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KANSAS FARMER

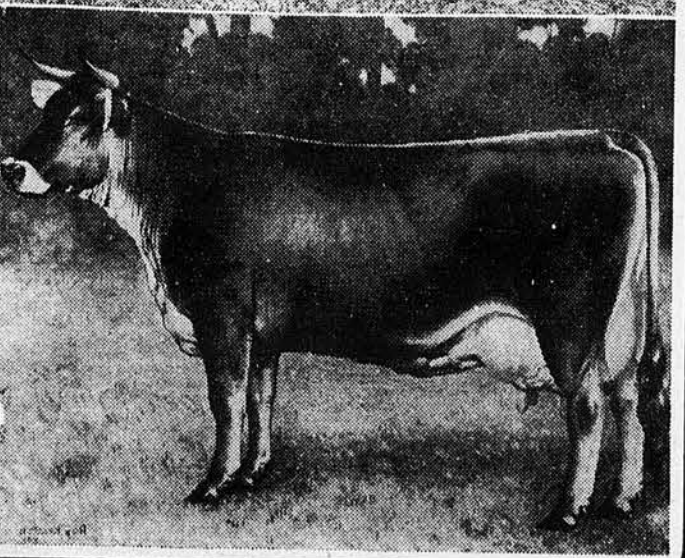
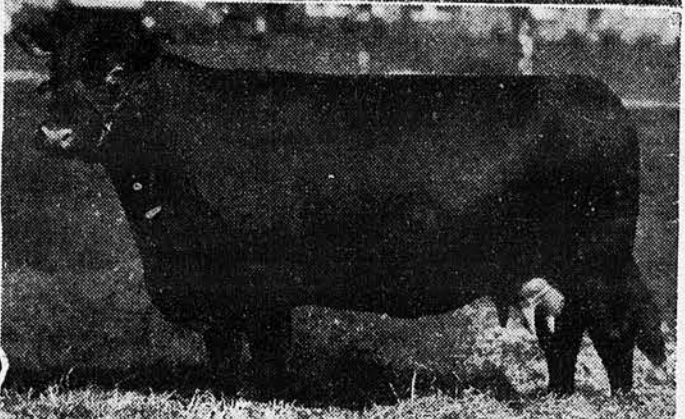
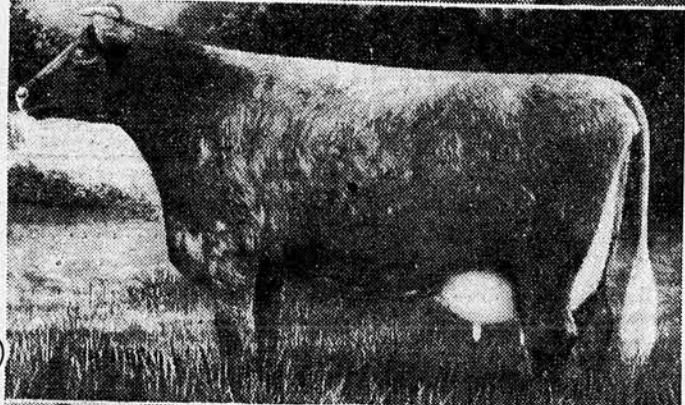
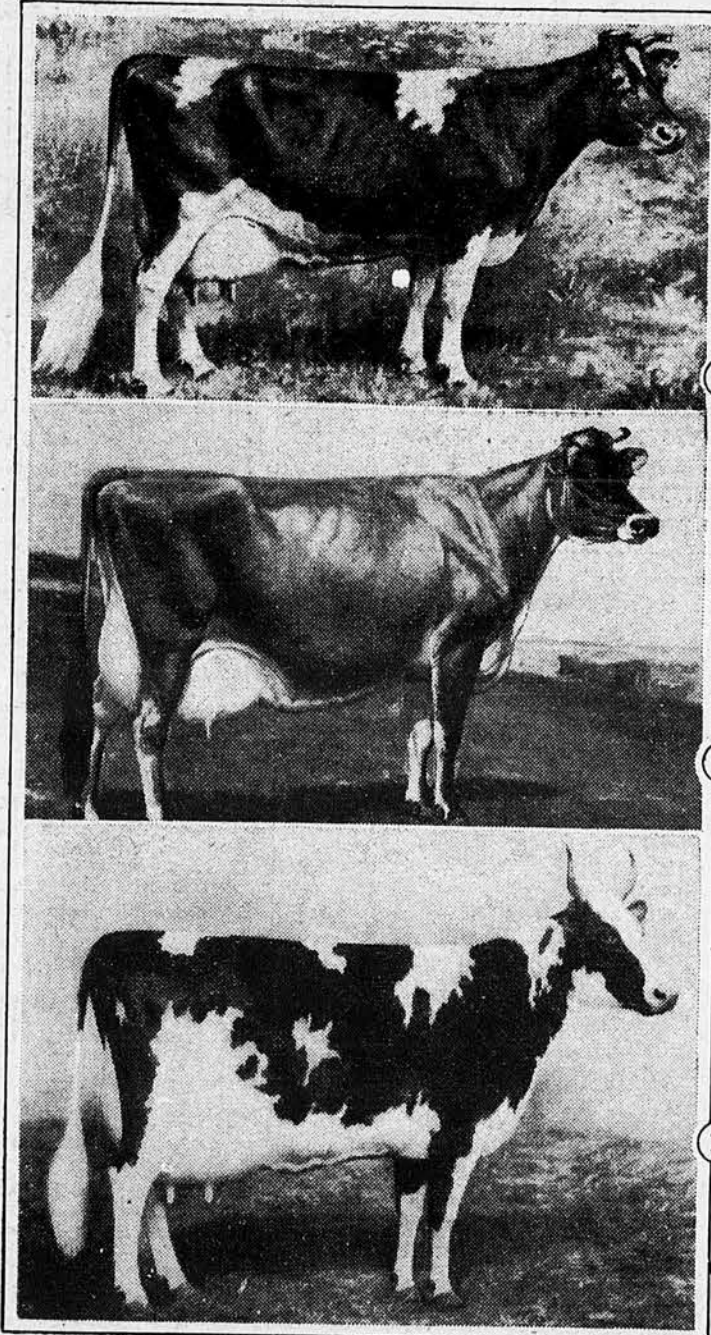
CONTINUING
MAIL & BREEZE

Volume 74

April 24, 1937

Number 35

DAIRY *Perfection*



1—Ideal type Guernsey cow. 2—Ideal type Jersey cow.
3—Perfect type Ayrshire cow. 4—True type Holstein
cow. 5—Milking Shorthorn model cow. 6—Perfect type
dual purpose Red Polled cow. 7—Model Brown Swiss cow.

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THE patented scientific arrangement and spacing of the deep, rugged bars of the tread make this tire self-cleaning. It will not clog or ball up, thus providing clean traction with every turn of the wheel. The deep rugged tread is held inseparably to the cord body because every cotton fiber in every cord has been soaked in pure liquid rubber by the Firestone Patented Process of Gum-Dipping. This gives the tire much greater strength to resist the strains of the extra "pull."

Ground Grip Tires save 25 per cent in time and 25 per cent in fuel. They give more traction and drawbar pull — ride easier and cut down repair bills. You can save time and money by equipping your tractors, trucks and farm implements with Ground Grip Tires. See your Implement Dealer, Firestone Tire Dealer or Firestone Auto Supply and Service Store today.



FOR CARS	FOR TRUCKS	FOR TRACTORS
4.50-21.....\$10.65	30x5 H.D.....\$28.50	5.00-15.....\$12.15
4.75-19..... 11.55	32x6 Truck Type.... 37.10	5.50-16..... 12.95
5.50-17..... 14.35	32x6 H.D..... 48.60	7.50-16..... 18.80
6.00-16..... 16.25	6.00-20..... 22.75	9.00-36..... 72.20
6.50-16..... 19.60	6.50-20..... 29.50	12.75-28.....112.75

OTHER SIZES PRICED PROPORTIONATELY LOW

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Firestone Dealers and Firestone Auto Supply and Service Stores are headquarters for farmers. Here you can buy Batteries, Spark Plugs, Brake Lining, Fan Belts, Garden Hose, Radios for car or home, Seat Covers and 2,000 other useful articles. You can be sure when you buy Firestone Products you are getting the greatest value for your money. If you have not received the new 1937 Firestone Auto Supply Catalog, write for it today, to Firestone Tire & Rubber Company, Akron, Ohio, or Los Angeles, California.

The Farmer's Choice FOR RURAL HIGHWAYS

FIRST GRADE QUALITY — Built of high quality materials by skilled tire engineers:

GUM-DIPPED CORD BODY — Every cotton fiber in every cord saturated with pure liquid rubber, giving greatest protection against blowouts.

LONGER NON-SKID MILEAGE — The wider, flatter tread — more and tougher rubber, gives long, even wear and thousands of extra miles.

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\$815
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Longer life, more power, heavier electrode for better motor performance.

HOME RADIOS
Complete line electric or battery sets; Walnut cabinets. Tone control; Dynamic speakers; Airplane dial.

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Power and dependability. Patented features insure long life.

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For cars, trucks and buses. Gives longer service.

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6 all-metal tubes. Sound diffusion. 8" dynamic speaker. Dashmountings for all cars.

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Rubberized cord, pre-stretched. Long wearing.

AUTO SUPPLIES For Every FARM NEED!

FOR ADDITIONAL ITEMS SEE THE NEW 1937 FIRESTONE FARM TIRE CATALOG

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WIBW Program Schedule

(Daily except Sunday)

April 17 thru April 30

- 4:00 a. m.—Sons of Pioneers.
- 4:30 a. m.—Alarm Clock Club.
- 5:45 a. m.—News.
- 6:00 a. m.—Henry and Jerome—Interstate Boys.
- 6:15 a. m.—Edmund Denny.
- 6:30 a. m.—Rupf Hatchery.
- 6:45 a. m.—Roy Faulkner.
- 7:00 a. m.—Uncle Ezra's Hour.
- 8:00 a. m.—Kellogg's Program.
- 8:15 a. m.—Unity School.
- 8:30 a. m.—Roy Faulkner.
- 8:45 a. m.—News.
- 9:00 a. m.—IGA Program.
- 9:15 a. m.—Ma Perkins.
- 10:30 a. m.—Protective Service and Anti-Crime Assn.
- 10:40 a. m.—Weather Bureau.
- 10:45 a. m.—Page's Funfest (M-W-F).
- 10:45 a. m.—Homemakers Exchange (T-Th).
- 11:00 a. m.—Monticello Party Line (except Sat.)
- 11:15 a. m.—Dinner Hour.
- 12:00 noon—H. D. Lee News.
- 12:15 p. m.—Complete Market News Service.
- 2:00 p. m.—Nat'l Bellas Hess News.
- 2:15 p. m.—Jane Baker the Kansas Home-maker.
- 2:30 p. m.—Harris-Goar's Street Reporter.
- 2:45 p. m.—Ackerman-Brock Norge Variety Program.
- 3:00 p. m.—Mary Ward.
- 3:15 p. m.—Kansas Roundup.
- 3:45 p. m.—Karlan's organalities.
- 4:00 p. m.—Henry and Jerome.
- 4:15 p. m.—News.
- 5:30 p. m.—Children's Hour.
- 5:45 p. m.—Little Orphan Annie.
- 6:00 p. m.—News.
- 6:15 p. m.—Marling Gossip.
- 6:45 p. m.—Kitty Keene, Inc. (beginning April 26—9:15 p. m.)
- 9:45 p. m.—Emahizer's Melodies—(except Sat.)
- 10:00 p. m.—Daily Capital News—Joe Nickell
- 11:30 p. m.—United Press News.

Highlights of Next Two Weeks

Saturday, April 17, and April 24

- 9:15 a. m.—Henry and Jerome.
- 10:45 a. m.—Dinner Hour.
- 8:00 p. m.—Kansas Roundup.
- 9:00 p. m.—Lucky Strike Hit Parade.
- 9:45 p. m.—Universal Rhythm.

Sunday, April 18, and April 25

- *(Beginning April 25, all programs one hour earlier than listed)
- 8:00 a. m.—Sunday Morning at Aunt Susan's.
- 8:30 a. m.—Reading the Capital Funnies.
- 8:55 a. m.—Press Radio News.
- 9:00 a. m.—Church of the Air.
- 9:30 a. m.—Romany Trail.
- 10:00 a. m.—Weather Reports.
- 10:05 a. m.—Organ Moods.
- 10:30 a. m.—Major Bowes' Family.
- 11:00 a. m.—First Methodist Church.
- 12:00 noon—Organalities.
- 12:30 p. m.—Uncle Ezra's Amateurs.
- 1:00 p. m.—The Coleman Family.
- 1:30 p. m.—Music of the Theater (c).
- 1:45 p. m.—Aeolian Trio.
- 2:00 p. m.—New York Philharmonic Symphony.
- 4:00 p. m.—Old Time Religion Tabernacle.
- 4:15 p. m.—News.
- 4:30 p. m.—Republican State Committee.
- 4:45 p. m.—Harmony Hall.
- 5:00 p. m.—Christian Science.
- 5:15 p. m.—Pacific Paradise.
- 5:30 p. m.—Chevrolet Musical Moments.
- 5:30 p. m.—SENATOR CAPPER (beginning April 25).
- 6:00 p. m.—News.
- 6:15 p. m.—SENATOR CAPPER (April 18).
- 6:30 p. m.—H. D. Lee Coffee Club.
- 7:00 p. m.—The Concert Master.
- 7:30 p. m.—Texaco Town—Eddie Cantor.
- 8:00 p. m.—Ford Sunday Evening Hour.
- 9:00 p. m.—Gillette Community Sing.
- 9:45 p. m.—Emahizer's Melodies.
- 10:00 p. m.—Capital News—Joe Nickell.
- 10:15 p. m.—American Legion.
- 10:30-12:00—Dance orchestras.

Monday, April 19-26

- 8:30 p. m.—Edmund Denny—K. P. & L. program.
- 9:00 p. m.—Lady Esther Serenade—Wayne King.

Tuesday, April 20, and April 27

- 5:30 p. m.—Alexander Woolcott (April 27)
- 6:30 p. m.—Chevrolet Musical Moments (April 27).
- 7:00 p. m.—Hammerstein's Music Hall.
- 8:00 p. m.—Watch the Fun Go By—Al Pearce.
- 8:30 p. m.—Jack Oakie's College.
- 9:30 p. m.—Phillips Poly Follies.
- 9:15 p. m.—Kitty Keene, Inc. (begin April 27).

Wednesday, April 21, and April 28

- 7:30 p. m.—Ken Murray and Oswald.
- 8:00 p. m.—Lily Pons.
- 8:30 p. m.—Palmolive Beauty Box Theater.
- 9:30 p. m.—Babe Ruth.

Thursday, April 22, and April 29

- 6:30 p. m.—Alexander Woolcott.
- 8:00 p. m.—Major Bowes' Amateurs.
- 9:00 p. m.—Eddie Tonar's orchestra—Victory Life.

Friday, April 23, and April 30

- 7:00 p. m.—Broadway Varieties.
- 7:30 p. m.—Hal Kemp's orchestra.
- 8:00 p. m.—Hollywood Hotel.
- 9:00 p. m.—Jordan's News Review of the Week.
- 9:30 p. m.—Babe Ruth.

Silos: It isn't too early to be thinking about silos. What could be finer than to plan a good permanent silo now, pick out the place for it, order the materials, get the foundation ready? Or, if it's to be a pit or trench, start the digging.



“REED QUALITY Milk and Cream”

Presenting the Story of an Up-to-date Farm Dairy Operated as a Family Enterprise

By TUDOR CHARLES

A RAPIDLY growing town of 4,000 people, \$2,000 in milk handling equipment; and the lack of any local milk ordinance or any effective demand for it, were primary factors in the dairying picture involving E. A. Reed, Lyons dairyman, 3 years ago.

But Mr. Reed believed it would pay to produce high quality milk in an up-to-date manner, and he went ahead and did it. People in and around Lyons are proud of this modern farm milk plant. Mr. Reed said his methods have paid because they have enabled him to attract and hold customers in this community where demand for milk has been active, and financial conditions up to par.

