperous part of Kansas from an agricultural standpoint.

In 1928, with a population of 5,481, Gove county produced an aggregate of agricultural products valued at \$3,261,770.75, or approximately \$600 per capita. Estimating the average family at five persons, this showed an average family income of \$3,000.

The largest town in the county has less than 500 inhabitants, so it is made up almost entirely of a farming population.

### Less Booze From Canada

THE amount of intoxicating liquor exported to the United States from Canada last year was less in value by 2 1/2 million dollars than the year before. However, while the flow of liquor into the United States is diminishing, the Canadians seem to be consuming more and more. Of course they say that a great deal of this consumption is due to the fact that citizens of the United States go over there to get their drinks, which does not harmonize with the other claim made by the critics of prohibition that anybody can get all the liquor he wants anywhere in the United States. A pamphlet issued by the Association Against the Prohibition Amendment, which is an enthusiastic advocate of the Canadian system, gives some interesting statistics showing the population of Canada at different periods and the amount of different kinds of liquor consumed.

For example, in 1927 the population of Canada was 9,519,220. The amount of hard liquor consumed in Canada that year was 2,894,322 gallons. The amount of malt liquor consumed was 51,879,344 gallons. The amount of wine consumed was 3,555,095 gallons. In 1928 the population was 9,658,000. The amount of hard liquor consumed was 4,105,982 gallons, an increase of 1,211,660 gallons. The amount of malt liquor consumed was 58,625,673 gallons, an increase of 6,746,329 gallons; the amount of wine consumed was 5,486,614 gallons, an increase over 1927 of 1,931,519 gallons.

During 1927 the people of Canada, aided, I assume, by visitors, spent \$72,721,713 for intoxicating liquors at the government liquor stores. In 1928 they spent \$107,694,384, an increase as compared with the previous year of \$34,972,671, or nearly 50 per cent. It has often been claimed that drunkenness in Canada is decreasing, if so, the official figures do not show it. In 1927 the number of convictions for drunkenness was 31,171. During 1928 the number of convictions for drunkenness was 33,095.

During 1927 the number of convictions for driving automobiles while drunk was 953; during 1928 the number was 1,322, an increase of 363. You may draw your own conclusions.

Texas is a great state, not only in area but in resources. It will be a much richer state in 25 years from now than it is at present. Still there have been some drastic criticisms. General Sheridan soon after his graduation from West Point in 1853 was commissioned a second lieutenant and stationed at Fort Duncan, a frontier post on the Rio Grande near Eagle Pass. It was a dreary place, and the young Irish Lieutenant was lonesome and homesick. Somebody asked him how he liked Texas, and he replied that if he owned hell and Texas he would rent out Texas and live in hell.

A chemist has taken the trouble to make an estimate of the value of the elements that make

up the human body, and has reached the conclusion that the market value of these constituents amounts to about \$1. I have seen a good many men, however, that would seem to me to be mighty high priced at that figure.

### A Den of Skunks

I dug out and killed a den of skunks on my farm, and now I am told I cannot dispose of these unless I get a trapper's license. Please print particulars.  
E. T.

Section 21 of Chapter 221 of the Session Laws of 1927 reads as follows:

That it shall be unlawful for any person to pursue, injure, trap, capture, kill, destroy or chase with dogs any fur-bearing animal, or to have in his possession any pelts, skins or carcasses of any fur-bearing animals hereinafter enumerated: muskrat, skunk, mink, raccoon, opossum, between the first day of February and the 15th day of November, both dates inclusive. No person shall use ferrets or employ any smoke, gun or other device for forcing smoke or any asphyxiating or deadly gas or liquid into the holes, dens, runways or houses of any fur-bearing animals, or shall kill or attempt to kill such animals with poison. No person shall destroy any muskrat houses, beaver dens, mink runs, or the holes, dens or runways of such animals: Provided further, that this act shall not prevent the owners or legal occupants of lands from killing these animals for destroying poultry or damaging property: And provided further, that when in the judgment of the forestry, fish and game commission it becomes necessary, in order to give added protection to the herein-mentioned fur-bearers, the said commission may, by rules and regulations as provided for in section 9 of this act, prohibit the taking or possession or pursuit of any or all the herein-mentioned fur-bearers, the said commission may, by rules and regulations as provided for in section 9 of this act, prohibit the taking or possession or pursuit of any or all the herein-mentioned fur-bearing animals in any zone or zones it may establish or define, or lessen the length of the open season in such zone or zones.

### Can Change the By-laws

What would be the liability of a stockholder in a stock company owning an elevator? Do the directors have a right to change the by-laws after they have sold stock? And if the elevator has not run according to the by-laws can they hold the stockholders liable?  
K.

The directors or trustees of the corporation may adopt by-laws for the governing of the corporation. But such by-laws may be altered, changed or amended by a vote of the stockholders and an election can be ordered for that purpose. In other words, as I understand the statute, the stockholders only have power to amend the by-laws by vote. It is the province of the directors to make the by-laws by which the corporation is generally governed. If the directors have violated the charter and by-laws of the corporation they may be held personally responsible.

### 'Tis a Good Deed?

A parent deeds a child a part of his property and the child fails to have the deed recorded. On the parent's death would such deed be a valid deed?  
W. H. G.

If this deed was made in good faith, yes. There are three requisites in a good deed. First the grantor must own the title to the property deeded. Second, the deed must be signed and acknowledged in the presence of some officer qualified to administer oaths, and such officer must state that such deed was signed and executed in his presence and to such acknowledgment he must affix his official seal. Third, the

deed must be delivered to the grantee. The fact that the deed was not recorded does not effect its validity as between the grantor and grantee. If the grantee fails to have his deed recorded and the grantor should execute a subsequent deed before the recording of the first deed, or if judgment should be obtained against the grantor before the deed was recorded, the second deed or the judgment would take precedence to the unrecorded deed. But as between the grantor or the grantee the unrecorded deed is good.

### Right on the Line!

I have just bought a little 20-acre farm and have leased it to an oil company. This farm is longer than it is wide, and though I have never measured it, I doubt whether it is more than 700 feet wide. Therefore if an oil well was sunk in the middle the well would be only 350 feet distant from farms on both sides of me. Some of my neighbors are contending that the laws of Kansas won't permit an oil well to be sunk unless it is over 500 feet distant from another farm. Is that the law or



are these men mistaken? Hasn't an oil company a perfect right to sink an oil well on my farm even if it is only 350 feet to my nearest neighbor's farm?  
J. E. N.

Your neighbors are mistaken. There is no such law in regard to sinking oil wells. You have a right to lease your land, and the oil company acting under this lease has a right to sink its wells anywhere on your land. There is a sort of common agreement that wells shall not be sunk nearer than 50 feet to the adjacent landowner's land, but that is not a law.

### What the Law Says

A is driving his automobile on the highway. B is approaching the main highway on a township road; there are no stop signs where the roads cross. At the left the view is obstructed by a building. Should a wreck occur who would be responsible? Is not a car approaching the main highway on any by-road or township road

compelled by law to stop before entering the highway even if there is not any stop sign?  
L. M.

The legislature of 1929 in Chapter 83 of the Session Laws modified the old speed ordinance so that it reads as follows:

Upon approaching a railroad crossing or intersection of highways outside of any village or city, or turning corners, the person operating a motor vehicle shall reduce the speed of such vehicle to a rate not exceeding 15 miles an hour, and shall not exceed such speed until entirely past such crossing or intersection: Provided, that the state highway commission shall erect at the entrances of intersecting state and federal highways signs notifying drivers of vehicles to come to a full stop before entering or crossing such designated highway, and whenever any such signs have been so erected it shall be unlawful for the driver of any vehicle to fail to stop in obedience thereto. The governing bodies of all cities are hereby authorized to regulate by ordinance the speed of motor vehicles within the limits of such cities. Township boards are hereby authorized to make and enforce rules regulating the speed of all motor vehicles within the limits of villages. The word "village" as used in this act shall include every inhabited place laid out in lots and blocks other than incorporated cities.

As will be seen, this does not require a person approaching the main highway on a township or state road to come to a full stop unless there is a stop sign. He would be required to reduce the speed to 15 miles an hour, and so, for that matter, would the person traveling on the main highway.

### Half to the Child

A and B, husband and wife, owned land in Colorado. A died leaving no will. Shortly afterward a son was born to B. Can B sell this land or must she keep it until this child is of age?  
A. N.

At A's death without will, under the laws of Colorado, this unborn child would inherit half of his property, at birth.

### Dogs Kill the Sheep

Are dogs allowed to run at large? I have had sheep killed and hurt by dogs coming into the corral at night. Have I a right to put poison out to kill the dogs or how can I get protection?  
W. E. J.

Section 564 of Chapter 21 of the Revised Statutes reads as follows:

Every person who shall willfully administer any poison to any domestic animal, or shall maliciously expose any poisonous substance with the intent that the same shall be taken or swallowed by any domestic animal, shall upon conviction be punished by confinement and hard labor not exceeding three years, or in the county jail not less than 12 months: Provided, that the provisions of this section shall not apply to persons exposing poison upon their premises for the purpose of destroying predatory dogs or wolves.

Section 646 of Chapter 47 of the Revised Statutes reads as follows:

It shall be lawful for any person any time to kill any dog which may be found worrying or injuring sheep.

W. E. J. therefore has a right to put out poison on his own premises for the purpose of killing predatory dogs or wolves. Or if the animal is found worrying the sheep he would have a right to instantly kill such dog. I think the courts would hold that even if the dog were not found actually worrying the sheep but it was entirely evident that such dog had been worrying the sheep or was pursuing the sheep for the purpose of worrying them, the owner of the sheep would have a right to kill the dog.

# Give the Farm Board a Chance

Warning that the grain trade and allied interests are flooding the country, including the farming section, with propaganda intended to destroy the Federal Farm Board was issued by Senator Capper at Washington, February 16. The statement follows:

**A**PPARENTLY no effort is being spared to block the Farm Board before it gets a chance to show what it can do. Pamphlets, speeches, market manipulations, inspired new stories—these are coming to us in a flood. All are directed toward one end—to discredit the board and to prevent its using its powers for the benefit of agriculture.

Virtually all this propaganda can be traced back to one or two sources. Most of it comes from the grain gamblers, who fear a stabilized market, for instance, will put an end to their easy harvests from growing "Paper Wheat,"—those who trade in little pink slips of paper, as Chairman Legge, of the Federal Farm Board, expresses it.

In the last few days I have received a speech by one Mr. McHigh, of Minneapolis, bitterly attacking the board as socialistic, paternalistic, malignant. This is being broadcast in pamphlet form by the Minneapolis Chamber of Commerce, I believe.

Then a very good friend of mine, Mr. W. F. Jensen, has written a series of letters discussing the Agricultural Marketing Act. He considers that act, and the actions of the Federal Farm Board, so dangerous to the future of the country, that he advocates the export debenture plan in place of the Farm Board plan. The American Association of Creamery Butter Manufacturers considers this such good stuff that it is printing pamphlets by the thousands.

All the way down thru the grain trade, private

interests are engaged in stirring up distrust among farmers and farmers' organizations.

It looks like a two-way attack. One by the grain trade and its allies to frighten the business man and the consumer, the other to persuade the farmers that the board is not acting in their interests.

The job ahead of the Farm Board is a most difficult one. By many it is held to be impossible of accomplishment. It is too early of course, to pass judgment on the board.

But it does seem to me that the board is on the right track, and is entitled to the wholehearted support of every true friend of agriculture and of the people of the entire country, until it shows what it can or cannot do.

To succeed, the board must encourage and develop co-operative marketing. It must hook up the various co-operatives already organized into more efficient and larger units.

Under this situation it is most unfortunate that the country is being flooded with propaganda from Chicago, Minneapolis, Kansas City and other grain centers—and from some financial interests also against co-operative marketing and especially against the grain co-operatives.

Perhaps one of the most extraordinary of these efforts is the campaign being waged against the Canadian wheat pool, evidenced by a recent article by James E. Boyle, reprinted by that old time friend of all opponents of the farmer, the Minneapolis Chamber of Commerce.

The main form the arguments against the Canadian wheat pool now take are some highly involved speculations as to whether its present market position is correct.

The market position of any selling organization is a day by day proposition. The executives

of the Canadian wheat pool have had a market position every day since it was organized. Naturally it would follow that their success would be largely in proportion to their skill in reaching the world's markets in competition with the old-line grain trade. Just what has been this success?

The Canadian wheat pool is the greatest co-operative grain selling organization the world has ever seen—which may be one perfectly good reason why the grain trade is weeping such bitter tears about it. It has 142,000 farmer members, and it does a business that amounts to almost 1 million dollars for every working day. It owns 1,636 country elevators, thereby making it largely independent of private elevators, and many terminal elevators, including the one at Fort William, with a capacity of 6,900,000 bushels, the largest single-unit elevator in the world. The total of the pool and terminal elevator capacity is close to 100 million bushels.

That is the result of a half dozen years of pool operation in Canada. Apparently the "market position" of the executives must have been reasonably good.

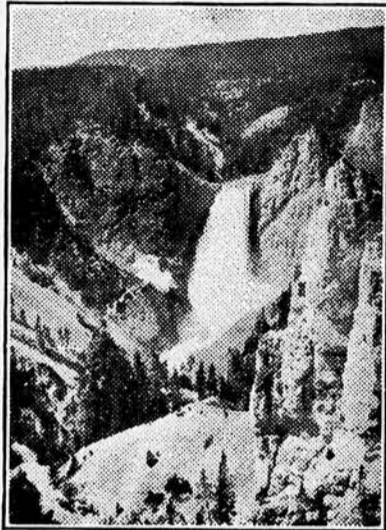
I want to say once more: The Farm Board is made up of strong men. They should be given every chance to function. They should have freedom of action.

Give the Farm Board a chance. And beware of propaganda from selfish interests.

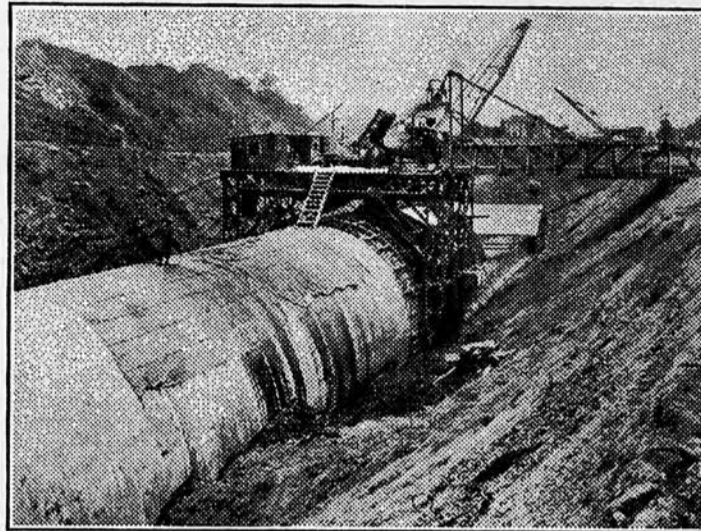
*Arthur Capper*

Washington, D. C.

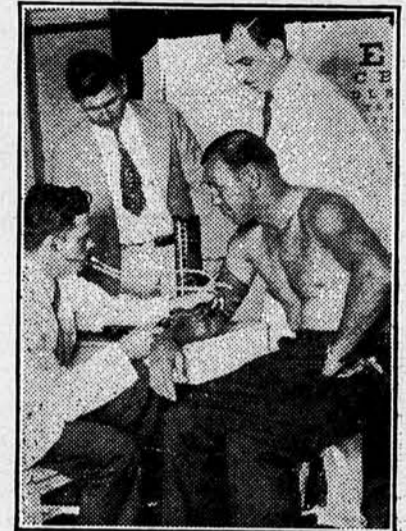
# World Events in Pictures



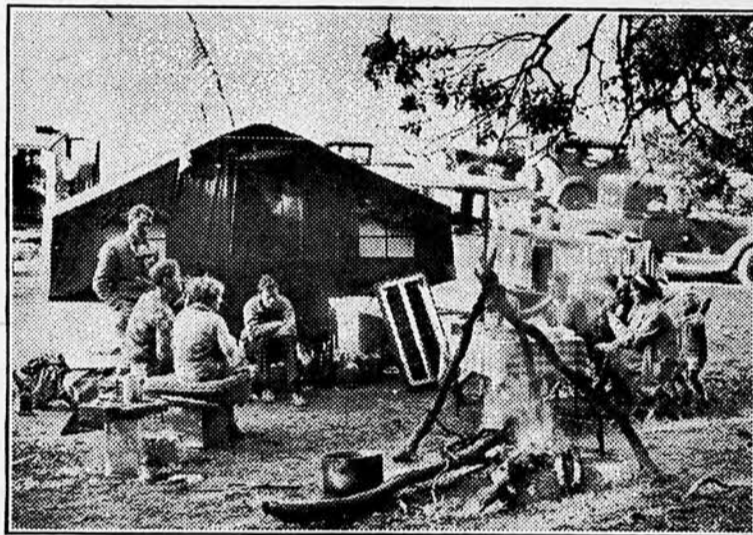
There Is Not the Breadth and Dash of Niagara, But in the Great Fall of Yellowstone One Finds Majestic Beauty Just the Same. And It Soon Will be Vacation Time Again



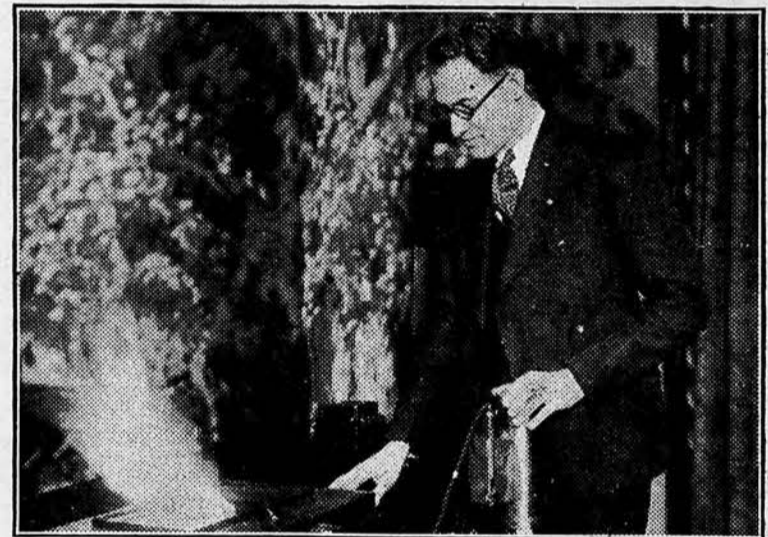
Who Ever Heard of Burying a River? But See for Yourself This Unique and Gigantic Engineering Task of Enclosing a Stream in the World's Largest Sewer, at St. Louis. The Men Are Busy Completing the "Grave" of the River Des Peres



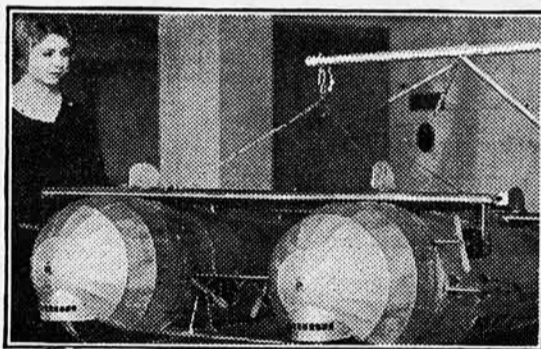
How They Looked Jack Sharkey Over Before Giving Him his Florida Boxing License, Prior to His Fight with the Briton, Phil Scott. The Doctor is Taking Sharkey's Blood Pressure



The Lindberghs in Camp in the Mountains North of Los Angeles Where the Famous Colonel Was Experimenting with the Bowls Glider and Came Near Cracking Up. Lindy Is Seated on the Rear Steps of the Trailer-Tent, While Mrs. Lindbergh is at Right with a White Band Around Her Head



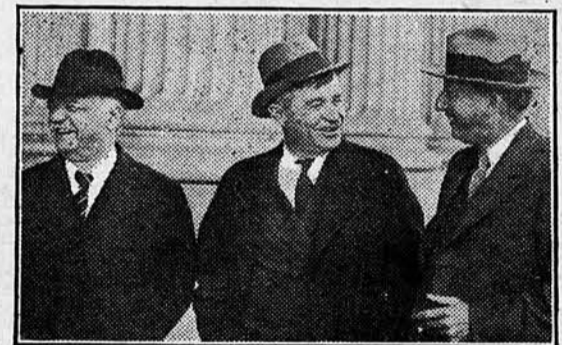
New Use for the "Electric Eye," Demonstrated by E. H. Vedder, of Westinghouse Lamp Co., New York. The "Eye," Seen Over His Right Shoulder, Detected Smoke in the Room and Turned on the Chemical Fire Extinguisher Which You See Operating in the Picture



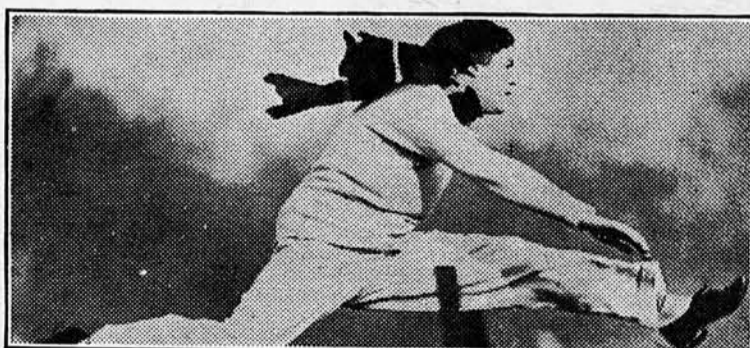
Model of Novel Airship Proposed by Williams Patent Corp., Los Angeles. It Would Have Two 310-Foot Dirigibles Rigidly Connected, and 210 Feet Wing Spread. The Idea Is for More Speed, Safety and Comfort



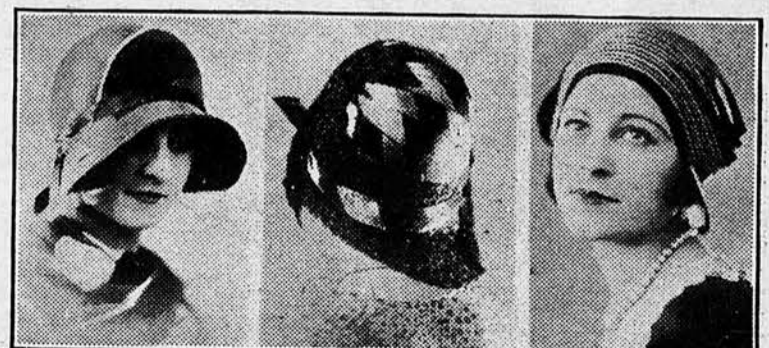
Ingeborg von Grienberger, Vienna, Who Has Been Selected as "Miss Austria" for 1930 to Compete in the International Beauty Contest at Rio de Janeiro This Summer



Will Rogers, Center, America's Unofficial Representative at the Arms Conference, Telling Vice President Curtis, Left, and Senator Pat Harrison of Mississippi, All About It



What a Stride! Miss Dewar, London, Noted Hurdler, Caught in a Fine Action Shot During Her Training at Battersea Park for the International Games at Prague. This Looks Easy But Just Try It Yourself to Make Sure



Left, a Black Bakou Cloche with Inlaid Work in Black and Grey Georgette Crepe, with Scarf to Match; Center, a Navy Blue Hemp, Trimmed with Navy Blue, Grey and Citron Ribbon; Right, a Stunning, Partly-Toned Chestnut and White Straw, with Inlaid Work of Chestnut Felt on Both Sides and Brim

# As We View Current Farm News

## Our Rural Educational Facilities Show Outstanding Progress

**W**E REALLY should be a well-educated state now and in the future, because more than one-fourth of the population of the state attends school. Kansas now ranks in the upper fourth of the 48 states, which is a big stride from the situation of 1910, when a report of the Russell Sage Foundation placed us 27th in school standing. The greatest advance has come in the matter of high school improvement. Twenty years ago high schools in rural districts were comparatively few. Those that did exist were under-manned as to instructors, had few courses to offer and the attendance was small. This is another proof that rural Kansas is coming into its own. Farm boys and girls now have all the educational advantages of the town children. And that is a fine thing, because a good share of the real "brains" of the entire country comes from farm homes.

Kansas is better supplied with colleges and universities than most states of the Union, having 30 institutions of higher learning. Sumner county has the largest number of districts maintaining schools, with 167, while Stanton has the fewest, 16. Kansas has 8,615 school districts, with 8,431 actual schools in operation.

### Honor for Poultry Experts

**K**ANSAS has had her champions in various fields of agriculture, from wheat experts to Master Farmers. In 1931 another "master" will be recognized, or in fact five of them. They will be poultrymen. This was determined at a recent meeting of the Kansas Poultry Improvement Association. Points to be considered will include average egg production, housing conditions, feeding methods, control of disease, profit to the bird, brooding methods and similar conditions. Awards will be presented during Farm and Home Week at the Kansas State Agricultural College in 1931. We just wish to add that the folks who are masters of this business from baby chick care on thru to marketing are finding it very profitable. And there is plenty of room for more good eggs and birds on the market.

### Can't Keep Farmers Down

**M**ORE evidence that agriculture "knows its stuff" is contained in a report from the agricultural implements division of the Department of Commerce at Washington. The farm equipment industry last year showed a fine increase in production as well as in domestic and foreign sales. Production and consumption in the United States were larger than any year in the last decade, with the exception of 1920, when implement production exceeded a half billion dollars. Exports last year established a record with a value of 141 million dollars, or 20 per cent of the total production. And equipment these days must prove to the purchaser that it will do the desired work cheaper.

### So He Bought in Kansas

**W**ESTERN Kansas apparently has acquired some of Missouri's thunder, if we follow C. S. Knowles, Kentucky stockman. "Missouri once was the place to get good mules," he said, "but now it is Western Kansas." He recently shipped 75 head of young stuff to his home state from near Garden City, and in the last few years has purchased more than 300 head there and placed them with Kentucky farmers. Mr. Knowles believes that altho tractors are replacing horses and mules in Western Kansas, there always will be a demand for the animals in the eastern half of the United States.

### A Youngster, But Wealthy

**W**HEN something is created or discovered that proves of real service and value, demand puts it at the top of the ladder of success. Just take a look at your radio and we'll tell you something about it. The business of making these instruments is one of the youngest, but it is one of the four largest in the United States, according to R. C. McCurdy, technical radio engineer of the Western Electric company. Now what we want to do is to keep experts interested in making new things out of farm products. They'll hit the bull's eye with something, sure.

### Where There's a Future

**F**ARMERS of the Larned vicinity likely will plant a large acreage of Irish potatoes this coming season. Plans are being made to ship in four carloads of Northern certified seed. The

acreage was reduced last year, due to the over-production in 1928, when many growers lost heavily. Of course, balanced production now is of greatest importance, and too large an acreage likely wouldn't help the market. But the interesting thing is that Western Kansas is discovering from year to year, that it can profitably produce more crops. The time will come when this part of the state will be unsurpassed in yield and quality of a great variety of crops.

### Just Think We See More

**H**OW many stars can you see these balmy winter nights, or any clear night for that matter? Pick out a nice high hill in the pasture and while standing there make an estimate of the number of twinklers that are visible to the naked eye, not counting those seen if you stumble and fall. Maybe you'll decide there are thousands or even millions. At any rate it looks as if there might be that many.

But that isn't so. In reality the total number of stars visible in the whole heavens, both the Northern and the Southern hemispheres included, is about 8,000. Of these the most that it would be possible to see with the naked eye in Kansas is 4,000, due to the fact that the other 4,000 are in the Southern hemisphere and are invisible here. The horizon, however, cuts off another 1,500, so that the number which actually may be seen is about 2,500, not including the Milky Way.



Prof. E. J. Prouse, head of the Washburn Astronomy Department, Topeka, is responsible for this information. And of course, if you don't believe him, just start counting. He thinks the sun is burning itself away, but because of its size this process will require millions of years for completion. Well, we can believe that it is burning considerable most any July or August day that might be selected. And the way it scorches crops at times is enough to make one see all kinds of stars.

### "As You Were"

**O**UT on the open prairie of Haskell county a town called Santa Fe took root, grew and branched out until it boasted a thousand inhabitants. For a while it was the trading center of the Southwest, then it stepped backward and dwindled. Time erased all signs of its stay, as the prairie took it back again. This summer a carpet of green will spread over the townsite and reach out in every direction for hundreds of acres. Then over this phantom town tractors and combines will roll, gathering a golden harvest of wheat. Progress waved its magic wand over the spot back in 1887 and conjured a little city. Then destiny gave the command: "As you were!"

### Turn About Is Fair

**A** FEW days ago a motor car "wrecker" had to come to the aid of a horse. Usually it is quite the other way around. Near Havana the animal in question trusted too much weight to planking over an old cistern, with the results that you would guess. Somebody had the bright idea of sending for the car wrecker. The horse was uninjured when the hoist lowered him to the ground a safe distance from the cistern. A good many farmers over Kansas still are called upon, when roads are bad, to have their teams pull various and sundry motor cars out of mud holes. And we

might reflect that horses deserve considerable credit for pulling Kansas out of a mire of worthlessness and barrenness, and on to its present solid footing as one of the leading agricultural states.

### Production on Increase

**D**UROC hogs owned by Fred N. Housh, Winchester, evidently believe in quantity production. Mr. Housh started to count the recent arrivals from a bunch of seven brood sows, and was astonished when he discovered that there were 90 of the little porkers on hand, all hale and hearty. His count disclosed that four sows had produced an average of 15 pigs, while a fifth sow claimed ownership of 20. The other two sows had smaller litters. Another report says that 33 pairs of twins were produced by 49 ewes owned by high school and 4-H club boys in the vicinity of Winfield. These boys are working out sheep projects this year under Prof. John Lowe, vocational instructor. The ewes are a part of a carload shipped to Winfield last fall from Idaho and distributed among the boys. One boy reports that his six ewes produced 10 lambs and saved all of them.

### Fortune Favors Southwest

**T**HE country around Liberal is far from being down-hearted. During 1929 about \$325,000 worth of broomcorn and between 4 and 5 million dollars' worth of grain, flour and feed were bought and shipped out of that active Southwestern Kansas town. About \$600,000 worth of poultry and eggs were added to the income for the year.

There is a larger wheat acreage now than ever before and prospects for a crop this year are excellent. Also there will be a much larger acreage of broomcorn this year than ever before. Wheat land is selling to local buyers readily at from \$35 to \$60 an acre.

### More Diversification, Maybe

**I**F SUFFICIENT interest in peanut growing can be aroused around Arkansas City, W. R. Ranney will install a mill for cleaning, grading and turning the crop into peanut butter, we understand. And mark you, this crop has other possibilities, not to mention its crunching properties when deposited on the theater floor. One Dr. George W. Carver of the Tuskegee Institute, reports that he has been able to make 265 articles from the peanut, all of which are used commercially. His exhibit includes "milk," dandruff "cure," salad, beauty cream, oil shampoo and various beverages.

### To Keep Farms at Home

**T**HE Government is starting some experimental work at Hays which is intended to help prevent Kansas farms from getting away from their owners. This is to take the form of work with soil erosion and water conservation, and will be in connection with the experiment station. Prof. F. L. Duley of the department of agronomy at the agricultural college is helping to perfect plans for the work. The Government has appropriated \$160,000 for the cause. This amount will be divided among the bureau of public roads, bureau of chemistry and soils, and the bureau of forestry. Stations located to date are in Oklahoma, Texas, Missouri and Hays. Others are planned for various sections of the country. At Hays 240 acres are to be used for these experiments. A number of plots will be laid off from which soil losses and actual run-off of water will be determined. And the results obtained will be of very great value to Kansas farmers.

### This Hog Went A. W. O. L.

**T**HERE is something to hog sense as well as the horse variety, apparently. A smart porker watched the D. R. Winsinger family, of near Moundridge, heat a kettle of water and get other things ready for a real butchering. Then he took action and made himself scarce from the scene. The animal later was found more than a mile from home.

### We're Not Even Bent

**G**UESS we're not broke yet! National banks in the United States had aggregate resources of \$28,882,483,000 on last December 31, according to the comptroller of currency. So that's where our money goes!

# There's Big Expansion Ahead in Radio

## And WIBW Will Keep Its Audience in Step With Progress

**W**E WANT you to take a look at the home of the Columbia Broadcasting System this week. Here is a picture of the fine, new building, located at 52nd street and Madison avenue, in New York City. You know, of course, that WIBW brings you the Columbia programs, which are presented by the best talent in the country. Columbia facilities now are the finest in existence, and came as the final step in building up an organization and putting all activities under the same roof. William S. Paley, president, said "The move into the new building has been made because of the optimistic view we have of the future of the radio broadcasting business, and in order to take care of the big expansion that has come and is yet to come."

Back home again for a few minutes, we wish to introduce the Oklahoma Revelers, the WIBW staff orchestra, directed by Boyd Shreffler. Every single one of these boys is an accomplished

Leslie Edmond's weekly sport review, formerly on Tuesday evenings, now is broadcast from 6:30 to 6:45 o'clock every Sunday evening, from the Capper Publications' station.

One of the best features of the week is the review of business conditions over the world at 6:45 every Sunday evening by Dr. Julius Klein, assistant secretary of Commerce of the United States.

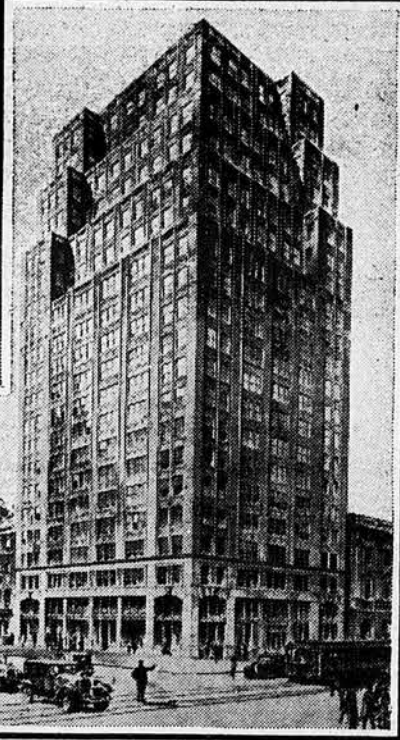
Senator Arthur Capper talks over the Columbia System and WIBW every week from Washington at 10:15 o'clock Monday mornings, our time. He always has something interesting, usually concerning some subject of importance before the Senate.

Any Kansas farmer may get the numbers of agricultural bulletins that are of interest to them, by turning to the Farm Note Program over WIBW

- 1:30 p. m.—Columbia Male Chorus (CBS)
- 2:00 p. m.—Symphonic Hour (CBS)
- 3:00 p. m.—Cathedral Hour—Sacred Musical Service (CBS)
- 4:00 p. m.—The Melody Master
- 4:30 p. m.—WIBW Harmony Boys
- 5:00 p. m.—Rabbi Levey's Question Box
- 5:15 p. m.—Recording Program
- 6:00 p. m.—Our Romantic Ancestors (CBS)
- 6:30 p. m.—Leslie Edmond's Sport Review
- 6:45 p. m.—The World's Business—Dr. Julius Klein (CBS)
- 7:00 p. m.—Pennant Cafeteria
- 7:30 p. m.—Pipe Dreams of the Kansas Poet
- 8:00 p. m.—The Music Hall
- 9:00 p. m.—Robert Service Violin Ensemble
- 9:30 p. m.—Arabesque (CBS) Courtesy Kansas Power and Light Co.
- 10:00 p. m.—Tomorrow's News

### MONDAY, MARCH 3

- 6:00 a. m.—Alarm Clock Club
- 6:45 a. m.—USDA Farm notes, time, news, weather
- 7:00 a. m.—Morning Organ Reveille (CBS)
- 7:30 a. m.—Morning Devotionals
- 7:55 a. m.—Time, news, weather
- 8:00 a. m.—Housewives' Musical KSAC
- 8:40 a. m.—Health Period KSAC
- 9:00 a. m.—Early Markets
- 9:05 a. m.—Sunshine Hour
- 9:45 a. m.—Housewives' Half Hour KSAC
- 10:15 a. m.—Senator Capper's "Timely Topics from Washington"
- 10:30 a. m.—Leo and Bill—Harmony Boys
- 11:00 a. m.—Women's Forum
- 11:15 a. m.—Studio Program



The Gentleman at Left is Dr. Thatcher Clark, One of the Most Prominent Language Teachers in the Country. Above is Boyd Shreffler and The Oklahoma Revelers, WIBW's Staff Orchestra. And the Building is the New Home of the Columbia Broadcasting System in New York City

musician, and some of them are composers. They won first in three different contests in Kansas City, as the best orchestra. The group has filled many theatrical and club engagements in Topeka and the Midwest, and radio listeners have accepted the Revelers as one of the most popular orchestras on the air.