The Reed farm, dairy herd, and milking plant are located several miles from town. It is a typical farm from nearly every standpoint. Mrs. Reed and the children, a girl and 2 boys, take an active interest in the farming operations. Every one of the children has a job to do in preparing the milk for delivery to town. They also have won prominence in their 4-H club dairy work, showing champion Holsteins.

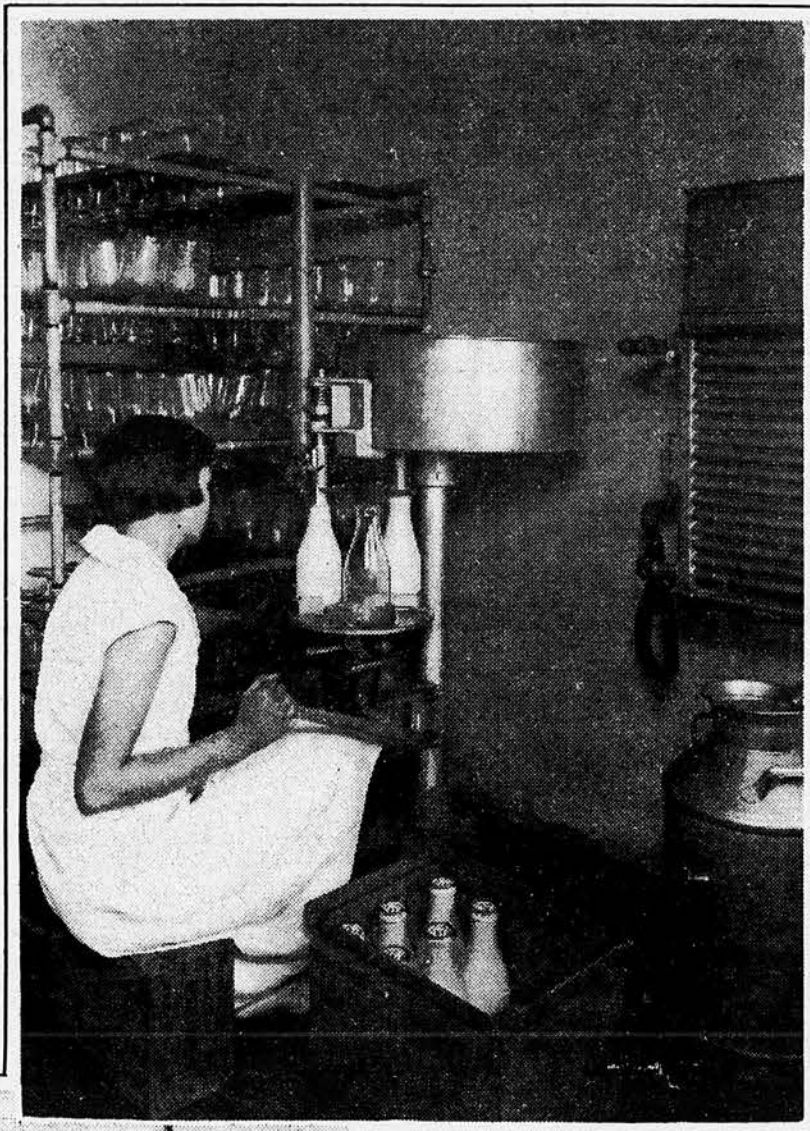
In the milk house are a big milk cooler, electrical refrigerator, bottling machine, and all the equipment necessary to wash and sterilize bottles, milker, and milk-pails. Keeping a clean and respectable appearance has meant much to the Reed dairy

business. The final word in this system of quality milk is an all-white speedy milk truck. The words “Reed’s Farm Dairy, Quality Milk & Cream,” tell their story to everyone.

Fresh well water is pumped to the milk house, where it is used for cooling and washing purposes. The system is arranged so that the water is carried out to the stock tanks from the cooler. It has been years since they have had to pump water directly to the stock.

The Reeds have been in the dairy business 16 years. They have outgrown a retail butter business, at which they once were selling as high as 75 pounds a week, into the retailing of whole milk only. Virtually no milk is separated. The milk retails for 10 cents a quart to regular customers. They are delivering between 100 and 110 gallons a day at present.

About 50 cows are in the herd, with 35 in milk most of the time. A combination of Holsteins and Jerseys is used. Each breed is kept separate and registered, altho Mr. Reed and his family are really Holstein enthusiasts. The dairy herd improvement test has been followed for 8 years. In the test year of 1928-29 the herd averaged 399 pounds of butterfat. In 1936, with 42 cows, more than half of which were first milking heifers, the average was 280 pounds. Drouth grazing conditions prevailed, too. The tests are all on two-time milking.



Above: Daughter is interested in the business and has a regular job in this pleasant bottling room. She is operating the mechanical milk bottler. One side of the milk cooler is seen at the upper right.

At left: Washing bottles in the Reed dairy plant, where quality milk and good management are paying for modern equipment.



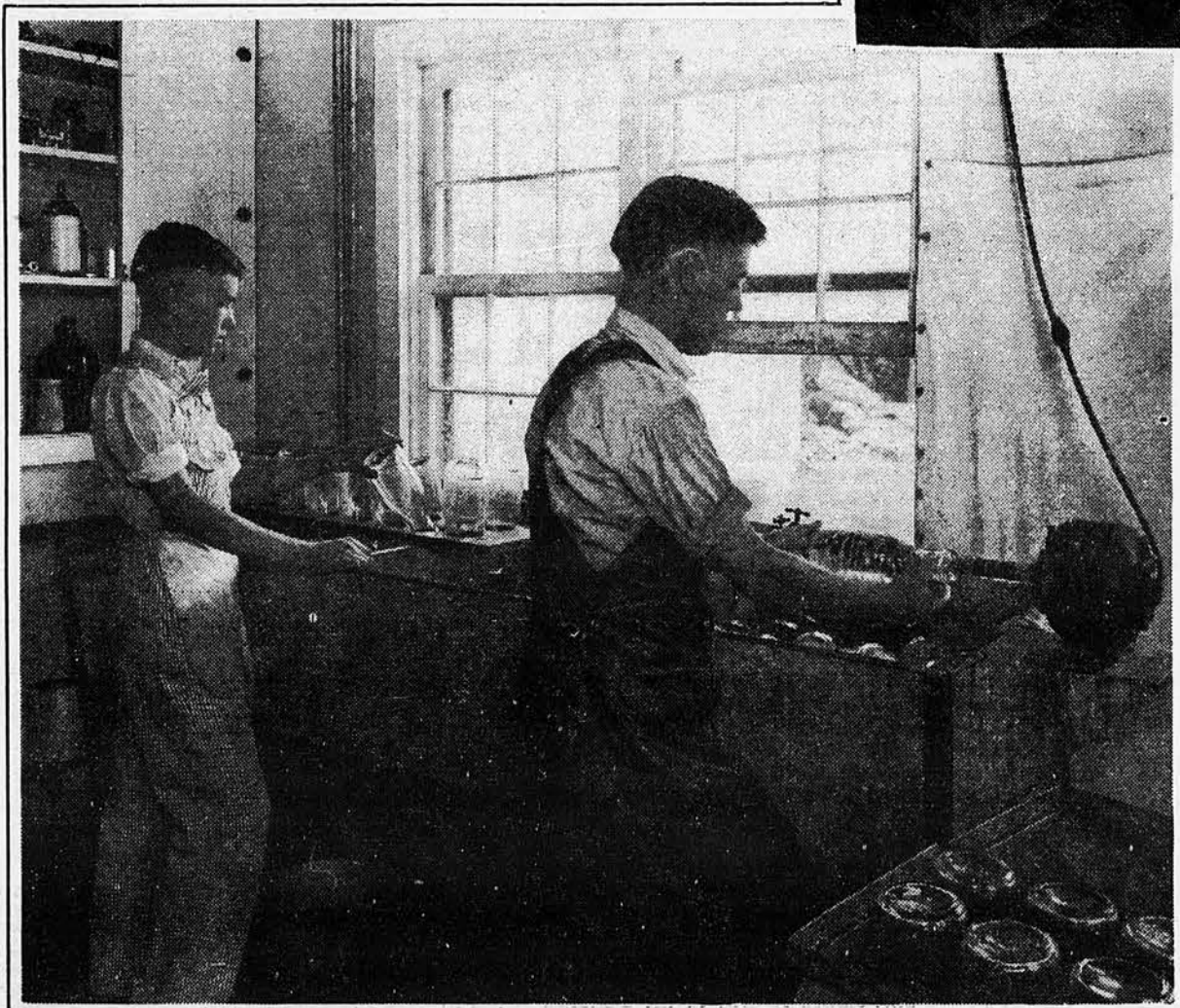
The highest record of the Reed cows is 635 pounds. One 500-pound cow is still in the herd, while a show-winner of one son, Edward, made 450 pounds as a 2-year-old.

The Reed herd is not kept for big individual records, however, but for high average excellence and final profits. A number of Jerseys in the herd have made 450 pounds of butterfat. Sometimes the Jerseys have the edge in amount of fat produced, and sometimes the Holsteins, so they are about on the same level.

The feeding method is to provide alfalfa hay in a high, slat rack, out in the feed yard. This rack will accommodate the entire herd. It has a wide concrete feeding floor around it, which Mr. Reed found well “worth the money” last winter and this spring to keep the cows clean and up on solid footing. Silage is fed in outside bunks.

The cows are milked in 3 shifts in the barn which accommodates about a third of the milking herd. A milking machine has been in use for 13 years, and it is

(Continued on Page 12)



At the Beginning of a Good Crop Year

Passing Comment by T. A. McNeal

IT IS UNSAFE to make predictions about Kansas weather. That is if you really suppose that anybody will pay attention to your predictions, or if you expect them to plow and plant, depending upon your supposed knowledge of Kansas weather.

I have lived in Kansas for more than half a century and never have seen two seasons exactly alike. Always Kansas weather is uncertain and capricious, but I have seen quite a number of fairly good crop years, followed by a number of poor crop years, and of the series of poor crop years the last 3 or 4 have been the worst in more than half a century.

Basing my guess on the general law of averages, I think we are at the beginning of the second quarter of a pretty good crop year. I do not expect to see the biggest wheat crop the state ever has produced, altho the present condition of our wheat shows up better than any of the states in the Union with three exceptions, and none of those exceptions is a large wheat growing state. I realize that there are two or three hurdles to get over before harvest, but I do expect a good wheat crop and a good price.

However, I wish to warn Kansas farmers against putting their trust in wheat. I can see no bright future for wheat. It comes nearer being a world-wide crop than any other. Countries that used to produce no wheat now grow almost enough to supply the needs of their populations. Canada and the United States can produce more than enough wheat to supply all possible future demands of the rest of the world.

Owing to abnormal world conditions, wheat growers this year are almost certain to get fair prices for their crop. But there is no reasonable assurance that they will get a fair price next year; neither is it reasonable to suppose that our Government will continue to subsidize wheat farmers. Such a policy can only be justified as an emergency.

It seems to me, however, that the independent farmer, as we knew him 50 years ago, has passed out of the picture. The tendency of the times is toward centralization and the outlook is more and more centralization. I cannot say that I like it, but we are confronted with a fact which knocks out a cherished theory.

Of course, the owner of a farm still could enjoy a large degree of independence if he were willing to give up the things which modern changes have brought. He could till his fields as his ancestors tilled theirs. His wife could own and learn to operate a hand loom and make the cloth necessary to clothe the family. He could have a small horse-power mill which would grind his grain. He and his family could live on what could be produced on the farm as his ancestors did. But the modern farmer is not going back to the self-supporting state. It is idle to talk about it. Modern civilization is a regimented civilization and will grow more so. Personal liberty becomes more and more restricted and in the not very distant future is likely to become only a memory.

Trade Junk for Ham

THREE years ago, under orders from the Department of Agriculture, 6 million pigs were killed. Now 50,000,000 pounds of hams are being shipped into the United States from foreign countries. Foreign hams, by reason of a quirk in the administration of the tariff laws, which lets them in at a 3½-cent duty instead of the 6-cent duty applying to other imported meats, are invading the American

More or Less Modern Fables

A DOG had fallen into the evil habit of sucking eggs. The lady of the house where the dog resided, having determined to break him of the practice, filled an eggshell with a mixture of egg and cayenne pepper and left it in a nest that had been robbed on several occasions by the dog. Soon after the dog passed that way, and seeing the tempting specimen of hen-fruit clapped it into his mouth. It was 2 days before he was able to get the temperature of his mouth down to normal. A few days afterward, while the incident was still fresh and hot in his memory, he happened to notice a hen that had just laid an egg in the nest which he had visited to his sorrow. When the hen had finished her jubilant cackling and headed for a neighboring garden to dig a few worms and newly planted vegetables, the dog walked over and looked at the new egg, and then said to himself: "That egg looks fresh but the last egg that hen laid indicated that she must be suffering from a very high fever. I believe that I don't care for any eggs today."

Keep the Quality Up

ED BLAIR
Spring Hill, Kansas

No one can look down on the man that excels,
No arrow can cripple his flight.
On the top of the business-wave, as it swells
He will ride where the sunshine is bright;
No fear for his craft e'er shall enter his head,
No cup of deep sorrow he'll sup.
He will win every day; solid paths he will tread,
If he only keeps quality up!

Keep it up, then, my boys, tho the fraud and the cheat
Devise shorter ways to the goal,
And flowers will bloom by the paths where your feet
Must travel, and joy fill your soul;
For the best now is wanted in product and man,
And the one that excels shall be king.
Push the standard still higher tomorrow; you can—
But only with honor's true ring.

Keep the quality up, 'tis a maxim of gold—
Burn it deep in your soul then, today.
In conduct and manner, be frank and be bold,
Unbending, tho frauds may have sway;
For success, true success, is not won by the knave,
Tho he tiptoe to steal from its cup,
Dishonor is his. But a crown's at the grave.
For the one who keeps quality up!

(Copyright, 1937)

market at an increasing price. Imports jumped from 2½ million pounds in January to 4¼ million pounds in March.

If the American farmers were trading some farm commodity for these foreign hams, that might be just a fair exchange. But what we are sending out is scrap-iron and other materials used for war purposes. Countries like Germany, which do have not enough fats to supply the needs of their people, are shipping canned hams to the United States and are receiving in return things that are intended to be used in war for the destruction of human lives.

Last December for the first time in our history, the importation of meats exceeded the exports, and since that month the excess of imports has been widening.

Will We Get Used to It?

WE use the plural, in speaking of dust bowls, advisedly. There seems to be a disposition in the effete East to charge up all the dust storms to Kansas, altho there is just as much or more dust in Eastern Colorado, Western Texas, Western Oklahoma, Western Nebraska and the Dakotas as there is in Western Kansas. It always has been so. In the older days Kansas was charged with all the cyclones, notwithstanding the fact that fewer real cyclones originated in Kansas than in several other states.

Kansans were partly to blame for this misrepresentation. With a certain perverted sense of humor they even magnified their misfortunes and derived a certain satisfaction out of telling the credulous tenderfoot, Munchausen stories of appalling disasters which never happened, but which the tenderfoot related as facts to the credulous readers of Eastern publications.

It was bad advertising for Kansas, but we Kansans made only feeble and occasional protest.

Here, however, is a real and serious situation. We are willing to take our share of it, but no more. The question is what can we do about it?

The legislature has enacted a conservancy law which we hope will help. Just how much, will be determined by experience. The wind, however, will continue to blow where it listeth, and it will continue to carry a considerable percentage of loose soil to the annoyance of the people who have to breathe it.

Will we get used to it?
Maybe not, but at least there are thousands of people in the dust-cursed regions of the Dakotas,

Western Nebraska, Western Kansas, Eastern Colorado, Western Oklahoma and Western Texas, who will manage to endure it. They are going to stick. A few of them, of course, will succumb, but nature will gradually build up a defense mechanism so that the rest will live and enjoy good health. We do not know much about the human anatomy or the mysterious ways in which Nature does her work.