Now you will be interested in meeting Dr. Thatcher Clark, who is considered one of the most prominent language teachers in this country. He conducts French lessons on the radio every Saturday from 4:45 to 5 p. m., Central Standard time, over WIBW and the Columbia system. It is interesting to know that he speaks 12 languages and 20 dialects. Two special features of Dr. Clark's method of radio instruction are his college yell rhythm, which he uses for drilling purposes and his systematic sentence building machinery, which is of value in acquiring a vocabulary. He was the first to introduce foreign language instruction by radio. A good many Kansas folks are interested in Dr. Clark's teachings. But even if you don't happen to be one of them, the matter of calling your attention to his work tends to show how far-reaching radio really is. WIBW and the Columbia system are endeavoring to bring you everything that could possibly interest you.

It probably isn't necessary to mention these things, but just as a neighborly reminder:

The Aztecs bring you all the rhythm of Spanish music over WIBW every Sunday afternoon. This is a real Mexican organization, formerly entertaining in Mexico City, and of course, their programs are highly recommended by WIBW.

every morning at 6:45 o'clock. The bulletins are supplied free of charge to everyone who writes in for them to the United States Department of Agriculture, Washington, D. C.

Newspapers all over Kansas praise the United States Service Bands which broadcast over WIBW at 3:30 o'clock. These daily afternoon concerts are given by the United States Marine Corps, the United States Navy and the United States Army bands.

### WIBW's Program for Next Week

#### SUNDAY, MARCH 2

- 8:00 a. m.—Morning Musicales (CBS)
- 9:00 a. m.—Land of Make Believe (CBS)
- 9:50 a. m.—Columbia's Commentator—Dr. Chas. Fleischer (CBS)
- 11:30 a. m.—Five Power Naval Conference (CBS)
- 12:00 m.—Pennant Cafeteria
- 12:30 p. m.—The Aztecs (CBS)
- 1:00 p. m.—Watchtower Program IBSA

- 11:45 a. m.—Complete Market Reports
- 12:00 m.—Golden Music (CBS)
- 12:20 p. m.—Health for the Family (CBS)
- 12:25 p. m.—State Board of Agriculture
- 12:30 p. m.—Noonday Program KSAC
- 1:30 p. m.—Ann Leaf at the Organ (CBS)
- 2:00 p. m.—Coora B. Lanham's Dramatic Period
- 2:30 p. m.—For Your Information (CBS)
- 3:00 p. m.—The Letter Box
- 3:10 p. m.—Leo and Bill—Harmony Boys
- 3:30 p. m.—U. S. Navy Band (CBS)
- 4:00 p. m.—The Melody Master
- 4:30 p. m.—Matinee KSAC
- 5:00 p. m.—Markets KSAC
- 5:30 p. m.—Uncle Dave's Children's Club
- 6:00 p. m.—Daily Capital Radio Extra
- 6:10 p. m.—Pennant Cafeteria
- 6:30 p. m.—Voices from Filmland (CBS)
- 7:00 p. m.—The Sod Busters
- 7:30 p. m.—St. Marys-Washburn Basketball Game
- 9:00 p. m.—Kansas Authors Club
- 9:30 p. m.—WIBW Harmony Boys
- 10:00 p. m.—Tomorrow's News
- 10:05 p. m.—Hank Simmon's Show Boat (CBS) Courtesy Nat'l Reserve Life Co.

### TUESDAY, MARCH 4

- 6:00 a. m.—Alarm Clock Club
- 6:45 a. m.—USDA Farm Notes, time, news, weather
- 7:00 a. m.—Morning Organ Reveille (CBS)
- 7:30 a. m.—Morning Devotionals
- 7:55 a. m.—Time, news, weather
- 8:00 a. m.—Housewives' Musical KSAC
- 8:40 a. m.—Health Period KSAC
- 9:00 a. m.—Early Markets
- 9:05 a. m.—Sunshine Hour
- 10:00 a. m.—Housewives' Half Hour KSAC
- 10:30 a. m.—WIBW Harmony Boys
- 11:00 a. m.—Women's Forum
- 11:15 a. m.—Studio Program
- 11:45 a. m.—Complete Market Reports
- 12:00 m.—Try Dancing (CBS)
- 12:20 p. m.—Health for the Family (CBS)
- 12:25 p. m.—State Board of Agriculture
- 12:30 p. m.—Noonday Program KSAC
- 1:30 p. m.—American School of the Air (CBS)
- 2:00 p. m.—H. F. Burleigh Girls Quartet
- 2:30 p. m.—For Your Information
- 3:00 p. m.—The Letter Box
- 3:10 p. m.—Leo and Bill—Harmony Boys
- 3:30 p. m.—U. S. Army Band (CBS)
- 4:00 p. m.—The Melody Master
- 4:30 p. m.—Matinee KSAC
- 5:00 p. m.—Markets KSAC
- 5:30 p. m.—Uncle Dave's Children's Club
- 6:00 p. m.—Daily Capital Radio Extra
- 6:10 p. m.—Pennant Cafeteria
- 6:30 p. m.—Jayhawk Trio
- 7:00 p. m.—WIBW Harmony Boys
- 7:30 p. m.—The Sod Busters
- 8:00 p. m.—Old Gold—Paul Whiteman Hour (CBS)
- 9:00 p. m.—Graybar's Mr. and Mrs. (CBS)
- 9:30 p. m.—Conclave of Nations (CBS) France
- 10:00 p. m.—Tomorrow's News
- 10:05 p. m.—Will Osborne and his Orchestra (CBS)
- 10:30 p. m.—Publix Radio-vue (CBS)

### WEDNESDAY, MARCH 5

- 6:00 a. m.—Alarm Clock Club
- 6:45 a. m.—USDA Farm Notes, time, news, weather
- 7:00 a. m.—Morning Organ Reveille (CBS)



7:30 a. m.—Morning Devotionals  
 7:55 a. m.—Time, news, weather  
 8:00 a. m.—Housewives' Musical KSAC  
 8:40 a. m.—Health Period KSAC  
 9:00 a. m.—Early Markets  
 9:05 a. m.—Sunshine Hour  
 10:00 a. m.—Housewives' Half Hour KSAC  
 10:30 a. m.—Leo and Bill—Harmony Boys  
 11:00 a. m.—Women's Forum  
 11:15 a. m.—Studio Program  
 11:45 a. m.—Complete Market Reports  
 12:00 m.—Famous composers (CBS)  
 12:20 p. m.—Health for the Family (CBS)  
 12:25 p. m.—State Board of Agriculture  
 12:30 p. m.—Noonday Program KSAC  
 1:30 p. m.—Syncopated Silhouettes (CBS)  
 2:00 p. m.—Columbia Ensemble (CBS)  
 2:30 p. m.—For Your Information (CBS)  
 3:00 p. m.—On Brunswick Platters  
 4:00 p. m.—The Melody Master  
 4:30 p. m.—Matinee KSAC  
 5:00 p. m.—Markets KSAC  
 5:30 p. m.—Uncle Dave's Children's Club  
 6:00 p. m.—Daily Capital Radio Extra  
 6:10 p. m.—Pennant Cafeteria  
 6:30 p. m.—Commodore Ensemble (CBS)  
 7:00 p. m.—WIBW Harmony Boys  
 7:30 p. m.—The Sod Busters  
 8:00 p. m.—Romany Patteran (CBS)  
 8:30 p. m.—Modocs  
 9:00 p. m.—Phlico Hour (CBS)  
 9:30 p. m.—Voice of Columbia (CBS)  
 10:00 p. m.—Tomorrow's News  
 10:05 p. m.—Voice of Columbia (CBS)  
 10:30 p. m.—Jan Garber and his Hollywood Orchestra (CBS)

THURSDAY, MARCH 6

6:00 a. m.—Alarm Clock Club  
 6:45 a. m.—USDA Farm Notes, time, news, weather  
 7:00 a. m.—Morning Organ Revellie (CBS)  
 7:30 a. m.—Morning Devotionals  
 7:55 a. m.—Time, news, weather  
 8:00 a. m.—Housewives' Musical KSAC  
 8:40 a. m.—Health Period KSAC  
 9:00 a. m.—Early Markets  
 9:05 a. m.—Sunshine Hour  
 10:00 a. m.—Housewives' Half Hour KSAC  
 10:30 a. m.—Leo and Bill Harmony Boys  
 11:00 a. m.—Women's Forum  
 11:15 a. m.—Studio Program  
 11:45 a. m.—Complete Market Reports  
 12:00 m.—High Lights from Light Opera (CBS)  
 12:20 p. m.—Health for the Family (CBS)  
 12:25 p. m.—State Board of Agriculture  
 12:30 p. m.—Noonday Program KSAC  
 1:30 p. m.—American School of the Air (CBS)  
 2:00 p. m.—Columbia Ensemble (CBS)  
 2:30 p. m.—For Your Information (CBS)  
 3:00 p. m.—The Letter Box  
 3:10 p. m.—Leo and Bill—Harmony Boys  
 3:30 p. m.—U. S. Navy Band (CBS)  
 4:00 p. m.—The Melody Master  
 4:30 p. m.—Matinee KSAC  
 5:00 p. m.—Markets KSAC  
 5:30 p. m.—Uncle Dave's Children's Club  
 6:00 p. m.—Daily Capital Radio Extra  
 6:10 p. m.—Pennant Cafeteria  
 6:30 p. m.—The Jayhawk Trio  
 7:00 p. m.—The Vagabonds  
 7:15 p. m.—Five Power Naval Conference (CBS) London  
 7:30 p. m.—Alladin Old Time Orchestra  
 7:45 p. m.—Manhattan Mood (CBS)  
 8:00 p. m.—Songs at Twilight. Courtesy Cap-per's Farmer  
 8:30 p. m.—WIBW Harmony Boys  
 9:00 p. m.—Grand Opera Concert (CBS)  
 9:30 p. m.—National Forum from Washington (CBS)  
 10:00 p. m.—Tomorrow's News  
 10:05 p. m.—Dream Boat (CBS)  
 10:30 p. m.—Bert Lown and his Baltimore Orchestra (CBS)

FRIDAY, MARCH 7

6:00 a. m.—Alarm Clock Club  
 6:45 a. m.—USDA Farm Notes, time, news, weather  
 7:00 a. m.—Morning Organ Revellie (CBS)  
 7:30 a. m.—Morning Devotionals  
 7:55 a. m.—Time, news, weather  
 8:00 a. m.—Housewives' Musical KSAC  
 8:40 a. m.—Health Period KSAC  
 9:00 a. m.—Early Markets  
 9:05 a. m.—Sunshine Hour  
 10:00 a. m.—Housewives' Half Hour KSAC  
 10:30 a. m.—WIBW Harmony Boys  
 11:00 a. m.—Women's Forum  
 11:15 a. m.—Studio Program  
 11:45 a. m.—Complete Market Reports  
 12:00 m.—The Music Box (CBS)  
 12:20 p. m.—Health for the Family (CBS)  
 12:25 p. m.—State Livestock Commission  
 12:30 p. m.—Noonday Program KSAC  
 1:30 p. m.—Ann Leaf at the Organ (CBS)  
 2:00 p. m.—Columbia Ensemble (CBS)  
 2:30 p. m.—For Your Information (CBS)  
 3:00 p. m.—The Letter Box  
 3:10 p. m.—Leo and Bill—Harmony Boys  
 3:30 p. m.—Light Opera Gems (CBS)  
 4:00 p. m.—The Melody Master  
 4:30 p. m.—Matinee KSAC  
 5:00 p. m.—Markets KSAC  
 5:30 p. m.—Uncle Dave's Children's Club  
 6:00 p. m.—Daily Capital Radio Extra  
 6:10 p. m.—Roy Ingraham's Paramount Orchestra (CBS)  
 6:30 p. m.—Pennant Cafeteria  
 7:00 p. m.—U. S. Navy Band (CBS)  
 7:30 p. m.—The Sod Busters  
 8:00 p. m.—True Story Hour (CBS)  
 9:00 p. m.—The Columbians  
 9:30 p. m.—Curtis Institute of Music (CBS)  
 10:00 p. m.—Tomorrow's News  
 10:05 p. m.—Sleepy Hall's Orchestra (CBS)  
 10:30 p. m.—Ben Pollack and his Silver Slipper Orchestra (CBS)

SATURDAY, MARCH 8

6:00 a. m.—Alarm Clock Club  
 6:45 a. m.—USDA Farm Notes, time, news, weather  
 7:00 a. m.—Morning Organ Revellie (CBS)  
 7:30 a. m.—Morning Devotionals  
 7:55 a. m.—Time, news, weather  
 8:00 a. m.—Housewives' Musical KSAC  
 8:40 a. m.—Health Period KSAC  
 9:00 a. m.—Early Markets  
 9:05 a. m.—Sunshine Hour  
 10:00 a. m.—Housewives' Half Hour KSAC  
 10:30 a. m.—Leo and Bill—Harmony Boys  
 11:00 a. m.—Women's Forum  
 11:15 a. m.—Studio Program  
 11:45 a. m.—Complete Market Reports  
 12:00 m.—By Popular Request (CBS)  
 12:20 p. m.—Health for the Family  
 12:25 p. m.—State Vocational Dept.  
 12:30 p. m.—Noonday Program KSAC  
 1:30 p. m.—The Gauchos (CBS)  
 2:00 p. m.—Columbia Ensemble (CBS)  
 2:30 p. m.—For Your Information (CBS)  
 3:00 p. m.—The Letter Box  
 3:10 p. m.—Leo and Bill—Harmony Boys  
 3:30 p. m.—Ann Leaf at the Organ (CBS)  
 4:00 p. m.—The Melody Master  
 4:30 p. m.—Quiet Harmonies (CBS)  
 4:45 p. m.—Dr. Thatcher Clark—French Lessons (CBS)  
 5:00 p. m.—Hotel Shelton Orchestra (CBS)  
 5:30 p. m.—Uncle Dave's Children's Club  
 6:00 p. m.—Daily Capital Radio Extra  
 6:10 p. m.—Pennant Cafeteria  
 6:30 p. m.—Commodore Ensemble (CBS)  
 7:00 p. m.—Exploring the Jungle for Science (CBS)  
 7:15 p. m.—WIBW Harmony Boys  
 7:30 p. m.—The Sod Busters  
 8:00 p. m.—Nit Wit Hour (CBS)  
 8:30 p. m.—Around the Samovar (CBS)  
 9:00 p. m.—Paramount Publix Hour (CBS)  
 9:30 p. m.—Tomorrow's News  
 10:00 p. m.—Guy Lombardo and his Royal Canadians (CBS)  
 10:30 p. m.—Roy Ingraham's Paramount Orchestra (CBS)

A lamb is a mammal, and a sucker is a fish; but in Wall Street you can't tell them apart.

Boosts Dairy Profits

Dairymen in the United States lose millions of dollars annually because of poorly cooled milk and cream, says the United States Department of Agriculture in Farmers' Bulletin 976-F, "Cooling Milk and Cream on the Farm," a new edition of which has just been printed. These losses occur because inferior milk or cream is returned by dealers to the farmers, and because they bring low prices.

The bulletin points out the necessity for prompt cooling of milk and cream and discusses the use of surface coolers, milk-cooling tanks, well or spring water, and mechanical refrigeration. Keeping milk cold during shipment and winter care and handling are other subjects discussed. Proper cooling is just as important with cream as with milk, especially as cream is often delivered less frequently than milk.

Farmers' Bulletin 976-F is a revision of an older publication bearing the same title. It may be obtained from the Department of Agriculture, Washington, D. C.

Farmers' Bulletin 976-F is a revision of an older publication bearing the same title. It may be obtained from the Department of Agriculture, Washington, D. C.

Bargain Burglary

The Gossip—"I hear your store was robbed last night. Lose much?"  
 The Optimist—"Some. But it would have been worse if the yeggs had got in the night before. You see, yesterday I just finished marking down everything 20 per cent."

# It's One of the Most Important Implements You Buy

**I**n the equipment you use in your farming operations is there any unit more important than a good lister?

Is there any other implement or machine that has so much to do in determining your profits from row crops?

Plowing and planting have always been the operations foremost in farming.

A lister is a plow and a planter combined.

That means a lister should be selected with double care—the care that a particular farmer uses, when buying a plow, plus the care that he uses when buying a planter.

No farmer can afford to buy a lister that is either a poor plow or a poor planter.

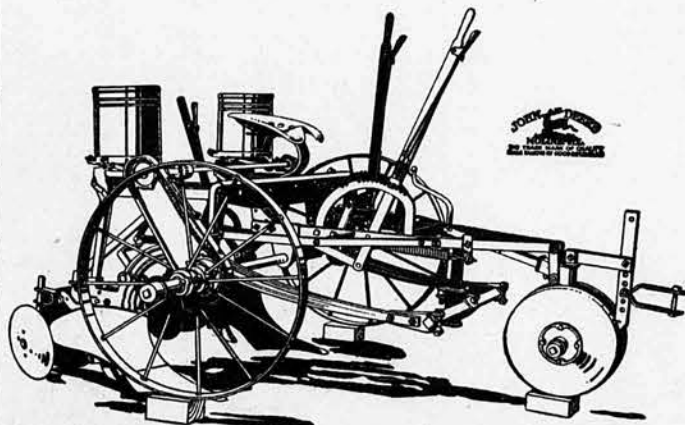
It is no wonder that more and more farmers look to John Deere Listers for the combination of plow and planter qualities desired.

John Deere is the oldest and largest manufacturer of steel plows and the largest manufacturer of planters.

You find in John Deere Listers the same qualities that have maintained leadership for John Deere Plows and John Deere Planters—exceptionally well-made bottoms and exceptional accuracy from the seed-dropping device.

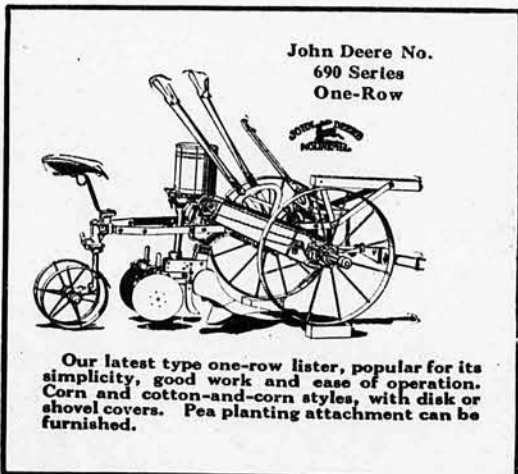
See new John Deere Listers, in tractor and horse types, at your John Deere dealer's store.

Have the dealer show you the bottom qualities that mean better work and longer wear and the simple drop device that assures accurate planting.



John Deere No. 660 Series Two-Row

The latest type of two-row lister, with important advantages that mean better, easier operation. Corn and cotton-and-corn styles, with disk or shovel covers.



John Deere No. 690 Series One-Row

Our latest type one-row lister, popular for its simplicity, good work and ease of operation. Corn and cotton-and-corn styles, with disk or shovel covers. Pea planting attachment can be furnished.

Write TODAY for FREE Booklet

to John Deere, Moline, Illinois. Tell us the type of lister in which you are interested and ask for Booklet LH-211.

# JOHN DEERE

THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

# Now Comes Coffee «« from the West Coast of Central America



A CENTRAL AMERICAN MOUNTAIN COFFEE FAZENDA—In the tiny districts shown on the map below grow rare flavored coffees that epicures pronounce unequalled. Primitive ox-carts bring these coffees to market.

A rare tang and mellow richness unlike any known before . . . For people who want something different in coffee « « « « «

**I**F YOU'RE tired of ordinary coffee—coffee that's "indifferently" good—try a new coffee. One that's really different. Try one whose flavor comes from the mountains of Central America.

In certain tiny districts along the West Coast of Central America are grown coffees with probably the choicest flavor known today.

They have a piquant tang, and full-bodied richness that experts concede are not duplicated anywhere else in the world.

No one can tell you how good it is. We leave that for your own taste to decide.

Years ago, this coffee was first served in the famous Bohemian restaurants of San Francisco where it was brought by Folger. Travellers tasting it there spread its fame. From all parts of the world they wrote back for shipments. For that was the only way it could be obtained. Today, however, your grocer has it packed in flavor-tight vacuum tins.

### Why Most Coffees Taste Alike

Ordinarily you note little real difference when you change from one brand of coffee to another. That is because over

70 per cent of all the coffee entering the United States comes from one common region—where Nature gives it the same common taste.

*It's a different type of coffee that makes Folger flavor different. Rare Central American coffees—mountain grown.*

You will realize that this is no ordinary coffee with the very first rush of fragrance that comes with the opening of the tin.

### The Flavor Test

Because Folger flavor is so distinctly different, we make an unusual offer. Buy a pound of this coffee today. Drink it tomorrow morning. Next morning drink the coffee you have been using. The third morning serve Folger's again. If for any reason you do not choose Folger's your grocer will gladly refund the full price. We'll pay him. That's fair, isn't it? Why not try it today?

FOLGER COFFEE CO.  
Kansas City, San Francisco, Dallas

75



VACUUM  
PACKED

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## They Included Livestock Master Farmers Depend Largely on Cattle and Hogs in Marketing Their Crops

BY RAYMOND H. GILKESON

**T**HERE is a direct relationship between successful, profitable farming and the handling of livestock. No better measure of this could be desired than the records of the 35 Master Farmers who have been selected in the last three years by Kansas Farmer. An exhaustive study has been made of these farms and the methods used on them, and to emphasize the importance of livestock to Kansas agriculture, we give here a composite picture of the results obtained.

From the start it should be understood that this is not a sectional view, because every part of the state is included. Here are the counties represented: Brown, Clay, Chase, Cowley, Doniphan, Douglas, Ellis, Finney, Franklin, Geary, Gove, Harper, Jackson, Jewell, Kiowa, Leavenworth, Lyon, Marshall, Morris, Norton, Osage, Pawnee, Republic, Rice, Riley, Shawnee, Washington and Wyandotte. One of the Master Farmers is deceased, but his records will be included because he was such an outstanding success, and because his sons are carrying on the work he started in a very credible manner.

As a starting point let's get a glimpse of the huge "composite" farm plant operated by these men. Farms owned by Master Farmers range in size from 80 to 7,620 acres. In all, these men control 33,500 acres and own 28,626 acres. Most of the men started from the bottom rung of the agricultural ladder, and thru their personal efforts have earned the success they now enjoy; 22 acquired their farms entirely by purchase with money they earned from farming. Most of the land owned by the other 13 men was bought with profits they earned in the big business of agriculture.

With these figures in mind let's look into the farming systems. Every single Master Farmer has some kind of livestock and has had practically all the years he has farmed. And here is how the records check up: 22 men have beef cattle, 35 have dairy cows, 33 have hogs and five have sheep. A word of explanation is due here. Most of the beef men maintain breeding herds while the others buy cattle to feed; some of them do both. The greater per cent of the men have strictly dairy type milkers, while a few have dual-purpose animals.

### Provide Market for Crops

Obviously livestock has had an important part in putting these men in the class of land owners and in keeping them there. As evidence we offer this bit of marketing information: of the crops produced on these farms, 92.17 per cent is marketed thru livestock. And most farmers will agree that crops marketed in this manner bring more net cash on the average than when sold off the farm. These Master Farmers, then, simply had to have cattle, hogs and sheep as a means of turning the crops they produced into as much cash as they received. Without this "at home" market they would have been forced to sell at less satisfactory prices than they received in disposing of their crops thru quality finished products in the form of beef, butterfat and pork.

And here allow us to add that every one of the Master Farmers increased his actual net worth in the last 10 years, counting back from the time his records were studied. It is safe to assert, therefore, that livestock made it possible for these 35 outstanding Kansas farmers to come thru a trying 10 years and show good bank balances to their credit. Further than that, the same thing is true of virtually all of the 1,000 candidates who have been interviewed in the Master Farmer project.

Naturally this business of marketing crops thru livestock has a beneficial effect on the fertility of the farms these men operate. Legumes and rotation have done their part, but barnyard and feedyard fertilizer has

been of great help. So we see the value of livestock reflected in crop yields to this extent: The average yield of corn to the acre on farms operated by Master Farmers during the last five years is 37.08 bushels, as compared with 18.83 for the state as a whole; their yield of oats during the same time averaged 42.65 bushels as against 23.4 bushels for the state; in that time Kansas averaged 12.25 bushels of wheat while the Master Farmers produced an average of 25.44 bushels. There are many other factors that could be considered in enumerating the values of livestock, such as a reduced cost of harvesting certain crops and efficiently utilizing forage crops, but that would carry us too much into detail in innumerable fields.

In this list of Master Farmers we find some of the best beef dairy and swine herds of the Midwest. J. G. Tomson of Wakarusa has a Shorthorn herd that is known internationally; William C. Mueller of Hanover recently was named the pork production champion of Kansas; E. P. Miller, Junction City, undoubtedly is one of the best and most successful dairymen in the entire country; A. L. Stockwell, Larned, has had outstanding success with his huge lamb-feeding project. Why, each Master Farmer is a specialist in his several lines of agriculture. Now look around thru your community and pick out the most successful farmers. We venture to say that by far the larger per cent of them owe much of their success to livestock.

### Why Not Higher Yields

BY H. M. BAINER

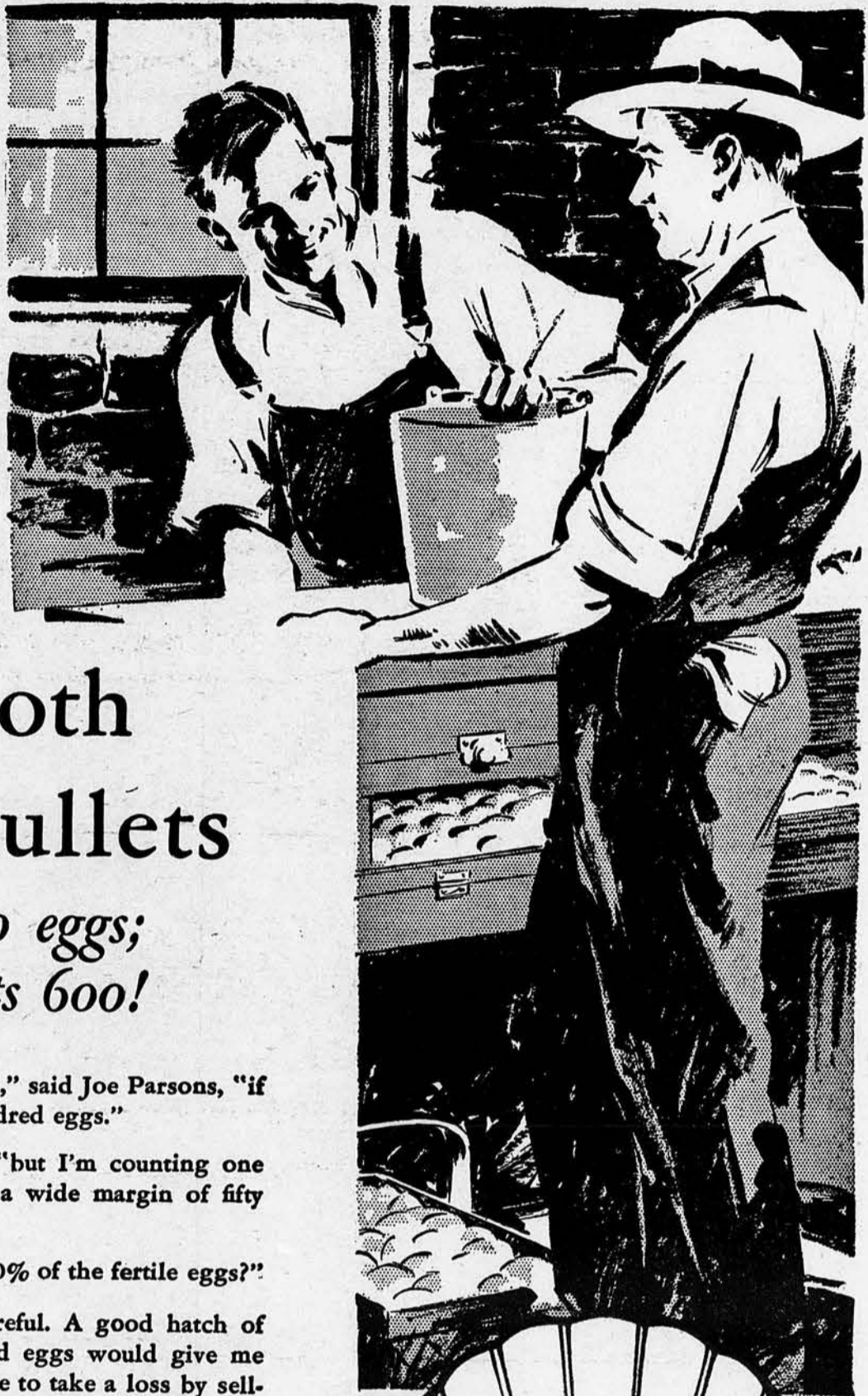
For more profitable production, the Southwest needs more wheat an acre. For example, the average Kansas yield on the acreage harvested during the last 10 years is 13.1 bushels an acre. But had this average been figured on the acreage sown instead of the acreage harvested, it would have been 11.1 instead of 13.1 bushels. This difference of 2 bushels an acre is due to an average abandonment of 14.8 per cent of the acreage sown.

Much of the low yield and losses on account of abandoned acreage are due to poor farm practices, and can be helped greatly by better methods, without increasing the cost. With more suitable methods it is possible to increase this average yield to 15 or 18 bushels an acre, and make a better quality of product besides.

It is true that climatic conditions have much to do with production, and that this is beyond the farmer's control, but he has everything to do with the way he handles his soil, the kind of seed he sows and with other things that influence yield. It does not cost any more to prepare wheat land early than late, but the early preparation will insure from 3 to 5 bushels more wheat an acre. It costs no more to produce wheat in a rotation, with a legume or with summer fallow, than it does to grow a crop continuously, but the rotation will often increase the yield several bushels. Good seed costs very little more than ordinary seed, but it will insure a bushel or two more wheat an acre. To treat seed wheat and control smut costs a few cents for material and labor, but it will make dollars in yield and quality. To clean up a rye-mixture will add to the cost in the beginning, but it will pay big in the end. It often costs less to burn straw and stubble than to plow it under, but all southwestern soils need more organic matter, and will produce higher yields and better quality when they are well supplied with it.

### On Docking Lambs

Farmers who raise sheep for the sale of lambs will be interested in Farmers' Bulletin 1134-F, "Castrating and Docking Lambs," which may be obtained free from the Department of Agriculture, Washington, D. C.



# They both want 50 pullets

*—one sets 300 eggs;  
the other sets 600!*

"YOU'LL run short of layers next fall," said Joe Parsons, "if you're only going to set three hundred eggs."

"Maybe so," replied Farmer White, "but I'm counting one pullet from four chicks and allowing a wide margin of fifty eggs to be infertile."

"Then you count on hatching about 80% of the fertile eggs?"

"Yes, sir! I figure them close and careful. A good hatch of strong chicks from five or six hundred eggs would give me more than I could handle. Then I'd have to take a loss by selling some of the pullets as fryers. So I'm only going to set three hundred and keep my eye on every one."

Shell Kerosene is a safeguard of expected results in the operation of incubators and brooders. Knowing that the smoke and fumes of the ordinary kerosene may prove fatal to eggs and chicks, thousands of successful poultrymen rely entirely on the clean-burning quality of Shell.

Shell Kerosene, costing no more than ordinary kinds, is refined in one top grade—clear, water-white—the only kerosene you need for every use of the farm and farm home. Made to meet the exacting requirements of hatching and brooding, Shell Kerosene naturally works better, too, in lamps, cooking and heating stoves, tractors and stationary engines.

SHELL PETROLEUM CORPORATION . . . ST. LOUIS

# SHELL KEROSENE

© S. P. C., 1930



The story of a dirt farmer and his experience in raising turkeys and caring for shotguns and farm machinery. Your copy of this amusing, common-sense booklet mailed free.

# Fed 637 Cattle and 700 Hogs

## Agricultural Students at the Wakefield High School "Learn to Do by Doing"

BY LAWRENCE F. HALL

SIX hundred and thirty-seven cattle and 700 hogs will have been co-operatively bought, fed and sold by Wakefield students since 1922, when the 20 boys enrolled in the animal husbandry class in the Smith-Hughes vocational agriculture department of the Wakefield Rural High School have marketed the 35 heifers and 60 shotes which they are now feeding as a class project.

This is the eighth consecutive year feeding operations have been carried on at the Wakefield High School. During this eight-year period 82 per cent of the farm boys enrolled in the high school have taken the vocational agriculture course and participated in these class feeding projects. It seems reasonable to suppose that the happy co-operative experience of these boys as vocational agriculture students will make them ready and able to actively participate in co-operative farm organizations as adults.

### Vinke Had Real Pep

Eight years ago Prof. Louis Vinke, for two years vocational agriculture instructor in the Wakefield school and now in charge of animal husbandry extension work in the Montana State College of Agriculture, conceived the idea of motivating the classroom study of livestock production thru the co-operative feeding of cattle and hogs on a scale comparable to that found on the stock farms of the community. It was his plan that the students should furnish the labor connected with the feeding operations and be paid according to the number of hours of work placed on the project.

Since that time continuous improvement has been made in the use of the class project as a teaching device. For the last three years, under the instruction of L. J. Schmutz, the boys have assumed financial risk and full labor and managerial responsibility.

The outstanding success of the projects carried under Mr. Schmutz's direction is evidenced by the way in which the boys have:

- Co-operated with each other, their teacher and the school board;
- Thoroughly studied market situations, as shown by their shrewdness in buying feeder cattle, stock pigs, and feed, and in selling stock;
- Skilfully and faithfully fed their cattle, as shown by the economical gains and excellent finish secured;
- Kept complete and accurate feed and financial records; and
- Given detailed and businesslike reports to the school board and the community.

The class projects have not been carried for the purpose of demonstrating feeding methods to experienced farmers or gaining spectacular publicity for the vocational agriculture department. The class project is a serious business undertaking to each boy, for it, together with his vocational agriculture home project, represents as much of a financial investment as he is able to carry. To the teacher it is an excellent device for increasing the effectiveness of his teaching.

Prof. C. W. McCampbell, head of the department of animal husbandry at the Kansas State Agricultural College, who has been an interested observer of these animal husbandry class projects, has this to say of the work at Wakefield: "The establishment of vocational instruction in high schools was one of the most progressive steps in the development of edu-

cational methods in America. The projects which are a part of this type of instruction show the way to better methods of production and marketing and leave their impress on the practices of every farm in the community. This has been demonstrated most effectively by the Wakefield High School."

L. B. Pollom, state supervisor of vocational agriculture in Kansas, in commenting on the feeding operations at Wakefield, said, "The class project work at Wakefield has been a challenge, and an inspiration to other schools in the state."

### Elkins Was a Leader

Eugene Elkins, named a Master Farmer in 1928 by the Kansas Farmer speaking for himself and other members of the school board, namely, Walter Avery, H. W. Avery, R. M. Lockridge and A. L. Guy, said, "We have observed the interest shown by the vocational agriculture students in this work and the training value of the class projects that they have carried. We believe that lasting benefits will be derived from the course in vocational agriculture."

To give a clear idea of the type of work being done at Wakefield the organization of this year's class project is outlined.

At the beginning of the school year, Mr. Schmutz and his students carefully considered the question of co-operatively feeding a carload of cattle and a few hogs as a class project. They worked out in detail a budget covering all items of expense involved in purchasing, feeding and marketing the stock. When they were investigating prices and market trends in connection with the budget, they found that it seemed good business to buy some shotes in addition to the ones they would need to place in the feed lot with the cattle. They decided, therefore, to include them in the tentative budget.

With this knowledge of costs at hand, the boys faced the problems of raising the necessary capital, assuming financial risk, accepting full managerial responsibility and determining the amount of labor and out of school time required.

### A Real Stock Company

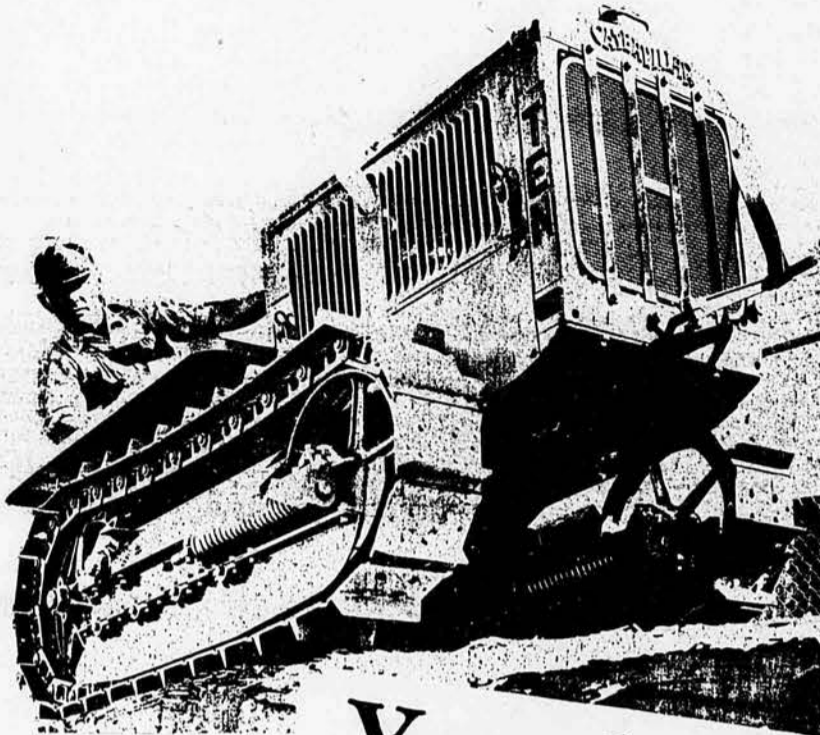
The estimated budget called for an expenditure of \$3,500. This was too large a venture for the boys to undertake alone, so a plan whereby the boys and the school board might go into partnership was worked out and drawn up in the form of an agreement from which we quote in part:

Each student may participate in these projects by owning one or two shares at \$50 a share. The school district shall handle the remaining shares not taken by students. Only students actively enrolled in vocational agriculture are eligible to own shares.

The profit or loss on the project will obligate each student according to the number of shares he may own. If there is a profit on the project, the students shall receive, in addition to their share of the profit, one-half of the district's share of the profit for labor and management given to the project. If there is a loss, the student forfeits his labor. Depreciation of equipment and rent on the yards, owned by the school district, shall first be deducted from the district's share of the profit before paying the students for compensation for labor and management. The district will stand any loss in excess of 10 per cent of the money the students have invested.

We, the following students who have signed this agreement, plan to conduct these projects in a businesslike manner; to study and plan each job; to do all the work and management guided by our instructor; to participate in the financing of the project as outlined above; to

(Continued on Page 37)



Your best  
crop insurance—  
"Caterpillar"  
Tractor's power  
and traction

YEAR in and year out, timeliness and consistently good farming provide the best crop insurance. It's insurance that can "cover" every crop—a bonus of performance that comes to every buyer of a "Caterpillar" track-type Tractor.

Never mind weather with a "Caterpillar" Tractor handy. If there's plowing, or planting, or harvesting to do, forget underfoot conditions as long as your other tools can operate. You've sure-gripping traction bigger than soft spots—traction that holds tight without slipping or miring. You've a world of power and stamina to boot. Up hills, through gullies, over sand—you tread surely and lightly—with full loads—doing good work.

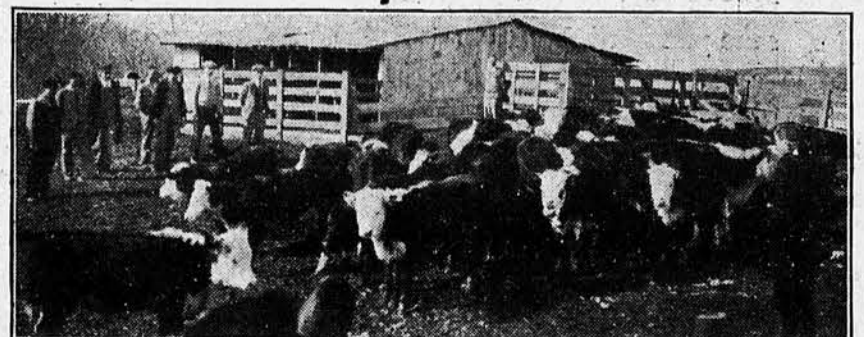
Keeping right on schedule—taking the threat out of seasons—making better crops, and saving them, with a "Caterpillar." There's crop insurance that pays big dividends every year—and it's protection without extra cost.

Prices—f. o. b. Peoria, Illinois  
TEN . . . \$1100 TWENTY . . . \$1900  
FIFTEEN . . . \$1450 THIRTY . . . \$2375  
SIXTY . . . \$4175

**Caterpillar Tractor Co.**  
PEORIA, ILL. and SAN LEANDRO, CALIF., U. S. A.  
Track-type Tractors Combines Road Machinery  
(There's a "Caterpillar" Dealer Near You)

- The Allen Tractor & Implement Co. Liberal, Hugoton and Elkhart
- The H. W. Cardwell Co., Inc. Dodge City
- Dwyer Machinery Co. Wichita
- Ensminger Tractor & Equipment Co. Parsons
- Gunnels-Hennon Tractor & Equipment Co. Colby
- Graham-Hobson Tractor Co. Kansas City, Mo.
- Martin Tractor Co. Ottawa
- Martin Tractor & Harvester Co. Topeka
- McFarland Tractor & Equipment Co. St. Joseph, Mo.
- Stewart-Oehlert Tractor & Equipment Co. Salina
- Hays Tractor & Equipment Co. Hays

**CATERPILLAR**  
REG. U. S. PAT. OFF.  
**TRACTOR**



These Are Part of the Herefords and the Hogs on Feed at Wakefield, With a Group of the Students in the Background

# SKELGAS

## Fuel Cost

REDUCED  
NEARLY

1  
3

TO BRING GAS SERVICE

TO EVERY FARM HOME

"Gas for Everyone"—that day is here. Now that the price of Skelgas has been reduced nearly **ONE-THIRD (31%)**, you and all your neighbors can change to this modern fuel. Will you wait longer to discard ashes and slow fuel and pumps and other devices city women forgot about years ago? Say "NO" to slow, dirty fuels. Cook breakfast in 15 minutes or less (for Skelgas reaches full heat instantly). Rinse soot-free pots and pans instead of scrubbing them. Do your flowers, chickens or garden need attention?—then put supper in the oven, turn on the thermostat, and forget the kitchen until time to serve. Does all this seem like a farm miracle that cannot be true for years and years?

Go to your Skelgas dealer at once for a demonstration—see for yourself that "gas for everyone" day is here—that we have only started to tell the Skelgas story.

### WHAT IS SKELGAS?

Raw natural gas as it comes from the well is made up of many gases, from the light inefficient ones down to those that are heavy, soot-forming. In the heart is Skelgas, clean, yet full of heat. In processing the raw gas the lighter elements are easily removed, then Skelgas is absorbed out of the remainder, released into large tanks, then compressed and bottled into the cylinders which reach you.



# SKELGAS

The COMPRESSED SKELLY NATURAL GAS

**How Does Skelgas "Work"?** From the Skelgas cylinder, which your dealer installs and "hooks up", the gas passes through an automatic valve which regulates the pressure as wanted (usually 6 ounces) to the stove or other appliance. There a lighted match and the turn of a burner handle produce full heat in one second. No pressure machines, no pumps, no moving parts, no intricate devices. It "works" exactly like city gas from a city gas line.

SKELGAS UTILITY DIVISION, SKELLY OIL CO., Eldorado, Kansas

Please send me the name of a Skelgas dealer and literature on cooking with Skelgas—the compressed natural gas, delivered to homes in cylinders.

Name \_\_\_\_\_ K-1

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

# Erosion, a Big Farm Problem

Kansas Soils Have Been Reduced in Fertility Greatly in Recent Years by Washing

BY F. L. DULEY  
Professor of Soils,  
Kansas State Agricultural College

SOIL erosion is rapidly coming to be recognized as one of the outstanding agricultural problems of Kansas. So evident is the destruction of our fertile soils by this process that it is being brought to the attention of people in every walk of life. The state and national governments are demonstrating their interest by the appropriation of money for studying erosion, and hundreds of millions of dollars for flood control, which is an integral part of this problem. Soil erosion and floods are due to exactly the same cause—"runoff water." In-so-far as we control the amount of runoff water we will reduce the damage from soil erosion and river floods simultaneously. River navigation is greatly hampered by the uneven flow of streams and the periodic changing of the main channel due to the deposit of mud and sand, or the cutting away of the river banks.

Most of the worn-out soils of the world are in their present condition largely because they have lost the greater part of the fertile surface layer by erosion, rather than that they have been worn out by cropping. Many of the soils of Kansas have been greatly reduced in fertility due to this process during the last three-quarters of a century.

## Nature Works Slowly

The fertility of Kansas soils is the result of thousands or even hundreds of thousands of years of development. Nature has produced our soils by breaking down the solid rocks thru disintegration and chemical weathering. Organic matter has been added thru the decay of animals and plants which have obtained the nitrogen for their growth directly or indirectly from the atmosphere. Not all of the soil materials which nature has added remain, but only those that have not been moved about on the surface by wind or water. Soil material has been carried down our hillsides and deposited at the foot of slopes or on our river flood plains. The alluvial lands thus formed are some of the most fertile in the state, but they have been built up at the expense of the uplands.

This movement of soils down slopes is the inevitable result of moving water over loose or unconsolidated material. Erosion is therefore a natural process which works in co-operation with the force of gravity in gradually reducing the land on the earth toward the level of the sea. But man has a certain control over natural processes, or at least he can sometimes use one natural process to balance another.

In fact, nature shows us how to do this, for she has in this matter, as in all others, so balanced her forces that the final result is more or less an equilibrium between destructive and constructive natural processes. Whenever climatic and soil conditions are favorable nature covers the land with vegetation, either forest or grass, until the soil itself is protected and built up.

## A Sod Cover Helped

When the soils of Kansas were in their natural state and the prairies were inhabited by the red men and the buffalo, the natural sod cover on the land protected the soil until the movement of the surface material was reduced to a minimum. When the white man came and began to break out the prairies and plow up the hillsides that they might produce more of the products required by a different type of civilization—then the natural forces for moving soil material were given the help of man. The processes which tend to build up soils were in many cases strongly opposed by man. That is, men handled their soils in such a way that they actually assisted in the removal of this surface accumulation of fertile soil ma-

terial, because they removed the natural vegetation which tended to keep the soil in place. This destructive process has continued unabated, and is rapidly reducing the fertility of thousands of Kansas farms.

For convenience we may divide soil erosion into different types:

1. Wind erosion, which assumes great importance in certain regions, and in some parts of Kansas, but for lack of space this type of erosion will not be discussed in this paper.
2. Water erosion, or the carrying of soil material by running water, which may be further divided into:
  - a. Sheet erosion
  - b. Gullying

By sheet erosion we mean the removal of a thin layer from the entire surface. It takes the most fertile portions of the soil, since in this process much of the light organic matter is carried away. Owing to the fact that the effects of sheet erosion usually are temporarily erased by subsequent cultivation, the damage done by this process may go almost unnoticed for a generation. There are many examples of the clay points showing up on the hill-sides where formerly the soil was fertile, but where even yet there may be no ditches. Altho sheet erosion is less noticeable, it probably is far more destructive of fertility than the other type of erosion known as "gullying."

Gullying is much more conspicuous than sheet erosion, and has had far more attention from farmers. Many a man works hard to keep the ditches out of his field, but pays little attention to the tremendous losses of fertility due to sheet erosion. Both types of erosion, however, are so tremendously important that we can hardly over-emphasize the necessity for speedily adopting as effective methods of control as can be devised.

## Hard Rains Are Destructive

There are several important causes for the rapid loss of soil by erosion and for the variation in the rates of erosion from different soils.

The lack of sufficient surface covering of vegetation on the land is one of the most important things. Land covered with dense sod loses very little soil and much less water than unprotected bare ground. Forest land holds much water, particularly where a dense mat of leaves covers the ground. When fire runs thru a forest and destroys the surface organic matter, runoff is greatly increased. Dense growing farm crops also have a very important effect in controlling erosion.

The character of the rainfall also is important. One of the characteristics of rains in Kansas and other states in this region is that many of our rains come in downpours. Such rains as this cause very much more erosion than the more even distribution of the rainfall in the states to the east and north.

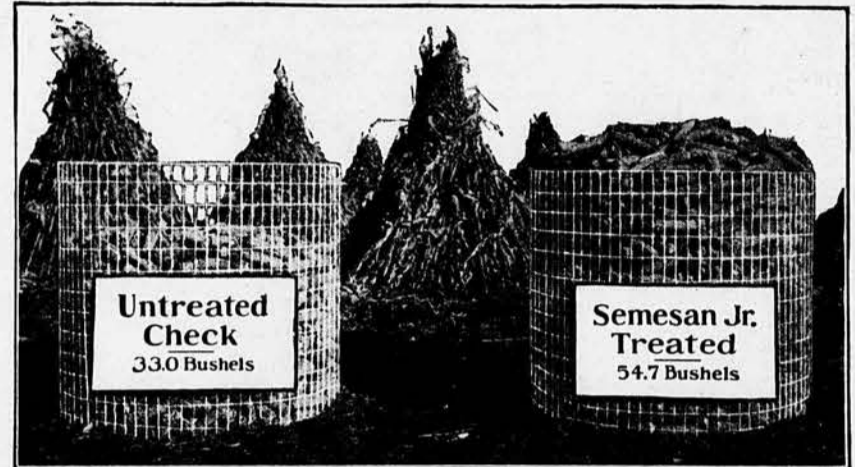
The steepness of the slope also is a factor, but the relative effect of different degrees of slope has not yet been definitely determined.

The type of soil is a great problem. It is a common observation that some types of soils erode much more rapidly than others. Large ditches are far more common in soils that have rolling topography, with a silty or sandy subsoil. Some areas in Eastern and Northeastern Kansas, particularly in the glacial region, are good examples of such soils.

## Out Into the Ocean

Considerable work has been done by geologists and engineers in measuring runoff and erosion by sampling river water and measuring the runoff thru the river channels. Such measurements at the mouth of the Mississippi River show that it loses 406 million tons of sediment annually. If Kansas loses its share of this, based on the area of the state, we would lose 27 million tons. In addition, there is carried to the ocean about 36 million tons of essential plant food ele-

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ments in solution. Our share of this probably would be about 2,400,000 tons. Of this amount we are returning less than 1 per cent in the form of lime and commercial fertilizers. We are therefore losing our fertility far more rapidly than it is being replaced.

No accurate experiments have been made to determine the rate at which soil is lost thru gullying. Some estimates, however, were made by our soil survey party in Doniphan county in 1927 on a single large ditch where 7,000 cubic yards of soil material were removed from the head of this ditch in a single season. In another ditch in which a straw stack had been piled, it was estimated that 430 tons of soil material had been caught during the fall rains of 1927. While the erosion in this county is extremely severe, many other counties of the state have and are suffering in much the same manner. The northeastern fourth of the state particularly and also many of the eastern counties south of the Kansas River have lost much soil. The southeastern part of the state loses soil because of very heavy rains even tho the land is not very rolling. There also is considerable erosion in the more rolling sections of South Central Kansas as well as in the northern part. In the western part of the state erosion is most severe on the steeper lands near the streams and at times of exceptionally heavy rains.

**Under Practical Farm Conditions**

Altho these estimates as well as the measurements by engineers are of great importance, we are primarily interested in what may happen on land under practical farm conditions on cultivated hillsides.

During recent years certain experiments have been conducted to determine the amounts of soil lost by erosion from land having different crop cover or different surface conditions. Sampson and Weyl made some measurements on grazing land in Utah in 1915 and 1916. They showed that the character of the rainfall is far more important than the total amount of precipitation.

About this time some preliminary work was started at the University of Missouri, and in 1917 a set of seven plats was started on which different crops were grown and different surface conditions maintained. The runoff water and soil was collected in concrete tanks at the foot of the slope. The amount of runoff and eroded soil was determined from each plat after each rain. The relative amounts of erosion are shown on the following chart.

Treatment	Soil Eroded From Land Under Different Surface Conditions in Six Years	
	Tons Soil Eroded	Years to Erode 7 Inches
Uncultivated	207.8	29
Spaded 4 inches	247.3	24
Spaded 8 inches	214.2	28
Sod	1.7	3,547
Wheat—annually	39.9	150
Rotation—corn, wheat, clover	13.7	437
Corn continually	106.5	56

During the first six years reported for these experiments there were 256 rains that caused runoff. The 16 most destructive caused more than 50 per cent of the erosion on five of the seven plats, and on the deep plowed plat they gave nearly 70 per cent of the total erosion.

In these experiments the amount of soil fertility lost may be illustrated by the loss of nitrogen in the eroded soil:

Crops	Loss of Nitrogen, Pounds An Acre
Corn—annually	40
Wheat—annually	29
Bluegrass sod	0.5

These results show that the loss of plant food due to erosion was as great in these tests as the amount removed in a 40-bushel corn crop or a 35-bushel wheat crop, but where the land was in sod the amount of loss was reduced to a negligible quantity. The loss from land in rotation with clover was intermediate between the continuously cultivated land and the sod. A good rotation is very effective in reducing this fertility loss.

Similar experiments have since been started at the North Carolina and Texas stations, and their results check remarkably well with the results obtained at Missouri and serve to emphasize the importance of the former results.

In Kansas the loss of water by runoff may be about as serious in some sections as the loss of soil material.

Wherever water is so often a limiting factor as is the case in many parts of Kansas, its conservation is of the utmost importance. No direct measurements have been made in this state to show just how much water we are losing under different conditions, but some measurements made on stream flow would indicate that while our total loss is not extremely high it is a material reduction in the already too limited supply.

In this connection let us again refer to the work at the Missouri station where measurements of runoff were made from land under different crop and surface conditions.

Treatment	Percentage of Rainfall Lost in Runoff	Percent of Runoff
Not cultivated—no crop	48.9	48.9
Plowed 4 inches—fallowed	31.2	31.2
Plowed 8 inches—fallowed	28.3	28.3
Sod	11.5	11.5
Wheat—annually	25.1	25.1
Rotation—corn, wheat, clover	14.1	14.1
Corn, annually	27.3	27.3

In these experiments during a year when the total rainfall was 31.47 inches, a dense growth of Red clover allowed but 0.42 inches of water to run off, or 1.34 per cent of the rain-

fall. During the same year land in corn allowed 5.49 inches of runoff, or 17.4 per cent of the rainfall.

In other words, the land in corn allowed more than 5 inches more runoff during this year than did land in clover sod. The importance of such a saving of water by sod land in the control of floods will be evident when we consider that only 1 inch of runoff from the entire Mississippi basin would flood the lower Mississippi Valley for a thousand miles from its mouth in a belt 10 miles wide and 10 feet deep.

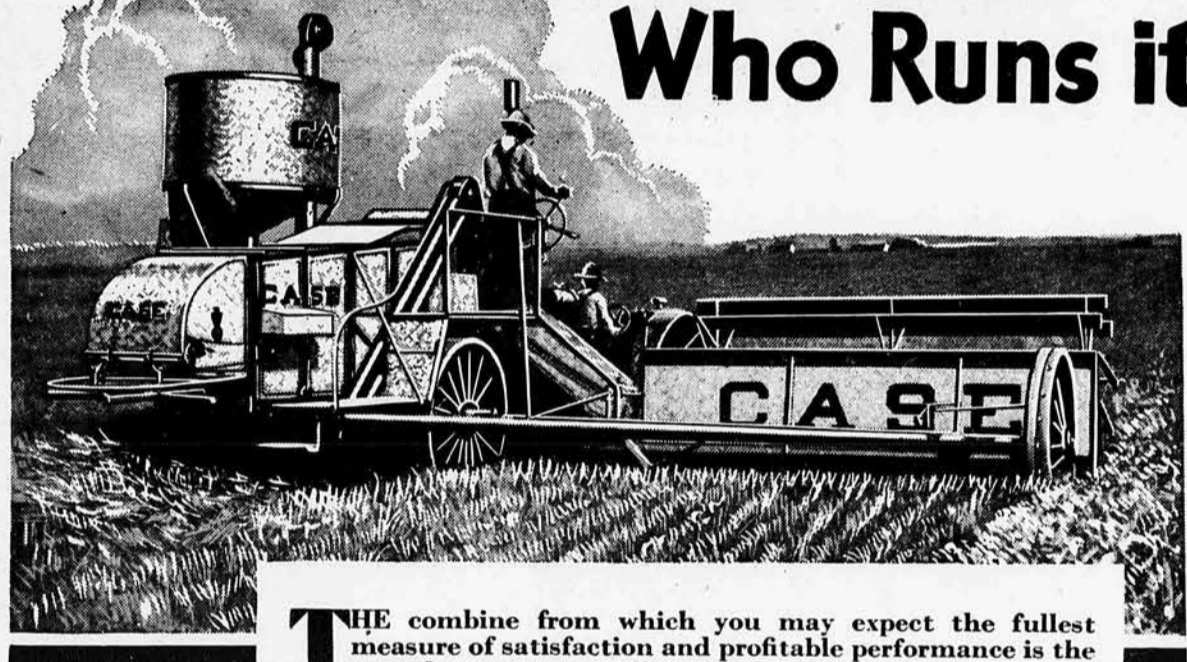
This work illustrates the greater effectiveness of sod crops over cultivated crops in reducing runoff. The effectiveness of sod, however, will depend somewhat on how closely the grass lands are pastured. Whenever there is a heavy mat of grass or organic material on the surface the flow of water is so retarded that it has time to be absorbed before it begins to run. Furthermore, the grass plants transpire large amounts of water, and thus keep the soil in condition to absorb the next rainfall.

The question is sometimes asked as to what effect grass land may have when we have very heavy rains or continued wet spells—since it is such rains that cause our most disastrous floods. During a single wet spell March and April, 1922, when 18.41 inches of rain fell within 30 days, the runoff from corn land was two and one-third times as great as from bluegrass sod land.

These results show that sod is a most effective means of reducing runoff. Therefore if we should materially increase thru improved crop rotations the amount of alfalfa, clover or other hay and pasture crops on our rolling lands, or otherwise provide conditions for the increased absorption of water, it would reduce the runoff sufficiently to materially lower the crest of the floods. It is the crest of the flood that breaks the levees. Furthermore, we should remember that the soil is a great storehouse for water. The soils of Western Kansas are seldom filled to their water-holding capacity, and we often get large

(Continued on Page 32)

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## And so the Outlook for Sheep Production in Kansas Grows Much Brighter

BY A. M. PATERSON

**T**HE sheep industry, as all other phases of agriculture and industry, has made many changes and improvements in the last half century. Sheep at one time were raised primarily for wool, but as the people of this country began to use lamb and mutton as a food, in larger quantities, breeders of sheep began to pay some attention to the mutton qualities of their flocks. This change was first brought about in the East, while the producers in the West still bred for wool as the principal product. Later, the western sheepman changed his methods and began to breed more for mutton, at the same time retaining the wool producing qualities of the flock.

Sheep production is entering a new era, so to speak, especially as it applies to Kansas and Kansas conditions, and sheep production offers opportunities in Kansas, if the proper methods of feeding, management and marketing are practiced. I question if we should increase the breeding flocks at this time, but it seems to me we should pay more attention to production methods in order that a better quality of lamb, mutton and wool may be put on the market. By putting a better product on the market, it will aid materially in increasing the consumption of sheep products, which in turn will be a factor in making sheep production a staple and profitable industry.

### Need Good Care Anyway

Information has gone out in the past that sheep are scavengers and will be profitable with very little care, feed and attention. While it is true that sheep have the ability to consume a large amount of feeds that are annually wasted on the farm, this method of sheep production is not conducive to profitable sheep production.

Kansas as a state offers opportunities for sheep production, due to its ideal weather conditions and the abundance of feeds that can be produced. Kansas also has market facilities where quality sheep products can be marketed to the best advantage.

It makes no difference how ideal the conditions are for sheep or the kinds of feed available, if the shepherd does not know his sheep and does not practice good methods of management, sheep production is likely to be a failure. I am going to take the liberty of quoting Prof. H. E. Reed, who has charge of the sheep work at the Kansas State Agricultural College.

"Sheep are not in any sense a 'get rich quick' proposition. Under present conditions they will, if handled properly, return a profit commensurate with the care and attention given them. Obviously, then, if the success or failure of a sheep proposition is going to hinge on any one factor, that factor would be the man who is handling them.

"To get the greatest return from a flock it is necessary to have a knowledge of sheep, and this can be had only from experience with them. Books, bulletins and other printed matter will give the owner many ideas as a basis on which to work, but in no wise can they replace practical experience.

### Three Phases of Production

"The beginner should not be led by tales of exorbitant profits to stock up beyond his abilities. It is much better to start with a small number and gradually grow into the sheep business. It is likely that at first he will make many mistakes. He will be better off if his mistakes affect only a few sheep rather than a larger flock.

"Men who are more familiar with other classes of live stock than they are with sheep think sheep are very peculiar animals requiring peculiar

methods of handling. Their peculiarities are in the majority of cases traceable to their habits and nature, which can be learned only thru experience with them. When these are known, the handling, care and management become simple. Regardless of the class of livestock handled, greatest success comes to those who know more than their livestock know, and sheep are no exception in this respect."

There are three phases of sheep production that may be practiced in Kansas, namely, the production of purebred sheep for breeding purposes; the feeding of lambs for market and the farm breeding flocks.

The production of purebred sheep, like all other classes, of purebred livestock is a highly specialized business. However, this business conducted on the proper basis can be made highly profitable.

To be successful in the production of purebred sheep, the breeder must understand breeding in order to properly mate his animals to produce the best possible specimens of the breed. He must be a good feeder, a good caretaker, a good salesman, and last, but not least, must be honest and reliable and stand back of every animal he sells for breeding purposes.

The feeding of lambs for market is a phase of sheep production adapted to Kansas conditions, and offers opportunities for profit if properly handled. The fattening of lambs for market is merely the purchasing of thin lambs, feeding them from 60 to 90 days and then marketing them when fat. Western lambs are the best for this purpose, as this class of lambs is generally healthy, thrifty and when fat produce a product that is very desirable to the packers.

The feeding of lambs for market requires a comparatively small amount of capital for the purchase of lambs, the equipment for feedlots, is inexpensive, the amount of feed is small and the length of the feeding period comparatively short. This industry can be carried on at the season when it will not interfere with other farm work.

### A Small Farm Flock

The other phase of sheep production that is adaptable to Kansas is the farm flock. The farm flock is a small band of sheep maintained as a unit of the farm business. The income from this enterprise is lambs and wool, and if properly managed offers opportunities for profit.

A farm flock may consist of native ewes or western ewes. Western ewes that have good mouths and udders and are of the right type are best for this purpose for the reason they are rugged, healthy and thrifty.

To the man already maintaining a flock of sheep and the man who is planning on going into this business, it would be well to take inventory of his farm, his equipment and himself. He should determine the number of ewes he can maintain on his farm and the equipment available without overstocking. He also should ask himself what knowledge he has of sheep and will he give them the care and feed necessary to raise a good crop of market topping wool and lambs.

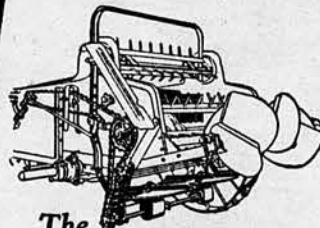
Maintaining a flock of breeding ewes is an all-year around proposition, and every season there are certain duties to be performed. The owner of the flock must have some knowledge of the market demands of both wool and lambs, and do everything possible to produce products of this nature.

The flock of ewes is important. They should be uniform in size and conformation, as a flock of this nature will produce more uniform lambs, which are more desirable to the buyers. Maintain only ewes in the flock which have good mouths and udders, as animals with poor teeth cannot handle their feed properly to get best results, and ewes with

(Continued on Page 28)

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# Now Comes the Oats Seeding

## Experience Has Taught Us That Early Planting Will Produce the Best Grain

BY HARLEY HATCH

**A**FTER a 10-day period of near spring weather we had a short relapse into winter, and this morning it was down to 10 above, but the sun is shining brightly and the forecast is for "fair and warmer," so it is probable that plowing and disking can be resumed on the drier ground in a day or so. It is getting close to oats sowing time for the "early birds," and if conditions are right the seed will begin to go into the ground soon. Because of one or two seasons in the last 35 years in which very early sown oats were thinned by cold weather, many folks fear to sow before March 15, but on this farm we always are glad to begin any time after February 25. In a real oats year sowing at any time before April 1 will bring good grain, but it has been our experience that anything in the oats line sown before March 15 has much the best show. We plan on sowing about 26 acres to oats this spring, and we have the ground plowed and ready for the disk; after disking, the ground will be harrowed and then drilled at the rate of 2½ bushels of clean seed an acre.

### 'Twas a "Seed Week"

This has been a sort of seed week on Jayhawker Farm. We had 600 bushels of oats good enough for seed and which was not needed for feeding this season, so we ran a little note in the local paper saying we had 400 bushels of Texas Red and 200 bushels of Kanota seed oats for sale at 55 cents a bushel. The ad appeared in the afternoon paper, and by 9 p. m. that night all were sold. The choice of most buyers seemed to be Texas Red two to one, which sold both lots at about the same time. This price of 55 cents a bushel was a little under what most sellers are charging, but we did not feel like charging brother farmers more than the regular price plus 5 cents a bushel for handling in small lots. At this price we figured it better to sell the oats rather than feed them to young cattle. The heifers had been getting oats all winter, and we thought a change to ground corn and cob would be welcome to them, and it seems to be. With corn at 75 cents and oats at 55 cents, corn is the cheaper feed. Our oats made 34 bushels an acre, and at 55 cents it makes them a fairly profitable crop.

### Good Profit From Cane

Last fall we had 385 shocks of Sumac cane, which averaged 1 bushel of seed to the shock. As cane seed always had been cheap here we fed most of it to the cattle, never heading the bundles. After corn husking we headed and threshed about 140 bushels of the seed, and this week cleaned it up in a fanning mill and offered it for sale at \$3 a hundred pounds. We had found out that mature cane seed was quite scarce, and that the price was likely to be high, so we concluded that \$3 a hundred was about right. We supposed it would take us most of the spring to dispose of this seed, but to our surprise it all sold inside of four days, one man living near Madison taking 100 bushels to sow and plant on his own farm. Most farmers in this part of Kansas have a definite choice of cane varieties, and nine in 10 take Sumac. It was because we had this variety and because the seed was so sound and well matured that it sold so readily. If our foresight had been as good as our hindsight we would have headed and threshed all the seed instead of feeding any to the cattle, as 25-bushel-to-the-acre cane seed at \$3 a hundred pounds is a profitable crop, especially when we consider that the fodder is left for feed.

### An Interest in "Hillers"

More than half my correspondence during the last three weeks has been regarding tractors, and much of that has been about the use of "disk hillers," which are used to convert the

regular two-row tractor cultivator into a listed corn cultivator. I can see where the subject would be of great interest to the owners of such cultivators, as by the use of disk hillers there is the saving of the price of what most farmers know as a "curler." I will repeat here what I have said in former issues regarding these disk hillers. All makers of tractor cultivators make these disk hillers as extras, and the cost for a set of four is around \$12.50. Any dealer should be able to supply these hillers to fit the cultivator he sells. These hillers are disks mounted on heavy shanks, and are reversible to throw the dirt either to or away from the corn. The long shank disks should be ordered for listed corn; if the socket into which the shank fits puts the disk too far from the corn take it off and put it on the other side of the beam.

### Better Follow Directions

A Greenwood county friend who has just bought an all-purpose tractor writes regarding the directions for oiling which come with the tractor. These ask the tractor owner to drain the oil out to the level of the middle drain cock every day; that is, every day of use; say 10 hours of steady running. Then after 60 hours of steady running directions say the crank case should be drained and filled with fresh oil. This our friend thinks is using too much oil. In this connection I would say, follow directions, and your tractor will last longer, run better and with less repairs. Oil always is cheaper than machinery. In regard to draining down to the middle drain cock every 10 hours, I will say that this is done to take out the oil which has been thinned by gasoline or kerosene getting into it; in this respect kerosene will thin more than gasoline. Do not drain at night when the oil is warm; wait until the next morning when the oil has cooled; then the thin oil will have raised to the top and is taken out by draining down to the middle drain cock. When in doubt about using fresh oil always remember that oil is cheaper than machinery.

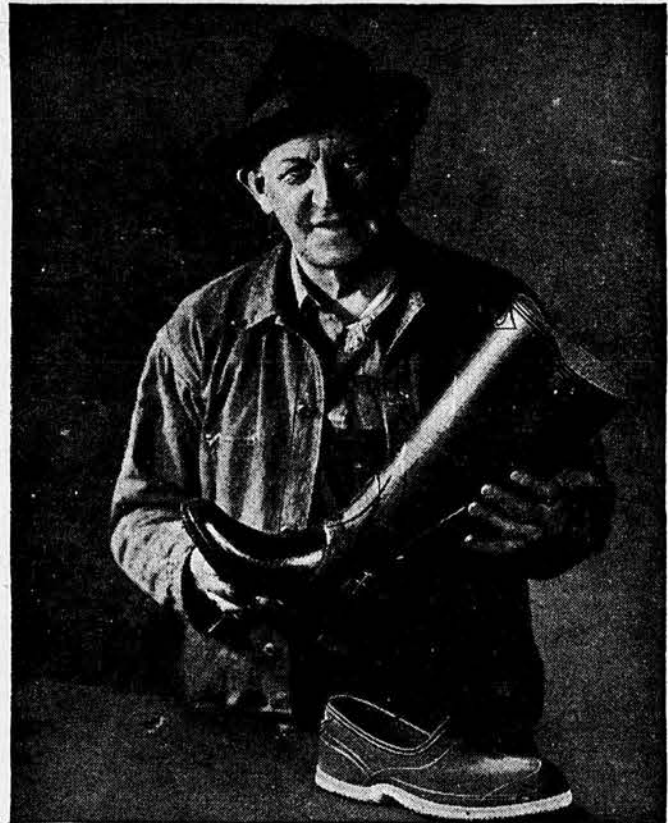
### Madison, a High Market

During the last week most grains have shown a downward tendency, especially in the futures market, which seems to have more effect on cash wheat prices than those for cash corn. The corn market in this part of the state is largely a local affair. In those localities where corn is bought for shipment some elevators are buying as low as 65 cents a bushel. In the feeding districts like those around Madison shipped in corn has sold all the way from 83 to 87 cents a bushel. Madison long has retained the local reputation for being the best point at which to sell feeding grains of any town in Eastern Kansas. With a good gravel road nearly all the way from this farm to Madison, that becomes our market for any surplus corn. In former times this was a long haul for us, altho the price often was enough higher to pay us to make it, but in this day of high speed trucks and gravel roads a few miles cuts little figure. Much of our surplus corn, the pick of the lot, has been sold this week for seed, about 120 bushels being taken for that purpose. It begins to appear as if the folks would take our corn almost as fast as they did our cane seed, as tests show germination running from 93 to 99 per cent.

### New Idea in Farm Relief

For Sale—Not trying to point you to wealth; but to independence. Small farms, highly fertilized with real truck farmers.—Ad in a Tyler (Texas) paper.

Vaults are those steel and concrete things in which banks keep money and securities that aren't being carried around by irresponsible boys.



Whatever your job or personal preference, you'll find the boot you want in the Ball-Band line—short boots, hip boots, red boots, white boots, sport boots, and the new 3-Buckle Walton for "boot protection with shoe comfort."

You'll find more days wear in this Ball-Band Sanslip with Double White Sole. Illustrated above with regular high front. There is a slightly higher style with two buckles especially built to stay on in stiff mud or gumbo.

# "That's what I want! ... a better boot for what I'm used to paying"

"Now that's the kind of a boot I want—better than I've ever had before, at about the same old reasonable price. It must have the real stuff in it. Just a piece of rubber wrapped around my feet isn't enough. I want a boot that knows its foot—that fits—that knows how much I need value and gives it to me."

**B**ALL-BAND rubber footwear is made for the man who wants a boot that has "the real stuff in it." Every item in the Ball-Band line "knows its foot"—because every one is built to the foot.

More than 30 years, all devoted to one job—the making of lasting rubber footwear—are behind this new built-to-the-foot line. Year after year, Ball-Band's skilled craftsmen have brought about improvements in design and manufacture—keeping pace with the farmer's needs. Now, Ball-Band gives you more quality than ever before, and at what you're used to paying.

The great Ball-Band factories prepare many different compounds of live, firm, tough rubber—one for the heel, one for the sole, one for the toe, and so on. Each is scientifically perfected for the job it

must do; each contributes to more days wear. Stout linings and fabrics are knit in Ball-Band's own mills at Mishawaka especially for—and only for—Ball-Band footwear.

Pick the style you need. There are 800 to choose from, including the famous long-wearing Mishko-sole leather work shoe. There's a Ball-Band dealer near you (if not, write us). Ask him for Ball-Band by name, and look for the Red Ball trademark—your quality guarantee.

MISHAWAKA RUBBER & WOOLEN MFG. CO.

441 Water Street, Mishawaka, Ind.

**ITEMS FOR WOMEN TOO**  
Ball-Band rubbers are "styled to the shoe" for dainty, snug fit and smart appearance. Light as light can be, and made of live, firm, wear-resisting rubber prepared at Ball-Band's factories for the sole purpose of producing lasting footwear.



Look for the Red Ball



**IDEAL PROTECTION**  
Here's ideal protection against mud and wet—the 4-Buckle All Rubber Arctic. Also made in 5-Buckle and 6-Buckle heights. Same heights in Red Rubber.