What I think is that after awhile the real acclimated settlers of the dust bowls will develop lung strainers and body dust pans. The strainers will separate the dust from the breathed air while the dust will be deposited in receptacles below the lungs which may be opened and cleaned at stated periods. Meantime, the dust breathers will become immune to dust, decomposed volcanic rock and vegetable matter and live to a good old age. In fact, it is not unlikely that there will be developed a race of people who cannot live anywhere else except in the dust bowl region. You may say this is preposterous. Is it? What about the fishes which can live only on the air concealed in water?

What about the old story of the dry-land fish in Western Kansas and Eastern Colorado, where by patient perseverance the owners of the fish gradually accustomed them to get along with less and less water, until finally the fish just flopped around on the prairie, living on grasshoppers, and other noxious insects, occasionally coming up to the water trough and taking a drink along with the cattle and chickens. These fish gradually developed a new breathing apparatus. It became necessary for the fish owner to watch over them and herd them under a roof in case of a hard rain so that they would not get into pools of water and drown.

I insist that this is a reasonable prediction. At any rate it is as good as I can think of right now.

Since the above was written they have been having rains out in the "dust-bowl." If this keeps up, as I hope it will, then the dust-bowl will become only a more or less unpleasant memory. The point I am trying to make is that whether it continues to rain or returns to a state of drouth and dust, the hardy residents of Western Kansas are going to stick and adapt themselves to conditions whatever they may be.

Hitler's Farm Plan

HITLER'S latest farm decree in Germany doesn't go quite so far as Stalin's in Russia, but is a close second. Stalin simply appropriated all private farms for public use. Hitler just took over the farmers themselves. Any German farmer who soldiers on the job is booted off his farm and another given his place. It hasn't reached the point where he loses his farm; he just loses the crop which the other fellow raises on it. But it isn't a very long step from taking the crops to taking the farm.

I wonder what the farmers of this country would say if they were ordered to either run their farms as the government said or turn them over to those who would. Can you imagine the commotion it would create? And wouldn't a howl go up from these city farmers if they had to go out themselves and work their farms, or lose the crops?

THE KANSAS FARMER

Continuing Mail & Breeze

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Farm Matters as I See Them

Low Interest Is Right

DESPITE the fact that Governor W. I. Myers, of the Farm Credit Administration, sees a great inflationary danger in "too low" interest rates on farm mortgages, I still am strong for providing agriculture with adequate credit at the lowest rates of interest afforded any other industry in our economic system.

There is every indication that this session of Congress will continue the 3½ per cent interest rate on Federal Land Bank mortgages for another 2 years. That seems only fair and right to me. My own bill, introduced in the Senate, would have made the interest rate 3 per cent. And I also believe that the farm commissioner loans should bear an interest rate as low as 3 per cent.

In this connection, the revised Jones-Bankhead farm tenancy bill, thru action in the House committee on agriculture, calls for 3 per cent interest rates on loans to tenants with which to buy farms, and also on the rehabilitation loans provided in that measure. Despite the troubles this measure had to go thru in the House committee on agriculture, I look to see a farm tenancy bill enacted into law at this session of Congress.

What I have written is not intended in any way as a criticism of or a reflection upon Governor Myers. As head of the Farm Credit Administration, Governor Myers has done a big job in a big way. I share the general opinion in official and farm circles that Governor Myers is one of the ablest and most conscientious administrators in this administration. I simply disagree with his views on farm interest rates, without in the least detracting from my appreciation of the excellent work he and his FCA have accomplished in the interest of American agriculture and American farmers.

An Honest Price for Wheat

IAM ENJOYING, with all of my Kansas friends, the good news about the wheat crop prospects. Also the season of promise ahead. Official figures estimate our state will grow around 173½ million bushels of bread grain. This is the largest crop since the record production of 251¾ million bushels in 1931. The growing crop also is distributed over a much wider territory than in recent years, which is a good thing. This outlook is as refreshing as a summer rain. In it we can see renewed activity along many lines. Homes will be improved. Needed equipment will be purchased. Debt loads will be eased or erased. The young folks will see their way clear to go on to college next fall. It means freedom from so many restraining "ifs."

Yet there is an "if" to be considered at the beginning of these good times. Not as big an "if"

this year as in the future. Yet we must consider it. "If" we do produce 173½ million bushels of wheat in Kansas—a fourth of the nation's 656 million bushels, by the way. "If" we harvest 200 million bushels. "If" yields are good for several years ahead, then what will wheat be worth?

I mention this now because I am so heartily opposed to market gambling in farm products. As sure as fate, any good news about production this year or next year, or in the future, will be turned into an excuse by market gamblers to crowd the price of wheat down, to their advantage, so when at harvest time farmers have wheat to sell, these actual growers are forced to take less than wheat actually is worth. Right now I want to say there is no honest reason for bearing down the price farmers receive for their 1937 wheat crop.

With short crops reducing surpluses, European countries bidding briskly of late for world supplies, for war purposes I fear, and with our own needs not any too well filled, the only thing that would seem capable of interfering with a good, substantial wheat price this year, would be gambling. And it is ridiculously unfair for market gambling to take money out of farmers' pocket-books.

While we all expect wheat prices to be good this year, I want to see farmers get the top dollar for their grain, without paying a rakeoff to gambling. The best way I see to do this, is to put into use all possible practices of orderly marketing of our crop. I hope creditors will consider the situation wisely and not force any measure of market dumping at harvest time. It is for the good of the state that farmers get full value for this important crop this year, and in the future.

Now I hope we are entering a period of better production years. If this is the case, there is an important fact to keep in mind. We again can have too much of a good thing. We can build up top-heavy surpluses. However, I hope we will use the best kind of judgment in planning ahead to avoid such a situation. I like to call it orderly marketing. We can make our production more nearly meet a profitable market demand by following better crop rotations and resorting to wider diversification. Not only is this a means of warding off weak prices, but it also assures us of profitable farming in the future.

War Preparations too Costly

FOR every \$3.00 expended in the United States for public education, including all state, city and local expenditures, Uncle Sam is spending \$2.00 for war preparations.

That is entirely too large a proportion for armament. I say that an adequate national defense for the United States, situated as it is geographically and economically, does not re-

quire expenditures of more than one billion dollars a year. That is why I have felt compelled to vote against army and navy appropriations bills in recent sessions of Congress.

It is small comfort to reflect that the record of other nations is even worse. Great Britain this year is spending some 1,390 million dollars for planes, tanks, battleships and other implements of destruction. For education the British budget calls for only 476 million dollars.

France is spending 185 million dollars a year for public education—five times that much for war purposes. Schools in Italy receive 130 million dollars a year; ten times that much on army and navy and war preparations and operations.

Uncle Sam spends a little more than 1 billion dollars a year on national defense; for public schools the annual expenditures in the United States total some 1½ billions.

Farm Ponds Are Included

IN CONNECTION with President Roosevelt's announcement of 2 weeks ago that he expects to use considerable WPA funds the coming fiscal year for the construction of farm ponds, I am glad to note that the national resources committee, in its recommendations for water conservation and flood control in the Kansas and the Arkansas river valleys, has included funds for investigating plans for farm ponds in both of these valleys. I am strong for the construction of more farm ponds. All of us hope it will be many years before the drouth cycle hits us again, but sooner or later it will. And the farm ponds and small lakes certainly help a lot under such conditions.

Decision May Affect Farming

IT IS MY hope that the Wagner labor acts decision of the Supreme Court of the United States, which lifts manufacturing out of the "purely local activity" classification and allows the Congress to legislate on labor relations in industry, will apply also to agriculture and mining. I never could understand the AAA decision handed down last year, in which the court held that agricultural production is a "purely local activity" beyond the power of the Federal government to deal with, no matter what the emergency. I maintain that the farm problem is a national problem, and must be considered and dealt with as a national program. And the Wagner decision seems to me an important step toward legal recognition of this fact.

Arthur Capper

Washington, D. C.

We Can Develop Local Poultry Markets

Market Barometer

Cattle—Gradually higher prices for most grades, especially slaughter cattle.

Hogs—Steady to slightly higher price trend is best that can be expected for near future.

Lambs—Not much chance for extra strength from now on.

Wheat—Everything pointed to steady prices, altho there was a recent price break.

Corn—About steady price levels for a time.

Butterfat—Lower prices by late April.

Eggs and Poultry—Steady levels seem probable.

IT LOOKS now as if having 10 to 30 per cent more pullets than last year in Kansas laying flocks for next fall and early winter, might be a good plan, said Vance M. Rucker, marketing specialist. Feed prices at present are causing a small early hatch.

Consequently, if poultry movements let up at all, the late hatch will be large.

Poultry producers who lost money last summer hesitate about going into the poultry business this spring. However, consumer demand is expected to be some 20 per cent higher in the late part of 1937 than in late 1936. This demand, coupled with favorable egg-feed ratios which should exist next fall, forms a sound reason for expecting higher egg prices early next fall.

The annual meeting of the Kansas Poultry and Egg Shippers Association took place in Manhattan last week. A hundred or more shippers were in for the meeting, and their discussions were particularly interesting in regard to the trend of conditions in the poultry producing business. Shippers were told by F. L. Stockard, president of the Institute of American Poultry Industries, that Eastern competition is a serious threat to Western poultrymen. He said that Kansas producers couldn't put light broilers on the Eastern market as cheaply as producers in that section. Grain is purchased from Minnesota and shipped on "Lake-rail" rate, via the Great Lakes, so that feed is nearly as cheap as in Kansas, even when grain is plentiful. As far as ordinary fresh eggs are concerned, the Western producer cannot compete directly with the Eastern poultry-

man, because the latter is 3 days closer to market and he has few refrigeration or special handling costs.

Mr. Stockard believes there is a prospect of developing more trade in canned or frozen eggs, a business in which Kansas eggs can compete successfully with the East. The housewife can buy this kind of eggs for cooking and get just as much quality at lower cost than by buying fresh eggs.

Another possibility is to develop local demand for broilers. "Chicken dinner" places have an important effect on poultry consumption, Mr. Stockard said, and he believes local trade should be developed in that way.

Because it takes longer to produce a "roaster" or heavy chicken, and the amount of grain required is considerable, the Middlewest can still raise them cheapest.

From these discussions it appears evident that one sure way to increase poultry profits is by the cost of production route. So high record hens, and careful feeding and handling, will have to be combined for the successful poultry flock in the future.

There has been a greater-than-average seasonal rise in farm prices of chickens this spring, and a less-than-average decline in farm prices of eggs. Chicken prices have gone up despite heavy market receipts and large storage stocks. A strong demand for eggs by cold storage operators was reported, with eggs going into storage at a rate 21 per cent in excess of last year, and at higher prices.

Trend of the Markets

Please remember that prices given here are Kansas City tops for best quality offered:

	Week Ago	Month Ago	Year Ago
Steers	\$12.75	\$ 8.25	\$12.50
Hogs	10.00	10.50	10.30
Lambs	12.50	11.10	15.00
Hens, Heavy	.17	.18	.17
Eggs, Firsts	.21	.18½	.21½
Butterfat	.30	.25	.33
Wheat, Hard Winter	1.42	1.09	1.41½
Corn, Yellow	1.41	.68	1.25¾
Oats	.57½	.29½	.53½
Barley	.92	.46½	.88½
Alfalfa, Baled	30.00	11.50	28.00
Prairie	19.00	6.50	16.00

Farm Sales: Farm sales by the Federal Land Bank of Wichita for the first quarter of 1937, reached a total of \$812,736 for 247 units. Sales for the last 3 months exceed those of any previous quarter since the bank has been in operation.

Value of Power Equipment Is In Saving of Chore-Time Minutes

By F. W. ATKESON
Dairy Husbandry, Kansas State College

MANY studies have been made of the use of labor-saving devices on the dairy farm. Equipment studied has included milking machines, power-driven cream separators, electrically operated refrigerating units, sterilizers, feed grinders and feed mixers. The conclusions regarding the place of each piece of equipment on dairies of various sizes have been based on the viewpoint of investment, hours of labor saved, and power costs for operation.

No one can question the validity of such conclusions, but we must face the fact that many dairymen are using milking machines, power separators, and other equipment, in herds much smaller than would appear justified by research studies. Of course, we occasionally find a dairyman quite mechanically inclined who may tend to over-emphasize power operated equipment. Such men, however, represent a relatively small proportion of total number that appear to be over-equipped.

These men are clear thinking business men who are making an effort to obtain a profit from their dairy herds. For example, surveys of dairy herd improvement association members, and these represent the progressive dairymen, show that many of them use milking machines. Machines are used in herds of 10 to 15 cows while most studies show that at least 20 cows are necessary before a machine can be justified. Are such dairymen wrong, or are the research studies wrong? Perhaps neither; perhaps the difference is a matter of viewpoint.

Jobs Done "By the Clock"

Let us look at the problem from the dairyman's viewpoint. Any study of labor saving on the dairy farm, to be in tune with the dairyman's problems, must be divided into chore-time labor and between chore-time labor. In general, the hours between 8 o'clock in the morning and 4 o'clock in the afternoon are subject to much the same kind of analysis on a dairy farm as on any general farm. In other words, none of the jobs are so pressing that they must be done by the clock.

Chore-time, however, is another story. About 2 hours is all that can be allotted to morning chores if the dairyman is able to be thru with breakfast at 8 o'clock. The evening chores must be done in about the same time if the work is completed at a reasonable hour. Many of the duties around a dairy are packed into these 2 periods of about 2 hours each. Once the chores begin the dairy farm becomes less like a general farm and more like a factory, with every step in the plant operation hinging on the preceding step.

The steps are about as follows: 1. The cows are brought into the barn. 2. Cows fed. 3. Cows cleaned. 4. Milking machines and separator set up. 5. Milking done. 6. Separating started. 7. Calves fed. 8. Calf buckets and milking utensils washed. 9. Cows fed hay and bedded for night or turned out

and barn cleaned. Other tasks such as feeding dry stock, heifers and bulls could be done ahead of this schedule but usually are not. Some overlapping of jobs exists, such as milk cooling, and separating while milking is going on, but in general, each of the above steps takes place in rather definite sequence.

Must Use the Same Labor

Now, what about time saving at chore time? The well-organized dairy must use the same labor at chore-time that is used the rest of the day. Even if twice as much labor was available on an hourly basis, the dairyman still would be faced with the step-by-step chain of operations. If he had twice as much help he would have to put virtually everybody to doing the same task, as the calves could not be fed until milking and separating were well along, and the utensils couldn't be washed until the calves were fed.

The whole equipment problem is one of saving minutes rather than hours, in order that the dairyman may handle more cows with the labor available. Even if more labor were available, the need for greater volume of production for every man unit would still exist.

There is another important justification for power-operated equipment, and it might be called the dairyman's stability of happiness. How often have we seen successful dairymen making money from their dairies but attempting to carry too large a burden in order to increase volume? They stand the strain of long hours just as long as

It's All the Same, to Dairy Cows Whether Years Are Fat or Lean

By J. C. MOHLER, Secretary,
Kansas State Board of Agriculture

FROM buffalo to Herefords and Shorthorns, Kansas always has been a cattle country. In recent years we have turned to the dairy type without losing prestige as a beef state and now take a definite rank with the distinctive dairy states.

The Kansas milk cow is one of the main standbys in times of adversity. She brings a steady daily cash income as does no other farm animal. Her product is one of man's most valuable foods that cannot be imitated in life-sustaining quality. She pays 100 per cent of her value every year and keeps it up, while her steer brother brings his profit just once. In the long, hot days of summer, when flies are going good, she affords the only opportunity in Kansas where one can get a legitimate drink with a real kick to it.

During the last 10 years, 1927 to 1936, despite the drouths in 5 of them, the Kansas cow produced an aggregate

necessary to make enough money to quit. The development of a commercial dairy business, or the breeding up of a high class herd, can only be started in a 10-year period. The ground work is just laid for real progress. Even if a little extra equipment is scarcely justifiable at present, the fact that the dairyman remains happy in his work and continues in the business may more than offset the extra cost by increased efficiency in later years due to improved judgment and ability. If dairying in America cannot be so organized that its very success will not drive men from the business, it is a slander on the judgment of those engaged in it, and does not deserve its rightful place in the American standard of living.

Thus, without any thought of suggesting the purchase of unneeded equipment, the question of labor saving devices on the dairy farm, particularly those used at chore-time, may be worthwhile sometimes when the figures might seem to say no.

value of \$321,375,248, or an average value of \$32,137,524 a year, while the annual average value of the 623,684 milk cows of the state was only \$30,240,506, or \$1,897,019 more for the products than the animals themselves.

In this decade the Kansas cow produced 723,694,863 pounds of butter, or more than enough to ease down all of the bread from the more than 13 million barrels of flour annually produced in the state. This butter was worth \$217,299,882 and with its average of \$21,729,988 a year, was one of the big items in the annual total of \$32,137,524. The production of Kansas butter has increased from a minimum of 59 million pounds in 1929, to 91 million in 1935, and the latest government report shows that Kansas ranks 6th among the states in volume of butter shipped to the principal markets.

A Record Cheese Climb

A surprise element in the dairy record of Kansas is the rapid growth in cheese production. It was long thought that good cheese could not be made where the summer temperatures ranged above a certain average. But modern methods have disproved all that and Kansas has stepped up from a total of 463,623 pounds of cheese in 1927, to 9,334,388 pounds in 1936, and from a value in the former year of \$76,187 to \$1,203,171 in the latter, and has shown a uniform increase in both volume and value thru the decade.

Not all of the industry of the Kansas milk cow is concentrated in the production of butter and cheese. During this decade she is credited with 422,555,125 pounds of condensed milk, worth \$26,656,930, from the state's 7 big factories. From the records, it would appear that Kansas people did not eat as much ice cream during the years of the drouth as had been their custom. In 1927, the total of ice cream manufactured in Kansas was reported at 4,603,249 gallons, but in the drouth year of 1934, this amount dwindled to 1,795,962 gallons, reached 3,007,406

Cattle Feeders' Day, May 8, at Manhattan

THERE are several important livestock field days in Kansas every spring. Counted among the most important, particularly for the eastern two-thirds of the state, is Cattle Feeders' Day at Kansas State College, Manhattan. This year the date is May 8.

Dr. C. W. McCampbell, in charge of animal husbandry work at the college, said the date was set early so visitors may see the well-wintered cattle before they go to pasture. In this experiment, choice steer calves have been wintered so as to gain about 250 pounds between November and May. They will be turned on bluestem grass, grazed 90 days, and then fed 90 days for market. Visitors will see these cattle, and also cattle which have been fattened this winter and spring.

The early part of the forenoon, May 8, will be devoted to looking at the cattle. Speaking in the pavilion will start at 10 o'clock. A summary of cattle feeding facts presented at all previous "Cattle Feeders' Days" will be given. Molasses discussions also are scheduled. A beef lunch will be available right on the grounds.

gallons in 1935, but dropped again to 2,340,909 in 1936. The total for the decade was 30,806,909 gallons, worth about \$1 a gallon at the factory.

After producing all of this butter, cheese, condensed milk and ice cream, the Kansas cow still had enough in reserve during the biennium to retail by the pint and quart a total of \$39,601,528 worth of milk and cream to those poor souls who have money but no cows, and who can't enjoy the pleasure of owning an animal that brings in more of cold cash every year than her own value.

Cows Over-Shadow Corn

In 3 recent years the Kansas milk cow has produced more value than was harvested from an average of more than 5 1/2 million acres in corn. Hampered by unparalleled conditions of feed shortage, water scarcity, dust storms and plagues of flies, the Kansas milk cow has carried on. During the depression, when distress sales were not uncommon, every effort was made to retain the good milk cow, and she responds with increased production.

In Kansas agriculture, the milk cow, collectively, is a big thing. Conservatively stated by an old-time Kansan noted for his keen observation and unquestioned truthfulness, "a combination of all Kansas milk cattle into one animal would make a cow whose milk would replace the Great Lakes; whose body would extend from the Gulf to the Arctic, and while she browsed on the greenery of the tropics, her tail would brush the sparks from the Aurora Borealis."

This picture may be adequate for the present, but soon may have to be redrawn, as the dairy cow seems bound to grow in importance with the passing of time. Under modern methods of farm management, she will loom larger than ever before as a factor in farm stability and rural betterment.

Let's Go to Hays Round-up

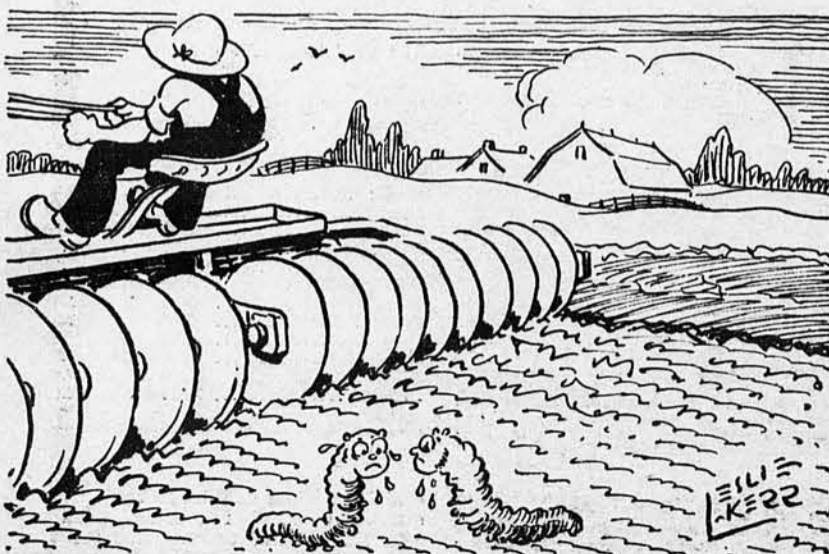
This is last minute notice of the big Northwest Kansas Cattlemen's Roundup, which will be held at the Hays Experiment Station this Saturday, April 24. Visitors may look at the experimental cattle thruout the day. An interesting speaking program for beef men will start at 1 o'clock. It will be followed by a field demonstration of basin listers and leveling operations. This always is one of the best beef meetings of the year. The experiments are based on various protein concentrates used to winter yearling steers fed Atlas silage for roughage.

Legumes Pay Most

The Allen county agent, Earl Means, submits figures which indicate the value of crops grown on Allen county farms, and may be used as a guide to profitable crop planting. These figures are:

	Acres	Production	Value
Soybean hay	1.44	tons	\$13.23
Soybean grain	8.7	bu.	14.78
Oats	23.7	bu.	7.88
Kafir grain	18.9	bu.	9.59
Wheat	15.4	bu.	13.09
Corn	18.0	bu.	9.73
Flax	6.5	bu.	10.47
Alfalfa	2.35	tons	26.06
Prarie hay	1.0	tons	5.91

Alfalfa is seen to lead, with soybean grain and hay, and wheat in a group considerably further behind. The cost of growing alfalfa on some types of land probably is above that of other crops.



"Well, can you beat that—now our dining-room and living-room is all thrown together."

Our Busy Neighbors

ALL OVER KANSAS

Wheat Grass Seed High

Some farmers are beginning to believe they could have made a lot of money by stripping the Western wheat grass from the patches along the fence-rows last summer, reports the Thomas County Farm Bureau. Seed now is high and scarce.

Turkey Income in April

Turkeys brought April income to Mrs. Guy Olson, Thomas county. She sold "Pete," a local lunch counter man, several nice turkeys for a special hot-turkey sandwich day. It is reported the demand for turkey sandwiches was as good in April as in November or December.

Started With a Lamb

Boys get into business one way or another, but Nicholas Carl, of the Wacanda 4-H Club, Mitchell county, started with a bottle lamb last year. He sold the lamb, added 12 cents to the returns and bought 2 ewes. Now the 2 ewes have 3 lambs.

Invents Rotary Sickle

Sylvia Maniger, Harper, has invented a rotary sickle that can be attached to any combine or binder, and threatens to be a competitor for the old style sickle. He has sold his patent to a manufacturing company in Peoria, Ill.

Fall Injures Neck

Chester Lukens, who lives near Holton, fell from a load of hay, fracturing his hand and badly injuring his neck. He was driving into his yard on top of the load when a telephone wire caught him. It is rather surprising to learn that there is a load of hay in Kansas big enough to fall off of.

Junk Attracts Thieves

Sheriff Roy Boast, of Shawnee county, blames a hike in iron and steel prices for several thefts reported in rural sections of the county. The thieves have stolen farm implements and about all the iron and steel they could "lay hands on." The sheriff declared that his deputies have been kept busy investigating such reports. He issued a warning for farmers to take precautions against leaving property in places where it can be carried off.

Note Machinery Shortage

Wheat farmers of Liberal community, eyeing the best crop prospects in 6 years, have noted a shortage of wheat harvesting machinery. Farm leaders said it might be necessary to import combines into the Southwest area this summer.

Agent for Indian Service

Martin D. Cheadle, now farm management supervisor for the Resettlement Administration for Indian reservation areas in Jackson and Brown counties, has been named farm agent for the Indian service succeeding Jesse J. Spring, recently transferred to Ardmore, Okla.

But Chinese Elm Lived

An excellent windbreak of Chinese elm trees has been grown by Frank Micek, Atwood. These trees are several years old and stand about 15 feet high at the peak. American elms planted in the same windbreak appear to be nearly killed out by drouth, hoppers or disease.

All Fight Soil Blowing

Marvin Murry, of Gray county, is well pleased with results obtained from his strip-crop practice so far. He believes it will do considerable good in the spring to help control wind erosion. V. R. Oline, Gray county agent, reports that neighbors of Mr. Murry also are satisfied with their results. A good

many farmers in Logan township organized there last year to fight wind erosion in an organized way. They had planned to use strip-cropping as one means of soil control before the AAA announced its program.

Good Way With Wheat

Seven hundred acres of wheat in Wichita county, belonging to Clark Kostner, is greening up nicely and promises a good crop. This wheat was seeded early, came up well and the grasshoppers took it. It was drilled again early in November with the temperature near zero. The soil was mostly listed early last summer, then broken down and worked with a field cultivator. Kostner said this type of implement will tear up rough soil if anything will. Last summer he harvested 15-bushel wheat on this farm from land handled in this manner.

One dollar paid for each of the two best contributions for this Neighbor page. Address Farm Neighbor Editor, Kansas Farmer, Topeka. We reserve privilege to publish all communications sent. No manuscripts can be returned.

Big Crop of Peas

Nearly 900 acres of peas will be planted in the Kaw Valley just as soon as the ground is dry enough for the farmers to get into the fields. Pea contracts have been signed by farmers north of the river from Williamstown to Fall Leaf and on the south side of the river from Eudora to Lake View, with other acreage in the Wakarusa river valley.

Irrigation Helped Alfalfa

One of the interesting fields of alfalfa in Southwestern Kansas is 29 acres of Ladak variety on W. A. Burch's farm, near Fowler. Mr. Burch is in partnership with Art Cummings, of Fowler, Mr. Cummings having supplied the seed for a share of the first seed crop to be harvested. The alfalfa was planted the spring of 1936, and Mr. Burch had a real fight with grasshoppers last summer but the new field came thru all right.

Another new crop variety which Mr. Burch grew the last few years is Flynn barley. He was about the only farmer



D. L. Wheelock, Clay Center, Secretary of the Kansas Jersey Cattle Club.

in Kansas to produce seed of this variety for sale from the 1935 crop. About 135 acres of his 160-acre creek farm can be irrigated. Water is pumped from the Crooked Creek valley.

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McCORMICK-DEERING

How a U. S. Farmer Sees Things On the Other Side of the Ocean

ROBERT C. VANCE

Poland, the cradle of democracy, stages a comeback. Article No. 14, in the travel series by Mr. Vance.

AT THE Russian border I was put thru as severe a baggage inspection by the Russians as when I had entered their country. My money and traveler's checks were counted and compared with the paper I had filled out at the port of entry. Three rolls of camera film were confiscated. My few remaining roubles, which I was not permitted to take out of the country anyway, went to grease the inspector's palm before I was cleared. When I had walked forward about 25 yards and boarded a Polish train, even the air seemed to have a fresher smell.

Since my return home I have been accused of being unfair by comparing conditions in Russia with the United States. Instead I have used Finland and Poland for comparison, and the greater part of both of these countries was a part of the old Russian empire.

Poland was more completely wrecked by the World War than Russia; yet in the short space of 20 years she has not only staged a comeback but is forging ahead.

After the train had passed thru the neutral zone, a Polish army officer entered my car. He and I were at one end of the corridor and a crowd of French people, returning from Moscow, were at the other. Every Frenchman was wearing the Hammer and Cycle badge of the Communist party and they were chattering like a bunch of magpies.

I understand no French, but because they were so often repeated, I caught the words "Soviet," "Moscow" and "Communist." The Polish officer evidently caught the words, too, for his eyes fairly glittered with hate. After giving me a close inspection he beckoned me over to his compartment and opened a little bottle of wine.

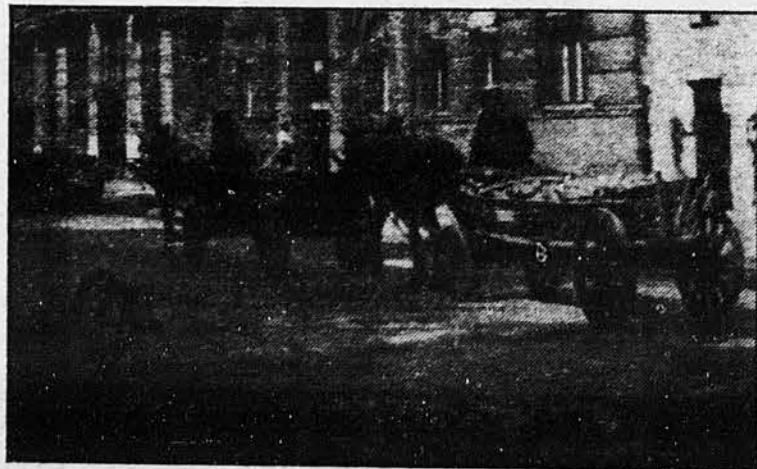
Because of the language difficulty, the officer and I were unable to exchange one word, but somehow we seemed to understand each other perfectly. I am confident that the toast he proposed was to democracy. At any rate, I drank it.

HISTORY credits Poland with incubating the first germs of democracy. A parliament was established in Poland as early as 1430 and the country became a republic in 1573.

Other rulers looked on this strange new form of government as anarchy and feared it might spread into their kingdoms. For the next two centuries Poland had to fight a continual battle for existence. She was finally crushed in a giant nutcracker, the jaws of which were Germany and Russia. The Polish Republic passed out of existence in 1795 and the territory was divided.

In the World War ancient Poland was the battleground for the armies of Russia and the Central Powers. More than 2 million Poles were conscripted into the opposing armies. Practically all livestock was killed for food. More than 1½ million farm homes were burned and the country was left a desolate waste. Agriculture was ruined—and 72 per cent of the people of Poland had lived by agriculture.

As was the case in Finland, it was hatred of Russia rather than any love for Germany that caused many Poles to volunteer in the Austrian and German armies. Joseph Pilsudski raised a Polish Legion to fight against Russia. When Russia was defeated he refused further allegiance to the Central Powers. Germany then imprisoned him until the war ended.



Wagons in Warsaw. The wagon box rests flat on the trucks. Hard riding!

Treaties at the close of the war restored ancient Poland's lost territory and a new nation was born. On his release from the German prison, Pilsudski hurried home to help form the new government and was chosen Chief of State.

His first move was to build a Polish army, using the veterans of his old Polish Legion as the nucleus. In 1920, Moscow began to get ideas and sent an army to capture Warsaw. Pilsudski gave the Bolsheviks such a beating that they have since been more than glad just to play in their own backyard.



Pole harvesting his oats. "Farming in Poland is still a mighty tough racket."

Pilsudski refused to serve as president of the new Polish Republic, and Ignace Paderewski, who was well known thruout the United States for his great musical talent, was elected the first president.