# BALL-BAND

Built-to-the-foot

BOOTS • LIGHT RUBBERS • HEAVY RUBBERS • ARCTICS  
GALOSHES • SPORT AND WORK SHOES • WOOL BOOTS AND SOCKS

# Quality Brings the Profit

## Both Farmers and Packers Will Gain From Better Eggs and Poultry

BY MORGAN KREEK

THREE times out of five, when a farmer drives up to the loading platform to sell us his eggs or chickens, he follows into the candling or weighing room to watch the handling of his produce. And as he watches he asks questions. What makes a first class broiler? How has the packer the nerve to add 9 cents a dozen to the price of eggs that pass thru his plant? Who sets the prices packers pay, and receive?

Even the 50 bankers who once made a tour of our plant were more interested to see "How the wheels go round" in the plant than they were to hear a dollars and cents discussion of the business of dressing and shipping produce.

But curiosity is not the only motive of interest where the farmer is concerned. The present campaign being waged by all poultry interests for better quality in eggs and poultry is interesting everyone concerned, and the wide-awake farmer is aware that whatever he can learn about what the market demands will mean dollars to him, and he can learn from the packer just why his produce has not brought top price, or why it has, if he has been so fortunate.

### On Different Grades

Everyone who has ever sold poultry understands the grading of it. On the market it is sold as broilers, fryers, roasters, fowl and old roosters, and the packer generally buys it by this same system. In general, heavy breeds such as Rocks and Wyandottes bring a premium over Leghorns and black chickens. Broilers are young chickens weighing up to 2 pounds. Fryers weigh up to 3½ pounds, and roasters are heavy springs weighing more than that. Fowls are hens of all sizes.

Chickens are weighed in the coops, transferred to feeding batteries and wheeled to the feeding station. We use steel batteries, which are similar to coops, on wheels, and have eight compartments. Each compartment holds five or six head of fowl, making 40 to 48 chickens in the battery; or six to eight head of springs to a compartment, making 48 to 68 head in a battery. We generally have 100 or 150 batteries on feed at one time. Many stations are larger, of course.

We feed the chickens 10 days before killing, and keep an experienced feeder who does nothing else. The chickens are "milk fed," that is, fed five times a day on a mash consisting of buttermilk, grain meal, and water, carefully proportioned. Chickens fed in this way are tenderer and whiter than if they were killed at once. Feed is withheld for a period before killing, to avoid full crops. Roosters are generally killed soon, and are not placed on feed at all.

Some stations use a system of force-feeding, giving the chickens several additional meals, and using electric lights at night to stimulate them to further feeding.

### After 10 Days

After the 10-day feeding, the chickens are taken to the dressing room and killed. Even this job is a matter of skill, for on it depends a great deal the appearance of the dressed product. The chickens are hung on a rack and killed swiftly by piercing the brain. This allows the chicken to bleed without disfiguring it as a dressed product.

The chickens are hung by the feet on shackles at shoulder height to be picked. Some packers pick the chickens dry; others have huge tanks of hot water for dipping before picking. We use the wet picking method, and also wash the chickens after dressing, to improve the appearance, and as a sanitary measure.

Women are employed almost exclusively to pick the chickens. The experienced picker makes \$2 or \$3 a day, at the rate of 3 cents a chicken! Fifteen chickens in an hour is about average rate. Beginners are dismayed to find that they can only pick a dozen in a day, and that these are

often rejected by the inspector as poorly done.

Even the smallest packing plants have extensive and expensive refrigerating systems. There must be two rooms at temperatures for the handling of eggs. Then there must be one room for packing the poultry, and one for freezing it. The packing room is maintained at 34 degrees, or just cold enough to chill thoroly without freezing. The poultry is chilled 24 hours before it is packed. The packer wraps the heads, which are always left on the chickens, then places the poultry in boxes, 12 in a box, with the heads tucked under and the breasts up to make a good looking package. These boxes are weighed, nailed shut, and transferred to the sharp freezer. Poultry of one kind and weight is always packed in a box.

The sharp freezer is maintained at from 10 degrees to zero, or below, so that the poultry will freeze solid before it is shipped. This varies, however, with the intended market for the

poultry. Sometimes it is kept cold, without freezing. Packers who ship drawn poultry have a different problem. It must be frozen almost instantaneously when it comes from the dressing room. To freeze so quickly requires a temperature many degrees below zero, for the quality of the meat is impaired if slower freezing is allowed, and putrefaction, a form of spoilage caused by enzyme changes in the cells of the flesh, starts almost at once if the meat is not frozen. Drawn poultry must be kept frozen until it reaches the consumer, which makes another problem for the retailer, who seldom has refrigeration facilities to care for it.

Most packers have a tag or seal that is attached to each chicken. This movement to brand poultry is a matter of pride with the packer, but it also is an expression of faith with the consumer, because a brand, once established, must be maintained in quality. It also means an open declaration of competition for quality among packers, to the benefit of the consumer.

The poultry is shipped in a specially built refrigerator car, and is packed with ice and salt and re-iced several times in transit, so that it will reach the market after many days journey in the same perfect condition in which it leaves the plant.

Much of the public prejudice against dressed poultry is due to mis-

derstanding of the term, and ignorance of the kinds and grades of it. Even the retailers in the city often are as ignorant as the consumers, and sell poultry under false terms.

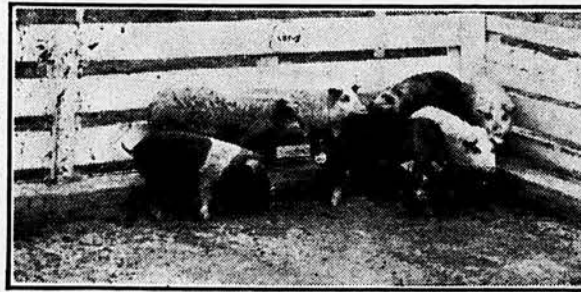
I knew of one Kansas woman who was in Boston for a time. While there she chanced to buy a chicken at a small shop.

"Is this a fresh-killed chicken?" she asked.

### Packed at Manhattan!

"Yes ma'am, fresh Massachusetts poultry, killed this morning," he assured her. When she got the chicken home she found proudly displayed on its breast the seal of our own packing company, and in plain English, "Packed at Manhattan, Kansas."

Such false pretenses are not approved by the packer, and certainly do not help the cause of dressed poultry. The chief reason for the attempt at deception, I believe, is the general misconception of the meaning of "Dressed Poultry." Poultry is fresh-killed, in our usual use of the term, until it has been stored a month or six weeks. Such poultry has never been in a cold storage house, but is simply refrigerated to await shipment and while it is in transit, just as fresh meat is refrigerated. It may even be frozen solid, but it still is fresh poultry, just as frozen fish or frozen strawberries are fresh. When it has been placed in actual cold storage for



Lot 1 got Hog Special 2nd period



Lot 2 got Hog Special 1st period

## Right in the middle of the test conditions were reversed on these hogs!

Hog Special added to the feed of Lot 2 first, and then switched to the feed of Lot 1, made a big difference in their gains

THESE two lots of hogs went on feed when they weighed 50 pounds. Both lots were fed all the ear corn they would clean up and a slop containing 8 parts wheat middlings to 1 part tankage and 1 part oil meal. But in addition, Lot 2 received Dr. Hess Hog Special, a conditioner and mineral supplement, during the first half of the test.

See what happened:

### FIRST PERIOD From 50 lbs. average to 100 lbs. average

	Lot 1 No Hog Special	Lot 2 Hog Special
Average daily gain per hog...	.82 lbs.	1.1 lbs.
Feed required for each		
100 lbs. gain.....	392 lbs.	293 lbs.
Cost of each 100 lbs. gain.....	\$7.21	\$5.41

The second period began when each lot averaged 100 lbs. per hog, and continued till they averaged 200 lbs. per hog. In this period conditions were reversed. Lot 1 had Hog Special in their slop twice daily instead of Lot 2.

### SECOND PERIOD From 100 lbs. average to 200 lbs. average

	Lot 1 Hog Special	Lot 2 No Hog Special
Average daily gain per hog...	1.88 lbs.	1.78 lbs.
Feed required for each		
100 lbs. gain.....	311 lbs.	354¼ lbs.
Cost of each 100 lbs. gain.....	\$5.54	\$6.34

In the first period Lot 2, with Hog Special in their feed, made their average gain in 11 days less time than the other hogs. They made each 100 pounds of gain on 99 pounds less feed at \$1.80 less cost than the other hogs.

In the second period, when Lot 1 had the Hog Special in their feed, the results obtained were in exact reverse. Lot 1 made their average 100 pounds gain in less time, on less feed and at less cost than the No. 2 Lot without the Hog Special.

For best results, Hog Special should be fed continuously from weaning to market time. It costs but 12½ cents per month for each 100-lb. shoat. See the local Dr. Hess dealer.

DR. HESS & CLARK, INC., Ashland, Ohio

# DR. HESS HOG SPECIAL

A Conditioner and Mineral Supplement

a period of time, four or five months usually, it may rightly be called storage poultry, and should be sold as such.

But to go back to the packing plant. The entire process of dressing poultry is not only long, but it requires a great number of people and a large expenditure of money. Most packers figure that it costs 7 or 8 cents a pound to dress poultry. This is actual outlay for labor, feed and packing, and does not cover shipping. A full car of dressed poultry is worth \$6,000 or more, depending on the season and the market. It contains about 5,000 chickens, or 20,000 pounds. It costs more than \$300 to ship a car of poultry to New York, and several hundred more to store the car, even for one month. Poultry that is to be stored to await a better market must therefore bring a good price, to be profitable. By the time the car of storage poultry finally reaches the market it has cost the packer 15 or 16 cents more than the initial cost a pound.

**Must Accompany the Car**

There is always a market for live poultry, but while this requires less handling in the plant, it is a problem to take a live-car to the eastern market safely, and with profit. A man must accompany the car and be in constant attendance. The Jewish people use a large amount of poultry for their frequent feasts and gala days. It is all supposed to be purchased alive and taken to a Kosher butcher, who is approved by the Rabbi. Incidentally, he receives 10 cents for killing each fowl.

Selling poultry wholesale, and selling live chickens retail are very different matters. Even with the widely varying systems of record keeping in use in packing plants, all have the same underlying principle. To sell even one chicken retail may upset to some extent the records for the day. Poultry is weighed and recorded by the pound, never by the head. It is weighed when it comes into the plant, again when it is dressed, and again when it is shipped. The pounds packed must tally with the amount bought, with certain allowances for shrinkage. A few live chickens sold may disturb the records to such an extent that no accurate estimate can be made of the gain or loss on feed or the shrinkage in dressing. Because this is misunderstood by housewives, and attributed to sheer obstinacy, many packers buy small amounts of poultry and handle them separately, just to oblige this occasional retail demand and keep the good-will of the local consumers.

Any establishment where food stuffs and handled must maintain some standard of cleanliness. In a poultry packing plant the cleanliness is not the sort that the neat housekeeper seeks. There are bound to be feathers about, and a general air of disorderliness. But there is a definite system in this apparent chaos. The concern for cleanliness is for sanitation.

**Diseases Cause Trouble**

There are certain diseases of poultry that are a bane to every packer as well as to the farmer. If these diseases, such as limberneck, gapes or roup, once start in the feeding station they will spread at an alarming rate because the chickens are so closely confined. To prevent any possibility of disease the packer takes every precaution. He inspects incoming poultry and rejects any that looks unhealthy. When poultry in the station does show signs of disease it is immediately killed and destroyed to avoid any possible epidemic. The batteries and feeding troughs are kept heavily white-washed, and if there is special cause to fear disease some form of medicant is used.

Every advance that the farmer makes in improving his flock is a distinct advantage to the packer as well, because the quality of dressed poultry that the packer puts on the market is determined by the quality of live chickens he is able to buy from the farmer. The same thing is true of the eggs that are packed. It is no wonder packers are doing all they can to help in the present campaign for better quality products. Produce packers have organized into state and district associations to further this end.

It is important to a packer, and to the farmer as well, that it be understood just how genuine is the interest

of the packer in the welfare of the flocks in the surrounding territory. Better stock, better care, and finer eggs spell money for producer and packer alike.

**Seed Corn is Poor**

BY R. I. THROCKMORTON

The farmers of Kansas are facing one of the most serious seed corn situations that has existed in the state for many years, and if extreme care is not taken to plant only seed that has been tested for germination, stands will be very poor in many sections of the state this year. Low quality seed corn is found in all parts of the state, but apparently the condition is less serious in a relatively small area in South Central Kansas than it is farther north and east.

The low germinating power of the seed from the 1929 corn crop became very apparent first when tests were made on 200 samples from 12 counties for the county corn contests. The average germination for the 200 samples was only 82 per cent. When we take into consideration the fact that these 200 samples were carefully picked and selected, and that they very likely represented the best corn in the counties, the seriousness of the condition becomes apparent.

More recently J. W. Zahnley, director of the State Seed Laboratory at Manhattan, has reported on the germ-

ination of 603 additional samples of corn which came from practically every section of the state. The average germination of the 603 samples was only 76 per cent, and 391 samples, or about 65 per cent of the total number, had a germination below 90 per cent, which usually is considered to be the minimum percentage of germination for corn that is to be used for seed, and it is highly desirable to use corn that has a higher germination if it can be obtained. A further study of the report shows that 170 samples, or about 28 per cent, of those tested had a germination below 70 per cent, and that 88 samples, or almost 15 per cent of those tested, had a germination below 50 per cent. With practically two-thirds of the samples that have been tested being unsuitable for seed because of low germination, corn producers in Kansas should use every precaution this year to plant only seed corn that has been properly tested for germination.

This does not mean that there is no good seed corn in the state, and that our farmers should send to other states for their seed supply. There is a considerable quantity of satisfactory seed in Kansas, and it is much better to use this seed than it is to bring seed, which may not be adapted to our conditions, from another state. Those farmers who have a good strain of corn, and who select seed for their own use, should first have this seed

tested, and if it is not satisfactory for planting they should purchase tested seed of an adapted variety. It is never advisable to plant corn without first determining the germination of the seed, but this year it is not safe to plant corn that has not been tested, because some of the corn which appears to be sound and of good quality is worthless because it will not germinate. It is not good practice, especially this year, to select seed corn only by appearance.

Many farmers are asking about the advisability of using seed from the 1928 crop for spring planting. In many cases this seed will be better than that from the 1929 crop, but it should be tested for germination, so that one may be sure of its value.

**New Uses for Soybeans**

Soybeans are of increasing importance all over the country, and especially in Illinois and Kansas. It already has become evident that the soybean factory at Fredonia will do a good business in 1930, as a heavy acreage will be planted to this legume in Southeastern Kansas. To supply additional information on the utilization of soybeans, the Government has prepared a Farmers' Bulletin on this subject, No. 1,617-F, Soybean Utilization. It may be obtained free on application to the Department of Agriculture, Washington, D. C.

# Increase Your Grain Profits with Rumely Combines

**Rumely Combine-Harvester Facts**

1. **Simplicity**—The Rumely Combine has fewer working parts.
2. **Longer Life**—The small number of parts and moderate speed give longer life.
3. **Positive Action Racks**—The Rumely system of handling straw is far superior to any other. It is not affected by the level of the machine.
4. **Positive Action Grain Drag**—Running the whole length of the machine. It is not affected by hills or slopes.
5. **Steel Header Balance**—Superior to weights and beams, and very compact.
6. **Built-in Recleaner**—Requires no tailings conveyor and distributes tailings evenly over whole width of cylinder.
7. **Spike Tooth Cylinder**—Has exceptionally large capacity.
8. **Grain Bin**—Adds nothing to the width of machine and very little to the height. It can be emptied in two minutes.
9. **Anti-friction Bearings**—Ball and roller bearings used on every important shaft. This means less wear and saves power.
10. **Roller Chains**—Roller chains on every important drive require less power and add durability.

*Savings in labor, grain and time with Advance-Rumely Combine-Harvesters mean money saved. Once over the field and out comes all of the grain ready for storage or market. Harvesting with a Rumely Combine means a saving of from 15 to 20 cents per bushel.*

**ADVANCE-RUMELY** Prairie Type Combine-Harvesters are built in sizes to meet all conditions. They are products of nearly a century of specialized threshing experience and have many excellent features not to be found in other machines.

Wherever the Rumely Combine is used, farmers praise its dependable, trouble-free service; its light, smooth operation and its ability to handle and clean a big volume of grain without wasting any of it. It eliminates the waste motions of binding, shocking, hauling and threshing. No more big crews to feed—cuts kitchen drudgery.

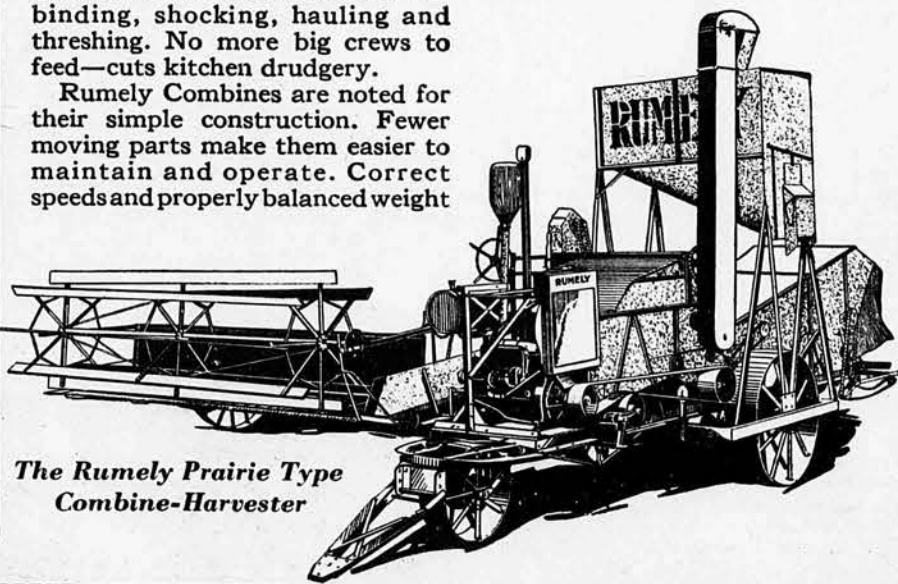
Rumely Combines are noted for their simple construction. Fewer moving parts make them easier to maintain and operate. Correct speeds and properly balanced weight

make it possible to use the Rumely Combine in districts where the combine's usefulness has been limited heretofore.

**Save money and use the coupon—today!**

If you want to make more money with less work—mail the coupon today. No obligation. Advance-Rumely Thresher Co., Inc., La Porte, Indiana.

Kansas City, Mo.  
Wichita, Kansas



*The Rumely Prairie Type Combine-Harvester*

- Prairie Combines
- Hillside Combines
- Oil Pull Tractors
- DoAll Convertible Tractors

## ADVANCE-RUMELY Power Farming Machinery

Advance-Rumely Thresher Co., Inc., Dept. F, La Porte, Ind.  
Serviced through 30 Branches and Warehouses.  
Gentlemen: Please send literature describing the items checked.

Name .....  
Address .....  
City ..... State .....

- DoAll 46-inch Tread 4-Wheel Tractors
- Grain Threshers
- Rice Threshers
- Bean and Pea Hullers
- Silo Fillers

# What the Folks Are Saying

## Modern Equipment Should Result in Larger and Better Gardens on Kansas Farms, and in All Sections of the State

**M**ANY a farm woman has remarked that she doesn't know how she and her family could get along without their garden. Valued in dollars and cents, the average farm garden produces all the way from \$50 worth of vegetables for the family table to a figure several times that amount, when quantities are canned for winter consumption.

The garden, however, has an additional worth to any household. No diet is complete without a liberal supply of fresh vegetables. Green peas, string beans, lettuce, radishes and a dozen or more other vegetables commonly grown in the family garden are a source of food which cannot even be purchased in many rural communities.

We have seen the advent of combined harvesting, mechanical corn picking, and a multiplicity of former hand tasks reduced to mechanical operations which save labor, time and money. One task which can be, but is often not accomplished differently than it was a century ago is that of garden making. The walking plow and the hoe "came west" side by side, but both now have modern descendants that have outstripped their ancestors in operating efficiency.

### A Wide Variety of Tools

Since the garden is of such importance, it seems only fair that some of the latest equipment, designed to lighten and speed up garden making, should be available on all farms. The wide variety of tools which may be purchased meet every demand or need of gardening.

Complete wheel and handlebar outfits which are equipped with demountable seeders, plows, rakes, pulverizers and other tillage tools are available at prices small in comparison with their usefulness. It is easy and fascinating to care for a garden with one of these little machines, which combines the work of half a dozen field implements.

The seeder attachment will drill practically all vegetables in rows, or drop them in hills of varying spaces. Blade cultivators shave off weeds just below the surface. A double-wheel combination makes straddling of the row possible, so that both sides may be cultivated at one time. A mulcher which functions somewhat the same as the common field pulverizer works admirably, and a small rotary hoe tears out tender weeds. There are other attachments for these outfits, and, of course, a wide choice of ordinary hand tools which are needed, in exceptionally small plots and for working directly in the rows. Here we find, besides the conventional hoe and rake, several new ideas in design: a five or six-tooth weeder in place of the hoe blade, a rotary hoe which is excellent in small plants, a self-cleaning rake designed for weeding lawns, and a two-bladed hoe which cuts on both the forward and back strokes.

### And the Garden Tractor

A significant development in commercial gardening or truck farming is the garden tractor. These small machines will plow, pull multiple row seeders, a one-section harrow and many other small implements. The smaller types are operated from handles, the operator walking behind, while the larger sizes are arranged with a seat and steering wheel.

Advantages of garden tractors are that they will do such a large number of field tasks, may be operated in crowded areas, are easily transported, and are "triple threat," having power take-off and belt power as well as drawbar power. On poultry and truck farms, in thickly settled sections near large cities and in landscaping work these small tractors are nearly indispensable.

Whether used in the family garden or to produce vegetables for the market, up-to-date gardening equipment

serves the gardener as one of the many labor and time saving features of modern farming. T. J. Charles, Chicago, Ill.

### Then the Steers Gain!

Early maturity is the market demand for meat animals. Feeders are interested in methods of feeding that give fast gains. Economy also is of prime importance.

Corn continues to be the chief fattening feed, yet this concentrate is being approached in fattening value by oats and barley.

The annual abundance of oats, especially in the central states, has made it desirable to determine the value of this grain for fattening cattle. At the Indiana Experiment Station, a feeding trial last year showed that one-third of the corn ration for steers could be replaced with oats ground medium fine. Steers receiving this ration, together with cottonseed meal and roughage, made a gain of 2.6 pounds a day and a profit a steer of \$12. This trial showed that ground oats can be used satisfactorily in the ration of fattening steers.

Barley, also, has been found to be very valuable in the ration of fattening calves. At the Michigan Experiment Station last year, ground barley was compared with corn fed to two lots of Hereford calves. Both lots also received silage and alfalfa hay. The calves fed ground barley made gains of almost 2 pounds a day, slightly more than that made by calves receiving corn. The feed cost on the calves receiving barley was also lower than that for the calves that were fed corn.

Even corn and alfalfa hay are being improved in their value for fattening cattle. At the Minnesota Experiment Station, last year, one lot of yearling steers was fed ground corn and ground alfalfa hay, as compared to unground corn and long alfalfa hay fed to a similar lot of steers. The steers receiving the ground and mixed corn and alfalfa hay made a gain of 2.6 pounds during the 161-day feeding period. This was the largest gain made by any lot of steers fed at that station last year. The steers receiving the ground grain and hay made their gains at a feed cost of \$1 a hundred less than that for the steers receiving the unground

feed. The steers receiving the ground ration also made a higher net income than those receiving the whole feeds.

Livestock meetings at these experiment stations where reports of these feeding trials are given are largely attended. This shows the interest of cattle feeders in improving their methods of feeding and in cutting the costs of getting cattle ready for market. Results of these experiments will be of value to cattle feeders in all sections, in showing how improvement can be made in the feeding of oats, barley, corn and hay to steers, since some or all of these feeds are available in practically all sections where cattle are fed.

L. H. Fairchild, Crown Point, Ind.

### Seed Corn is Poor

Seed corn in Kansas is the poorest in years. Heavy losses from poor stands are inevitable this spring unless the precautionary measure of testing seed corn is generally adopted.

The germination of Kansas seed corn is the lowest in nine years, according to J. W. Zahnley, director of the State Board of Agriculture seed laboratory. Two hundred samples from 12 counties widely distributed over the east half of the state show an average germination of only 82 per cent, and this is the lowest average since 1922, and is more than 10 per cent lower than the average for the nine-year period 1922 to 1930.

Tests this year show a germination of 3.2 per cent below the tests for 1926, the next poorest seed corn year since 1921. As these samples that were tested were from county corn contests, they represent seed grown by the most progressive farmers, and it is safe to say that the samples were above the average.

Seed corn should germinate at least 90 per cent, and it is not regarded as very good unless it averages 95 per cent or more. Very little seed this year will approach this standard. Forty-five of the 200 samples this year have tested below 90 per cent, and nearly three-fourths are below 95 per cent.

The large proportion of unusually poor seed corn this year is due mainly to the exceptionally cold weather about the middle of November. A large part of the Corn Belt experienced temperatures around zero

nearly two weeks before Thanksgiving. This had been preceded in many sections by frequent rains and weather generally unfavorable for drying. Corn which contains a high percentage of moisture is seriously damaged by heavy freezes. Seed corn which was selected in the field and properly dried before the first heavy freezes usually gives high germination.

Twenty-eight samples were tested from one county which had much rainy weather in the fall and unfavorable weather for the corn to dry out. The average germination from that county was only 60 per cent, and more than half the germination was below 70 per cent. It is safe to say that from one-half to three-fourths of the seed corn selected after the cold weather set in will be unsatisfactory, if not entirely unfit for planting.

All corn this year should be tested for germination before planting. A very high percentage of failures is bound to result from planting untested seed this spring. Seed testing is especially important when the seed is of doubtful viability. In order to obtain authentic tests of seed it is urged that samples be sent to the State Seed Laboratory, Manhattan, Kan., where tests will be made promptly and without charge. Samples of seed corn should consist of at least 400 seeds, and should represent a fair average of the lot to be tested. Topeka, Kan. J. C. Mohler.

### Butter Substitutes

Many Kansas newspapers since the decline in the price of butter have printed the statements of grocers that the chief buyers of butter substitutes are farmers themselves. Another statement is that the oleomargarine and other substitutes are well advertised, whereas butter is not. The Iola Register went thru its own pages and reported 42 ads of grocers. In many butter substitutes were advertised, but not one mentioned butter. Yet the other day, perhaps because of this publicity, one grocer in a Kansas paper printed an ad mentioning butter alone, not another article, which showed his goodwill toward the farmers.

The Bureau of Agricultural Economics at Washington the other day printed the statement that butter substitutes lately have become a factor of growing importance in European countries, the bureau stating that this affects "both the demand for butter in importing countries and the surplus in butter exporting countries." The United States, notwithstanding its large dairy interest, is still an importer of butter.

But, according to the Washington bureau, oleomargarine consumption in Germany now actually exceeds butter consumption. Denmark, the greatest dairy land in the world, consumes substitutes, thereby augmenting its butter surplus for export, and the same is reported of the Netherlands. Perhaps the tendency now mentioned of Kansas farmers to use substitutes for butter has a similar effect; that is, of supplying American butter for export. The fact is, at any rate, that relatively low butter prices in this country during a good part of the last year have resulted in smaller importations of foreign butter into this country, and produced a slight surplus for export.

In Europe it is reported that "material improvement in the quality of European oleomargarine" is a contributing cause of increasing consumption of that substitute. American creameries can produce a higher quality of butter than they commonly turn out, for that matter, but it would have to be at a higher price, which would probably not help the situation. But a combination advertising campaign by dairy interests would probably be effective, and is the most promising plan for maintaining the popularity of butter, against the well advertised substitutes.

Topeka, Kan. Harold T. Chase.

## Capper Employes Have Big Party

**T**HE FIRST service recognition party in the history of the Capper Publications was held February 13 at Topeka. More than 1,500 employes of the Capper plant, including their wives, husbands or one invited friend, attended the party. The crowd on hand to see the program staged by Capper employes included more than 60 Capper folks from Kansas City and Chicago.



Facsimile of 1/2 Inch Service Recognition Pin Awarded 464 Capper Publications Employes. Nineteen Old Timers Received This Pin

Thirty-seven years ago Senator Arthur Capper started in the publishing business with the North Topeka Mail, since consolidated with the Kansas Farmer. The list of Capper Publications today includes The Topeka Daily Capital, The Kansas City Kansan, The Household Magazine, Capper's Magazine, Capper's Weekly, Capper's Farmer, Kansas Farmer, Missouri Ruralist and a controlling interest in the Ohio Farmer, Michigan Farmer and Pennsylvania Farmer.

Pins for service ranging from five years to the Old Timers' Club pin, with 25 years service as a prerequisite, were awarded at the recognition party. T. A. McNeal, editor of Kansas Farmer, was awarded an old timers' service pin. Out of a payroll of 989, exclusive of the 157 employes on the Ohio, Michigan and Pennsylvania publications, 464 employes received service pins. The Old Timers' Club includes 19 men and women who have rendered more than 25 years of service to the Capper Publications; 27 received 20-year service pins, 51 were eligible for the 15-year service pin, the 10-year class included 116 and there were 247 recipients of the five-year service pin.



Many  
mechanical improvements  
make this an even finer Pontiac



NEW SERIES

# PONTIAC BIG SIX

*Illustrated above: The 2-Door Sedan, Body by Fisher*

Here is a car that is particularly well designed for the kind of driving farmers do. It is the New Series Pontiac Big Six—an automobile which lives up to its famous name in every way because it includes all of the qualities that have made past Pontiacs so popular on the farm.

Power and speed—dependability under the severest driving conditions—riding ease—long life—safety—and remarkable economy of operation and maintenance . . . these qualities have won farm friends for Pontiac in rural sections everywhere.

But today's Pontiac is even finer because these same qualities have been enhanced by many mechanical improvements. It has new-type rubber engine mountings, for example, which insulate the engine from the frame and give greater smooth-

ness—improved internal-expanding four-wheel brakes, now more efficient and reliable than ever—a new steering system which acts on roller bearings, providing greater handling ease—increased rigidity in the crankcase which, with the Harmonic Balancer, reduces crankshaft distortion to a minimum.

Ask your Oakland-Pontiac dealer to tell you about its many other improvements—such as the new type of starting motor, semi-automatic and manually controlled, and the sloping, non-glare windshield, which makes night driving safer. Ask for a demonstration, too. That's the most satisfactory way to learn all the advantages offered by the New Series Pontiac Big Six. . . . Seven body types. Oakland Motor Car Company, Pontiac, Michigan.

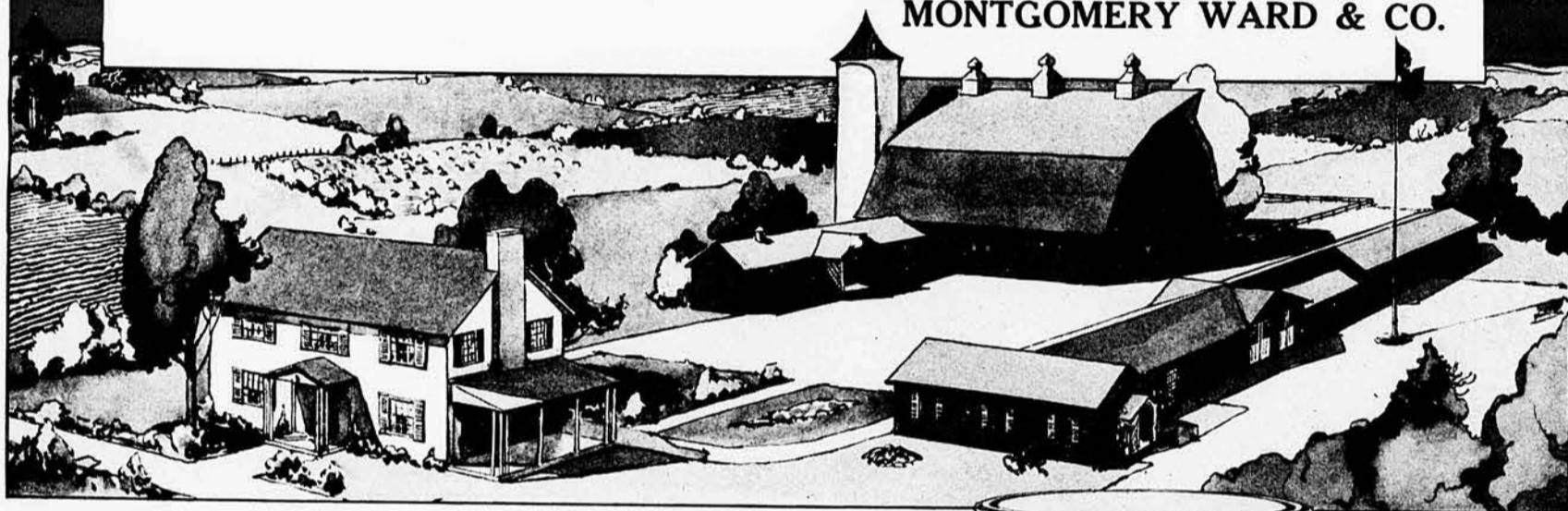
*Write for an interesting booklet which illustrates and describes the design of the New Series Pontiac Big Six with its important improvements.*

*Remember . . . you can buy a Pontiac on special G. M. A. C. terms offered to farm buyers exclusively with payments at convenient intervals during the year.*

A FAMOUS NAME, A FINER CAR . . . PRODUCT OF GENERAL MOTORS

**“If this paint does not wear as long, look as well, and go as far as the highest-priced paint made we will furnish new paint FREE and pay for putting it on” . . . .**

**MONTGOMERY WARD & CO.**



**T**HIS guarantee, covering Ward's ZINC-ITE and Master Painter's paint, is the simplest and strongest guarantee in the industry! And the reason we can make it lies in the quality of the paints themselves.

Using only the finest materials . . . supplied by producers like National Lead, New Jersey Zinc, Eagle Picher, and Du Pont . . . we manufacture more than 80 per cent of these paints in our own factory. We consume each year around a half million bushels of flaxseed, and sell millions of gallons of paint annually; while our formulas call for a larger percentage of pure linseed oil and stronger color pigments, to insure finest results for the user. Every batch of every brand is tested eight different ways . . . and both ZINC-ITE and Master Painter's give splendid hiding power, surface coverage and lasting sunproofness. Your Ward Store also carries a complete line of other house and barn paints, enamels and varnishes for every purpose.

Our nationally famous WARD-SET Brushes, made of pure Chinese hog bristles that absolutely will not loosen or shed, are the ideal companions to these quality paints. Every brush will pass the weight-test illustrated, and we supply a complete line for all painting, varnishing and enameling purposes. WARD-SET Brushes are lower priced than usual . . . and their performance always dependable.

Any of our 550 Montgomery Ward Stores throughout the nation is ready now to supply your painting requirements—not only satisfactorily, but at a real saving.

“Save the surface and you save all” — *Montgomery Ward*



**WARD-SET Brush, “Painter's Favorite.”**

Tested under 200-pound pull, and in gasoline, oil, water, alcohol and acids—WARD-SET Brushes never shed a single bristle from their Bakelite setting! This 4-inch brush has finely-balanced handle; gives smooth flow on any surface. Price, prepaid, \$1.50.



ZINC-ITE is the industry's very latest paint development! Exceptionally sunproof. Covers 400 square feet per gallon (2 coats) at a saving of \$1 to \$2 per gallon. Unusual hiding power and leaves no brushmarks. Supplied in 12 colors. Price, prepaid, **\$2.80\*** in 5-gallon cans . . . Per Gal.

Ward Paints for the group of buildings illustrated above would save you approximately \$30.



**MASTER PAINTER'S.** The purest lead-zinc-and-oil paint that can be made. Meets maximum U. S. Government Specifications 10B. Formula on every can shows extra percentage of pure linseed oil. Covers 360 square feet per gallon; smooth-flowing. Choice of 12 colors. Prepaid **\$3.39\*** price, in 5-gallon cans . . . . Per Gal.