I found Warsaw a clean, modern city. The people in the streets were well fed and well dressed. It is true that I saw a lot of men who were keeping some good horse out of a job by pulling wagons thru the streets, but at least they were wearing shoes and appeared to have had enough to eat. After all, 20 years is a small measure of time in the building of a nation.

Letters of introduction given me by the Polish Consul and the Secretary of the Polish American Society in New York gained me interviews with officials in the Department of Agriculture in Warsaw. There I was told something of Poland's "land policy."

Prior to the World War the greater share of Poland's land was held in large estates. Peasant holdings were very small and were usually divided up into small strips. A farmer might own but a few acres and yet have several fields that were miles apart. These small fields made the use of machinery impossible and farming was a hard, poorly paid occupation.

The new Polish Republic recognized agriculture as a special problem. The "Land Reform Bill," passed in 1919 and revamped in 1927, is aimed to do away with the "strip" farming and consolidate the small parcels into family-size farms. The government is empowered to enforce the sale of any land holdings of more than 360 acres. A National Land Bank has been established to finance small landowners to buy more land. Payments are extended over a number of years and interest rates are low.

Santa Claus does not enter the picture, however. There seems to be no provisions for

the man without land or capital to own a farm. Most of the farmers having lost everything in the war, are not in shape to expand. Up until 1935, only about 4 million acres of scattered plots had been consolidated into family-size farms.

There is an estimated area of 50 million acres that requires drainage. The government supplies the engineers and the farmers supply the labor. Where the drainage district is waste land and is reclaimed, it is divided up among the villagers who do the work.

Judging from what I saw, it is my belief that farming in Poland is still a mighty tough racket. Despite this, Poland is, in comparison with the other countries of Europe, third in the production of rye and potatoes, second in flax and third in cattle and hogs. It also is the second largest horse breeding nation in Europe.

Up until the formation of the new Republic there was a large per cent of illiteracy in Poland. Now 16½ per cent of the national budget is set aside for education. There is free and compulsory education for all children that are between 7 and 14 years old.

In most of the public schools each class is given one month of special courses in physical training. This is creating a national interest in sports. In Warsaw I saw more people wearing the interlocked rings, indicating that they had attended the Olympic games in Berlin, than in any other city.

Poland has a universal military service, each recruit serving 18 months. The army is looked upon as a good training school for the recruits from the backward districts, for it teaches them cleanliness, obedience and civic responsibility.

Do You Like Vance Articles?

Mr. Vance's European travel articles are nearing an end. The editors would like to know whether you have enjoyed reading them. Now he is going to South America to report on agricultural conditions there. If you wish us to continue to follow his experiences, won't you please drop a line to Kansas Farmer, Topeka, Kansas, Dept. R. H. G.

Despite the new apartment houses going up, Warsaw lacks sufficient housing. Overcrowding is especially bad in the Ghetto, or Jewish quarter. Poland has always had a large Jewish population, and since Hitler's rise to power thousands more have fled from Germany to Poland.

No visit to Warsaw is complete without a visit to the Ghetto. A young Englishman and his wife and I hired a one-horse open carriage for the trip. We proved to be as much of a curiosity to the Jews as they were to us. There must have been 100 boys from 12 to 20 years old in the crowd that swarmed around our carriage. Our driver kept them off the carriage by standing up and slashing every one he could reach with his whip. Several times we were asked in German if we were from Germany. Needless to say I tried to look as little like a German as possible.

Theoretically, Poland offers religious freedom to all creeds. The European Jew, however, is very sympathetic toward Moscow, and Warsaw's population is nearly 40 per cent Jewish.

I was told that a popular outdoor sport among young army officers, when they are feeling their oats, is to stage a "pogrom." Dividing into squads, they enter a street in the Ghetto from both ends. Every Jew they can catch is then subjected to such indignities as being cuffed around and having his whiskers cut off, and the loss of his whiskers is a very serious matter to an Orthodox Polish Jew.

Altho Poland had a great task of reconstruction after the war, this new Republic has gone a long way in enacting a Social Security program. Every worker in Poland is subject to compulsory health insurance, one-half of the (Continued on Page 12)

Until Dinner Is Ready—

BY THE EDITORS

Mills: The new tax tokens to be used in paying the 2 per cent sales tax will be made of aluminum, it has been announced. The tokens will be in 1 and 5 mill denominations, and 15 million tokens probably will be needed to start. The reformatory at Hutchinson will manufacture the tokens.

Cow Queen: Earline of Jo-Mar 309336 has completed a record which makes her queen of all 4½-year-old Kansas Guernseys in Class BHI of the American Guernsey Cattle Club. "Earline" was bred by Nathan L. Jones, of Salina, and is owned by E. H. Whitlow, of Tecumseh, and in 1 year made a record of 9,137.8 pounds of milk and 466.3 pounds of butterfat.

Soil Board: Jonas Graber, of Kingman, and H. F. Sutton, of St. John, have been appointed as members of the state soil conservation board. Other members of the board are the dean of the Extension Service at Kansas State College, Manhattan; the head of the Kansas State Experimental Station, at the college, and a member to be appointed by the secretary of agriculture at Washington.

Bindweed to Congress: Representative Clark of Idaho—yes they have bindweed there, too—has introduced a bill in Congress to appropriate 50 million dollars for bindweed eradication. His arguments for the bill follow such as would naturally follow the comment of the Nebraska College of Agriculture agronomist: "There's lots of land in Nebraska that can be had for a song because it is covered with bindweed. This is good land, too. But bindweed makes it almost worthless."

Farm Sitter-Downers: Nearly every farmer in the land has wondered, these last few months, what would happen if farm help started a sit-down strike. We can tell them. Reports from

Southeast Missouri are that 7 workers on the T. J. Greenwell plantation, near Hayti, Pemiscot county, struck, and that shortly after the strike started the strikers were sitting down in jail. They were demanding \$1.25 for an 8-hour day, a change in pay and hours from their \$1 a day of 10 hours work.

Racket: The AAA has issued warnings against persons who represent themselves as AAA agents and collect fees for taking "claims for processing taxes paid out by consumers" under the adjustment program. Don't let yourselves be "taken-in" by such fakery.

Stingless Bees: A college professor, Dr. Lloyd R. Watson of Alfred University, proposes to de-sting bees by the use of radium rays. If his experiments prove successful he sees a nation of stingless bees by 1940.

Million Mark: 4-H Club enrollment in 1936 passed the million mark for the first time, exceeding the 1935 membership by almost 150,000 boys and girls. Early reports indicate that the total may have passed 1,130,000 members.

Dairy Show: For the first time in 18 years Columbus, Ohio, will be host to the National Dairy Show in 1937. It will be held at the state fair grounds, October 9 to 16.

Death Crossings: Reports show that 1,786 persons were killed in highway-railroad grade crossings accidents in 1936, the highest number in 5 years. Persons injured in such accidents numbered 4,930. "Railroad crossing, look out for the cars."

Apples: The United States is the largest producer and exporter of apples in the world. During the last 5 years we have produced 31 per cent of the world's 500 million bushels.

How Holstein Herd Test Works

By C. L. E. EDWARDS

THE Herd Test of the Holstein-Friesian Association has been in progress since 1928, and the records of herds tested every year are reported in the Herd Improvement Register Year Book, or Red Book. Volume 8, of this publication, which now is being prepared, will report the work of last year and will include the herd averages for 413 herds including 8,566 cows tested thruout the United States. These reports give the average production in pounds of milk and butterfat for every cow in every herd, with the classification to show the number of daily milkings. The sire list in the Red Book shows the tested daughters of each sire on the basis of lactation records, and a second list includes all cows with 3 or more tested daughters.

Another feature of the Red Book is the list of sires, with indexes. This list includes all sires with 6 or more tested daughters whose dams also have records. Average figures for the production of all these daughters are given for comparison with the production of their dams. Because of the differences of ages of cows tested and, also, on account of the difference in the number of daily milkings, each individual record is first adjusted to a basis of mature age and 3 times a day milking so that all may be made as fairly comparable as possible. Mature cows from 5 to 8 or 9 years old will produce more milk in a year than they produced as heifers and, also, cows milked 3 or 4 times daily will produce more than if milked only twice daily. These adjustments bring all records to a comparable basis as nearly as possible.

The factors used in adjusting the records are based on studies of more than 10,000 Herd Test records. Many animals have several records and in such cases each individual record is adjusted and the average of the several records is taken as the production of the cow. In this way the average of all the tested daughters of the sire is obtained and the average production of their dams is figured in the same way. The index is an attempt to determine the transmitting ability of the sire. We

have the average production of his daughters and the average production of their dams, and we assume that the daughters lie about midway between the parents. Thus, if the daughters have higher average productions than their dams, we add the difference to the daughter average and the result is considered to be the transmitting ability of the sire. For example, if a sire had 10 daughter-dam pairs, the daughters averaging 14,000 pounds of milk and the dams averaging 13,000 pounds the difference—1,000 pounds—added to the daughters' average would give 15,000 pounds as the sire's index for milk. But if the daughters averaged only 12,000 pounds and their dams averaged 14,000, the difference—2,000 pounds—would be subtracted from the daughters' average, giving the sire a milk index of only 10,000 pounds. In the same way, the index for per cent fat is figured, adding to or subtracting from the daughters' average for per cent, as the case may be. Then by combining the index for milk and per cent fat, we obtain the index for fat production.

Interest in proved sires has increased rapidly during the last few years and the use of the sire index has grown accordingly, as the index is merely a form of expression of the transmitting ability of the sire. At present more than 500 herds of pure-bred Holsteins, including between 14,000 and 15,000 cows, are on test for Herd Improvement Registry thruout the country.

The Kansas Holstein herds which have been on test for several years and reported in Volume 7 are:

- Kansas State Agricultural College, Manhattan.
- E. P. Miller, Junction City.
- Security Benefit Home & Hospital Association, Topeka.
- Ira Romig, Topeka.
- C. L. E. Edwards, Topeka.

In the last year there have been several other herds on test and in the next issue of the Red Book, which will be Volume 8, several new Kansas herds will be reported.

GET A CASE AND DO A COMPLETE JOB



**CLEAN CUTTING
•
CLEAN THRESHING
•
DOUBLE CLEANING**

To be a good combine—a REAL combine—it must do WELL each of three jobs: (1) **Cut all the heads.** Case guards lift lodged, tangled growth; cutter bar gets close to the ground for low-growing heads or pods; continuous canvas runs within a half-inch of sickle, all the way into feeder house; flexible header follows slope of ground, cuts at even height. (2) **Get grain out of straw.** Case close-combing all-steel cylinder puts teeth into threshing; non-clog steel-finger grates and steel-grid straw rack

separate grain from straw more swiftly, surely. (3) **Get grain clean.** Case DOUBLE-CLEANS... a first-class job at the all-steel shoe... a fanning-mill job in the recleaner... both by the Case air-lift method.

The Model H Combine shown above will do a COMPLETE JOB not only in the common grains but in field peas and soy beans, kaffir and alfalfa, in fact all crops that can be combined. Owners are enthusiastic in their praise of its work and capacity.

NEW MOTOR-LIFT COMBINE

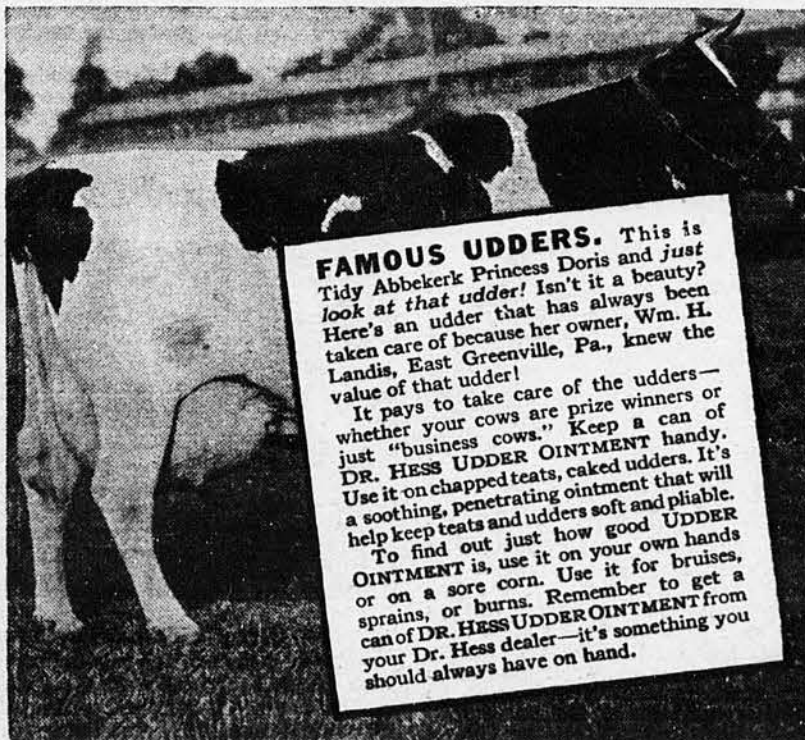
Case has a complete line of complete-job combines. Sizes to suit every tractor and every farm. The new Motor-Lift Model C raises and lowers header, also hoists it for transport, on engine power; header controlled from tractor seat. See your Case dealer; let him show you how Case does a complete job with simpler, stronger design that is easier to operate, easier to keep up, and lasts years longer. Mail coupon today.



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Trade with Kansas Farmer Advertisers

The products and appliances that they offer for sale are as represented. The things they say about farm profit and farm improvements are sound and truthful. We wish to recommend to you the advertisements in Kansas Farmer as an additional source of farm information and help.



FAMOUS UDDERS. This is Tidy Abbekerk Princess Doris and just look at that udder! Isn't it a beauty? Here's an udder that has always been taken care of because her owner, Wm. H. Landis, East Greenville, Pa., knew the value of that udder!

It pays to take care of the udders—whether your cows are prize winners or just "business cows." Keep a can of DR. HESS UDDER OINTMENT handy. Use it on chapped teats, caked udders. It's a soothing, penetrating ointment that will help keep teats and udders soft and pliable. To find out just how good UDDER OINTMENT is, use it on your own hands or on a sore corn. Use it for bruises, sprains, or burns. Remember to get a can of DR. HESS UDDER OINTMENT from your Dr. Hess dealer—it's something you should always have on hand.

From a Marketing Viewpoint

HOMER J. HENNEY

(Carrying costs and probable changes in feed costs have been considered in suggesting the best marketing program.)

I have some Angus heifers which weighed 333 pounds on January 1. They have been on rye pasture and I have plenty of Bluegrass pasture from now on. Would you suggest (1) starting on 90-day feed July 15, (2) selling off grass, or (3) keep on grass until new corn is ready?—R. D., Allenville, Ill.

About 8 chances out of 10 that No. 1, program will show a profit and about 9 chances out of 10 that it will net more than either No. 2 or No. 3 program, even if it should not turn out to be profitable. Unless prime steers at Chicago reach a yearly peak in April, May or June, you are fairly safe in No. 1 program. Start with it and write in on July 1, to see whether it then is advisable to continue as planned or to switch to the No. 2 or No. 3 program.

I have 10 calves weighing about 500 pounds that have gained 200 pounds since last fall. I have been full-feeding lately. Would you advise selling now or continuing the feeding?—H. P., Simpson, Kan.

About 8 chances out of 10 that these calves fed 2 to 4 months longer will pay for their feed. They are light enough yet to gain economically. Feed costs are more likely to decline than advance during that period, and prices for finished steers are more likely to advance than decline. Risks in continued feeding will increase should prime steers at Chicago by June 15, show signs of having made the yearly peak in April or May. I suggest you get in touch with the situation by letter each 30-day period, if you decide to keep on feeding.

I have some gilts that I expected to breed May 1, and sell about August. Corn prices are still getting higher. Would you advise selling the gilts now or going ahead as planned?—H. S., Topeka, Kan.

About 7 chances out of 10 that prices in August will justify continuing your original program when you consider the present value of the gilts if sold now. In this type of year most of the advance for the year tends to come after the first half of the year. The odds for profit above present value and feed costs to August are not strong but all factors combined such as a small spring pig crop, better business, and a probable large feed crop for 1937, warrant taking the chance.