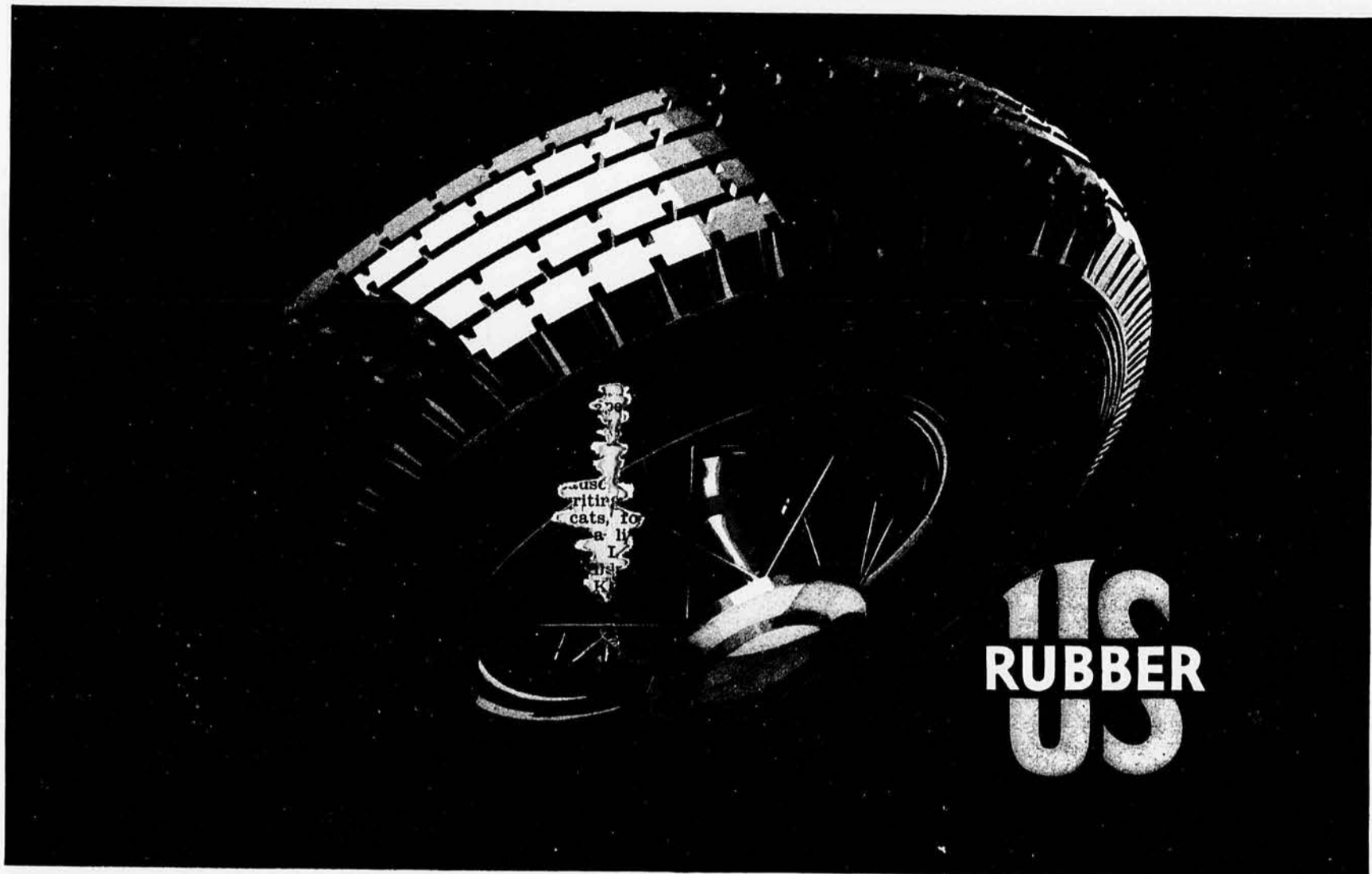
We also carry a complete line of barn paints at prices as low as from \$1.20 to \$1.80 per gallon, in 5-gallon cans.

\*Price slightly higher in some states.

**MONTGOMERY WARD & CO.**

World's Largest Chain of General Retail Stores

Mail Order Branches at: Chicago · Kansas City · St. Paul · Baltimore · Portland, Ore. · Oakland, Calif. · Fort Worth · Denver · Albany



## U. S. Tires are especially suited for service on the farm

Your U. S. tire dealer is a responsible merchant, a tire specialist, and your neighbor.

He not only handles the greatest line of tires in the world for all-round use on farm vehicles, but he is always on the job to take care of your requirements at a minute's notice.

He has the U. S. Royal, built of the finest, purest, toughest rubber and cord the world affords. We know because we grow the rubber on our own plantations; we make the cord in our own mills.

There's no other tire, at or near the price, that will stand up under all kinds of fast, hard, continuous farm operation as well as the new U. S. Royal. It was virtually made to order for all-round farm purposes.

He will show you the U. S. Peerless, an entirely new tire. It is built of the same high quality cord and rubber as the U. S. Royal, but it is priced lower to meet the farmer's demand for a first-class high-grade tire at a very low cost.

He will show you the out-



standing heavy service tire of all time—the U. S. Royal Heavy Service—in balloon or high-pressure.

To choose among these three great tires you have only to consider how much or how little you want to pay for a tire—and what you expect that tire to do.

Your U. S. dealer will not only tell you honestly which U. S. tire is best suited to your needs, but he will put on the tire for you, see that the inner tube is properly fitted, check your air valves, check your wheels for alignment and see that your tire has the proper amount of air in it.

And when, any time after, you want service of any kind, that same U. S. dealer is around the corner or down the road to give it to you. No need to conduct a correspondence with HIM. Your telephone takes the place of your fountain pen!

And more important still, every U. S. dealer stands back of the tire he sells you—and back of him stands the United States Rubber Company, the world's largest producer of rubber. This great organization, with a worldwide reputation for square dealing, is just as anxious as your dealer to see that you are perfectly satisfied with any product that bears its name—a name that extends back to the very beginning of the rubber industry.

Call on the U. S. dealer. You will be surprised to know how much U. S. mileage you can get for so little U. S. money!

## The McCORMICK-DEERING Tractor Line Gives You POWER for EVERY Need



This is the powerful 15-30 McCormick-Deering. It pulls four plow bottoms in all average conditions.

**Y**EAR after year the man who centers his farm operations around the McCormick-Deering tractors gets the utmost out of modern power farming. The reasons are plain. McCormick-Deering tractors are simple, sturdy, highly perfected, standardized models, built with every conceivable advantage and feature, designed by International Harvester skill to work with the full line of McCormick-Deering power farming equipment.

### The 15-30

For big-capacity operations on the medium-size and larger farms, take the powerful 15-30. In the field shown above it is turning beautiful furrows at a rapid rate. *The powerful 15-30 puts a big day's work in one man's control the year through.* Cash in on its generous power and economy during tillage and seed-bed preparation, grain and corn harvest, and the heavier belt and power take-off jobs. Note the list of 15-30 features at the right.

### The 10-20 and the Farmall

For smaller operations the McCormick-Deering line offers the 10-20 (built just like the 15-30), and the Farmall. The popular Farmall, shown here with a 4-row cultivator in a corn field, is a *true all-purpose tractor* in that it *also* handles the planting and cultivating of row crops. On the majority of farms the Farmall completely solves the power problem, whatever the crop or operation. On the larger row-crop farms it frequently supplements the power of the 15-30 McCormick-Deering.

McCormick-Deering tractors have stood every test in years of service. Nothing has equaled their work in cutting the costs of production. Make full use of McCormick-Deering power during 1930. Displayed and serviced everywhere by the McCormick-Deering dealers.

Catalogs on request

**INTERNATIONAL HARVESTER COMPANY**  
606 So. Michigan Ave. **OF AMERICA** Chicago, Illinois  
(Incorporated)



Here the 15-30 delivers its power at the belt. Both the 15-30 and the 10-20 have these quality features in their construction: A 4-cylinder power plant, ball-bearing crankshaft, ball and roller bearings at 34 points, strong 1-piece main frame, new manifold design for fuel efficiency, filtered fuel supply, protected air supply, circulating splash lubrication, high-tension magneto ignition, three forward speeds, removable cylinders, and replaceable parts throughout.



This is the famous Farmall, cultivating four rows of corn. Remember that if it isn't a McCormick-Deering it isn't a Farmall. This tractor makes a square turn and clears high rows. With 2- and 4-row planters and cultivators it handles from 25 to 60 acres in an 8-hour day. It cuts a 14-ft. swath of hay, with 7-ft. Farmall-powered mower and 7-ft. trailer-mower attached. Handles rakes, loaders, etc. Plows two furrows, pulls all seed-bed implements, and operates grain and corn harvesting machines.

# McCORMICK-DEERING



# Here's Fun for After-Supper Hours

I AM 10 years old and in the sixth grade. My teacher's name is Mr. Peter. I go to Leasburg school. I like to go to school. I have three brothers and one sister. Their names are Cleatis, Melvin, Kenneth and Betty. Kenneth and Betty do not go to school. This summer during vacation I went to visit my grandmother and stayed a week. I enjoy the boys' and girls' page very much.  
Cedar, Kan. Marjorie Byfield.

### What is the Proverb?



The letters in each group can be rearranged to form a word, and when the resulting words are placed in the right order you will find a proverb. The illustration furnishes a clue. Send your answers to Leona Stahl, Kansas Farmer, Topeka, Kan. There will be a surprise gift each for the first 10 girls or boys sending correct answers.

### Diamond Puzzle



1. Stands for East. 2. A conjunction. 3. To come in. 4. A hide-out. 5. A consonant.

From the definitions given fill in dashes so that the diamond reads the same across and up and down. Send your answers to Leona Stahl, Kansas Farmer, Topeka, Kan. There will be a surprise gift each for the first 10 girls or boys sending correct answers.

### Likes to Go to School

I am 11 years old and am in the sixth grade. I like to go to school. My teacher's name is Mrs. Burr. I have three brothers. Their names are Nor-

man, Kenneth and Cletis. My birthday was July 20. Have I a twin? I would like to hear from some of the girls and boys.

Forrestine C. Hooper.  
Marienthal, Kan.

### Enjoys the Letters

I am 8 years old. My birthday is May 5. Have I a twin? I go to Jefferson Center school. My teacher's name is Miss Hugos. I have three sisters and one brother. My sisters' names are Eleanora, Aloisia and Irene. My brother's name is Paul Eugene. I like to read the letters in the Kansas Farmer very much.  
Cuba, Kan. Stanley Baxa, Jr.

### Has Plenty of Pets

I am 4 years old and because I am so little my big sister is writing for me. For pets I have five cats, four dogs and one pony. I have a little baby brother and two sisters. I like to have my sister read the children's letters which are printed in the Kansas Farmer. I would like to have some little boys and girls write to me.  
Onaga, Kan. Marjorie Zehner.



### Try These on Your Guesser

- When does a bed become a vehicle? When it is a little buggy.
- Why should one never complain of the price of a car ticket? It is a "fare" thing.
- Why is a colt like an egg? It must be broken before it can be used.
- When you listen to a drum why are you a good judge? Because you hear both sides.
- Why does a mariner need a great deal of sand? Because he scours the sea.
- What is the most indigestible age? Cabbage.
- Why is a person of short stature like an almanac? Because he is often looked over or over-looked.

When a little boy gets his stockings on wrong side out, what does his mother do? Turns the hose on him.

What is the most difficult lock to pick. One from a bald head.

When is a shoemaker like a doctor? When he is heeling.

### Do You Know This Animal?



If the black pieces are cut out and properly fitted together, they will make the silhouette of an animal. Can you guess it? Send your answers to Leona Stahl, Kansas Farmer, Topeka, Kan. There will be a surprise gift each for the first 10 girls or boys sending correct answers.

### Yellow Water Lily

If you were lost on a desert island and could find a big bed of yellow water lilies, you would not need to starve. Despite the fact that it is not as handsome, the yellow water lily that you see blooming all summer long in stagnant water is of more real usefulness than its lovely cousin, the white water lily.

The seeds of the water lilies ripen under water in a fleshy pod. When the flower is mature it is drawn under the surface by the bending or curling of the long, flexible stem, and

the seed pod develops, bursts open and scatters the seed.

At first they float, supported by a buoyant aril or sac which aids in scattering them about on the water. This finally is dissolved, allowing the seed to sink.

Indians gathered the ripe seeds in small sieves or nets, dried them and ate them parched, or ground them into a meal from which cakes were baked. Among the Klamath Indians the seed of the western water lily was a staple article of diet, largely taking the place held by the maize or Indian corn among the tribes of the East.

Even today South American Indian tribes living near the headwaters of the Amazon river visit the vast lily beds in the swamps of that region to harvest the seeds that form an important item of their menu.

Moose and deer also feed on the water lily, being very fond of the buds, the leaves or pods, and the roots. The yellow water lily often is known as the cow lily, perhaps from its lack of beauty, perhaps because it is eagerly sought after by cow moose in the Northern wilderness.

### March

Some people think this chap called "March"

Is just a windy bluffer,  
A noisy boy who takes delight  
In making people suffer.

Indeed, I know, he puffs and blows  
And flaps one's clothes about;

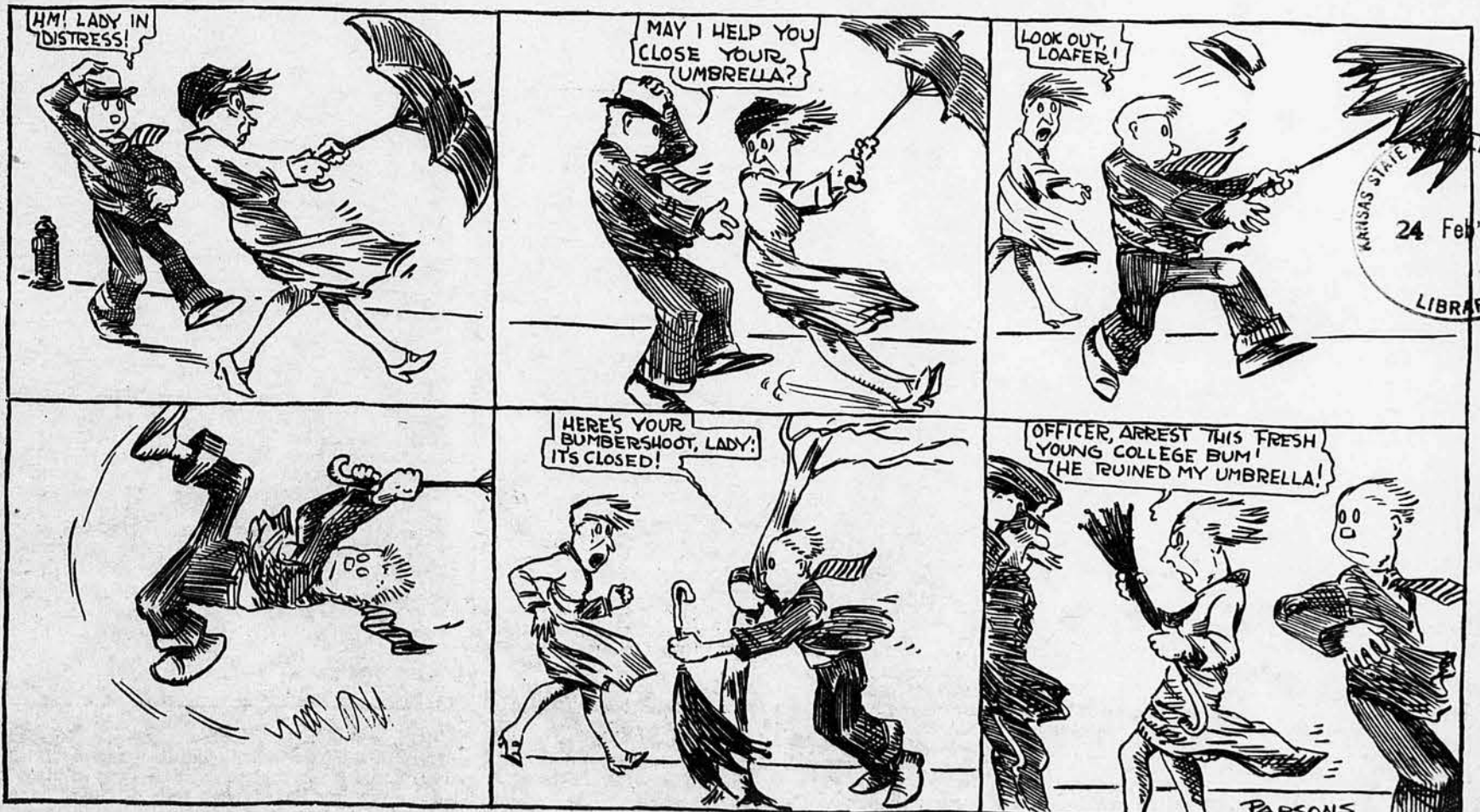


I guess he even laughs a bit  
On hearing someone shout:

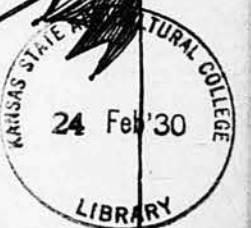
"There goes your hat!" But just the same

We should be fair and say,  
"He can't do otherwise and blow  
The winter's cold away."

—Edna Becker.



The Hoovers—The Good Samaritan and the March Blow



# Substitute These Recipes for Meat

"Butter, Cream and Cheese Help Keep Away Disease"

**W**ITH butter, cream and cheese you may keep away disease." Thus do the sturdy Swiss herdsmen paraphrase our Anglo-Saxon "apple a day."

It is no wonder that cheese has been one of the principal foods of civilized people. The early nomadic tribes of Asia and Africa were among the first extensive users of cheese. The records of all ancient people refer to cheese as an important part of the food supply.

Cheese is an especially valuable addition to our American dietary, providing as it does a concentrated food at a comparatively low cost. It supplies protein in a concentrated form, as well as fat, and vitamins in appreciable quantities. A misunderstanding relative to the digestibility of cheese has been corrected to a great extent. This unfavorable reputation is attributed in part to the fact that cheese used to be eaten with other foods already too rich in themselves. In recent years it has taken its rightful place in the diet, replacing instead of supplementing eggs and meat.

Perhaps the cheese most commonly used in our country is the American or cheddar cheese. There is, however, another popular kind known generally as cottage cheese. This is available at all times on almost every farm. It is so simply and easily made, and keeps well in a cool place. I often substitute it in salads where a soft ungrated cheese is to be used.

To make really good cottage cheese use fresh sweet skim milk. Warm it to a temperature of 70 degrees Fahrenheit and let it stand until it forms a curd. This usually requires from 12 to 18 hours. After a good curd is formed, break it up gently and warm to 90 degrees for 10 to 15 minutes, then pour into strainer cloths. When sufficiently drained the curd should have the consistency of thick mush.

Buttermilk cheese is quite similar in appearance but finer grained and is much smoother. To make this cheese the buttermilk is heated to 140 degrees Fahrenheit, or scalding hot. In about half an hour it is poured into a cheesecloth bag and hung up to drain. In 2 to 4 hours the curd will be dry enough to salt to taste.

Here are some of the popular cheese dishes, each of which is almost a meal in itself.

## Cheese Souffle

2 tablespoons butter	1 cup grated cheese
2 tablespoons flour	2 eggs
1 cup milk	½ teaspoon salt

Melt butter, blend in flour, add milk and cook until thick. Stir in beaten egg yolks, salt and



May I suggest that any woman who is interested in this article by Miss Callahan send two cents in stamps to our Home Service Department, Kansas Farmer, Topeka, Kansas, for our "Note-Book on Fish and Cheese." These are two health foods

that it is well to include in our menus regularly, and I feel sure that new recipes are always welcome.—The Editor.

cheese. Remove from fire, cool slightly, and fold in beaten egg whites. Pour into greased casserole, place casserole in a pan of water and bake in slow oven 30 minutes, or until stiff.

## Creole Pudding, Corn and Cheese

1 can corn	2 eggs, well beaten
2 tablespoons flour	2 tablespoons sugar
¼ teaspoon each, paprika and pepper and 1 canned pimento shredded	2 tablespoons melted butter
	1 teaspoon salt

Mix all well and place in greased baking dish. Cover with thin layers of cheese and bake ½ hour in a moderate oven.

## Welsh Rarebit

1 tablespoon butter	¼ teaspoon mustard
2 cups grated cheese	¼ cup milk
¼ teaspoon salt	1 egg

Melt butter, add cheese and seasonings, and the milk gradually, stirring constantly. Add egg slightly beaten and cook 1 minute. Serve on toast or crackers.

## Baked Spaghetti

½ pound spaghetti	2 cups tomatoes
1 tablespoon chopped onion	¼ teaspoon pepper
2 tablespoons butter	2 teaspoons sugar
2 tablespoons chopped green pepper	1 teaspoon salt
	¼ teaspoon paprika
	1 cup grated cheese

Cook spaghetti in boiling salted water until tender. Drain. Melt butter, add onion, green pepper, tomatoes, salt, pepper, paprika, and sugar,

By Nelle G. Callahan

and cook 10 minutes. Mix spaghetti with this sauce, add ½ cup cheese, pour in greased baking dish, sprinkling the top with remaining cheese and bake in a hot oven 20 to 25 minutes or until cheese is brown.

## She Learns Meat Judging

BY RACHEL ANN NEISWENDER

**W**HAT is the younger generation coming to? This is a favorite query of some of the elders. Let me say that it is coming to a better working knowledge of the world in which we live. For one thing what did the bride of yesteryear know about foods? Nine-tenths of them didn't know much. But the bride of tomorrow will be wiser. This applies, in particular, to the girls who are doing constructive work in the home economics departments of our colleges.

I'm asking you to meet one of the outstanding girls on our Kansas state agricultural college meat judging team, Vivian Abell of Riley. Miss Abell was high individual in the entire contest as well as being high in judging and also in identification. She made the highest individual score



in judging meat that has ever been made in any meat judging contest. Miss Abell says: "Certainly the training which the meats class receives is worthwhile in itself. The experience is fine regardless of whether the team wins or loses." The information learned thru class work of this kind will be invaluable in the kitchens of the future. It is one thing to buy or butcher meat. It is another thing to know the different cuts, their relative costs and food values. We offer congratulations to Prof. D. L. Mackintosh, who is responsible for this excellent team of meat judges. Twice in the last three years Professor Mackintosh's team has brought home the cup. The members of this year's team were Mary Wilson, Council Grove; Frances Wentz, Ames; Orpha Brown, Edmond and Vivian Abell, Riley.

## Visit the Charm Shop

BY JANE CAREY

**T**WO women just passed the door of the Charm Shop. One waddled like a duck; the other walked like a princess! I watched them, and my thoughts went walking, too. Carrying one's self well is an art which can be acquired. Most of us walk unthoughtfully. Let's become walk-conscious.

Begin by assuming correct posture, but don't let yourself feel like an army private at attention. The idea is to hold one's self erect, but to do so with a relaxed, buoyed-up feeling.

Do you keep your feet in the straight and narrow path? Toes should look neither to the right nor left. Indian fashion is splendid. Take a tip from a squaw and don't toe out.

Watch the feet of people who walk gracefully. Practice stepping as they do. Walk on the outside of your foot. Try to step lightly. Don't bring your weight down on your heels.

Remember that squeezing your foot into a short shoe is going to make it look bulgy and

will bring on bunions. If you aren't enjoying foot comfort, buy your next pair of slippers a half size larger than you have been, and on a narrower last.

Walking on tiptoe helps to make graceful ankles and to develop the calves. Tiptoeing also strengthens the muscles of the feet. Walk barefoot on your toes until you must drop back on the whole foot.

A good exercise for improving ankle contour and strengthening the feet is this one: Rise on the toes (barefoot). Stand with feet parallel, about 8 inches apart. Rise on the ball of the foot, twisting the heels inward and trying to grasp the floor with the toes. Do this morning and night, from 20 to 30 times, slowly.

If you want to reduce your hips practice walking with a lengthy stride, stepping until you feel the muscles pulling at the back and front of the thigh.

Drop me a line about your beauty problems. I'll be glad to help. Address Jane Carey, The Charm Shop, Kansas Farmer, Topeka, Kansas.

## Home Made Soap Powder

BY GRACE E. JOHNSTON  
Jefferson County

**H**OMEMADE soap is unwieldy to prepare for the wash boiler, especially after it is a year or so old. Soap powder is easily made. Hack your soap into pieces small enough to put into the hopper of your food chopper. A quantity should be prepared at one time to avoid washing the chopper too often. Two cups of this powder is sufficient for a large washing. This would vary according to the strength of your soap.

## Paddy's Patrick Party

BY PHYLLIS LEE

**T**HE invitations to your party can be made with a correspondence card and a few Saint Patrick's cut-outs. Underneath each reminder of the Emerald Isle a bit of your invitation can be penned. Green and white streamers cut from crepe paper will lend a festive atmosphere to any room. Shamrocks of various sizes, snakes, pipes and the ever-faithful Irish potatoes will make your guests think of the good Saint Patrick.

You might like to make it a costume party with the guests representing some Irish character. You could have a box of articles such as green ties, green aprons and caps, in the room in which the guests are to leave their wraps and let them choose some bit of greenery to wear.

"Paddy, Paddy" will start your party off with a bang. "Paddy's Pipe", "Paddy's Irish Stew", "Paddy's Potato Pant", "Paddy's Supper" and "A Green Romance" will all be hilarious games. And, as a climax to a gay evening take your guests on a trip to Dublin.

The refreshment table should be gay with shamrocks of all sizes. They may be laid flat on the table with the silverware and dishes of mints placed on top. They will make plain candlesticks charming if fastened to one side. A centerpiece can be made with a man's black silk high hat, lined with green paper. The favors may be put in the hat with silver ribbons attached to them and spreading out over the table.

You'll want Irish sandwiches for refreshments, some rolled and some shaped like shamrocks, and



Do you like the ideas for "Paddy's Party?" If you do, you'll want the leaflet that Miss Lee has prepared which gives not only ideas about decorations and refreshments, but all the rules for the games mentioned in the party, and for which we do not have space here. The leaflet may be obtained from Phyllis Lee, Entertainment Editor, Kansas Farmer, Topeka, Kansas. The price is 5 cents, stamps or coin.



Good Luck salad. Mad Hatter cakelets and green and white mints will be palatable and no Irish party would be complete with a "cup o' tay." Tied to the handle of each cup of "tay" is a good luck fortune written on a small cardboard shamrock.

# Some Rules for Decoration

Remember That Any Art Can Be Cheapened if It Is Overdone

BY MRS. NORMAN DAVIS

**M**Y EARLIEST recollections of my cousin John's and Sally's home are of well built, home-made mission furniture, with tatted and crocheted scarfs and centerpieces. Fashionable for those days, but very monotonous! Years later, when color came into its own for home decoration, that furniture was still solid and

winter bouquets, basketry, plastic work, crystal work, wax decorations, crepe paper flowers, are a few of the many arts that may be learned at home, and used to make the home artistic, cheerful and homelike, but any one of them may easily be overdone. Concerning the use of vases, bouquets, statuary and other decorations for shelves, mantles or tables, I think a safe rule is "when in doubt, don't." Unless you are positive the appearance of the room is improved by the use of added decoration, leave them out of the picture.

## Write About Your Garden

"Mary, Mary, quite contrary, how does your garden grow?" All of us are looking at seed catalogs these days, and hoping that the garden we make this spring will grow beautifully, and blossom well. You'll be glad to welcome the old friends who have been in your garden for years, and to put new ones there to add color and beauty. A garden contest should give us all new ideas. Write now, to our Garden Editor, Kansas Farmer, Topeka, Kansas, and tell us your garden plans, the plants and shrubs you have and the ones you intend to add. Tell us something of your designs, your color schemes and the flower you like best. The contest will close March 20. The first prize will be \$5, second prize \$3 and third prize \$2. Let us hear from you.

## Dresses for School Wear

2783—This plain dress with fashionable seaming suggests a scalloped bolero with hipyoke in two sections scalloped at the edges. The attached two-piece skirt has inverted plaits at either side of the front. A shoulder



good, and every piece of furniture in the house except the piano was given a covering of bright enamel. Fabric painting had also become popularized, and these vivid pieces took the place of the old needlework.

You can easily imagine the garish and tiresome ensemble that was the result. Since then I have seen several charming arts cheapened and made common in their home, by overdecorating. I have seen reed baskets placed on every shelf and table. Later these spaces were filled with artificial flowers Sally had learned to make. Just at present they are filling every conceivable space with plastic picture frames, flower pots, vases, footstools, boxes, book ends, lamp bases and magazine racks. And again they are cheapening a versatile and attractive art by making it too common.

If you are learning something new in home decoration, do remember not to overdo it. Make a piece or two for yourself and then if you wish to make more, fill your gift box. The pieces you do keep will appear much better. Or if you make some pieces you feel you just can't bear to part with, keep them but do not use them all at one time.

Block printing, fabric painting,

bow with rippling ends adds to the beauty. Designed in sizes 16, 18 years, 36, 38, 40, and 42 inches bust measure.

2687—Here is a little girl's dress made in adult mode with a hip yoke scalloped across front with box-plaits below in the skirt, gathered in all-around styling. Belt is stitched at each side giving the bodice a slight blousing. Designed in sizes 6, 8, 10, 12, and 14 years.

## Are You a Little Cook?

**DEAR LITTLE COOKS:** Are you a new member of our little cooks' club, or haven't you joined yet? The door to our club is wide open and we'll be glad to have you walk in. I have made a little book of all the recipes which have been run in our corner since the club started and I am sure this will be of interest to every little cook, whether old or new, and a good way to get acquainted with us if you don't belong now, but will soon.

Fill out this coupon if you would like to have the book of little cook's recipes. The book will be sent you immediately on receipt of the coupon and two 2-cent stamps for postage.

Dear Miss Gardner: I would like to have "The Little Cook's Own Book of Recipes" which you have prepared for the benefit of little cooks. Inclosed are two 2-cent stamps for postage.

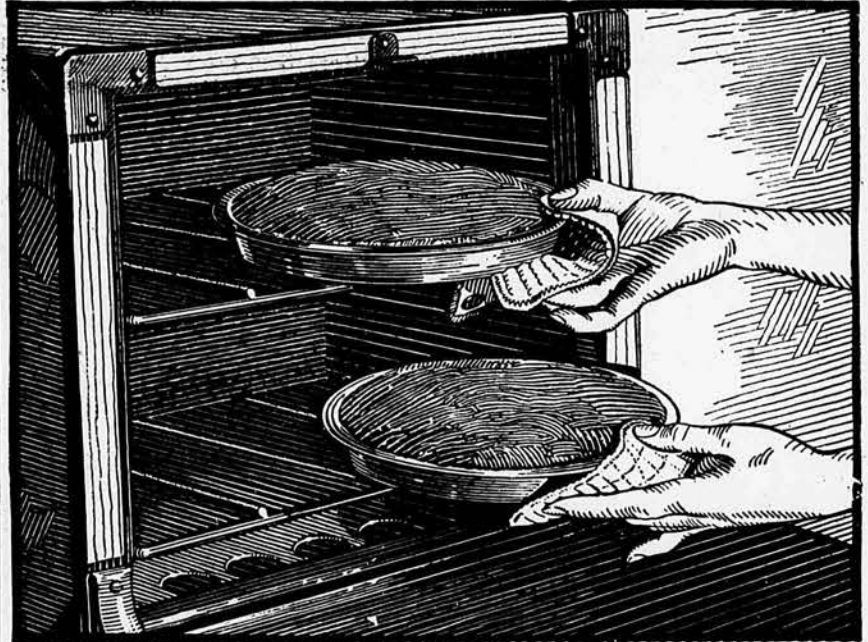
My name is .....

My address is .....

My age is .....

Patterns for the dresses pictured above are 15 cents each and can be obtained by writing to Pattern Department, Kansas Farmer, Topeka, Kan.

# Calumet's Double-Action is making the oven a safer place for cakes -

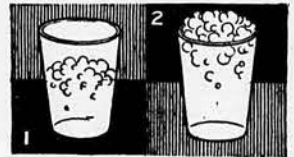


It's just one baking triumph after another when you use Calumet Baking Powder. You can always feel so sure your cakes and biscuits will be protected from oven failure. That's because Calumet acts twice.

Calumet's first action—in the mixing bowl—gets the leavening started. Then, when you put the batter into the oven, the second action occurs. A full, steady rising lifts the batter right up and holds it. Your cakes and biscuits and quick-breads are light, fine-textured, perfect—even though you may not be able to regulate your oven temperature accurately.

All baking powders are required by law to be made of pure, wholesome ingredients. But not all are alike in their action. Not all will give you equally fine results in your baking. Calumet is scientifically made of exactly the right ingredients, in exactly the right proportions to produce perfect leavening action—Double-Action.

Let your next cake be a Calumet cake. Then you'll understand why Calumet is the most popular baking powder in the world. Be sure to use only one level teaspoon of Calumet to each cup of sifted flour—this is the usual Calumet proportion and should be followed for best results. A real economy, too. Mail the coupon today for this new, free Calumet Baking Book.



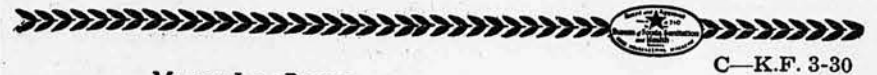
## MAKE THIS TEST

Naturally, when baking, you can't see how Calumet's Double-Action works inside the dough or batter to make it rise. But, by making this simple demonstration with only baking powder and water in a glass, you can see clearly how baking powder acts—and how Calumet acts twice to make your baking better. Put two level teaspoons of Calumet into a glass, add two teaspoons of water, stir rapidly five times and remove the spoon. The tiny, fine bubbles will rise slowly, half filling the glass. This is Calumet's first action—the action that takes place in the mixing bowl when you add liquid to your dry ingredients. After the mixture has entirely stopped rising, stand the glass in a pan of hot water on the stove. In a moment a second rising will start and continue until the mixture reaches the top of the glass. This is Calumet's second action—the action that takes place in the heat of your oven.

Make this test. See Calumet's Double-Action which protects your baking from failure.

© 1930 G. F. Corp.

# CALUMET The Double-Acting Baking Powder...



MARION JANE PARKER  
c/o Calumet Baking Powder Company, (Inc.)  
4100 Fillmore Street, Chicago, Illinois.

Please send me, free, a copy of the Calumet Baking Book.

Name .....

Street .....

City .....

State .....

Fill in completely—print name and address.

FREE



# HOG LOSSES STOPPED -after 60 had died!



Amazing benefits given by



**VERY EASY TO USE**  
Just mix with oats, barley or slop. Pigs sure do like it. Eat it when too sick to eat ordinary grain.

"My hogs were dying every day," says Garret Vink (Iowa.) 30...40...50...finally 60 had died! Thought the whole herd would be wiped out. Many medicines had done no good.  
"Finally tried 'Liquid HOG-HEALTH.' Results were wonderful! Never lost another hog—and they sure did fine after that. I want to tell every hog raiser—'Don't be afraid to feed HOG-HEALTH. There is no medicine on the market that will compare with it.'"

### Are YOUR Hogs Sick or Dying?

Thousands of users say—"Give it to wormy pigs—it expels wads of worms. Give it to runty pigs—it sure makes 'em grow. Give it to sick and dying pigs—it stops losses immediately and puts animals in condition to gain fast.

Not a "cure-all"—no! But a remarkable, easy-to-use liquid formula, combining the benefits of wormer, conditioner, disease-preventive and growth-producer. Has succeeded where everything else has failed. Has stopped losses after 60% of the herd had died. Valuable aid in treating Necro, Flu, Mixed Infection, Coughing, Thumping, Scouring. Has many records of 250-lbs. gain in 6 months.

# Free!

**SAMPLE and 80 page book**



**Remarkable Hog Book**  
Contains valuable secrets. How to make more money with hogs. How to pick best market. All about "Liquid HOG-HEALTH." Write!  
**SEND NOW!**  
"Most helpful hog book I ever read!" say hog raisers. 80 pages. 50 photos. Names and actions of the 9 ingredients. Send NOW!

GENERAL VETERINARY LABORATORY  
Dept. F-22, Omaha, Neb.

Please send me, free and postpaid, sample of "Liquid HOG-HEALTH" and book.

Name \_\_\_\_\_

Town \_\_\_\_\_

State \_\_\_\_\_ R.F.D. \_\_\_\_\_



## Ribstone SILOS

The most modern and efficient cement and steel silo made. Staves are steel reinforced, made of best quality wet mixed concrete. Guaranteed—price reasonable. Liberal discount on early orders. Write for circular.  
The Hutchinson Concrete Co., Hutchinson, Kansas  
Exclusive M'grs.



## Lock Joint, Concrete, Stave SILO

Scientifically made concrete. Erected by us. Freight paid. Big discount now.  
INTERLOCKING CEMENT STAVE SILO CO.  
Wichita, Kansas



# Rural Health

Dr. C.H. Lerrigo.

## Mother Nature Probably Has a Good Laugh; Anyhow Let Your Doctor Decide!

MRS. SMART is much too clever to buy patent medicines. She realizes that the medicine makers prepare their alluring advertisements with a keen eye on the dollar rather than from any solicitude for her health, and she refuses to bite. But lately there are a lot of nice things advertised that are not medicines at all—just helps to nature. They cost a lot more than patent medicines did, but they last a long time, and surely one should give Mother Nature an occasional boost. Take this matter of Ultra Violet Rays for instance. All the doctors admit the value of Ultra Violet. This Nature's Helper Company asks only a small sum down and a few dollars a month for putting an Ultra Violet machine right in the home where it can be used by every member of the family every day. "What about it?" she asks.

Well, I never did jump heavily on all proprietary medicines. While the whole medical profession shouted the anvil chorus I agreed that some such medicines possessed some value if only they were given by someone who knew what such medicines contained, what they were capable of doing, and whether the one to whom they were administered had need of such a medicine. The same rule obtains with these special devices of "health apparatus." Do you know the physics of Ultra Violet Rays? No, I thought not. How then, do you know that you need such treatment? Do you have knowledge (apart from the advertisement) of what Ultra Violet Rays are capable of doing? Then why take the risk? Do you positively know that you have need of such treatment? If not, why spend the money?