I have some Bluestem grass not yet leased. Would you think advisable to lease for \$6 for yearling steers or \$5 now since most pastures are leased or would you prefer buying? If so what kind of cattle?—C. C., Cottonwood Falls, Kan.

About 8 chances out of 10 that one could net more by buying choice, thin 400 to 500 pound stocker steer calves on the present break than leasing one's grass for \$5 for the season for yearlings. This is assuming one buys the best quality calf that now costs between 8 and 9 cents and sells fairly early, if there is a big corn crop. It also assumes you have credit to carry this quality of calf to the spring of 1938 in case there happens to be a small corn crop. If one can get \$6 or better for grazing yearlings, which is the same as \$9 for aged steers, then one has about 7 chances out of 10 of making more by leasing the grass to some one else.

All-Day Holstein Meet

The Capitol Holstein Association will hold an all-day meeting April 28, at the Kansas Free Fair grounds in Topeka. There will be judging contests for everybody starting at 10 o'clock with prizes offered by the association. The senior team will be picked at this time to represent the association at Kansas Free Fair next fall in the state-wide contest sponsored by Kansas Farmer.

The Topeka Chamber of Commerce is sponsoring a luncheon at noon at the Hotel Jayhawk for all Holstein enthusiasts who attend this meeting. Robert

Gieger, fieldman for the National Holstein Friesian Association, will be the noon speaker.

Prizes will be offered by Topeka business houses for cattle showings. Those entering this part of the all-day program include: St. Mary's College, Topeka State Hospital, Boys' Industrial School, C. L. E. Edwards, Romig & Sons, David Pence, Jr., Clayton David, Ted Dale, Phillip Romig, Martin Presgrove, Lawrence Edwards and Mrs. Jack Mosby. H. W. Cave, Kansas State College, will judge the show. Counties included in this Association are Shawnee, Wabaunsee, Osage, Pottawatomie, Jackson and Coffey. Robert Romig, of Topeka, is president.

Best Gardens in Kansas

The garden spot of Kansas! Where? Northeast Kansas? No! That section does have many hundreds of good home gardens. But Southwest Kansas has the best gardens of the state every year, even in 1934 and 1936. This fact has been continued during the course of farm garden programs conducted by the Extension Service of Kansas State College co-operating with county Farm Bureaus in 90 Kansas counties beginning in 1929.

The advantages Southwest Kansas has which enable that section to grow good gardens are a long growing season with ample time for fall garden crops to mature, a relatively high altitude with cool temperatures at night, plentiful supplies of water for irrigation over most of this section, according to Henry L. Lobenstein, Extension specialist in horticulture.

Even more important, perhaps, is a widespread interest in home gardens among farm people and a determination to succeed which, without question, provides the incentive for overcoming obstacles such as drouth, dust storms and insect invasions.

For that section, and in fact for the entire western half of the state, it may be said that the 3 essential requirements for successful gardens are windbreaks, irrigation and determination.

Gardens Need Windbreaks

By WILLIAM G. AMSTEIN
Kansas State College

Food produced this summer for use this season and next fall and winter will be the result of careful planning and hard work. One feature of careful planning is to provide windbreaks. Too many gardeners neglect this fact, thinking it means a delay of 5 to 10 years in order to grow a permanent protection. This is not always necessary. Hundreds of Kansas home gardeners have successfully used temporary windbreaks such as annual crops, lath fence or discarded roofing.

The John Schneider family, in Rush county, have cut up old tanks and placed around the south and west sides of their garden. In addition, a thick planting of corn has been made every 7th row thru the garden for further protection.

At Emil Fisher's, in Edwards county, protection afforded by board fences and buildings have done much to improve



People who like picturesque water scenes enjoy the waterfall on the Saline river at Lincoln. Power is still transmitted to the old mill at the right. In the background is a modern silo. The view is from the bridge on highway No. 14.

their garden production in recent years.

In Haskell county, the Grant Dunn family has used sorghums to provide necessary protection for low growing crops.

Atlas sorgo, Sudan grass, corn, okra, or other similar crops can be planted rather thick and grown on the south and west sides of the garden plot. In addition, this device can be used every few rows thru the garden to give interior garden protection to the crops. This arrangement needs to be repeated every 30 to 35 feet across a large garden in order to provide sufficient protection.

A New Lamb School

An added attraction for Kansas sheep men, one which will appeal to the flock owner, is the first annual Kansas lamb school, to be held in the American Royal building in Kansas City, May 26-27. Production of good lambs and a safe marketing program, are features of the school.

A carcass demonstration will be staged with lambs brought in by farmers from 50 or more counties. There will be a round trip of the lamb market, methods of dipping and drenching which may be used on farms, and all

the features of marketing which will explain for themselves why farmers should bring tippy, uniform lambs to the stockyards market.

Five fleeces and 5 lambs will be entered from each Kansas county, after selection in a county show. There also will be 5 farmer-delegates from each participating county. Carl G. Elling, extension sheep specialist at Kansas State College, is back of the lamb school for Kansas farmers.

'Catawampous' Garden Rows

The 1937 style in garden rows might be modeled somewhat after the contour farming feature of the 1937 Agricultural Conservation Program. This method, as adapted to gardens, might be termed "catawampous" rows. That is, instead of running the garden rows either north and south or east and west, the method proposed is to run the rows from southeast to northwest to give additional protection from prevailing winds, usually from the southwest. By use of high growing protective crops on the outside and repeating the arrangement every few rows, a real system of protection can be developed thru this device of "catawampous" or diagonal rows.

Angus Folks All Pull Together

THE 12th annual Better Livestock Day, sponsored by the Angus breeders of Geary and Dickinson counties, and held on the farm of "Andy" Schuler, near Chapman, was another crowning success. This gathering is a unique example of a community of breeders who set out to advertise their local herds and their breed, the Aberdeen Angus.

Some of the men who have been most active in the movement are Ralph Poland, the late Charles O. Munson and his sons, "Jim" Hollinger, "Tully" Mullins, and Wm. Ljungdahl who now lives in Thomas county. They started with the idea that advertising their herds thru a local field-day would build a wide

interest in the local community and over the state, too. The plan has been very successful.

Last week 746 people took part in the judging contests which are a primary part of the day's entertainment. Forty-nine 4-H boys teams, 17 4-H girls teams, 34 Vocational Agriculture teams, 60 college students, and 386 farmers made up this total. After the placings were completed by the contestants, F. W. Bell and J. J. Moxley, of Kansas State College, made the official placing on 8 different classes of Angus and explained these to a wide circle of interested people.

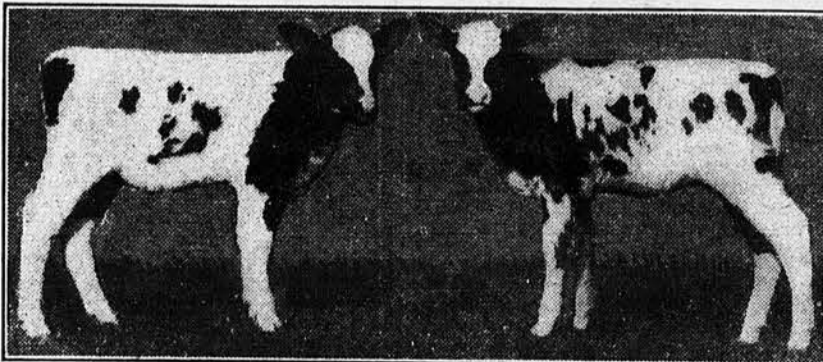
The usual delicious lunch of Angus beef with proper trimmings was served to about 2,000 people at noon, and this was followed by a worthwhile program in which Angus breeders took a prominent part. Mike Wilson, Angus breeder of Horton, brought greetings from Eastern Kansas Angus men, and Wm. Ljungdahl, of Menlo, did the same for Western Kansas. Rep. Gaylord Munson, of Junction City, presided. W. H. Tomhave, secretary of the American Aberdeen-Angus Breeders Association, was an honored guest of the day.

The Chase county vocation team won first in that division. The members are Doyle Conley, Jack Osburn, James Scott, and the coach L. E. Croy. Doyle Conley was also the high point vocational judge.

In the boys' 4-H class, the Geary county Who's Who club was first, the members being Charles Streeter, Billy Rogers, and Ralph Dietrich. Charles Streeter was high point individual judge in the 4-H class and also the entire contest.

The Geary county Who's Who club also sent the prize girls' team, with Alice Rogers, Helen Feist and Verda Gwin. Alice Rogers was high point girl judge.

Howdy Folks! We're Twins!



WE ARE just a bit proud of our mother. She is the 100th Ayrshire cow to make a cumulative production record of 100,000 pounds of milk. We live with Hugh J. Crisholm at the Strathglass Farm, Port Chester, N. Y. Our mother's name is Strathglass Jingle, and we have 8 other brothers and sisters, all of us born within a period of 8 years and 3 months.



IT TAKES LOTS OF WATER TO MAKE BEEF AND MILK

To PAY a profit, both beef and dairy cattle must be kept in condition—and this means plenty of fresh clean water, especially in hot weather.

Now, before seasonal droughts set in, is the time to check over your water equipment and replace all unserviceable tanks.

But don't gamble on an ordinary tank. For just a trifle more you can get one made of Armco Ingot Iron—the well-known metal that is highly refined for extra durability.

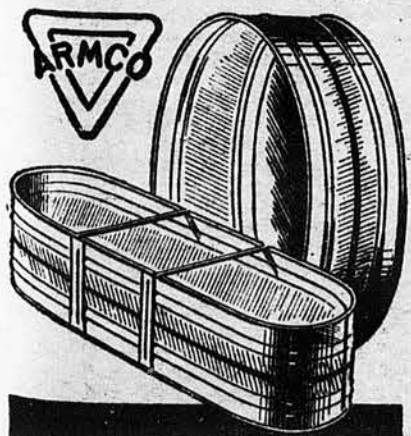
Leading manufacturers of stock tanks, grain bins, combines, feeders, silos, septic tanks and other forms of farm equipment use Armco Ingot Iron for their better lines, in preference to all other sheet metals—because it lasts, because it is thrifty.

Look for the Armco trade-mark. It will save you trouble and save you money.

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Kansas Farmer for April 24, 1937.

No Bees—No Pollination

JAMES SENTER BRAZELTON
Echo Glen Farm, Doniphan County

THERE must be plenty of bees in the apple orchard at blooming time if adequate pollination is to be accomplished. More and more, growers are realizing this and are taking steps to provide them, either by going into the bee business themselves or by renting hives just for the blossoming period. In an apple growing section the thousands of blossoms to be pollinated are out of proportion to the wild bee population, so these cannot be depended upon to get the job done. Then, too, as it is so often rainy at blooming time, it is wise to have plenty of bees on hand so the greatest use may be made of every minute of sunshine available.

Altho the apple blossom is a "perfect flower" as the botanists say, that is, it has both the male and female parts; yet the pollen from the anthers is not capable of fertilizing the ovule of that same flower. The apple blossom is self-sterile and must be cross pollinated. This important business is accomplished by the bees. Nature has provided them with a highly specialized pollen-gathering apparatus in the form of fuzz or hair all over their bodies, or serrated hairs on their legs and a pollen-carrying apparatus on their hind legs.

Nature, however, has made the apple blossom as enticing to bees as possible. As if realizing its dependence upon them the flower puts out all kinds of inducements. Its color is attractive, its odor is alluring and its nectar and pollen are of practical value to the bees. From a structural standpoint it is quite evident that the apple flower needs the bees and the bees need the flowers, each intent on its own end and purpose. This is but one outstanding example of the interlocking relationship that exists between the plant and animal kingdoms, where both work together.

Should Alternate Varieties

Of recent years when new orchards were planted it has been the practice to set large blocks solid to one variety. Being sterile to their own pollen all the bees in the country could not accomplish results in pollination. Many have learned by sad experience that the best practice is to alternate varieties about every fourth row. But even where this is done care must be used in choosing the varieties for there are certain possible combinations that would result in inter-sterility; varieties that seem to have no affinity for each other. It is the orchard man's business to know these things.

In cases where solid blocks have been planted or where 2 or more incompatible varieties have been set side by side there are 2 remedies. First is to top-graft some trees with a variety known to have an affinity for the trees already in the block. This method, however, takes time. For immediate results large bouquets of flowers, cut from compatible varieties at exactly the right time are distributed thruout the block in tubs or barrels of water.

When bees are placed in the orchard usually one strong colony to the acre is considered enough to do effective work. In an orchard of 10 to 15 year old trees half that number would be enough. One colony will take care of 4 or 5 acres

where the trees are only 5 years old. It is important to remember that the hives are not all placed in one spot but are scattered over the entire orchard. The work of pollination will be evenly distributed if the hives are placed 200 feet apart. It is done this way because if the temperature at the time the trees are in full bloom is below 60 to 65 degrees the bees will not be very active and they will work only on the trees nearest at hand.

Don't Kill Bees with Spray

Every experiment station in the United States advises against spraying while the trees are in bloom. Yet it is a practice that is not at all uncommon and countless thousands of bees are killed while at work. It is like killing the goose that lays the golden egg. To spray at this time is destructive not only to the bees but damaging to the blossoms as well. The tremendous pressure that forces the spray liquid thru the guns plays havoc with the delicate flower parts, killing the embryo fruits.

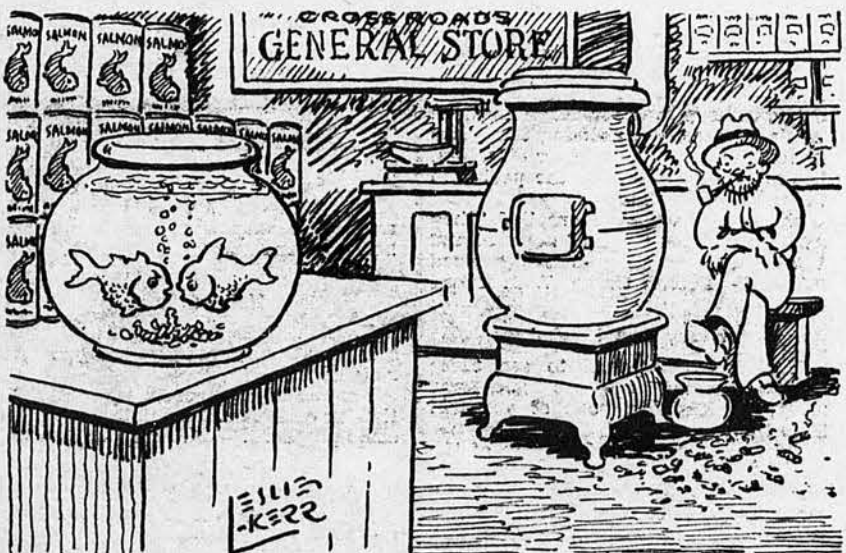
Should Protect Our Birds

In his worthy effort to farm well the farmer has cleared out hedges and thickets, thereby unwittingly destroying the natural habitat and nesting places of birds. As a result the bird population is decreasing and the fine, hair-trigger adjustment between birds and insects is thrown out of balance. The insects are about to gain the upper hand as witness the scourge of grasshoppers we experienced last summer. In our desperation we spread poisoned bran mash by the ton, much of which was eaten by unsuspecting birds which died by the hundreds. In destroying a few grasshoppers we have destroyed also large numbers of their natural enemies which seemingly were put here for the very purpose of holding them in check.

Every farmer owes it to himself, to his neighbor and to future generations to do all that he can for the preservation of bird life on his own place. In the United States there are 45 species of birds known to have nested in man-made houses or on supporting devices provided for them. It is mating time and bird boxes should be erected now. I do not mean just 1 or 2 about the house and garden but they should be made in large numbers and put up all over the farm. This is not a matter of sentiment but should be looked upon as a practical proposition. A bird house on every fourth fence post would do much to solve the grasshopper problem.