There is another side to Mrs. Smart's story. Granting that no healthy person living in our wonderful climate should think for one moment of spending money on health devices, we may as well bear in mind that not all people are healthy. In childhood we have the little one with rickets. Sun treatment, cod liver oil, green vegetables and various other things help. But no one can deny that such a child may profit during certain seasons of the year by Ultra Violet Rays artificially produced. There is the chronic invalid who is up one day and down the next. Some special stimulus might be just the thing to keep him up long enough to get a good start. Then there are those in their declining years who need just a little boost to help them thru the heavy dull season that precedes spring. Surely they might profit.

You see, I do not object to the principle of supplying mechanical and electrical devices to aid those who need them. My objection is to buying things of which you know nothing and expecting them to paint as good pictures of health in your own family as you see in the advertising. They may be positively harmful, for the short rays of Ultra Violet with their bactericidal action are sharp tools. But let your doctor decide whether you will profit by such aids to nature. Let him select the apparatus if he decides yes. And do not forget that he may be able to arrange for you to rent such apparatus instead of buying it, and thus save you from finding three months later that you have one more thing to clutter up the attic.

### No "General" Cure

I believe I have kidney trouble, and I hope you can give me a prescription for it. I mentioned it to our doctor, but he started right away to ask for specimens of urine. All I want is a little medicine. Mrs. K. H. F.

There is no greater delusion than the thought that there is a disease known as "kidney trouble" for which a doctor may give a prescription that will cure any and every case. There is no such "shot-gun prescription" possible. Real disease of the kidneys is serious. Every case must be treated on its own merits. The urine must be carefully analyzed and tests must be

made of heart action and blood pressure. After the analysis has been made the doctor can tell you what you should eat and drink, what work you may do, perhaps what climate you can live in. These things are vastly more important than a prescription of medicine.

### Iodin Might Help

Has a serum been developed to absorb goiter? About 15 years ago an operation was performed and one gland removed, and now the growth is almost as large on opposite side as was former growth. I read some time ago a goiter operation now is considered a very simple one, but I am told my case now is not an operative one. P. L. J.

I know of no serum that is efficient. Some help might be obtained from an iodine compound injected into the substance of the gland. But a surgical operation is the most dependable method. There are some cases in which it cannot be used, but not many.

### An Operation is Needed

I have a rupture of long standing that is gradually getting worse. I have to wear a truss. I have been advised to have an operation. Are such operations a success? R. I. M.

If you are a man young enough to be doing active work you should have a surgical operation. If done by a surgeon of experience and skill, 90 per cent of operations for cure of rupture are successful. There is practically no danger in it.

### Good Living Will Help

What is the difference between valvular and organic heart disease? S. R. T.

Valvular heart disease is always organic, but there are many forms of organic heart disease that are not valvular. Any organic heart trouble is serious, yet careful attention to habits of living may help the patient to get along very comfortably thru a long life.

## We Eat More Mutton Now!

(Continued from Page 16)

spoiled udders will not produce enough milk, if any, to raise their lambs, and the year's operations with ewes of this kind will be lost.

Only the best purebred registered rams should be used. The right kind of purebred ram is cheaper at \$50 than a scrub ram is at \$15, for the reason that the lambs will be ready for market sooner, with less feed, and they will produce a carcass the buyer likes, and the consumer will be better satisfied with the meat when it reaches the table.

The ewes should be bred as early as possible in order that the lambs may be dropped early enough to be ready for the market before July 1, weighing from 75 to 85 pounds and fat. To produce lambs of that weight before July 1, the ewes must be given good care and feed from the time they are bred until the lambs are ready for market. The feeding and management of the flock might be summed up in this manner:

1. Maintain good ewes in the flock.
  2. Use good purebred rams.
  3. Give the flock good feed, care and plenty of exercise.
  4. Keep clean, fresh water before the ewes at all times.
  5. Have ample equipment to avoid crowding in and around sheds and feed bunk.
  6. Be on the job during the lambing time in order to save a maximum number of the lambs.
  7. Creep feed the lambs as soon as they will eat feed in addition to the ewes' milk. This will make the quickest and most economical gains.
  8. Castrate and dock the lambs, as this operation will result in the lambs making quicker and more economical gains and the buyer will pay more for them on the market.
- Any one in the sheep business or planning to go into the sheep business should get all the information possible. One of the best publications on the subject is Bulletin No. 240, by Harry Reed of the animal husbandry Department of the Kansas State Agricultural College. The Kansas City Stock Yards Company also will be glad to send you a recent booklet, "There's Money in Raising Sheep."

# What Bonds Shall I Buy?

HUNDREDS of thousands of investors have answered this question by purchasing in the last 12 years more than a \$1,500,000,000 worth of Federal Land Bank Bonds, mutually guaranteed by the Twelve Federal Land Banks under the conditions stated in the Farm Loan Act. Backed by first farm mortgages upon hundreds of thousands of farms, these bonds offer conservative investors all the features deemed desirable in long-term, safe investments—stability of income, ready collateral, marketability, desirable maturities, and tax exemption. These features are reflected in the interest rates. Interest is paid semi-annually.

The 12 banks have total capital, legal and other reserves and undivided profits, aggregating more than \$84,000,000. Their total assets exceed \$1,300,000,000.

Although operating since 1916, through the worst depression ever experienced by agriculture, the net carrying value of the real estate, sheriff's certificates and other items owned by the Twelve Mutual or Co-operative Federal Land Banks on November 30, 1929 was only 1.1 per cent of their assets. This mutual system—the 12 banks and 4662 local National Farm Loan Associations—affords the investor the added security of diversification, for it operates not in one or two states, but throughout the United States.


From time to time these 12 banks make offerings of their bonds. Write the nearest Federal Land Bank or the Fiscal Agent for Circular No. 16.

### The Federal Land Banks of

- |                    |                  |
|--------------------|------------------|
| Springfield, Mass. | St. Paul, Minn.  |
| Baltimore, Md.     | Omaha, Neb.      |
| Columbia, S. C.    | Wichita, Kan.    |
| Louisville, Ky.    | Houston, Tex.    |
| New Orleans, La.   | Berkeley, Calif. |
| St. Louis, Mo.     | Spokane, Wash.   |



Charles R. Dunn  
Fiscal Agent  
FEDERAL LAND BANKS  
31 Nassau Street  
New York City



# KC Baking Powder

(Double Acting)

## Same Price for over 38 years

# 25 ounces for 25¢

### USE LESS than of high priced brands

#### MILLIONS OF POUNDS USED BY OUR GOVERNMENT



## Sharpens Discs Cheaper, Better, Quicker, Easier!

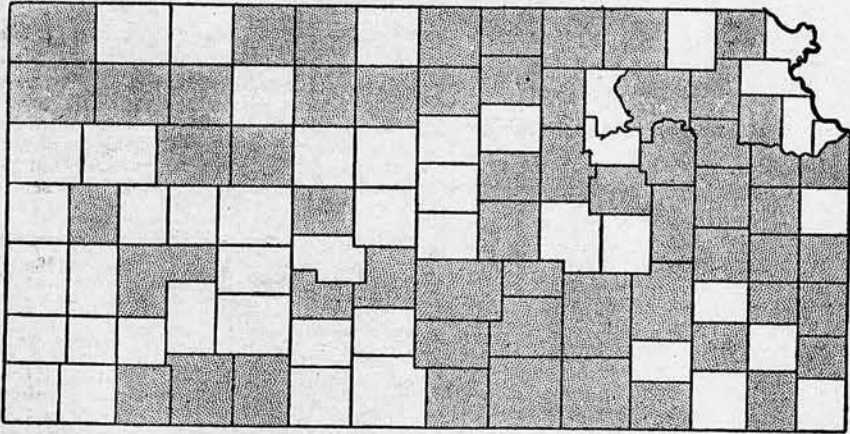
Power-Driven! Perfect Grinding! Guaranteed! No detaching disc no delays, no big grinding costs, with a Red-Devil Disc Sharpener! Uses any farm power, to sharpen discs, on the frame! Simple. Safe. Low cost! Grinds full set toughest steel discs in 1 hour. Will not draw temper. Work your discs, sharp! Easier pulling. Better seeding. Get a Red-Devil! Save! Thousands used. Life-wear. New low price. Write!

Dices revolve against sharpener. Pulley furnished. Willford Tractor Guide Co.  
Dept. 34 Omaha, Neb.

# Win a Pioneer Club Ribbon

Only 44 Counties Not Represented. The First Member Received From Each to Be Honored

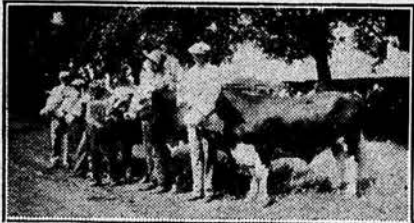
BY J. M. PARKS  
Manager, The Capper Clubs



The 60 Shaded Counties in This Map of Kansas Already Are Lined Up for This Year's Capper Clubs' Contests. Our Goal is a 100 Per Cent Representation. Enrollment Period Lasts Until April 15

ALL OF the 60 shaded counties in the map of Kansas shown here have Capper Club members for the 1930 contests. Since the map was drawn, one other county, Pawnee, has been added, giving a total of 61. Now wouldn't it be fine to have the other 44 in our ranks also? With 100 per cent of the counties in Kansas lined up for the Capper Clubs we'd have

county not on our list. With the hope of encouraging wide-awake boys and girls in the remaining 44 counties to send in their applications right away, we're going to award a pioneer ribbon to the first applicant from each county. It will be the same size as the loyalty ribbons, 1½ by 5 inches, and will have on it the words, "Pioneer Member, The Capper Clubs, 1930," together with our official monogram.



Here Are the Winners in the Burden Boys' Beef Club for 1929. Ross Triplett, Winner of First Prize, is Shown in the Foreground. Thirteen Burden Boys Form the Local Capper Club for 1930

one of the best organizations for boys and girls in the whole country. Then there could be so much more visiting between county teams, and it's always an interesting occasion when a group of young folks from one county calls on a club in another.

Every day we get applications from several of the 61 shaded counties. That's because the first member is eager to get several of his friends to send in applications so a local team can be organized. A little club boosting by the pioneer members soon increases the number enough for a local club to be formed. Since the important thing, as you can see, is to have at least one club booster in each county, we're doubly pleased when an application comes from a

Now, who is going to be the first to win a pioneer ribbon? Check over the map carefully and see if your county is shown. If not, fill out the application blank on this page and send it in right away, before other boys and girls get ahead of you. We don't hesitate in the least to insist on your joining, for we know by the experiences of other members that you'll never regret it.

One very encouraging trend in the last few weeks is the increased interest shown by vocational agriculture instructors and their students. Superintendent Claude Lowe of Burden is adviser for a fine Capper Club team of 13 hustling boys. Prof. J. L. Jacobson of Berryton has a team of eight and several other prospects on his list. Prof. E. I. Chilcott of Carbondale is organizing his boys for the second year in Capper Club activities. Prof. Thomas Bruner of Auburn came into the office a few days ago and took a supply of club booklets and applications with the intention of organizing a Capper Club team in connection with his school work.

Some of the vocational teachers are going still farther and are encouraging their advanced students to organize Capper Clubs in the neighboring grade schools and to act as club advisers for the younger boys and girls.

(Continued on Page 41)

## The Capper Clubs

Capper Building, Topeka, Kansas  
J. M. Parks, Club Manager

I hereby make application for selection as one of the representatives of \_\_\_\_\_ county in the Capper Clubs.

I am interested in department checked:

- Baby Chicks  Gilt  Small Pen  Sow and Litter  Farm Flock   
Dairy Calf (?)  Turkey (?)  Sheep (?)  Bee (?)  Beef Calf

If chosen as a representative of my county I will carefully follow all instructions concerning the club work and will comply with the contest rules. I promise to read articles concerning club work in the Kansas Farmer and Mail and Breeze, and will make every effort to acquire information about care and feeding of my contest entry.

Signed..... Age.....

Approved..... Parent or Guardian

Postoffice..... R.F.D..... Date.....

Age Limit, Boys and Girls 10 to 21. (Mothers also may use this blank)

Fill Out This Coupon and Send It to J. M. Parks in the Capper Building, Topeka, and Get a Start for Profits in 1930



# Raised Everyone . . . of a Litter of FIFTEEN..

**CORA MAE BRIGGS**

Seward, Nebraska

Member of  
4-H Club  
Big Elm Pig Club  
Blue River Baby Beef Club  
Wild Rose Clothing Club

August 24, 1929.

Nutrena Feed Mills Inc.,  
Kansas City, Kansas

Dear Sirs:  
In 1927 I raised 7 pigs from 8 farrowed; in 1928 11 pigs from 11 farrowed, and in 1929, 15 from 16 farrowed. I fed them on Nutrena Pig Starter.  
This is my third year in 4-H Club work. I won 15 firsts, 11 seconds, 5 thirds, 4 champions and 2 grand champions on my herd at the Seward County Fair this year. My premium check was \$90.00.  
My litters have shown excellent results on Nutrena and I certainly expect to continue feeding it.

Yours sincerely,  
CORA MAE BRIGGS.

It's not hard to make the high-peak markets. Get them growing before weaning—keep them gaining every day. NUTRENA Pig Starter, with its effective worm controller, makes fast consistent gains. Faster gains make fewer feeding days and greater saving in maintenance cost. Feed NUTRENA Pig Starter to supplement your own farm grains and pasture. Easy to feed—it can be slopped, hand-fed, or self-fed with your own grains. Making the April-September markets pay you well. NUTRENA Pig Starter is made to put your pigs there.

**Nutrena Feed Mills, Inc.**

219 Ewing Street, Kansas City, Kans.



PS 210  
NUTRENA FEED MILLS, Inc.  
219 Ewing Street,  
Kansas City, Kansas.

Please send me more FREE information about NUTRENA PIG STARTER.

NAME.....

TOWN..... STATE.....

R. F. D.....

MAKERS OF 35 SUCCESSFUL FEEDS

### Cultivate the Easy Way

No Long Stops To Make Adjustments!

The convenient double lever control which shifts beams in pairs and adjusts gangs for narrow or wide rows is only one of the many new improved features which make **DEMPSTER** the outstanding Two-Row Cultivator of 1929. Gangs raised or lowered separately or together. Adjustable to every cultivating condition. Exceptionally easy to operate. Does a cleaner, more thorough job. Constructed of strong, shock-absorbing steel. All parts securely riveted. See it at your dealer's or write us for descriptive literature.

**DEMPSTER MILL MFG. CO.**  
719 So. 6th St., Beatrice, Nebr.

**DEMPSTER**  
2-ROW Cultivator

## Cream Wanted

We have opened a new Direct Shipper Department and will guarantee highest market prices in line with other direct shipper prices. We will pay all transportation charges; also guarantee weights and tests and return of can. Give us a trial shipment and be convinced of our returns and service. Patronize a Home Institution. Write for Direct Shipper Tags.

**WESTERN CREAMERY CO. INC.**  
Wichita, Kansas.

## "I Read Your Advertisement In Kansas Farmer"—

That's what you should say when writing to advertisers. It gets quick action for you and also helps KANSAS FARMER.

# A GOOD BUY

You get the most for your money when you buy an Aermotor. When you need a new windmill you will buy an Auto-Oiled Aermotor if you know how good it is. The Aermotor runs easiest, lasts longest and gives the best satisfaction.

The owner of the outfit shown here says, "I bought this Aermotor in June, 1926. There has not been a day that it has failed to run sometime during the 24 hours. I have had to do no hand pumping at all."



**AERMOTOR CO.**  
2500 Roosevelt Road ... Chicago  
Branch Houses—Dallas Des Moines Oakland  
Kansas City Minneapolis

.... The Auto-Oiled Aermotor is made to run, and Run and RUN.  
.... The frictionless Roller Guide gives the pump rod a direct vertical lift.  
.... There are no parts which need oiling oftener than once a year.  
The double gears run in oil. The pitman bearings are automatically oiled at every stroke. The galvanized wheel runs steadily and silently in any kind of wind.  
The Auto-Oiled Aermotor is all that a first-class windmill should be. The Aermotor Company also makes the best pumps and cylinders for use with windmills.

## Why work so hard on wash day?

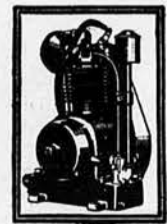
Let this big capacity, super-speeded ABC be your faithful servant for many, many years to come. Let it take greasespots out of overalls, clean heaviest blankets, wash sweat stains from collars and cuffs—all without your help. And so gentle—silk things can be trusted to it safely.

### GET THESE 5 STAR FEATURES

- ★—Big, oversize, aluminum agitator—amazingly fast, thorough.
- ★—Beautiful, everlasting porcelain tub (made in ABC's own porcelain plant). Smoother than any metal—prevents clothes wear caused by friction.
- ★—16 position swinging wringer (invented by ABC). Self-adjusting, big cushion rolls; dry evenly without breaking buttons.
- ★—"Sealed in" mechanism; works in oil in leak-proof case; safe from tiny fingers.

### Briggs & Stratton 4-Cycle Gas Motor

- ★—More power with 1/3 the fuel of 2-cycle type. Easy foot lever start; no cranking. Surplus power all the time—winter or summer—year after year.



## ABC Companion The PORCELAIN WASHER

Altorf Bros. Company, Peoria, Ill. (COUPON)  
Please send me your ABC folder and name of dealer in my vicinity. Dept. M4-KF

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



G.E. FERRIS  
MANAGER

# Protective Service



Membership in the Protective Service is confined to Kansas Farmer subscribers receiving mail on a Kansas rural route. Free service is given to members consisting of adjustment of claims and advice on legal, marketing, insurance and investment questions, and protection against swindlers and thieves. If you keep your subscription paid and a Protective Service sign posted, the Protective Service will pay a reward for the capture and 30 days' conviction of the thief stealing from the premises of the posted farm. Write for reward payment booklet.

## Remember This Letter the Next Time Any Stranger With Something to Sell Talks to You

**B**ELIEVING that quoting the following letter received from a Kansas Farmer Protective Service member might save other Protective Service members from a similar plight, the Protective Service Department prints this experience with business colleges and correspondence schools. Although numerous similar complaints have been recorded, judgment should not be taken against all business colleges and all correspondence schools. It is most important, however, never to pay any money until certain that everything is agreeable and that satisfaction will be rendered. The letter:

"I have read in the December 7, 1929, issue of Kansas Farmer the Protective Service story entitled, 'Holler When You Get Stung So Other Folks Can Be Warned and the Swindle Stopped.' I do not know if everyone would call a swindle what I am going to holler about, but I feel that we have been swindled.

"Business colleges and correspondence schools send out slick-tongued agents to get students; which is all right. Then, if in any way they can talk the students into paying in advance or giving a note for their tuition they do it and threaten to collect the note.

"If the pupil does not like the work or something happens he cannot continue the school work, it is just too bad. The institution has the money and generally will not pay 1 cent of it back. The course is offered and the student can take the course or nothing.

"I can count about 12 persons from our one little country high school who paid tuition in advance and did not take the course. Those whose parents did not pay taught school and paid their notes.

"About eight years ago two of my boys were teaching school. A correspondence school agent sold them and got their notes by telling how much more money they could make after completing the course, and that it was much easier and nicer work than school teaching. Several lessons were sent for them to work at home. These lessons, not being what they expected, were not completed. But the note had to be paid.

Last year a business college representative talked my daughter into a business course. I wanted her to pay

her tuition by the month, but he out-talked me and got a check for more than \$200. The girl did not like the work and returned home to teach. Would they pay a cent back? No! I feel that my family has been swindled out of about \$700.

"Business colleges and correspondence schools are all right, but my advice to parents and school prospects is to pay tuition by the month, for in the end very little more will be paid than when paid in advance, and if the course is not completed it may be nearly the cost of the course saved."

### Guarantee Means What?

There are people who think that a guarantee, verbal or written, means nothing more than the privilege to back out if they choose to; that whatever they have purchased, whether as represented or not, they can return and ask for their money. As a matter of fact a sale is generally considered a closed transaction. The seller can only be held who gives a written or printed guarantee specifically stating the terms under which the article is sold and not then unless the buyer has conformed strictly to the terms of the guarantee.

The seller is not in any way bound by the sales talk and exaggerated promises of his agent and this fact is frequently written in the contract or order blanks the agent asks to be signed. Keep in mind it is the conditions of the guarantee that bind you as well as it does the company you are buying of and not what the agent or representative of the company tells you. Read the guarantee and note what it says and how it says it.

The principle of warranty or guarantee has become all too common. Every unscrupulous agent goes strong on the use of both words, and some people are led by the agent's talk to believe that everything is guaranteed to be just as good and perfect as the imagination of a high pressure salesman can paint it; that it will wear and perform just as he says it will, when, as a matter of fact, the article he is offering is not officially guaranteed, and often the sales price would not even warrant it.

A written agreement is worth any number of oral guarantees falsely made.

## Help Make a Good Law Better

**T**HE act concerning buyers of poultry and prescribing penalties for violation thereof as enacted by the Kansas Legislature in 1925 is a good law. Under penalty of a fine or a jail sentence, poultry buyers are required by this law to identify the seller of poultry bought and to preserve, for a period of 30 days, the number and kind of poultry purchased, and the date of said purchase, which memoranda shall be produced and exhibited on demand of any peace officer.

This law was the first real step that was taken in Kansas looking toward the prevention of poultry stealing. About a year ago the Kansas Farmer Protective Service made available to its members a wing tattoo marker for poultry and has registered with the sheriffs in this state the more than 1,000 different marker numbers assigned. Now comes the Protective Service making available a **THIEVES BEWARE—CASH REWARD** sign indicating that the poultry on the posted farm is tattooed with Kansas Farmer's wing poultry marker and that sheriffs have recorded the wing tattoo number. All this means that thieves will steal mostly from farms where this sign is not posted. Why should they steal from a farm where a cash Protective Service reward will be offered for their capture and conviction?

Every Protective Service member who marks his chickens is making the state poultry theft law more effective. Protective Service members actually have reported fewer thefts of poultry since the Protective Service made available the wing tattoo marker. Maybe you have not assured yourself that you and not a thief will reap the profits from your poultry raising. Can you afford not to warn thieves! See the advertisement on page 34.

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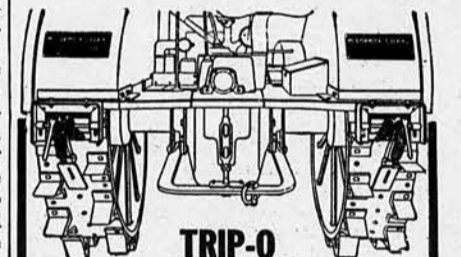
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**A New Book Presents an Excellent Formula for Attaining Real Happiness**

BY D. M. HARMON

**B**EWARE of reducing your way of living to a pat formula. Beware of thinking you can live always on one high level of pleasure. Variety is the spice of happiness and fluctuation a necessity. Do not think that "spiritual life" which scorns the joys of food, drink, love and excitement, is a short cut to happiness. It all depends on your personality.

Never think that, in order to "be yourself," you must give way to every impulse. This is a sure way to be unhappy.

Don't think your way of living is so wonderfully good that everyone else must adopt it.

Take neither yourself nor any ideal too seriously.

Whenever you feel less happy than usual, eat less, sleep longer, exercise more, and find out if something is worrying you. If this doesn't help, see a doctor.

As far as it seems wise, do all things as the spirit moves, but be sure the moving spirit is intelligence.—From Walter B. Pitkin's Recipe.

**Happiness is for All**

The above formula is taken from Mr. Pitkin's book, "The Psychology of Happiness." It is a sane discussion of the means for attaining happiness, and a very worth-while book for everyone to read.

By analyzing various types of "happy" and "unhappy" personalities, Mr. Pitkin furnishes the reader with material which will assist him in seeking out the reason, and perhaps the cure, for his own maladjustments and unhappiness. The cases analyzed are taken from life, and include a number of well known men and women, among them Garibaldi, Katharine Mansfield, Van Gogh, Descartes and Woodrow Wilson.

Mr. Pitkin attempts to put happiness on a scientific basis. His "cases" are varied enough to show the immensity of the task, and by their very plausibility, they demonstrate that happiness is not impossible.

Mr. Pitkin is professor of journalism at Columbia university, after years of advanced study of languages and psychology in Europe.

**A New Type of Novel**

A very unusual and excellent book of recent publication is "Ultima Thule," by Henry Handel Richardson. Don't let the name fool you. The author is a woman who writes under a pen name. This novel tho complete in itself, is the third of a trilogy. The previous volumes, "The Fortunes of Richmond Mahony" and "The Way Home," have not been published in

America. Richard Mahony, a middle-aged Australian physician, loses his fortune, and under stress of poverty and professional failure, becomes insane. The book is a remarkable study of mental and physical degeneration, relentless and often painful in its portrayal of an inevitable tragedy.

The excellence of "Ultima Thule" can be laid to no one characteristic, device or trick of the profession. It is the finish of the whole. The tragedy moves with gathering power from beginning to end, scarcely ever turning back to pick up the thread of the story with some other character. There is an unusually small number of characters, the story being almost entirely concerned with the doctor, his wife and three children.

**Hudson River Bracketed**

Mrs. Edith Wharton, author of "The Children" and "The Age of Innocence," has written a new novel, "Hudson River Bracketed." The odd title refers, as the author explains on the flyleaf, to a type of American architecture that was popular in the last century, a style which an architect of that time named Hudson River Bracketed. Much of the action of the novel takes place in the setting of an old house on the Hudson River, a house called the Willows, which is a perfect example of the bracketed school of architecture.

The book is a portrait of a young artist's progress as poet and novelist—the progress of a writer too honest to be either bohemian or a blurb-writer, bound on the one hand by the needs of his sick young wife, on the other by the complicating and not too savory consideration of a publishing house which was bent on having him win the Pulitzer prize by fair means or—well—at least unliterary ones.

This is a narrative that ranges from a Middle Western town to the literary circles of New York, and portrays the development of a young man of creative genius in the swift currents of modern life. In addition to the interesting portrait of a dreamy young genius, in the person of Vance Eston, the book includes a gallery of minor characters, all of whom strike the reader as real.

The desire to be happy is an innate human tendency. Since we are all searching for happiness, it is not such a bad idea for us to read how someone else has worked it out on a scientific basis. The author does this in "The Psychology of Happiness." The other two books deal with happiness in somewhat of a negative fashion, but for some of us that is a better way to learn its secrets.

**Novels of Distinction**

**T**HE desire to bring books within the reach of everyone has caused the publishers to offer these novels of distinction for \$1, or less than half of their original price. Remit \$1 for each title you want, and your order will be mailed to you postpaid. If the book you want is not listed here, write for our price.

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Dawn	Irving Bacheller
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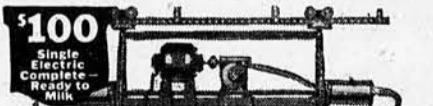
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## Sunday School Lesson

by the Rev. N. A. McCune

**J**OHNS the Baptist is a strong figure. What was it about him that made people come by the hundreds to hear him, out in the country, in a lonely place? And they came to listen reverently and to be baptized, not to see the latest curiosity. They were looking for a great prophet to come, and they thought that possibly here was the man, at last. But alone would not account for his influence. There was something about him that made them think of God; that something which grips men when they come into contact with a strong personality, explain it as they will.

Well, this man John the Baptist had two times of going under the cloud of unpopularity. The first time was when Jesus appeared, and John said of him, "Here is the man I have been talking about. He is the long looked-for Messiah. He is going to increase in influence and power, but I am to have less and less influence. He will increase, but I must decrease." Never did a great man make way for a greater man more gracefully or more sincerely.

But now that has passed. Another cloud appeared, and this cloud hovered over him longer. He was hurled into prison by a jealous queen. How long he was there we do not know, but probably a long time. Those eastern prisons are not places for lawn parties. The damp, cold, narrow cells, the lack of any sort of sanitation, the absence of daylight, the stench, make them places of horror. Well, that was where John was put.

Now, health has much to do with our outlook on life. Someone asked Beecher whether life was worth living, and the famous preacher replied, "That depends on the liver." When one has good digestion, vigor of step, zest in his work, life is pretty likely to appear worth living. But when one's hold on the physical goes, some other things go, and one of them may be one's grip on religion, the sense of God's presence becomes dim, and the joy of religious experience is no more than a faded memory.

It seems as if something of this kind had happened to John the Baptist. After all his announcing of the fact of Jesus was the expected Messiah, he now sends a committee to him to ask whether, after all, he is the expected one. The reply of Jesus is characteristic of his master mind. He does not say that he is the Messiah. He says "Go and tell John what you see and hear. The blind receive their sight, the deaf hear, the dead are raised, to the poor the good news is preached." In other words, he calculated that John had brains enough to draw his own conclusions.

I have no doubt that John recovered his religious experience after that. He probably could endure anything, knowing that God had not forsaken him, but was by his side. When we are in that condition of heart, nothing can hurt us. Ill health can be endured, misfortune faced and overcome. I have no doubt but that John died in the faith.

After this, Jesus gave expression to an outburst that is remarkable, even in his exuberant and abundant life. He exclaimed, as in a shout of prayer, that he was glad God had hidden these things from the wise and educated, and had revealed them unto the simple and the poor. People do not seem to know it, but there is a great truth here. Our very knowledge may shut out the greatest lessons. This is not a plea for ignorance. In Jesus' day, the educated and the wealthy would not receive Christ's teachings, because these teachings interfered with their social standing, of their business methods, or their political connections. So they missed the word of life that was brought to them. But the common folks had no such high and mighty associations, and were ready to receive the word. The child-like attitude was what Jesus was continually looking for. He said we must become like children and be child-like and teachable and believing. (Child-like does not mean childish.) This is what the scientist does. He studies a fact of nature and is prepared to learn what that fact teaches him, no matter if it destroys some opinions he has held for years.

Said the great biologist Huxley, "Sit down before a fact as a little child, and be prepared to give up every preconceived notion, follow humbly to whatever abysses nature leads you, or you shall learn nothing." Exactly this was Jesus' teaching. If we are humble and teachable, we shall learn from him the deep lessons of life. How many things done by Jesus are still done by the Christian church? Does the church appeal to poor folk as it once did? How can we acquire a child-like mind?

Lesson for March 2—"Jesus' Teaching About Himself." Matt. 11:2 to 50.  
Golden Text—Matt. 11:28.

### Erosion, a Farm Problem

(Continued from Page 15)

amounts of runoff from land in which the subsoil is relatively dry. Our problem both for erosion and flood control as well as the conservation of water is to force the soil to absorb a higher proportion of the rainfall.

The loss of water from Kansas lands is therefore causing us trouble in three ways. (1) It allows water which is badly needed by crops to run off the surface of the soil. We therefore lose the use of it for crop production. (2) Runoff water carries much soil from our uplands and is rapidly decreasing the fertility of such soils. (3) The runoff water does much damage to the bottom land farms due to overflow, and in some cases the deposition of sand or other poor soil material on to originally productive soils.

The Kansas Experiment Station, in co-operation with the Bureau of Chemistry and Soils and the Bureau of Public Roads of the United States Department of Agriculture, already has underway, at the Fort Hays Substation, experimental work to determine soil erosion and runoff losses for conditions in that part of Kansas. The idea of conserving more of the rainfall in the soil to use it more advantageously for crop production is receiving much attention in these new experiments.

On land that has already been badly damaged by erosion, we must adopt methods that will enable us to grow crops despite its eroded condition. This can be done, but it requires a much greater knowledge of soil fertility and soil management than is required to farm more fertile land. This fact is well illustrated by some farmers who are desperately struggling along trying to produce crops by the same old methods they used when the land was first broken out of the prairie and before it had lost the greater part of its fertility due to erosion. Some badly eroded soils must be turned back to grass or to forest, but other lands will have to be farmed. There is much evidence already available to show that by proper methods of fertilizer practice, green manuring and rotation these eroded soils can be made to produce fairly good crops, but they are greatly handicapped from an economic standpoint. The cost of producing good crops will undoubtedly be much higher than would have been required to keep the land in a productive state from the beginning.

### The Cover This Week

Hutchinson, the Kansas city featured on the cover this week, with its population of more than 30,000, easily holds fourth place in size among Kansas cities. The city has long been widely known as the center of the salt mining area of Kansas, and is also in the heart of the wheat producing region. Hutchinson is an important jobbing center and retail point. It is the home of the Kansas State Fair. Such well known Kansans as Emerson Carey, founder of the Carey Salt Company; W. Y. Morgan, publisher of the Hutchinson News-Herald, and A. L. Sponsler, secretary of the Kansas State Fair, have done much to promote the growth of the city.

It is best to kill unthrifty baby chicks; they may spread disease.

# The economics of AGRICULTURE are changing

**ARE YOU half farming all your acres instead of intensively farming half your acres? This is the charge that some authorities make against many**

**farmers. Does it apply to you?**

**Modern farming is intensive farming. A full yield from 40 acres always shows more net profits and surer profits than a half yield from 80 acres. It means less work in plowing, planting, cultivating and harvesting. It means less money for help, seed and implements.**

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### Livestock Men Will Meet

(Continued from Page 3)

If a miserable destiny should balance the Kansas livestock account and thereafter eliminate this source of income, what would result? Business failures in this state would be enormous because farmers wouldn't buy—later on they couldn't buy. The present high standard of rural life would hit the toboggan. Soil fertility would suffer greatly and market prices for most of our crops would slump to a starvation point. Removing livestock from our possible markets for farm crops would be a crushing blow. Let us consider the single crop of corn in this connection. We produced \$82,638,720 worth of this grain last year. It is common knowledge that livestock provides a market for 85 per cent of the corn for the country as a whole, and in Kansas the figure is higher, according to best authorities. Without livestock, what would happen to this crop? So far 10 per cent of the corn crop is used for human food and 5 per cent in industries. Perhaps these figures could be increased by virtue of necessity, but very likely it wouldn't be to any great extent. What profits could be expected from the grain sorghums, alfalfa, oats, wheat?

Even under present marketing conditions, what does livestock add to the value of crops? Let's consider corn again in this connection, because for the average farmer it has the possibilities of being marketed either as a grain crop or thru livestock. The latter method will pay more bushel for bushel than the cash market. Here are figures that substantiate this statement. During the recent Farm and Home Week at the agricultural college, Dr. C. W. McCampbell said: "Primarily it is the duty of livestock to provide a market for our crops. We have found that when we feed the right kind of ration to the right kind of cattle, we have received in the last seven years, an average of 50.6 per cent more for corn than the elevator would have paid us—and mark you, that carries us back thru the deflation period." In considering what may be expected by marketing corn thru hogs we have other evidence from Doctor McCampbell. "Most hogs are marketed at comparatively young ages. On the average, one should be able to produce 14 pounds of pork from a bushel of corn on spring or fall pigs fed from weaning time to market time, if the corn is properly balanced with other feeds. The Kansas State Agricultural College usually produces from 14 to 18 pounds of pork from each bushel of corn." No amount of figuring ever will detract from the value of livestock as a market for crops.

Now, let's go another step with Doctor McCampbell and other authorities on the farm as well as away from it, and add this value to the market-thru-livestock idea: "When corn is sold off the farm all its fertilizing value is lost. When fed to livestock on the farm one is enabled to return to the soil most of the fertilizing constituents the corn has taken from the soil, and it is generally recognized that one of the most important problems confronting American agriculture is the one of maintaining fertility." Crops fed to livestock on the farm serve a dual purpose, sold on the open market they likely will bring less net cash and the fertility value is eliminated.

So Kansas may look to the future with confidence in this basic industry



of the state. We are better prepared to handle livestock today than ever before, we have access to improved methods and to instantaneous market information, and we know better how to balance livestock and crop production. Over-production is to be guarded against, but there isn't anything disastrous in sight. Kansas is especially fortunate in location and climatic conditions, so far as livestock and crops are concerned. And grazing conditions are excellent; our Bluestem Grazing Area is unequalled.

Isn't it quite fitting then, for us to pay tribute to this great livestock industry; and to the Kansas Livestock Association, and individuals and other organizations who have sponsored and dedicated their efforts to the progress that has been made?

### Livestock Helps the Soil

BY JESSE R. JOHNSON

L. P. Humphreys of Osage county classifies himself as a livestock farmer, but the interesting story he tells of how his father, a native of Wales, happened to settle in Kansas indicates what a close call he had of being born the son of a coal miner instead of having a successful Kansas farmer for his father.

The elder Humphreys, with other Welsh colonists, came to Osage county and laid out the town of Arvon 60 years ago. This was the birthplace of Mr. Humphreys and the comfortable modern home now owned and occupied by himself and family is located in that historic and once prosperous village.