Shrubs for Bird Comfort

The planting of such shrubs as lilac, spirea or honeysuckle in gullies and ravines would not only check the soil washing but would provide protection and roosting places for the birds as nature intended. Of course, I do not mean expensive nursery specimens for this purpose but there is scarcely a farmstead anywhere that does not have one or more shrubs that could be grubbed out and divided.



"I do wish he'd move us away from the salmon department."

"IT HAS MADE ALL THE DIFFERENCE IN THE WORLD IN THE GROWTH AND HEALTH OF MY LIVESTOCK"



"TAKE it from me, Cudahy's All Purpose Mineral Feed really gets young animals off to a flying start. And that goes for all of the spring litters of pigs, calves, lambs and chicks."

Feeding Cudahy's All Purpose Mineral Feed is the smartest and thriftiest step you can take toward increasing the productiveness of your livestock. No waste, no unnecessary ingredients. Just an ideally balanced mixture of palatable, easily digestible minerals that build bone and muscle, make healthy breeders and promote early growth. Low in price—high in quality and merit. Ask your nearest feed dealer or write direct to us.



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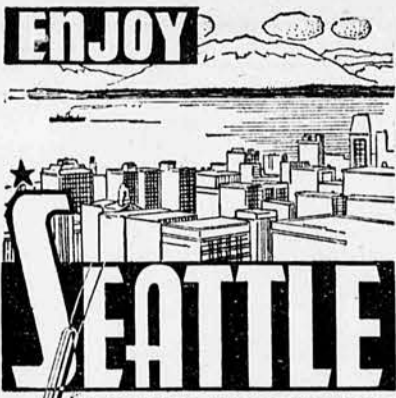
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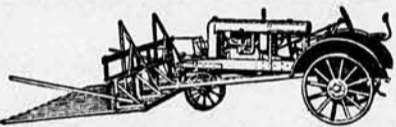
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"We Can Put Fear Into Thieves And I Don't Mean Maybe"

J. M. PARKS, Manager
Kansas Farmer Protective Service

A FRANK opinion as to the merits of the Protective Service is expressed in this letter, under date of March 24: "I received the check for \$25 and will divide with Mr. Lindawood. I wish to thank you very much for this reward. I think Kansas Farmer is doing a fine thing in helping to curb farm thefts. If the farmers will cooperate more with Kansas Farmer, the Protective signs will put fear into thieves, and I don't mean maybe. Yours truly, James H. Williams, Hutchinson." The reward, referred to by Mr. Williams, was paid by Kansas Farmer for the conviction of Jack Johnson, who stole a combine wheel from one of Williams' farms. His punishment was 60 days in jail. Mr. Williams took double precaution and had posted both the farm on which he lives and a second 80 acres which he operates. Paul Lindawood, who lives near Williams' 80 acres, saw a prowler about the place and telephoned to Williams who reached the scene of the theft just in time to find Johnson loading the combine wheel. The sheriff was called and an arrest was made immediately.

He'd "Warm Up" Engine

The disappearance of a pocketbook containing \$47, from the home of Emil A. Johnson, R. 2, Ellis, caused him to search his memory for clues. He recalled Albert Koleber and John Reitemeier had been in his home about the time the money disappeared. They had been hunting rabbits while visiting at Johnson's. Just before leaving, Reitemeier, who formerly had worked on the farm, remarked that he would "warm up" the engine, in preparation for the drive. Later, Johnson recalled this was not necessary, since it was not a cold day. In going out to the car, tho, Reitemeier went thru a door next to the bedroom, where Johnson kept his

money in an overall pocket. When the sheriff was given a complete account of this event, he questioned the 2 suspects and they confessed to the theft. Reitemeier has been paroled, but Koleber will spend 1 to 5 years in the Hutchinson reformatory. All of a \$25 Kansas Farmer reward was paid to the Service member. The arrest was made by Sheriff C. E. Bradley of Trego county.

Couldn't Pass Officer's Net

Modern methods of running down thieves were used successfully in the capture of Clyde Strahan, John Van Holman and Bert Woodworth, charged with burglarizing the home of E. C. Norman, R. 3, McPherson. In his account of the theft, Norman said Sheriff Ralph McPhail, McPherson county, responded to the call within 40 minutes, made a complete investigation, and recovered most of the stolen goods. Then, the sheriff spread a net by use of radio calls, letters and telegrams. The suspects were picked up at Ft. Scott, and brought back to McPherson. Each drew an indefinite sentence in the state reformatory. A Kansas Farmer reward of \$25 was divided equally between Service Member Norman and Sheriff McPhail.

Chase Ended in Arrest

While doing his early morning chores, John Sherman, R. 1, Leona, caught a glimpse of a man retreating from his hen house. Sheriff W. C. Worman was called. He came immediately for an investigation. In the game of hide and seek which followed, the elusive thief would disappear only to be heard of soon in some other part of the community. In his eagerness to out-distance the sheriff and Sherman, the fugitive, Russell Retz, overturned his truck and while attempting to

We'd like to have your favorite story for this column. Please address Natural Gas, Kansas Farmer, Topeka.

Natural Gas

Bald Headed

"What is in that locket of yours?"
"A lock of my husband's hair."
"But your husband is still alive."
"Yes, but his hair is gone."—L. A. Clay, Montgomery Co.

Just at Night

Agent: "Are you always troubled with poor lights like this?"
Housewife: "Oh, no. Not always."
Agent: "I thought so, only at certain times?"
Housewife: "Yes, only after dark."
—V. D., Johnson Co.

He Didn't Mean It

Uncle William: "I hope you will be careful with that money I gave you. Remember the saying 'a fool and his money are soon parted'."
Albert: "Yes, Uncle, but thank you for parting with it."—S. C. L., Franklin Co.

Just Friends

On boarding the train, Mr. and Mrs. Newlywed tipped the porter generously, to keep their marriage a secret. The next morning, noticing the many knowing looks cast in their direction, the angry groom called the porter to task for his treachery.
"Land sakes, boss," he replied, "they asked me if you was jus' married and I sez no, they're jus' very good friends."—Better Crops With Plant Food.

Every One Needed

Noah was surprised to see three camels coming up the gangway. "Hey," he shouted, "one of you will have to stay ashore."
"Not me," said the first ship of the desert. "I am the camel so many people swallow while straining at a gnat."
"I," said the second, "am the camel whose back is broken by the last straw."
"And I," said the third and last, "am

escape on foot was brought down by shots from Sheriff Worman's gun. Altho it is quite certain Retz had stolen chickens from Henry Lutes, of Leona, and Clarence Spaight, Purcell, and possibly others, he was prosecuted on a charge of stealing from Sherman. A long list of crimes, including an escape from prison, all were considered, when Retz was given a life sentence in the state penitentiary. A \$50 reward, paid by Kansas Farmer, was divided equally between Service Member Sherman and Sheriff Worman.

A U. S. Farmer Sees Poland

(Continued from Page 8)

premium being taken from his wages and the other half paid by the employer. The worker has free medical aid.

Unemployment insurance also is compulsory. When out of work, the wage earner is paid 30 per cent of his former salary if he is a single man or 50 per cent if he has dependents.

The Maternity Protection law gives the working woman 12 weeks maternity leave, and any firm that employs more than 100 women must maintain a nursery.

These Poles are mighty proud of their country. They may be a stiff-necked, bull-nosed race, but those are the qualities it takes to stage a comeback when you are down and out. I hope that this little story may help to give you a clearer understanding of the new Republic of Poland.

Quality Milk and Cream

(Continued from Page 3)

considered essential to handling a commercial dairy herd.

The manure spreader runs regularly, hauling out huge quantities of fertilizer. Sudan grass is the primary summer pasture. Several fields are planted, and grazed alternately. Small grain pasture is used when it seems practical. Sweet clover was used extensively a few years ago, but Sudan grass has been found more drouth-resistant under heavy grazing in this section of Kansas.

Good breeding bulls are used in this herd. Some of the outstanding animals of the state have been owned. The pedigree of the present herd bull, Winterthur Great Judge Dad Quolk, boasts that his 7 nearest dams had an average of 953.2 pounds of butterfat; while 15 nearest dams averaged 879.5 pounds. An addition to the herd, a Holstein bull calf, has excellent promise for showing and the Reed boys will appear with him at the 1937 shows and fairs.

Books You Will Enjoy

JANET McNEISH

Moons in Gold—By C. S. Montanye. Lippincott—\$2. This thriller has glamor, action and suspense, opening in Paris you meet Captain Valentine, the rogue in this book, awaiting his opportunity to get "Moons in Gold," the world's most magnificent collection of opals. St. Julien, the captain's only rival to the title of foremost international gem thief, and Mademoiselle Ormonde Grunoff, a beautiful and mysterious woman, also are watching their chance. These three race from Paris to Shanghai, encountering many dangerous situations.

The Falcon's Prey—By Drexel Drake. Lippincott—\$2. Centers around the activities of one who calls himself the Falcon. A man who takes money from those who come by it illegally and, in constant danger of his life, thwarts the plans of the crooked politicians and police. The plot is laid in New York City. This is one of three runners-up in the \$7,500 Lippincott-Harrap mystery contest.

The Substitute Guest—By Grace Livingston Hill. Lippincott—\$2. The Devereaux home is the hub around which this romance is woven. The Christmas season is the time. The substitute guest longing for an old-fashioned Christmas. How he found a new life, a new love and a great happiness are told in this engaging new novel.

Mr. and Mrs. North—By Richard Lockridge. Stokes—\$2. Mr. and Mrs. North could be any one you know—your husband or your wife. The book is composed of short sketches in the lives of these two people. Written with a quiet and sly wit that has endeared to thousands the lives of this couple thru the pages of The New Yorker.

the camel which shall pass thru the eye of a needle sooner than a rich man shall enter the kingdom of heaven."
Noah scratched his head in perplexity. Finally, deciding that posterity could ill spare any of these, and would be lost for illustrations without them, he let them all come aboard.—J. M. Snodgrass, Saline Co.

All Under Cover

"And you sir, don't you think there should be only one head to every family?"
"Yes indeed. And everyone else would, too, if they had seven daughters and a wife to buy hats for, like I have."
—D. M., Montgomery Co.

He Didn't Understand

Buyer: "That land you sold me is no good. You said I could grow nuts on it."
Seller: "Oh no, I didn't say that. I said you could go nuts on it!"—H. M. Lang, Jackson Co.

One Ear at a Time

"Robert, I see your teacher is coming for your music lesson. Have you washed your face and hands?"
"Yes, ma."
"And your ears?"
"Well, mother," replied Robert, "I washed the one that will be next to her."
—Bruce Smyth, Butler Co.

Help! Police!

English literature student: "Professor, what subject are you going to give us tomorrow?"
Professor: "Tomorrow, we shall take the life of Robert Louis Stevenson. So come prepared."—M. A. C., Marion Co.

Rough Treatment

Mr.—"I've sure got a bad head this morning."
Mrs.—"I'm sorry, dear. I do hope you'll be able to shake it off."

Ideas That Will Come in Handy

BY FARM FOLKS

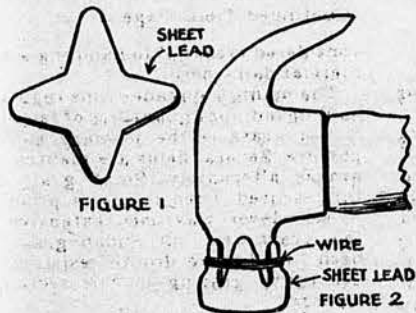
Home-Made Lettering Brush

Often the farmer is in need of a brush for painting signs or for painting numbers on milk or cream cans. One can be easily made from materials found right on the farm. Procure a piece of bright tin 5 inches long and 1 1/2 inches wide. Put this in a vise and bend at right angles 1/4-inch from the edge. Then 1/2-inch from the opposite edge, bend also at right angles. Then get a tuft of hair from a horse's fore-top. Close the tin handle down on the hair, allowing to project about 3/4-inch below the tin. The brush then may be trimmed to any length or shape with a pair of scissors. The finished brush will be 1/2-inch wide and flat like a mucilage brush.—R. W. Taylor.

Wire Teepee for Hen

A portable pen that is convenient for moving a hen and chicks about the yard, is made from a piece of chicken wire rolled into a cone and tacked to a sharp stake. It is an easy matter to pull the stake and move the pen along to a new spot without allowing the hen to escape, and, while the hen is kept inside, the chicks can pass in and out freely.—Benny Youngs.

Need a Soft Hammer?

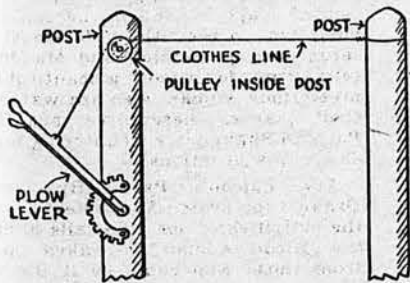


A soft hammer is often desirable in doing repair jobs but the farmer's tool chest does not always contain one. A satisfactory substitute can be made in a few minutes by cutting a piece of sheet lead in the shape shown in Fig. 1. The wing-shaped pieces are then bent upward over the pole of an ordinary claw hammer and wired into place as shown in Fig. 2.—B. E. M.

Light Will Burn Brighter

Add a heaping teaspoonful of common salt to the oil used in kerosene lamps and you will be surprised how much brighter your light will be. You can also burn the oil much lower without refilling.—Mrs. H. R. S.

For a Tight Clothesline



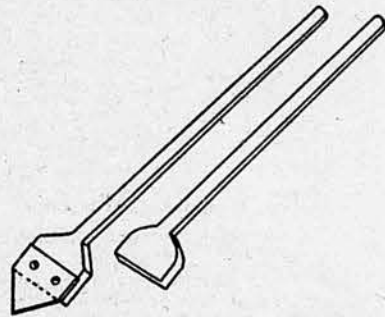
This is my idea of a clothesline tightener. All that is used is an old plow lever, a pulley, four bolts, two posts and your line. It is put together as shown in sketch. When done you have a clothesline that will last a lifetime. It is worked by raising the lever to loosen the line, to tighten you push downward.—Merle Lancaster.

Handy Slopping Trough

To prevent hogs from getting their heads right under the stream of slop from the bucket and spilling it, use an old cream can, from which the bottom has been taken out. Remove the lid and set it upright in the trough. The cream can top is just right to fit most feed troughs and hold it about 3 inches from the bottom. Then tie a baling wire securely around the neck of the cream can and around the bottom of the trough against a fence with the

cream can end against the fence, and the trough is ready. The slop is poured into the trough without spilling a drop, unless the bucket leaks.—J. S. S.

Death to the Dandelion

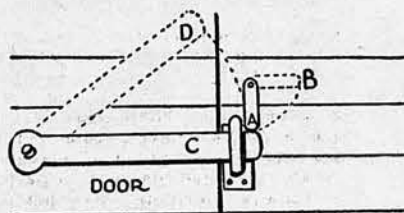


As dandelion time soon will be here, here is a sketch of my dandelion cutter, which I find very useful. All that is needed is a 1x3 pine strip, 3 feet in length, a mower section and two screws. Trim the pine strip down to a size that is comfortable to hold. Shape one end as shown in sketch and then screw on mower section, and you are ready to go to work. Dandelions can be cut below the surface of the ground with the cutter.—O. F.

Drive Chicks With Screen

A fine way to gather your young chickens when spring showers come up unexpectedly is with a little screen made of 2 burlap sacks and a few light pieces of wood. Make 2 frames, each the size of a burlap sack. The sack should be left whole as it lasts longer than when divided. Tack the burlap on each frame, then nail the frames together to form a right angle. A light strip of wood nailed across the corner of the frame makes a convenient handle.—C. B.

Horse-Proof Door Latch

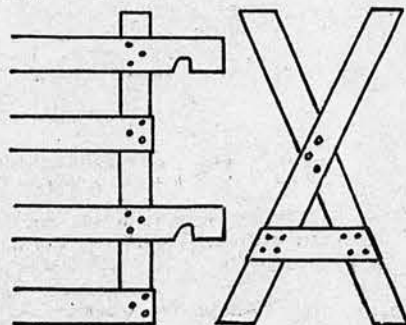


After having several horses founder by opening the doors of granaries and feed bins, we arranged this fastener that cannot be opened except by the use of two hands. A is lifted to the position of B, then slide C may be raised to position of D, and door opened.—Maxine Mink.