The Humphreys lands comprise several thousand acres, located in the extreme north section of the Blue Stem Grazing Area. The land is more nearly level than farther west and south, and for this reason, Mr. Humphreys says, the mistake has been made of breaking too much of it. Now the problem of getting back the lost fertility faces those who expect to make farming profitable in the future. Formerly a large percentage of the Humphreys lands were under the plow, but for some time now an effort has been made to seed down as many acres as possible every season. Orchard grass and Sweet clover are used mostly. Asked to define what he meant by the term livestock farmer, Mr. Humphreys gave this definition: "A farmer who uses his farm lands, entirely for growing feeds to be fed to livestock on his farm."

For many years the plan has been followed of buying cattle from the Texas ranges instead of raising them, but Mr. Humphreys points out that prevailing prices of stockers on the ranges are causing Kansas stockmen who are in position to do so to produce their feeders.

Formerly 3 or 4-year-old steers were bought, but now only 2-year-olds are handled. The demand for smaller carcasses on the part of buyers has brought this about. About 1,500 head are bought annually, and are brought to the Kansas pastures just as early as grazing will permit. They are fed grain on grass during the summer and always are sent on to market before frost in the fall. Careful records of first cost, freight and feed are kept, and at the end of each feeding period it can be determined whether the undertaking was profitable.

"One can learn much about the business as a whole over a period of years," Mr. Humphrey says, "but experience helps very little because of the varying buying and selling prices of the stock." But there is from his standpoint a distinct advantage in livestock farming that other kinds of farming do not have, and this is the help in soil building. Some of the land in his locality has been farmed nearly 70 years without any resting, and the time is at hand when it will have no value for growing crops unless the fertility can be replaced, and livestock feeding is the most economical way to do this.

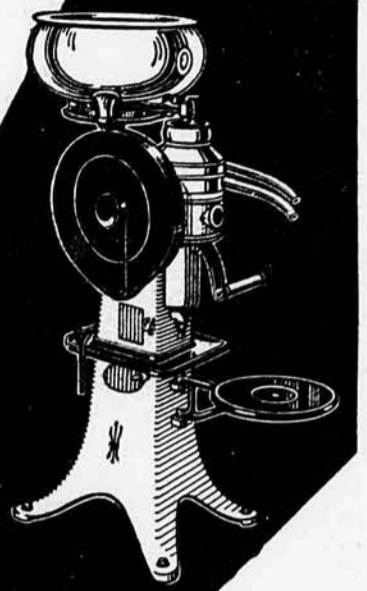
### Blacklist

"My girl got her nose broken in three places."  
"That'll teach her to keep out of those places."

The employees in a soap factory are forbidden to smoke, we read. Tobacco manufacturers probably will retaliate by ordering their employees not to wash.

# De Laval

## 52 YEARS OF LEADERSHIP



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## Farm Crops and Markets

### A Large Acreage of Soybeans Will Be Planted This Year in Southeastern Kansas

**T**HERE is an active interest in Southeastern Kansas in increasing the soybean acreage, which is a splendid thing in the progress of the agriculture of that section. That part of Kansas especially needs a much larger acreage of the legumes. Wheat was not damaged greatly by the cold weather, except on some fields in the soft wheat section. Livestock is wintering well. A full trainload of fat cattle was moved recently from Berwick, in Nemaha county, to Chicago. Some oats seeding has been done, especially in Southern Kansas

The foreign demand for the products of American farms, in the opinion of the Bureau of Agricultural Economics, is likely to be better on the whole than the rather depressed situation encountered abroad by our products of 1929. In the first half of the 1930-31 marketing season foreign demand may be less than it was for the first half of the 1929-30 season, but is likely to improve as the season advances, and be considerably better during the last half of the 1930-31 season than in the corresponding period of the present season.

In view of the easier international money situation, prospects are for some improvement in economic conditions and purchasing power in Germany and Great Britain by the end of 1930, and this should tend to offset any slackening in demand that may take place in other foreign markets. The competition to be met by American agriculture as a whole from foreign production probably will be somewhat greater during the 1930-31 season than in 1929-30. More competition may be expected from foreign production of wheat, corn, flaxseed and pork products, and less from tobacco, sugar and apples. Little change is to be anticipated in the competition from foreign dairy products and wool.

Economic conditions are at present somewhat depressed in most of our leading foreign markets. In the principal European countries, notably Great Britain and Germany, this depression is to be associated with the increasing tightness of money that prevailed during the first three quarters of 1929, accompanying the high interest rates in this country, which steadily reduced the outflow of American capital to Europe and caused a flow of funds to New York. These conditions have now changed. Interest rates have been reduced generally in Europe as well as in the United States, and prospects seem good for a renewal of the flow of American capital to Europe. The low point in the current business recession in Europe may not yet have been reached, but the change in the international credit situation paves the way for improvement during the latter part of 1930.

#### Too Many Cows, Maybe?

Dairymen face a period of readjustment. While an annual increase of about 1 per cent in milk cow numbers is necessary to increase production sufficiently to balance increasing demand, the number was increased 3 per cent in 1929. The number of heifers, 6 per cent greater than a year ago, is sufficient to cause still further increases in cow numbers in 1930. While the underlying situation is not so bad as would appear from current butter prices, the duration of the period of readjustment will depend partly on the promptness with which producers adjust their methods to meet the situation, and partly on the culling out of old or low-producing cows, and by either marketing a larger quantity of milk in the form of veal or, in the beef sections allowing more calves to run with the cows. With present lower butter prices, dairy cows will be fed less purchased grain. Unless dairy herds are closely culled and more of the less desirable heifers sent to slaughter, there will be a further increase in the number of milk cows during 1930 and 1931.

Over a longer period the general dairy outlook is unfavorable because of the large number of heifers now on hand and being raised, and because of the probability of a marked upward trend in beef production during the next five years or more. There is an increasing number of dual-purpose cows which will be milked whenever the price of butter is sufficiently high and the price of meat animals is sufficiently low. On the whole, a conservative policy in regard to raising dairy calves is called for. Probably more calves were raised in 1928 and 1929 than can be raised to advantage hereafter. Dairymen who have to buy dairy cows probably will be able to buy replacements at less cost to two or three years than they can now.

Total milk production for all purposes in 1929 was apparently but slightly in excess of 1928. In the eastern market milk areas production was slightly below 1928 until about September, but well above 1928 after that. In the areas chiefly devoted to manufactured dairy products, production exceeded 1928 during the favorable pasture season, averaged about the same as 1928 during the remainder of the year, but the year closed with production generally showing slight increases over 1928.

Production of manufactured dairy products in 1929, in terms of milk equivalent, was about the same as in 1928. Estimates for the year show increases of about 2 per cent in creamery butter production, 8 per cent in condensed and evaporated milk, and a decline of 14 per cent in cheese production.

Trade output or the quantity of butter absorbed by our markets is estimated to have declined about 1.5 per cent. Until April about the same quantity was consumed as in 1928, but afterward the rate of consumption was less, and with increased production the largest storage stocks on record amounting to 169 million pounds on September 1 were accumulated. At the close of the year those stocks had been reduced to 82 million pounds, but still were 38 million pounds heavier than a year earlier. Prices were about the same as in corresponding months of 1928 thru April, from April until October they followed the usual seasonal course below the level of 1928 by 2 or 3 cents, then prices declined instead of making their usual seasonal rise. Coincident with the decrease in the trade output of butter, there has been a corresponding increase in the production of butter substitutes.

#### Further Declines in Horses?

The outlook for horses and mules is primarily one in which long-time factors predominate. The number of horses and mules on farms will continue to decline for six years at least; whether it continues thereafter will depend on whether births continue at about present or lower levels, or increase materially within the next few years. The decreasing use of land for agricultural purposes in eastern states releases work stock for use on the more favorably situated farms. The increasing use of and improvements in tractors, combined-harvesters, and other power-operated equip-

ment, the increase in the size of the farms, and expansion of improved roads, all mean a replacement of horses and mules by mechanical power. As long as the mechanization of agriculture is able to keep pace with the decreasing numbers of work animals, it is not likely that the prices of work stock will advance materially except in those areas where special conditions render difficult the use of mechanical power.

Average farm prices of both horses and mules for the United States, during 1929, were slightly lower than during 1928, but they remained above the prices of 1927. Reports from key markets in the Middle West indicate an increased demand for both horses and mules during 1929. Liberal supplies and higher prices than in 1928 prevailed at these markets during the year. Most of the advance in horse prices in these key markets was for active horses of medium weight, suitable for farm work. The January 1, 1930, farm prices of colts, 1 year old and under 2 years, showed increases over a year ago of 2 per cent in the east north central states, but no appreciable change was in evidence in the west north central states.

Mechanization of agriculture is resulting in a much more highly localized market for horses than for mules. There is a more definite and regular movement of mules from the producing states to the cotton states east of the Mississippi River, consequently the changes in mule prices in 1929 compared with 1928 have been reasonably consistent in the several states of deficit mule production. The farm prices of horses frequently show changes in opposite directions in two adjacent states. Prices of horses were definitely higher in Michigan, New York and Virginia during 1929 than in 1928, whereas in Pennsylvania they were lower. In Ohio, Indiana and Maryland, prices were lower than the previous year during the first half of the year, but higher during the last half. In practically all states west of the Mississippi River prices in 1929 tended to be slightly lower than in 1928, but no lower than in 1927. There has been practically no change in the farm price of horses during the last three years in Illinois, Missouri, Iowa and Wisconsin, whereas in North Dakota and Colorado a downward trend is evident. The present low level of farm prices of horses is caused in part by the large proportion of old animals now on farms. These older animals are meeting the needs for animal power on many farms where mechanical power performs the heavy work.

The number of horses and mules on farms continued to decline during 1929. Reduction in the number of horses from January, 1929, to January, 1930, was about 465,000 head, or 3.3 per cent; the number of mules declined about 68,000 head, or about 1.3 per cent. Sharp declines in numbers are indicated in the mule-producing states. This decline in the number of horses and mules has followed the general downward trend forecast for several years. Indications are that the number will be reduced from about 25 million in 1929 and 19 million at present to about 10 million or less by 1940, providing births continue at about present or lower levels. With the maximum increase that could occur under the stimulus of the most rapidly possible rising prices, the number by 1940 would not exceed 14 or 15 million.

### To Reduce Disease Losses

BY DR. JOHN R. MOHLER

In the course of the approaching spring months millions of domestic animals will be born. In view of the investment in parent stock, and the expense of feeding, housing and caring for them, the young animals represent a greater value than is commonly realized. Yet, in the past, a large proportion of this new livestock generation has failed to attain maturity or market size. In order, therefore, to consider how losses may be reduced this year thru foresight and thru a wider application of methods known to be effective. With the coming of warm weather, many livestock enemies, especially the parasites, will become more vigorous in their attacks. These attacks will be directed principally against the young and less resistant animals.

Of 10 livestock maladies of major importance widely prevalent in the world, the United States is entirely free from five; it is rapidly eradicating two others, and has two more under effective control, and has the 10th under partial control.

The five important infectious animal diseases from which the United States is entirely free are foot-and-mouth disease, rinderpest, surra, contagious pleuropneumonia and epizootic lymphangitis. To this group of five some livestock enemies may be added others of almost equal importance, including African horse sickness, mal de caderas, nagana, ulcerative lymphangitis, cattle farcy and European fowling pest. These livestock scourges cause heavy losses in various parts of the world, but are being kept out of the United States by regulation of imports, by quarantine methods, and by veterinary inspection.

Success in coping with diseases present in the United States has resulted largely from aggressive eradication and control measures, based on the results of careful research. Tick fever, a disease of cattle in the South, has been eradicated from 10 states in the last two decades, and now occurs in only five—Arkansas, Florida, Louisiana, Mississippi and Texas. The square-mile basis tick eradication is about four-fifths completed, and the area still occupied by ticks is being steadily reduced. In addition, the spread of ticks to free areas is being successfully controlled by quarantine measures.

Tuberculosis, which is one of the most stealthy and persistent of infectious diseases attacking livestock, likewise is on the wane. In addition to North Carolina and Maine, which have reduced tuberculous infection of cattle to less than 1/2 of 1 per cent, most of the other states are conducting extensive eradication work on an area basis. Progress in Michigan, Indiana, Illinois, Iowa, Minnesota, Wisconsin, Ohio and Idaho is especially notable. Abundant evidence shows that tuberculosis of cattle, swine and poultry can be eradicated from large as well as from small areas when the work is properly organized. According to results of tuberculin testing for the last fiscal year, the prevalence of bovine tuberculosis among cattle of the United States is about 1.8 per cent, as compared with 4 per cent when systematic eradication work was undertaken.

Anthrax, a serious disease of livestock, occurs in the United States in limited areas only. Anthrax may be prevented by vaccinating susceptible animals with anthrax vaccine. The decision to guard against anthrax by vaccination depends on the extent of local losses and other indications of probable danger. Grazing on lands recently covered with flood waters is such a danger.

Hog cholera is being controlled by the use of anti-hog-cholera serum inoculated simultaneously with hog-cholera virus. The exact extent of hog cholera can be only estimated since minor outbreaks are not always reported and investigation and diagnosis of many of the reported cases prove that the losses are the result of other diseases or conditions. Approximately 3,000 outbreaks of hog cholera,

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however, were positively diagnosed by federal veterinarians in the fiscal year 1929. Even with a liberal allowance for unreported cases, hog-cholera infection probably now occurs in the course of the average year on less than 1 per cent of the farm premises in the United States. The concentration of swine production in about 16 of our 48 states makes it highly desirable for growers to take special precautions in these states where hogs are numerous.

**Will Control Abortion**

Such encouraging progress in controlling the diseases already mentioned gives ground for an optimistic belief that it finally will prove possible to curb infectious abortion, which is now the most serious single livestock malady in the United States. It is serious because of financial losses and because of the discouragement of livestock owners whose efforts toward control have been unsuccessful.

The not uncommon infectious abortion can be suppressed to a large degree by sanitary measures when these are combined with proper herd management and with the detection of infected animals by veterinary tests. Seven states are co-operating actively with the Bureau of Animal Industry in research which seeks to develop improved methods of controlling and eradicating this disease.

Stockmen and farmers should keep in mind that, in general, infectious diseases are more dangerous and cause larger losses than those not communicable. The situation regarding important infectious diseases has been caused serious losses or anxiety is set forth as follows:

**Blackleg**, a malady affecting calves principally, may be prevented by vaccination with blackleg vaccine, filtrates or aggressins. Medical treatment is effective, but losses occur only when this precaution is omitted.

**Dourine**, a disease primarily affecting the reproductive organs of horses, is almost completely eradicated. Formerly present among animals of Indian reservations in New Mexico and Arizona, and occasionally on ranches and farms in several western states, the disease is now known to exist only in limited areas in Nevada and Arizona.

**Glanders** of horses and mules, once common in various sections of the United States, is readily detected by several tests and is under effective control.

**Scabies** of sheep and cattle have been eradicated from large areas by systematic dipping of infected and exposed animals. The sheep scab is constantly being reduced in most areas, increases occurred last year in several states where flock owners should be especially alert in detecting and reporting outbreaks. Those states are California, Kansas, Kentucky, Mississippi, Oklahoma, South Dakota and Utah. Cases of cattle scab last year were about one-third fewer than in the preceding year. However, an increase in infected animals occurred in Arizona, Colorado and Wyoming, and in these states this form of scabies should now receive the special attention of cattle owners.

The sheep tick, a blood-sucking parasite, which infests sheep on both farms and ranges, causes a diseased condition, the losses from which are chiefly local. The only practical way to destroy the pests is by dipping the sheep in a suitable medicated solution. Two dippings are necessary—about 24 days apart.

**Rabies**, the most common among dogs, may also affect cattle and other animals. So many incorrect beliefs exist concerning this disease that the study of the Farmers' Bulletin on the subject or of other dependable information, is strongly advised. Rabies is best controlled by the destruction of vagrant dogs, muzzling dogs running at large, and immunization when the disease is a definite menace. Its presence is principally localized in areas harboring considerable numbers of dogs.

Various diseased conditions of livestock result from their infestation with stomach worms, roundworms, tapeworms, flukes and other internal parasites. These parasites cause losses that are commonly underestimated. Young animals, especially, are susceptible to serious injury. Preventive measures to be effective must destroy the parasite at some stage of its life cycle, preferably in its least resistant form. Control commonly involves systems of sanitation, use of disinfectants, the destruction or control of intermediate hosts, avoidance of overstocking, and in some cases, the medicinal dosing of infested animals. Internal parasites are widely distributed in the United States. In general, areas of greatest danger are the low lands of warm, humid sections having large numbers of livestock. Danger from internal parasites is considerably less in the high, dry, range areas.

External parasites, such as mites, lice, grubs and ticks other than those already mentioned, infest livestock. As in the case of internal parasites, treatment involves sanitary procedures, disinfectants and the use of various chemicals. The chemicals should be applied in proper strength, usually by dipping, the spraying, dusting and hand treatments are used in some cases. External parasites are a constant menace everywhere. Their prevalence in a locality indicates lack of concentrated effort toward control.

**To Control Shipping Fever**

Hemorrhagic septicemia, also known as shipping fever, occurs chiefly among animals which have been subjected to hardships of travel, especially in the winter months. The disease may be prevented by immunization with bacterins or aggressin injected at least 10 days before shipping the animals. Other methods of reducing losses from shipping fever include regular and adequate feeding and watering, plenty of rest, and general attention to the comfort of animals enroute to prevent drains on their vitality. The infection is prevalent thruout the country, but animals in vigorous, thrifty condition are least likely to be victims of the disease.

**Vesicular stomatitis** is a disease of cattle and horses. The occurring rather infrequently in the United States, and even then causing only minor losses, this malady deserves special attention because of its similarity to foot-and-mouth disease. The common symptoms—drooling, blisters and erosions—caused by both diseases in cattle are so much alike that affected animals should be separated promptly from others in the herd and the circumstances reported at once to the nearest veterinarian, or to the state livestock sanitary official, or to the United States Department of Agriculture. The two diseases can be distinguished by veterinary tests, based largely on the relative susceptibility of different classes of livestock. Horses, tho susceptible to vesicular stomatitis, have not been known to be affected with foot-and-mouth disease in any of the outbreaks in the United States. Sheep and swine, on the other hand, are attacked by foot-and-mouth disease, but are regarded as immune to vesicular stomatitis.

**Poisonous plants** cause heavy losses of livestock, especially in range areas. The reduction of such losses usually is best achieved by keeping livestock away from the plants, especially when very hungry. Stock owners also should familiarize themselves with the distribution and appearance of stock-poisoning plants. Such information is readily available from government publications on the subject.

**Poultry diseases** have received increasing study in recent years, the result primarily of the growing commercial importance of the poultry industry and of the enhanced values of individual birds. Tho poultry diseases are numerous and widespread, those of principal economic significance are pullorum disease (bacillary white diarrhea), infectious bronchitis, tuberculosis, blackhead (of turkeys), roup and coccidiosis. Research is improving methods of preventing and controlling poultry maladies, especially thru blood tests, vaccination and sanitation.

Altho our knowledge concerning animal disease is comprehensive, recent observations have revealed several comparatively new mala-

dies—or those newly-recognized as of economic importance. One of these, anaplasmosis, is caused by a protozoan parasite in the blood, and results in loss of appetite, fever and other symptoms common to febrile diseases. Anaplasmosis has been reported as existing in Kansas, Florida, Louisiana, Arizona, Texas, Oklahoma, Missouri, Nevada and California. Investigations are in progress to determine how the disease is communicated. When determined this should point the way to methods for control.

Another malady, known as Johne's disease or paratuberculosis, is an incurable, infectious dysentery which affects cattle principally, but which may also attack sheep and goats. It has been diagnosed in several parts of the United States and is believed to be rather widespread, tho not yet a cause of serious loss. No satisfactory treatment for Johne's disease is known, but its presence or absence may be determined by the Johnin test. This test, aside from a slight difference in technic, is used in much the same manner as the tuberculin test. Congress has granted the Bureau of Animal Industry authority to pay indemnity to cattle owners for animals slaughtered because of their reaction to the Johnin test.

For several years a sheep disease has existed in Southern Idaho that caused considerable losses among lambs. The disease has been diagnosed as tularemia, and is caused by the same organism that affects rabbits and, in some cases, man. The common symptoms in sheep are lagging behind the flock, lying down much of the time, lameness in one or both forelegs, fever and rapid loss in weight. The disease was found to be associated with infestation of the sheep by ticks, and recovery is rapid as a rule if the ticks are killed or removed before the disease becomes advanced.

It is apparent that domestic animals of the United States are free from many serious diseases that exist abroad and that most of the diseases present in the United States are being eradicated or controlled. This conclusion is supported by records of the federal meat inspection service, which annually conducts post-mortem examinations of about 70 million food animals. In recent years condemned carcasses have been less than 1/2 per cent of the total number of animals slaughtered, signifying a rather satisfactory health condition of the food animals submitted for slaughter and inspection.

The principal losses from animal diseases, however, are in the important producing areas, and the toll is greatest among young animals, many of which never reach market.

The practical course by which livestock owners may reduce such losses is to: (1) make a careful study of the probable local danger from each disease; (2) obtain publications containing directions for dealing with the danger in the most effective manner; (3) establish a high degree of farm sanitation; and (4) consult a reliable veterinarian to advise further

methods of prevention, diagnosis, and control, including the use of biological products.

**Allen**—Public sales are quite numerous. The horses here now are mostly smooth-mouthed, but as horses are scarce they bring an average of about \$75, which is a good price. Dairy cows are selling at lower prices, due, no doubt, to the fact that butterfat brings only 30 cents a pound—a year ago it was worth 45 cents. However, some of the folks are buying cows.—Guy M. Tredway.

**Barber**—Farmers are busy getting their ground ready for oats. We have been having nice spring-like weather. Wheat is "greening up" rapidly. Wheat, 95c; corn, 70c; kafir, 56c; hogs, \$9.50; heavy hens, 18c; eggs, 25c; cream, 30c; hides, 5c; potatoes, \$2.—Albert Peiton.

**Barton**—Wheat is becoming green. Livestock has not required so much attention and feed recently, with the coming of warmer weather. A considerable mileage of the roads is being sanded. Cream, 32c; eggs, 26c; wheat, 99c; corn, 67c.—Alice Everett.

**Bourbon**—Many public sales are being held; everything moves at good prices. Renters have been busy moving. There is plenty of farm labor. Farmers are at work plowing. Wheat is in good condition. Milk, \$1.90 a cwt.; cream 27c; corn, 75c; hogs, \$10; hay, \$8.—Robert Creamer.

**Cherokee**—Wheat is in fairly good condition. Livestock has wintered very well. Only a few public sales are being held—good prices are being paid, however. Wheat, \$1; corn, 65c; prairie hay, \$7 to \$11; hens, 20c; eggs, 30c; butterfat, 30c.—J. H. Van Horn.

**Clay**—We have had nice weather recently; farmers have been doing considerable field work, especially plowing and oats seeding. The wheat outlook is excellent. Livestock is doing well. Many public sales are being held, with good prices. Farm flocks are doing well; the poultry business has been expanding here for several years, which has been a mighty helpful item in the progress of the agriculture of this section. Eggs, 27c; cream, 32c; shorts, \$1.65; bran, \$1.45; hens, 18c to 21c.—Ralph Macy.

**Cloud**—We have been having spring-like weather, and wheat and grass are becoming green. Young calves and cows are doing well; there will be enough feed to take the animals thru to grass, altho grain may be scarce. Chickens are doing well, and egg production is increasing.—W. H. Plumly.

**Dickinson**—Farmers have been busy with oats seeding. Wheat is doing well; a good rain would be helpful, however. Livestock has wintered well. Egg production is increasing.—F. M. Lorson.

**Ellis**—We have been having some fine spring-like weather. Snow or rain would be welcome, as the ground is getting rather dry. There still is an ample supply of rough feed,

along with plenty of wheat pasture. Wheat is becoming green; it was not injured by the hard freezes. A great deal of ice was put up by the folks in this section during the cold weather; it was from 6 to 14 inches thick. Wheat, 90c; corn, 60c; kafir, \$1.10 a cwt.; shorts, \$1.75; butterfat, 30c; eggs, 26c.—C. F. Erbert.

**Finney**—Wheat is "greening up" and is growing rapidly. Most of the corn shelling has been finished; yields were from 5 to 40 bushels an acre. Cattle and horses are doing well on wheat pasture. Roads are in fine condition. Corn, 65c to 70c; wheat, 95c; kafir, \$1.10 a cwt.; milo, \$1.15 a cwt.—Dan A. Ohmes.

**Ford**—The weather has been favorable for spring work, and some plowing has been done. The ground is rather dry, and a rain would be welcome. Wheat is becoming green and it is supplying considerable pasture. The weather has been very warm for this season. Some new poultry houses are being built. Roads are in good condition. Wheat, 98c; corn, 68c; eggs, 25c; cream, 30c.—John Zurbuchen.

**Franklin**—The weather has been in good condition, and a considerable amount of road work has been done recently. Roads are in fairly satisfactory condition. Many public sales are being held. Corn, 60c; oats, 45c; butterfat, 30c; eggs, 25c.—Ellas Blankenbeker.

**Harper**—Wheat has been making a fine growth recently. Oats seeding is practically completed. There is plenty of soil moisture. A large acreage of sweet clover will be planted here this year. Livestock is in good condition. Oats, 50c; butterfat, 30c; eggs, 25c.—Mrs. W. A. Luebke.

**Harvey**—The weather has been fine for spring work. Farmers have been working on their oats ground. Wheat is becoming green. Livestock is doing well, and prices are on the up-grade. Wheat, \$1; corn, 75c; oats, 45c; alfalfa hay, \$16 to \$18; eggs, 26c; butter, 36c to 40c; flour, \$1.40.—H. W. Prouty.

**Jackson**—Considerable spring work has been done recently, especially in preparing for and in seeding oats. Oats seed is scarce, and is selling for 80 cents a bushel. Cattle are generally in good condition. Feed is rather scarce. Prairie hay, baled, \$10; eggs, 23c; cream, 31c.—Nancy Edwards.

**Johnson**—The weather has been spring-like, and a good deal of field work is being done. A considerable acreage of oats will be planted—seed oats are bringing 85 cents a bushel. Farmers who have held their wheat certainly are not satisfied with present prices! Bran, \$1.35; ground barley, \$1.60.—Mrs. Bertha Bell Whitelaw.

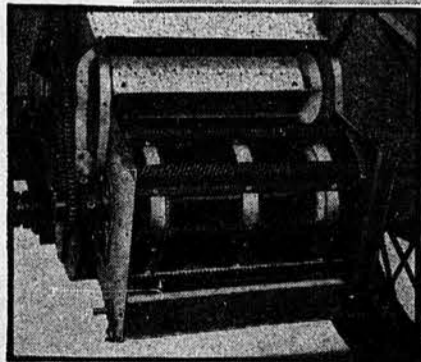
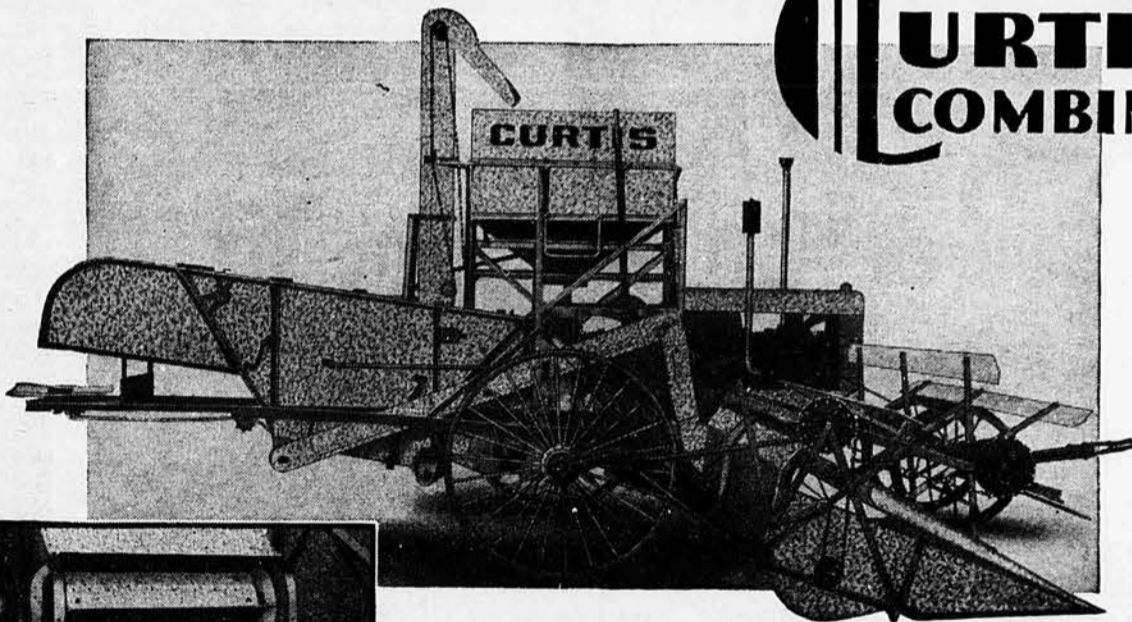
**Jowell**—Wheat and rye are becoming green. Farmers have been preparing the oats ground. Livestock and poultry are doing well. Many all-purpose tractors have been sold here this (Continued on Page 41)



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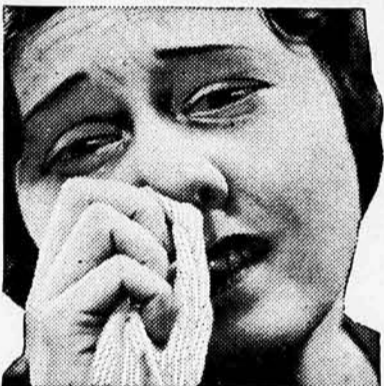
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Send for our New Free Catalog on Disc Harrows. Every one made in our own big factory and sold direct to farmers. As an example of the outstanding values we give, catalog shows horse-drawn Discs as low as **\$32.25** Genuine Alomite Fittings

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164 styles direct from factory at wholesale prices, gates, fences, barb wire, posts, roofing, paint. Satisfaction guaranteed or your money back.  
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Last FOREVER  
Cheap to Install. Free from Trouble.  
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**Kansas Poultry Talk**  
by Raymond H. Gilkeson

**Give Quality Birds Plenty of Room and Balanced Feed, Then Expect Real Production**

THE experience of Floyd Fike, Marion county, seems to indicate that it will pay most every poultry flock owner to count heads in the laying house again. Briefly, he housed only 24 per cent of the pullets he raised, and then culled and culled that bunch until he had the "cream" of the flock, every bird being capable of turning feed into eggs. As a result, at the end of the record year this flock averaged nearly 190 eggs.

Compare that with the record your birds have made in the past and with what the present layers are doing. Take the total number of eggs and the total number of layers and do a little problem in division to see what your average is. It is safe to say that the average flock owner in Kansas will find too wide a spread between the number of eggs received and the number of hens that have to be fed.

It may be that some of your layers are not capable of high production; those that are not should be culled out and sold on the market. If your feeding method isn't satisfactory, egg production would be affected. And if you know your birds are good, but still the production is too low, perhaps you have too many in the laying house, causing them to be crowded. You will recall that 3½ square feet should be allowed for each bird of the light breeds and 4 square feet for the heavies.

**Quality Is Selling Point**

Not long ago Kansas Farmer carried an article about Oscar Jones, Harvey county, in which Mr. Jones was quoted as saying "consumers will buy more good eggs." And let us repeat his definition for good eggs: Those that when placed on the market do a fine job of advertising themselves. Such a good job in fact, that customers on seeing them feel the urge to buy, and do buy. Thru this process folks are taught to eat more eggs. That is the idea Mr. Jones follows in production.

Now, let's apply the same reasoning to market birds. If the poultryman is to realize the most profit from poultry sold for meat, the best quality should obtain. G. D. McClaskey, expert poultryman of Topeka, explains it well: "Good body appearance when dressed is an essential for the profitable marketing of poultry," he said. "A nice, plump carcass of good appearance means that the bird is half sold. To have a plump carcass of good appearance calls for good feeding. Corn puts on the weight." The point we wish to make is an old, old, old one. But it is true. If the producer is to realize the most from his poultry and eggs he must keep an eye on the quality the consumer desires to buy, and does buy.

**Is a Good Investment**

Are incubators and brooders indispensable, profitable, economical to operate, and do they pay for themselves? Our forefathers hatched eggs and raised chicks without the incubator and brooder. Thousands of eggs are hatched and the chicks raised without the incubator and brooder in our Sunflower state even in this age. The incubators and brooders are very convenient, but they are not indispensable.

Profit in any enterprise is measured only by success. We find the incubator and brooder profitable. The incubator may be set at any time desired and the hens kept busy producing more eggs. A nice lot of chicks of uniform size and age can be obtained at one time from an incubator, which sometimes is impossible with hens. Early chicks will do much better raised with a brooder than with hens. The brooder keeps the entire house warm, and the chicks have access to warmth as desired.

The brooder also is a great labor saver, compared with hen-brooding. Considering the time it takes a hen to hatch and raise a dozen chicks,

when she should be laying eggs, it is only wise to say incubators and brooders are economical. No investment with poultry will pay for itself in so short a time as the incubator and brooder if well managed.

Taking into account their economical operations, achievements reached thru their use, time and labor saved, we would say they will pay for themselves.  
W. W. Mollhagen.  
Frederick, Kan.

**Poultry Pays the Bills**

When we first started to farm some 20 years ago, we paid very little attention to the poultry phase of farming. We had some mixed chickens, Rhode Island Reds mostly, which kept us supplied with a few eggs in spring and summer; none in fall and winter. But struggling along with little ones, sickness and hired help didn't give much time to devote to poultry, so the chickens were ill-housed and neglected.

Picking up a farm paper one day I read an article in it which stated the White Leghorns were wonderful profit makers, so I thought I'd try some hatching eggs. They were not plentiful then, but I found an ad. and sent an order for 100 eggs. From this \$5 investment, I raised 40 pullets and about that number of fries, which we ate. The pullets matured early and started to lay in July. They were so alert and pretty with their white coats and red combs, and laid such lovely eggs that they became my favorite breed.

I persuaded my husband to build a small house 12 by 20 feet for my layers. I couldn't call it a poultry house for it was just a shed, but better than the old chicken house. We sold off the mixed flock and kept just the White Leghorns. I began to see that beauty helps in humdrum work, and proportionately I became more interested in my little flock. They laid all winter and I kept studying, reading and observing and each year increased and improved the flock by buying pedigreed cockerels and high-grade hatching eggs. Now we have quite a large flock. The last two years I have imported large English Canadian males of 265 to 290-egg dams for two generations.

We have added on to the original 12-foot shed twice as we were able to spare the money, and finally seeing the long narrow shed was impractical, moved the whole building back 8 feet and built on that number of feet in front, thus making the laying house 20 by 76 feet, and adding a straw loft and open front.

I call them "my Leghorns," for early in our married life my husband said I could have the chicken money, thinking perhaps I would feel more free to buy little things I wanted. That lent an additional incentive, and I felt I would be more independent with my very own bank account.

As time went on I generally had cash to buy little household necessities, and numerous things to make life more pleasant. My husband noticed this. I seemed to be banking money when his account was small. Several times he came to me saying, "I'm just a little short now and wonder whether I could get a couple of hundred dollars to tide me over until I can sell something, or 'Maybe you could help out by paying the taxes this year. I just haven't enough on hand, unless I borrow."

So the hens have paid the taxes, the interest, painted the house, bought a car, sent husband on the Jayhawker Tour, paid for music lessons, bought the young daughter's clothes and hundreds of other expenses. They pay the butcher, the baker and the candle stick maker; the latter in the form of electric lights which we have enjoyed for some time. The income from the flock is the largest on the farm with the least investment.

We hatched at first with hens, but this became too laborious for the large number of chicks we wanted. There began to be a demand for our

**Danger of Infection Among Baby Chicks**

Success in raising baby chicks is dependent upon proper care and management. Readers are warned to exercise every sanitary precaution and beware of contaminated drinking water. Baby chicks must have a generous supply of pure water. Drinking vessels harbour germs and ordinary drinking water often becomes contaminated and may spread disease through your entire flock and cause the loss of half or two-thirds your hatch before you are aware. Don't wait until you lose half your chicks. Take the "stitch in time that saves nine." Remember that in every hatch there is the danger of some infected chicks—danger of diarrhea in some form and other loose bowel and intestinal troubles. Don't let a few chicks infect your entire flock. Give Walko Tablets in all drinking water for the first two weeks and you won't lose one chick where you lost dozens before. These letters prove it:

**Mrs. Bradshaw's Remarkable Success in Raising Baby Chicks**

"Dear Sir: I see reports of so many losing their little chicks, so thought I would tell my experience. I used to lose a great many of the little downy fellows from bowel troubles, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 40, Waterloo, Iowa, for their Walko Tablets for use in the drinking water of baby chicks. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after using the Tablets and my chickens are larger and healthier than ever before. I have found this Company thoroughly reliable and always get the remedy by return mail."—Mrs. C.M. Bradshaw, Beaconsfield, Iowa.

**Never Lost One After First Dose**

Mrs. Ethel Rhoades, Shenandoah, Iowa, writes: "My first incubator chicks, when but a few days old, began to die by the dozens. I tried different remedies and was about discouraged with the chicken business. Finally I sent to the Walker Remedy Co., Waterloo, Iowa, for a box of their Walko Tablets to be used in the drinking water for baby chicks. It's just the only thing to keep the chicks free from disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."

**You Run No Risk**

We will send Walko Tablets entirely at our risk—postage prepaid—so you can see for yourself what a wonderful working remedy it is when used in the drinking water for baby chicks. So you can prove—as thousands have proven—that it will reduce your losses and double, treble, even quadruple your profits. Send 50c for a package of Walko Tablets (or \$1.00 for extra large box)—give it in all drinking water and watch results. You'll find you won't lose one chick where you lost dozens before. It's a positive fact. You run no risk. We guarantee to refund your money promptly if you don't find it the greatest little chick saver you ever used. The Pioneer National Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of our guarantee.

Walko Tablets are sold by leading druggists and poultry supply dealers.  
**WALKER REMEDY CO., Dept. 40 Waterloo, Iowa**

**Johnson Ideal Halter**  
ASK YOUR DEALER OR WRITE US  
Price 95c to \$1.35. One year guarantee. Buck ropes, tie chains, big team hitches.  
Johnson Ideal Halter Co., Aurora, Illinois

**Do You Know That—**  
you have not read all the paper until you have looked over all the classified advertisements?

hatching eggs, and that was the largest source of our income. We invested in two 600-egg machines to hatch all our chicks at one time, as they are easier to care for. We began hatching for other farmers, but could not supply the demand for chicks, so added additional capacity and then turned many customers away. This year we have been forced to enlarge again, and have installed an all-electric incubator to hatch all eggs produced on the farm and to do custom hatching. The orders are all for 1,000 or more and come from local people.

We built chick storage batteries to take care of any surplus chicks and sell "started" chicks.

We market the broilers at about 8 to 10 weeks old, when they will average more than 2 pounds. Hatching the chicks in February or early March gets the broilers on the market when they are high. We figured the broilers would pay for all the feed needed to grow and mature the flock to pullet age, and they do much better.

There is a growing demand from our town of 5,000 for fries early and late in the season, and being only 6 miles away and on the highway, scarcely a day passes but some city dweller comes out and buys from two to a sackful. These fries are finished off in a battery crate with a milk-fattening mixture, and our growing list of customers testifies as to their quality. We often dress birds for private customers, picnics and luncheons, and the extra price easily pays for the labor. Between the hatching seasons all eggs that are produced are selected and sold at a premium to the grocers in town for their select trade.

Besides the baby chicks, broilers and selected eggs we have sold breeding stock and pullets. Last year, up to January 1, our flock netted us \$4.70 a bird. There is something to sell from the flock every day in the year, while the average farmer must wait seven months to a year to cash in on his livestock or grain.

We have cut the cost of mill stuff by grinding our grains raised here on the farm, buying only the meatscrap, oilmeal, alfalfa meal and codliver oil for the mash. Surplus skim milk from the Holstein herd is fed to the flock, and the birds have access to rye fields when there is no snow.

I would say cleanliness is the foundation of successful poultry keeping, and you will find the flock appreciates clean litter and surroundings by their contented singing and cackling. Raising chickens is not all velvet, and there have been ups and downs to it, but taking everything into consideration year in and year out, it is more interesting and profitable than anything else I have undertaken.

Mrs. Lulu Abels.

Clay Center, Kan.

### Fed 637 Cattle and 700 Hogs

(Continued from Page 12)

keep accurate records on the project; and to send the board a financial statement once each month.

After this preliminary planning, the question was put to vote and the boys unanimously decided to undertake the class project provided the school board agreed to the proposed contract. The school board decided to go into the project with the boys.

Each of the 20 students enrolled bought two shares, thus making the student investment \$2,000. Most of the boys borrowed their money from the bank at 6 per cent interest. As noted in the agreement, the boys risked 10 per cent of their investment, thus covering any loss up to \$200 that might occur in the feeding operations. This removed practically all chance for losing school district funds.

On November 22, 1929, the class purchased 35 Hereford heifers on the Kansas City market at \$9.75 a hundred. Sixty Duroc Jersey shoters were purchased November 14, 1929, locally at \$5.50 each. Sixteen of them were turned into the cattle feed lot and the remaining 44 were placed in the lot adjoining to be self-fed.

Student committees were delegated to locate and price feed that could be purchased. The class made purchases after hearing the committee reports.

#### Bills Are Paid by Check

The business involved in carrying the project is placed on the shoulders of the students. One member of the class is elected treasurer. All bills are

paid by use of the check system, each check being signed by the official treasurer and counter-signed by the vocational agriculture instructor. Each boy in the class has a check book of his own and writes checks corresponding with the official checks written by the project treasurer. The checks are periodically balanced with the official bank statement; thus the class is made familiar not only with the financing of the project, but also with a simple system of bookkeeping.

Each day students who are on duty to care for the project keep a record of expenses, feed fed, and a diary of unusual events occurring during their term of duty. Two different students are on duty each week, and the experience of keeping records and feeding is constantly being rotated among the members of the class. The boys on project duty make a weekly feeder's report, telling the other members of the class how much feed the cattle or hogs are eating and any other interesting feed lot news. Once a month all cattle and hogs are weighed individually on the stock scales that are a part of the feed lot equipment. With the accumulative daily feed record and the weights on the cattle, the students have the necessary data from which to figure the exact financial standing of their project.

They determine the exact gains and cost of gains made during the last 30 days and to date. With this information they are in a position to compare costs with market values. Every student in the class gets the required data from the official class record book and figures the problems out independently. The results are then discussed and a field trip is made to the feed yard in order that the students may compare the individuals in the lot with the records of their gains. Finally the class formulates a project report for the last 30-day period and to date to be sent to the school board and to be taken home to their parents.

#### To the Market

All business, feeding, organization and management problems are, so far as possible, planned in advance, and then solved systematically by the group as a regular part of the classroom work. Probably the greatest value derived from the class project is the training in co-operation thru the class study and discussion of problems and then abiding by a majority vote.

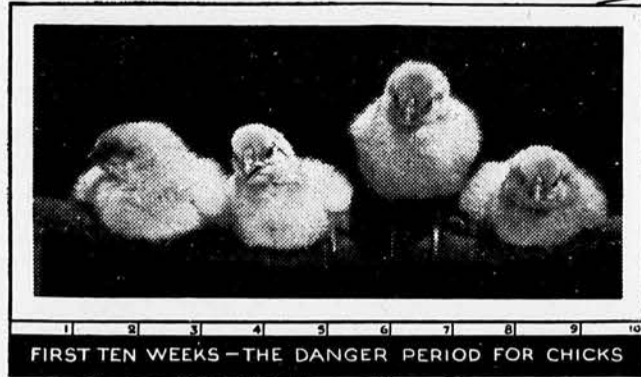
The students will hold a feeders' day in the spring. Parents and interested farmers will be invited to visit the feedlot and hear the students give a report of their feeding operations. This year the boys will continue the custom established by previous classes of securing an animal husbandry specialist from the Kansas State Agricultural College to meet with the farmers and answer their questions pertaining to their own livestock production problems.

When the stock is marketed all the members of the class will go to Kansas City to see their cattle and hogs sold. It has been customary for a representative of the livestock commission company thru which they deal to take the class on a tour thru the stockyards, pointing out the various market classes and grades of stock received, and then thru a packing plant, showing them the method of processing and the final products ready for retail trade.

Thru this class project the students are having an opportunity to learn to do by doing; they learn to co-operate by pooling their money, time and ability in a common enterprise; they learn to handle stock by purchasing a carload of cattle and 60 hogs and the necessary feed for them, handling these cattle and hogs under feed lot conditions, and selling them on the open market; they learn to practice good business methods by borrowing money at a reasonable rate of interest, determining the opportune time to purchase desirable feeder cattle, hogs and feed at a reasonable price, deciding on an economical ration, establishing practical records and selecting a profitable time to market.

A prehistoric skeleton has been found with its legs almost round its neck. Evidently even in the old days there were new dance steps.

It has been demonstrated that Wall Street can make a monkey out of a lamb.



## This chick doctor is always on the job— but never sends a bill

Poultry authorities will tell you that most chick troubles occur in the first 10 weeks of growth. This is known as the "Danger Period." And they will also tell you that one of the best ways to guard against these troubles is to enlist the aid of sunlight through those cold, wet spring months.

CEL-O-GLASS does this in a way that ordinary glass and soiled cloth curtains can never do. It floods your brooder house with the life-giving ultra-violet rays of sunlight, bringing all the benefits of the outdoors right inside your brooder with none of the dangers.

Just like a tireless doctor, these ultra-violet rays guide your chicks safely through the "Danger Period" to strong healthy maturity. They promote the building of bone and body tissue, prevent leg weakness and help keep the house free from disease. They cause the chicks' blood to manufacture Vitamin D which means faster growth and healthier chicks.

And more, these ultra-violet rays, playing the role of doctor, help guard your chicks from those outdoor dangers such as coccidiosis, worm infestations, deaths due to chilling, drowning and crowding.

It is very simple and inexpensive to change your present brooder into a CEL-O-GLASS health house—by replacing glass or curtains with this easily installed material. If you are building a new brooder, check the coupon for free blue prints. Doctor Sunlight, with his life-giving ultra-violet rays, will do the rest.

#### CEL-O-GLASS acclaimed by users

Experiment stations and thousands of farmers have found that CEL-O-GLASS brings more chicks safely through the 10-week "Danger Period" without leg weakness.

For example, a farmer at Mt. Carroll, Ill., writes, "I didn't have a single case of leg weakness with my chicks brooded behind CEL-O-GLASS."

Use CEL-O-GLASS on your hog houses too. And for dairy barns, milk houses and cold frames. Write for a copy of this free book, "Health on the Farm."

You can get CEL-O-GLASS at hardware, lumber, seed and feed dealers. If your local dealers cannot supply you, please write Acetol Products, Inc., 21 Spruce St., New York City.



# CEL-O-GLASS

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ON THE SELVAGE

Acetol Products, Inc., Dept. 1503, 21 Spruce Street, New York City. Gentlemen: Please send me a copy of your free book, "Health on the Farm." Also send me free blue print(s) checked.

Name .....  
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- Brooder House
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## HIDES - FURS

Salt Cured Hides (under 45 lbs.)	No. 1	No. 2
	10c	9c
Horse Hides (45 lbs. and up)	8c	7c
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TOPEKA, KANSAS  
**T. J. BROWN**

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### Mothers, Mix This at Home for a Bad Cough

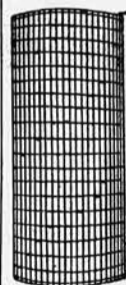
You'll be pleasantly surprised when you make up this simple home mixture and try it for a distressing cough or chest cold. It takes but a moment to mix and costs little, but it can be depended upon to give quick and lasting relief.

Get 2½ ounces of Pinex from any druggist. Pour this into a pint bottle; then fill it with plain granulated sugar syrup or strained honey. The full pint thus made costs no more than a small bottle of ready-made medicine, yet it is much more effective. It is pure, keeps perfectly and children love its pleasant taste.

This simple remedy has a remarkable three-fold action. It goes right to the seat of the trouble, loosens the germ-laden phlegm, and soothes away the inflammation. Part of the medicine is absorbed into the blood, where it acts directly upon the bronchial tubes and thus helps inwardly to throw off the whole trouble with surprising ease.

Pinex is a highly concentrated compound of genuine Norway Pine, containing the active agent of creosote, in a refined, palatable form, and known as one of the greatest healing agents for severe coughs, chest colds and bronchial troubles.

Do not accept a substitute for Pinex. It is guaranteed to give prompt relief or money refunded.



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You can find almost anything you need in the Classified Section. Poultry, Cattle, Honey, Dogs, Hogs, Lumber, Machinery, Farms.

Read the Classified Advertisements.

- 20 CONCORD GRAPE VINES ..... \$1.00
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- All Postpaid. Healthy, well rooted stock, sure to please.  
Fairbury Nurseries, Box J, Fairbury, Nebr.









CATTLE

WANTED TO HEAR FROM STOCKMEN having trouble with their cows bringing weak or defective newborn calves. Federal inspected mineral preventive. Sunnyside Farms, Buck-tall, Neb.

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PERCHERON MARES—CASINO AND CAR-not breeding. Bred to Carnot horses. W. P. Hamilton, Rt. 2, Belle Plaine, Kan.

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O. I. C. BRED GILTS, FIGS. L. E. WEST-lake, Kingman, Kan. SPOTTED POLAND SOWS, GILTS, WINNERS ten Kansas Fairs, Farrow in March and April. Fall boars. Inquire Wm. H. Crabill, Cawker City, Kan.

LAND

KANSAS

LAND BARGAINS—FRANK MADIGAN, Sharon Springs, Kan. BEST PRICES on new wheat land. E. E. Nelson, Garden City, Kan. WHEAT AND RANCH LANDS, BARGAINS. Write or see C. N. Owen, Dighton, Kan. 160 ACRES IN WHEAT, TWO MILES NORTH Hayes, Kansas. Crop will pay for at forced sale. Box PM, Kansas Farmer.

MISSOURI

LAND SALE, \$5 DOWN, \$5 MONTHLY, BUYS 40 acres, Southern Missouri. Price \$200. Send for list. Box 22-A, Kirkwood, Mo. OZARKS—20 ACRES, POULTRY LAND \$100, \$5 monthly. Fishing, hunting, trapping. Other bargains. Zimmer, 1802 N. 5th, Kansas City, Kan. POOR MAN'S CHANCE—\$5 down, \$5 monthly buys forty acres grain, fruit, poultry land, some timber, near town, price \$200. Other bargains. Box 425-O, Carthage, Mo.

TEXAS

IN THE GULF COAST country of Texas, there is now a splendid opportunity to buy forty acre farms at very low prices with long, easy terms. Down payment within our means. Deep, black fertile soil with excellent drainage. Long and favorable growing season permits wide range of crops including cotton, corn, magnolia figs, satsuma oranges, all kinds of vegetables. Especially well adapted for dairy-ing hogs and poultry. Lands ready for culti-vation. Excellent railroad facilities afford ready access to large markets. Good roads, schools, churches. For detailed information address C. L. Seagraves, General Colonization agent, Santa Fe Ry., 970 Railway Exchange, Chicago.

MISCELLANEOUS LAND

OWN A FARM in Minnesota, North Dakota, Montana, Idaho, Washington or Oregon. Crop payments or easy terms. Free literature. Mention state. H. W. Byerly, 81 Nor. Pac. Ry., St. Paul, Minn. THE GREAT NORTHERN Railway serves an agricultural empire in Minnesota, North Da-kota, and Montana, where opportunities abound for small farms or large operators to rent or purchase at the lowest prices and best terms of many years. Profits are insured by rapid progress being made in diversified crops and livestock raising. Idaho, Washington and Ore-gon offer the best in low-priced cutover lands, high producing irrigated land, or small suburban tracts near large cities, for general farming, dairying, fruit or poultry. Mild cli-mate. Write for free Zone of Plenty book with detailed information. Low Homeseekers' Rates. E. C. Leedy, Dept. 100, St. Paul, Minn.

SALE OR EXCHANGE

BARGAINS—E. Kan., W. Mo. farms, sale or exch. Sewell Land Co., Garnett, Kan.

REAL ESTATE WANTED

WANTED—GOOD GENERAL OR DAIRY farm. Under \$30,000. Box 140-W, Brookfield, Ill.

REAL ESTATE SERVICES

WANTED—FARMS FROM OWNERS. SEND cash price with description. Emory Gross, North Topeka, Kan. WANTED TO HEAR FROM OWNER HAVING good farm for sale. Cash price, particulars. John Black, Chippewa Falls, Wisconsin. SELL YOUR PROPERTY QUICKLY FOR cash, no matter where located; particulars free. Real Estate Salesman Co., 510 Brownell, Lincoln, Neb.

SMALL FARM WANTED

Located in Kansas, suitable for general farming, dairying and stock raising. If a bar-gain, write me full description and lowest cash price. John D. Baker, Mena, Ark.

3,200-Acre Ranch For Sale

Splendid location in line of oil development. Good im-provements, running water; 200 acres of good bottom land, part in alfalfa. Six good level quarters of wheat land, balance good pasture land. Attractive price. Write DR. ALEXANDER, DODGE CITY, KANSAS.

Do You Want a Home?

One that can pay for itself in one year. I have it here in Western Kansas and Eastern Colorado. Best farming land in the world; you can raise anything. Best of Schools, Churches and Railways. Write, wire or call J. R. Houston Realty Co., Gem, Kan.

The "Wonder District"

A rapidly developing section of the Texas Panhandle. Wheat and corn land as yet priced below its crop value, and on easy terms. Fine climate, good roads, pure water. Write J. H. CRANE, DALHART, TEXAS

Farm Crops and Markets

(Continued from Page 35)

year; farmers who have had experience with them are very much pleased. Power farming is making many gains in this section a year after year. Many farm sales are being held; "bucket" calves 1 or 2 months old still bring from \$20 to \$25. Corn, 64c; wheat, 90c; eggs, 24c; cream, 33c; oats, 55c.—Lester Broyles.

Lyon—Wheat is greening up with the com-ing of spring; the outlook for a crop is good. Grass also is starting on the river bottoms. Farmers have been doing some field work, es-pecially oats seeding. Livestock is doing well. Eggs, 21c to 25c.—E. R. Griffith.

Miami—Farmers have been busy with their field work, especially oats seeding. Wheat is becoming green; it has stood the winter very well. Many public sales are being held; cattle, especially purebred animals, are selling un-usually well. Cream, 33c; eggs, 26c.—Mrs. Bertha Bennett.

Mitchell—We have been having some fine weather recently. Livestock is doing well; corn stalk fields have been pastured considerably recently, as the supply of feed is scarce. Many public sales are being held, with fairly high prices. Several carloads of livestock have been shipped to market recently. Cream, 24c; eggs, 27c; corn, 70c; hogs, \$10.—Albert Robinson.

Morris—The continued warm weather of February put the soil in fine condition, and farmers have been quite active with their spring work. Wheat is in excellent condition. A considerable acreage of oats, and also of alfalfa, will be sown here this year. Farmers are convinced that the county should be grow-ing a larger acreage of the legumes, and es-pecially alfalfa. There is a good demand for seed corn; most of the corn here has a low percentage of germination due perhaps to its high moisture content last November during the zero weather. Livestock has wintered very well; there will be plenty of feed. A good

many public sales, with satisfactory prices, are being held over the county.—J. R. Henry. Neosho—Wheat is becoming green—it evi-dently was damaged but little by the cold weather earlier in the season. Soil is in good condition; farmers have been plowing and disking the land, and especially they have been planting oats. The peach buds were mostly all killed by the cold weather earlier in the year. A considerable acreage of Sweet and Red clover is being sown this year. Livestock and poultry are in excellent condition, and there is plenty of feed. Seed corn with a high percent-age of germination is scarce. Roads are in splendid condition. Wheat, \$1; alfalfa hay, \$15; kafir, 70c; corn, 85c; hens, 18c; eggs, 25c; butterfat, 30c.—James D. McHenry.

Rice—Wheat is in good condition. A consid-erable acreage of oats has been planted. Live-stock is doing well. A few public sales are being held, and some land is changing hands, at satisfactory prices. There is renewed activi-ty in oil leases. Wheat, 99c; eggs, 25c; cream, 33c; hens, 19c.—Mrs. E. J. Killion.

Sumner—The weather has been ideal for this season. Farmers have been busy preparing land for oats; the soil is in fine condition. Wheat prospects are not very good. Several carloads of stock have been moved to market recently. Many farm meetings have been held over the county recently. There is plenty of farm labor. Wheat, \$1.01; oats, 50c; corn, 85c; eggs, 28c; butter, 30c.—E. L. Stocking.

Thomas—Wheat is in fine condition. Live-stock is wintering very well. We have had some favorable weather recently. Corn, 65c; butterfat, 30c; wheat, 90c; barley, 44c; hogs, \$9.40.—C. C. Cole.

Washington—We have been having some fa-vorable winter weather. Many farm sales are being held—there is an unusually good demand for corn and hogs, and in general everything brings satisfactory prices. Butterfat, 31c; eggs, 25c; hens, 18c.—Ralph B. Cole.

Trapping: Animal Lures

BY GEORGE J. THIESSEN

The trapper must know how to use animal baits—and when to avoid them. Generally speaking the be-ginner uses decoys too much and often when he should not. The old saying that a little knowledge is a dangerous thing never was more important than when applied to fur bearers. Not only must one select the right attractor but he also must use it in the proper place at the opportune time.

Meat is a general lure for the smaller animals, with the exception of the muskrat. It must be fresh, but this does not mean that it ought to be changed every day. To do so is liable to excite the more cunning ani-mals and make them suspicious. But there are limitations to the use of flesh. It should not be placed too close to dwellings, as dogs and cats are likely to be drawn to it instead of fur bearers. When trapping in open sections, it is best to hide meat from crows, hawks and other birds that might molest it.

Hunger is a great aid when using attractors. Therefore it can readily be seen that meat will give the best results right after a cold spell, since the animals, or most of them, have remained in their holes and are com-ing out for something to eat. Yet it must be remembered, too, that flesh which has frozen and thawed a number of times loses most of its power to attract the smaller game. During late winter and spring food does not draw so well.

The best natural bait for mink is rabbit or muskrat. Use small pieces. Make each carcass serve eight or 10 traps. Fish also may be employed. Some use frogs and crawfish, but these do not, as a rule, bring as good results as the others.

Muskrats exist entirely on vege-table food, such as roots, bulbs, stalks and grass. Corn is good for bait when the animals have access to fields of it near their dens or burrows. When snow is on the ground, tops of car-rots, beets and turnips are more effective than most other decoys. Apples, potatoes, cabbage—in fact al-most all the vegetables, may be used to lure these fur bearers.

For skunks use large chunks of bloody meat. Carcasses of muskrats and rabbits are good; rip open the bellies so the entrails protrude, plac-ing the traps among them.

When after weasel, blood serves as an attractor. Meat can be depended on also. Heads of rabbits and chickens often draw the animals.

The trapper must remember that the coon always seems hungry and has a keen nose to detect food. Canned or smoked fish are good natural lures for coons. Fresh fish may be used, also. Comb honey, clams and meat are dependable. Corn also draws these animals.

Opossum have very similar tastes to those of raccoons. Outside of the baits named, cheap sardines put up in oil are effective. The oil may be used as a trail scent to get the fur bearers to the traps.

While a knowledge of these decoys is necessary to the successful pelt hunter, generally he feels that some-thing else is needed to get the ani-mals. One reason is the high prices of furs and the competition among trap-

pers. Then again the settlements be-ing close together, food is easier for the animals to obtain now than a few years ago. Consequently artificial lures are looked on to supply what the foods lack.

There are two kinds of so-called patent baits upon the market. The liquid scent has been offered for sale quite a long time, but the paste at-tractors are of comparative recent in-vention. Users of the former find that it evaporates very rapidly, most of the odors being gone after 5 or 6 hours. When baiting their line one day they cannot expect any great re-turns the next. Just before dawn is when the animals are most active. Experts know that in many cases it is necessary to keep away from their traps two or three days at a time to get fur. Hence the liquid scent has not met with the favor that the dis-tributors anticipated.

Another fault is the ease with which rain destroys the old-style at-tractors. Users are compelled to re-lure their lines after every shower. They cannot make sets along small creeks, ponds or lakes for fear that the water will rise and render their labor of no value. Even frost, snow and sleet have a bad effect on this class of mixtures.

The various paste baits do not give much trouble. The odors are so mixed that they last for days without evap-oration. The decoy may be submerged under water for a long time, and when exposed to air will be almost as strong as when first squeezed from the tubes.

But none of the baits are miracle compounds. They do not draw ani-mals as a magnet does steel.

Crude sets and improper uses of baits are handicaps. The best lure in the world will not make an expert out of a novice in 10 seconds. Yet when attractors, either the natural or arti-ficial, are used as they should be they will increase the catch and prove an investment for the pelt hunter.

Fences We Really Need

BY W. L. SEVERANCE Sedgwick, Kan.

A good fence is a joy forever while a poor fence is one continual source of annoyance. Livestock raising be-hind a good fence never gives any trouble, while stock behind a poor fence always is looking for weak place, and when they acquire the habit of getting out they are very difficult to stop.

In building a fence it is well to re-member that the corner post is the one important part to a good fence. With a good, solid corner there al-ways is something to work from, and it is very easy to maintain a No. 1 fence. All land used for pasture should be fenced with a good four-wire fence. Every farm of less than a section should have a good sub-stantial line fence. There should be from 15 to 30 acres of hog-tight fence on every home farm. The house, garden and lawn should be fenced chicken tight, and the remainder of the farm depends on local condition.

If you are on a road where folks continually are driving stock past your place it is best to have a road fence, or if you have a neighbor who is careless about letting his stock run you better fence them out. But under normal conditions it is better to put up a temporary fence in the fall and remove it in the spring, in case you want to pasture your wheat or stalk fodder. The extra ground you have to farm and the expense saved cut-ting weeds will well pay for putting up and removing the fence.

Fences built from good-sized hedge posts set well in the ground, and heavy galvanized wire, will last a life time. Too small hedge posts soon be-come weakened by worms.

Win a Pioneer Club Ribbon

(Continued from Page 29)

With the Capper Clubs, The Capper Future Farmer Essay Contest, and the Future Farmers' Oratorical Con-test all under the same management, we are able to offer encouragement to both beginners and advanced stu-dents. For further information about the Capper Clubs write to the club manager. We'll furnish full particu-lars and will send you a copy of the Capper Club News each week from now till April 15.

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One or a carload. Also a carload of females either bred or unbred in lots to suit purchaser. See or write

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**G. M. Shepherd, Lyons, Kansas**

## Grain View Farm Notes

BY H. C. COLGLAZIER  
Pawnee County

The warmer weather and the longer days are making quite a difference in the appearance of the wheat over the country. The fields are beginning to show considerable green, even at a distance. The "freeze damage" is not showing up a great deal. We have noticed a few fields that show more damage from blowing than from the cold. In several localities over the county the wheat is entirely too thick to ever make a high yield, unless unusual weather should prevail thruout the spring. The growth is so heavy in many fields that a thick sod is formed. The field has the appearance of an old stack bottom. The probable outcome of some of the very thick wheat will be short heads at harvest. Prospects in this part of the state indicate a smaller percentage of the crop will be abandoned than usual. This probably is generally true over the state, judging from reports we have had from men who own land in different sections.

Several farmers here have their oats and barley ground about plowed and ready for seeding. There is plenty of moisture to start the crop off in reasonably good condition. There probably will be a smaller acreage of small grain crop planted locally this year than usual. With over three-fourths of the entire county in wheat there is not a great deal of good ground left for small grain. The warm days are beginning to make the alfalfa show signs of starting. We have noticed a few fields being prepared for spring seeding of alfalfa. Several carloads of alfalfa seed have been moved out of the county this spring.

The creation of the Farm Board has brought out a new demand for an additional course of study at the agricultural college, or a home study course that business men who are planning to address groups of farmers can take. It is really pitiful the way most business men "get off" with their addresses before a group of farmers these days. They usually take the first half hour telling about the time they lived on a farm in Indiana or Iowa when they used to have to go to mill on horse back and do the chores in hip boots and then the last half hour of their address they tell how the Farm Board is going to ruin the country, and then, as a fitting climax, they jump on President Hoover. It does seem that a course in "Modern Technique in Addressing Farm Groups" should be popular with the small business man. The average farmer today is very well posted on most of the economic problems, and has read and listened to his radio enough to arrive at some definite conclusions regarding his own business. The conditions of living 40 years ago have little to do with present costs. The present day business man doesn't run his business like he did 40 years ago. The farmer today is

interested in present day problems as they affect his business. He is more than willing to pay the highest kind of tribute to the pioneer and the station of old age. But for a man who has not lived on a farm for 40 years to tell a group of farmers how they ought to run their business, especially when Champion and Master Farmers are in the audience, seems like gross impropriety.

The local farmers who have wheat out West are beginning the spring migration. Several are planning on breaking out quite an acreage of sod this spring. Some of the new land will be sown to barley, and the remainder will be prepared for fall wheat. Those who have been out report that the wheat is in good condition. There are many new elevators going up along the railroads leading into the new parts of the Wheat Belt. Most of them are farmers' elevators. Since most farmers' elevators handle oil, gas, coal and feeds, they have several sources of income. The farmers' elevators of this county made very good money last year.

At the wheat school at Great Bend we learned about 13 per cent of the wheat going to the market had been grading weevily. This seems like a rather high percentage. The local elevator manager says a very large percentage of the wheat coming in is full of weevil. The weevil and shrinkage along with the poor price have made holding grain this year rather a bad proposition. If one expects to hold grain in the bin until late spring it is a very good practice to give the bin a treatment of carbon bisulphide. The recommendations at the wheat school were 1 pound carbon bisulphide to every 35 bushels of grain. This would be 40 pounds to 1,000 bushels of wheat. The carbon bisulphide is sprinkled over the top of the grain, and the bin is left closed for several hours. Covering the grain is not necessary.

## From Nitrate Land

An event of historic, as well as economic importance, appears this year on the calendar of American agriculture. It is the 100th anniversary of the introduction and use of commercial fertilizer in this country. Four generations of American farmers have in this period used inorganic fertilizing materials to maintain and improve their crop yields.

The distinction of being the oldest of the commercial fertilizers goes to nitrate of soda, the first shipment of which was brought to the United States in 1830. Only lime and marl of the present soil-improvement materials have been utilized for a longer period. The use of superphosphate was not started until 1842, and it was not until about 1860 that potash from the German mines was first used for farm purposes.

Simple arithmetic is required to show the economic importance of commercial fertilizers to American farmers. The figures fairly make one's eyes pop. In the case of nitrate of soda or Chilean nitrate, as it is now known, it is estimated that at least 900 million dollars have been added to the incomes of American farmers in the form of heavier crop yields as a result of the use of the nitrogen fertilizer since 1830. This is a conservative figure, for it was obtained on the basis that \$1 invested in nitrate of soda has returned itself and another in net profit, whereas it

is more common for farmers to report returns several times higher than this ratio.

A product of Chile, and found in workable quantities only in that country, nitrate of soda occurs as a crude ore on a vast barren plateau high in the Andes Mountains. The entire area, covering about 77,000 square miles, is a desert on which rain seldom falls and no vegetation grows. This peculiar region is Nature's laboratory for producing a mineral as vital to the plant as is bread or water to the human body.

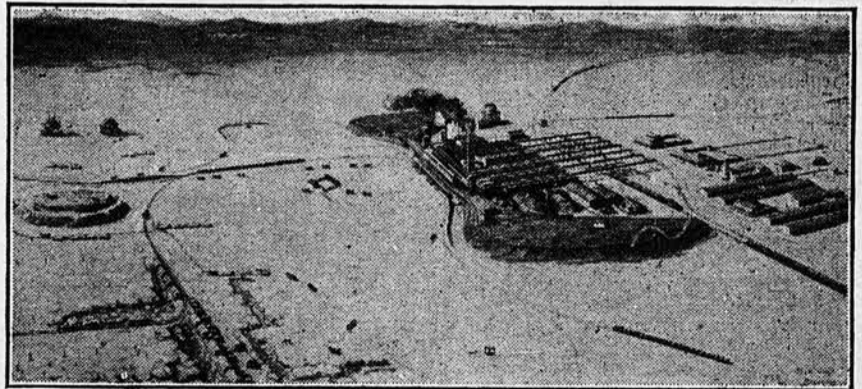
The origin of the nitrate beds is unknown. Various theories have been suggested to explain the formation of the vast deposits, but none of these are safe from the cold-blooded analysis of science. One theory maintains that the entire nitrate bed was, in prehistoric times, a part of the Pacific Ocean, but during a volcanic eruption a portion of the sea was enclosed by the land. As the sea water evaporated, nitrate of soda was formed. Another credits electrical storms, which are common in the Andes Mountains, with making nitric acid which in the soil was turned to nitrate salts. Still a third believes that the deposits represent an accumulation of drainage from the Andes, while another regards the field as the work of certain bacteria.

The crude nitrate occurs several feet below the surface, as a stratified ore called caliche. It varies in sodium nitrate from 5 to 70 per cent. The ore is mined generally by blasting, and is hauled over small railways to a refining plant, known as an oficina, of which about 70 are in operation at present. The ore is first crushed and then leached in huge evaporating pans. The recovery of the nitrate follows, after which the crystals are dried, placed in sacks and loaded on the cars for transportation to the coast. The entire industry has recently gone thru a period of transformation, and any description of the detailed process may within a few years be obsolete. These changes, however, have brought about the elimination of waste and the assurance of greater economic efficiency.

In connection with the refining, iodine also is obtained from the caliche. Small quantities of the iodine, as well as other valuable elements, magnesium and boron, are present in the refined nitrate. When ready for shipment, the fertilizer is uniformly fine in texture, and it contains 96 to 99 per cent sodium nitrate, or more than 15 per cent nitrogen.

The first nitrate mine to be opened on a commercial scale was started in 1818 by an Englishman, George Smith. In 1830, when the first shipment was made to America, about 8,000 tons were exported from South America, much of which was sent to Europe. Early experiments in England proved its worth, and the American farmers were quick to follow the example of the English. After the 50's there slowly developed a steady demand for the fertilizer, which during recent years has grown in this country alone to more than a million tons annually.

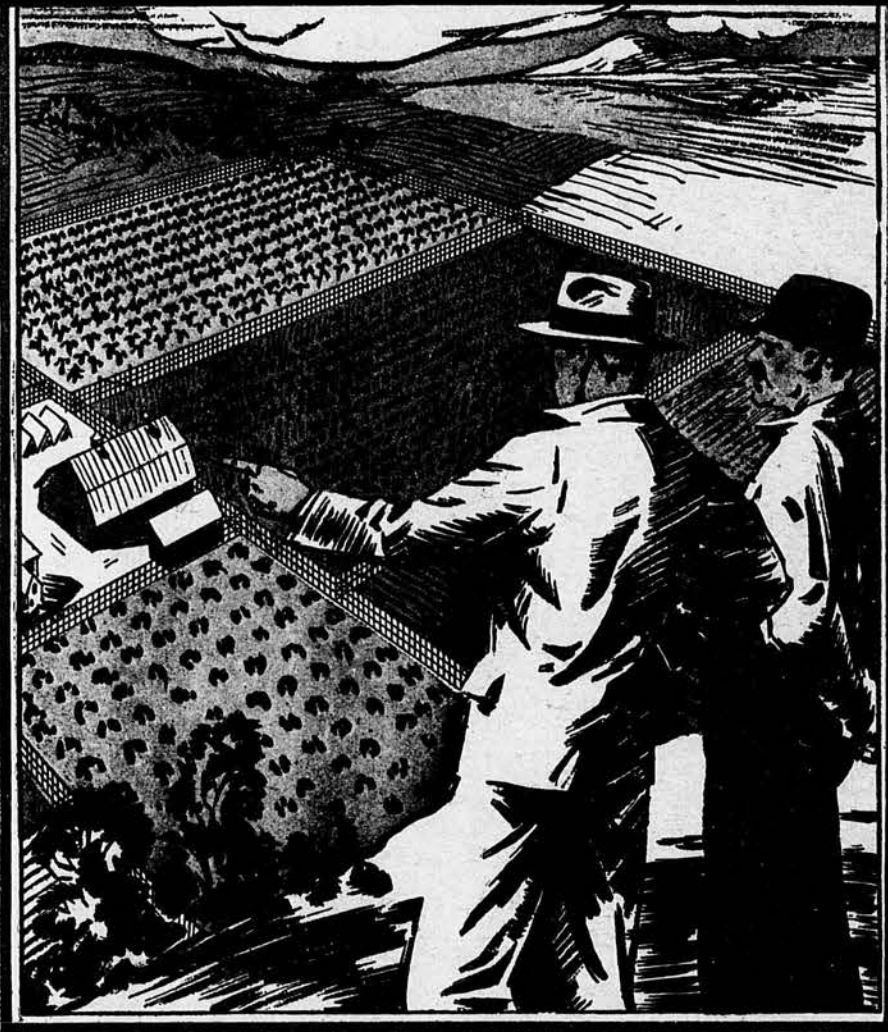
Among farmers nowadays, nitrate of soda is highly prized because of its immediate effect on all types of plants. This is due in part to the fact that it carries nitrogen in the natural nitrate form which plants can use at once. It is thought by some scientific authorities that its value is enhanced by reason of the fact that it is a natural product, formed by nature's hidden processes in much the same



This is a Nitrate Refining Plant on the Barren Chilean Desert. The Crude Nitrate Ore Lies Close to the Surface and is Extracted by Open-Cut Mining. At the Left, Chunks of the Ore Are Being Mined and Transported to the Refining Plant in the Center. Administration Offices and the Homes of Workers Are Seen on the Right.



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