Remove Paint and Varnish

Old or soiled paint or varnish may be removed by using a soft soap on it. The soft soap is made by using ordinary laundry soap and boiling water, then cool and add to it 1 tablespoon of concentrated lye and 1/2 cup of coal oil. Spread this preparation over the woodwork with a paint brush and let remain 1 or 2 days, then scrub off with hot water. The paint and soil will be easily removed, leaving the woodwork ready to be repainted or varnished.—E. B.

My Portable Fence



The drawing shows portable fence that can be set up easily. It is built of 1 by 4 lumber in 10 foot sections.—Raymond Frazier.

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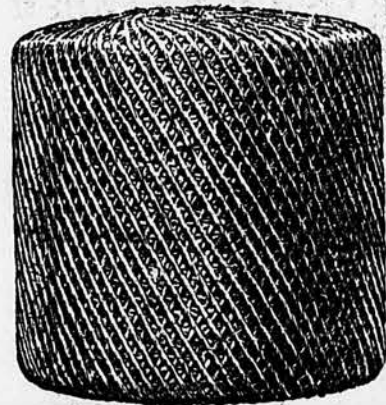
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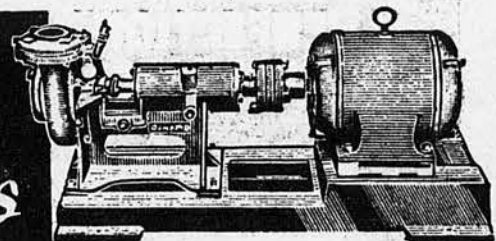
BUCK RAKE



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Extra Value For Your Money!

These dainty napkins are made from Tint-Sax, the new bags now used for sacking all Staley Poultry Mash and Pellets. From these colored cambric bags you can also make attractive aprons, rompers, handkerchiefs, curtains, towels, quilt blocks, etc. That means you get extra value when you buy STALEY'S Poultry Feeds in Tint-Sax.

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Cream Improvement Was Forced On Us; Looks Like a Winner Now

H. E. DODGE
State Dairy Commissioner

CREAM improvement in Kansas started in earnest 3 years ago and has continued without a let up. The Federal Pure Food and Drug administration inaugurated a policy of condemnation of all unfit butter and cream moving in interstate commerce at that time. Condemnation of several carloads of butter and thousands of cans of cream followed, and creamerymen in self-preservation had to improve the quality of their raw material in the shortest possible time.

This resulted in buying cream in Kansas on a differential basis. The producer of first grade cream now receives 3 cents a pound more for his butterfat than the man who brings in cream that is off-flavor or dirty. All buyers were required to run monthly sediment tests on every producer's cream. Dirty sediment pads have decreased from 17 per cent when the test was started to 4 per cent at present, and Kansas cream is just that much cleaner and better.

Cream buying is a highly competitive business. Some operators feel when they buy a producer's cream as second grade he might become offended. This fear has hindered 100 per cent effectiveness of buying cream on grade, altho it is the only logical and fair way.

Plans Tried Out in Anderson

We decided to carry on an intensive cream improvement project in Anderson county, starting December 4, 1936, and continuing for 30 days. This county has 28 cream stations. We planned to correct any errors in the plan that might appear while the work was being carried on in this trial county. The 3 main objectives were:

(1) Thru close inspection to see that all cream buyers actually graded each delivery correctly and bought it on the basis of that grade. Mr. Bair, a deputy of the State Dairy Department, graded nearly every sample of deliveries made in Anderson county during this period. Direct shipments were graded at depots. He visited all the larger cream stations every day. A few of the smaller outlying stations were visited every other day.

(2) Our second objective was, by close inspection, to eliminate the usual operator complaint "that I can't grade because my competitor doesn't grade," and to make both the operator and the producer more "quality conscious."

(3) We desired to obtain definite information regarding conditions and practices on a large number of farms. This type of information is not available at present and is greatly needed in planning advance quality work.

A meeting of all cream buyers in the county was held December 3 at Garnett, to start off the project. The plan of procedure and objectives we

desired to obtain were explained and discussed. Buyers were given 2 mimeographed sheets to be given every farmer when he delivered cream at the station. The farmer was requested to answer certain questions. These questions concerned the kind of equipment used and practices followed in the production of cream on the farm. His cream record was entered for his current delivery. This showed the size, test, grade, sediment test, and frequency of delivery to the station. He also was requested to keep a similar record on all deliveries made during the month. A carbon copy was kept by the operator and a duplicate record of all cream deliveries made for the project period so we would be sure to obtain the desired information should the producer fail to return his copy. Another sheet explained our plan and stated rules to be observed in producing quality cream, together with an explanation of the reason these rules should be followed.

Every Delivery Was Graded

We have found it a difficult matter to reach the producer of poor cream, and it was our thought that realizing an intensive grading program was on and that every delivery was being graded by a state inspector and second-grade cream bought and paid for as such, even the indifferent producer would take notice and show some interest in following proper practices. Cotton pad strainers, cover-top milk pails, chlorine disinfectant, and a mineral washing powder were available at all stations at cost prices.

After the first week of grading there was a decided decrease in the percentage of second grade offered for sale, showing where cream is really bought on grade the producer of poor quality cream is reached and does make an effort to bring in better cream.

Only 2.7 per cent of the producers in Anderson county used covered top buckets, while it is a well known fact that this type of bucket keeps out 70 per cent of the dirt normally getting into the milk at milking time.

About 29.5 per cent of the deliveries were either hand skimmed or separated with a water separator. This type of cream tests low and quickly deteriorates to second-grade or worse. About 28.1 per cent of the separators were washed but once a day while they were used twice a day. Much of the second-grade cream is traceable directly to the use of dirty separators.

The use of cotton pad strainers has not as yet become at all general; 16.7 per cent of those interviewed had such strainers. Many of these were not using pads because of the slowness of
(Continued on Page 20)



Harry H. Reeves, Pretty Prairie, Secretary of the Kansas Milking Shorthorn Breeders' Society which is taking part in the parish show program for the first time.



G. G. Meyer, Basehor, Secretary of the Kansas Holstein Breeders' Association, and member of the board of directors of the National Holstein-Friesian Association.

Deferred Feeding Offers Safety, Low Cost, Lamb Tests Show

By TUDOR CHARLES

LAMB Feeders' Day at Garden City, April 10, brought out sheep men from as far as Republic and Sumner counties in Kansas, and from Texas, Oklahoma and Colorado. Feeding experiments at Garden City are under the direct supervision of F. A. Wagner, the station superintendent. Mr. Wagner produced the feed used in fattening the lambs. He advised that sorghums often are planted too thick, and that 2½ to 3 pounds of seed are enough in a well prepared, warm and moist seedbed. The sweet sorghums will grow in a poorer seedbed than the soft-coated grain varieties. Ordinarily sorghums should be planted fairly late in Southwest Kansas, about June 1, as this retards the heading period so fall rains usually help the filling process.

The lamb fattening experiments are under direction of Rufus F. Cox, sheep specialist, and Dr. C. W. McCampbell, animal husbandry head at Kansas State College. In one comparison of feeds, Dwarf Yellow, milo grain, Wheatland grain, and sumac grain were fed with a standard ration of cottonseed meal, ground sumac stover, and ground limestone. It was found there was only slight difference in the cost of gains, with the Wheatland-fed lot the cheapest. This difference was due largely to a quicker gain, amounting to .36 of a pound daily, compared to .33 for the other lots.

Is a Feed Saving Plan

In another important comparison, the standard rations were fed both lots, except that the milo grain ration of 1 pound daily was deferred 30 days in one lot, and fed from the start in the other. This is the fourth time the 30-day deferred feeding plan has been tested, Mr. Cox said, and the experiment station now is ready to state definitely that it is a feed saving plan, for results have been nearly identical each time. By this method there was a saving of \$1 a hundred pounds in the feed cost. In the lot getting grain from the beginning, the cost was \$9.16 and in the other \$8.16.

But more important than the feed cost, Mr. Cox believes is the safety factor. When lambs are fed only ground fodder and cottonseed meal for the first 30 days, they suffer little indigestion and losses are much lower.

Altho the experiment station officials do not attempt to give a definite explanation to the fact that gains by

this method are cheaper, they believe it is because the lamb's stomach is small and unaccustomed to dry feeds when he comes from the range. By feeding roughage for a time his stomach may be given a chance to enlarge and it then is able to fully utilize grain feed.

Last year the odds and ends of lambs at the station were fed sumac grain. There has been some belief this grain is poisonous for lambs. There were no losses, therefore a complete lot was fed in this manner this year with excellent results. However, Mr. Cox said they were not ready yet to say for certain that sumac grain is a safe feed. Some feeders believe unhappy results with it on some farms may have been due to low quality or spoiled grain. The experiment will be repeated again next winter.

Lambing-Down Is Wasteful

The tests this year indicated again that lambing down a reasonably good crop of milo is a wasteful and extravagant process when prices are good. There is more danger of death loss, and last winter about a third of the crop being lambing down was harvested by blackbirds and crows, before the lambs got to it.

The experiment station isn't trying to force the growth of lamb feeding in Kansas, but feels it should, and will, grow of its own accord as sorghums are increased. Another possibility in the Garden City territory is to feed beet sugar by-products—the tops and molasses.

A local farmer on the program was Alfred Ward, lamb feeder of Stanton county. He said land in his county that had a good cover of sorghums has not blown. In October, 1932, Mr. Ward started feeding 1,572 lambs with an average weight of 51 pounds. Just 106 days later in Kansas City, the lambs weighed 85 pounds and sold at the top of the market.

When they first arrived on Mr. Ward's farm the lambs were ranged on milo or "maize" pasture for 30 days, then fed ground milo forage. This contained enough grain to make a 15 to 20 per cent grain ration by weight. After 30 days in the lot some ground barley was added, and increased until the grain ration was 60 to 70 per cent just before shipping. About ½ pound daily of ground alfalfa hay was fed (Continued on Page 20)

Questions Lamb Feeders Asked

AT GARDEN CITY, LAMB FEEDERS' DAY

How do you start lambs in lambing-down milo?

Fill them full of roughage before turning out. Keep a palatable roughage at some handy place, preferably near the gate where they are driven in at night.

How much grain was wasted in lambing-down?

About 50 per cent of what should have been consumed in fattening.

Which is better for lambs, ground fodder or silage?

Not much difference, altho the dry feed has a slight edge. Feeding both is good but increases costs.

Is the self-feeder practical?

Yes, but slightly more dangerous and costly. Grind grain and roughage together.

Can the limestone and salt be safely mixed?

Yes.

How would it be to feed alfalfa alone for the first 30 days?

Would be all right, but expensive except where alfalfa is the cheapest roughage, which doesn't occur in Kansas.

How do you start the grain feed in dry lot?

Take about 7 days to work up to 1 pound daily.

What forage makes the best silage?

Sweet sorghums are better for volume of roughage, and the grain sorghums have more fattening value.

What are the symptoms of urinary calculi or bladder stones in lambs, and what can be done about it?

Lamb goes off feed, shows signs of pain in abdomen, stretches legs backward in lying, drips urine on rising. The best solution is to sell after the first attack. A lamb never survives more than two attacks.

What about molasses for lambs?

Any time it is as cheap as grain it will save money if it replaces up to 50 per cent of the regular grain ration.

Does it pay to keep the best ewe lambs for breeders?

No. Western lambs can be bought as cheaply in the fall as a native ewe lamb will sell in the spring.

How do cottonseed and soybean meal compare?

About equal.

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- ... Walls ... Poultry House

Dairy Judging for "Grown-Ups" Offers Peck of Fun at All Shows

THE Kansas "grown-ups" dairy judging program will be carried out in a bigger way than ever this year, in connection with the district dairy shows and show herds which have been so brilliantly successful.

To the 4 breeds, Holstein, Jersey, Guernsey and Ayrshire, which were included last year, will be added a breed of growing popularity, the Milk-Ing Shorthorn.

Prize money awarded by Kansas Farmer, co-sponsor of the judging work, will amount to \$300. The winning individual judge for each breed will get a check for \$25; second place, \$15; third, \$10; and each high-scoring team, \$10.

These judging contests create fun and interest at the district shows and

fall fairs. But more important, they teach many details of animal selection to the men and women who take part. Last year's winners will be admitted to the contests again. It seems better to do it this way than to eliminate former winners.

The men and women who take part in this work are the type who wish to be full-fledged winners, and not one of them would care to win and then feel that it may have been because a better farmer-judge had eliminated himself by winning the year before. We do not know yet whether last year's winners will be in the contests. They may feel some inclination to withdraw with their laurels, but knowing they are welcome, and that every person connected with the contest wants to see them back in the ring, they are likely to be out unanimously to defend their titles.

Judges Are Announced

James W. Linn, extension dairyman, has just announced the complete list of official judges for the spring shows. The Holstein shows, now in progress, are being placed by Prof. H. W. Cave, of Kansas State College, who is a leading judge of the Middle West and Pacific coast.

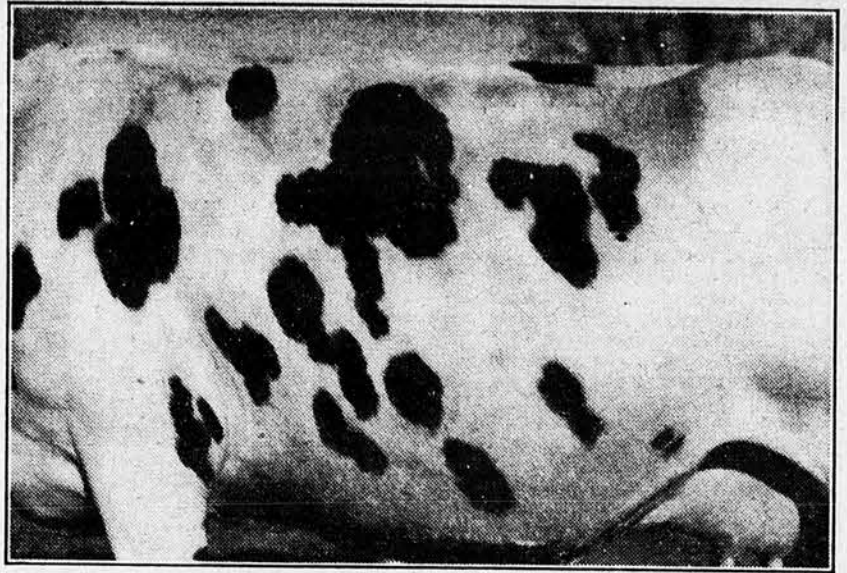
The Jersey parish shows will be judged by Prof. J. B. Fitch, dairy department head, University of Minnesota. Guernseys will be placed by Walter Guerink, of Chapman Farms, Independence, Mo., a man with lifelong acquaintance with the Guernsey breed.

At the Ayrshire shows which are next in line, Gordon Mahoney, former manager of Fairfield Farms at Topeka, and now extension dairyman at the college, will place the animals.

W. J. Hardy, of the Shorthorn Breeders Association, will judge Milk-Ing Shorthorns. This work will be of particular interest to farmers and dairymen, as this is the first series of



Do you know what to look for in a dairy cow's head? You will wish to give this some thought before entering the judging contest of your favorite breed. Here is an ideal Ayrshire head belonging to the 100th Ayrshire cow to produce 100,000 pounds of milk under official test.



Look for capacity in the animal's barrel to consume lots of feed. Large milk veins are a prominent sign of milking type. A strong back line and wide spring of ribs are points of excellence. Here is the processing plant of the milk machine. This particular "middle" belongs to Ettie Gelsche Segis, owned by Ira Romig and Sons, Topeka.

shows for this popular breed in Kansas.

The spring dairy shows and judging work, and arrangements for showing and judging at the fall fairs, are under the direction of local farmers. So that readers may know who is in charge of the work in their section, and to give credit to the men and women who are furthering dairy interests in their districts, we are giving names of the committee members, places and dates of the shows:

Holstein

Central Kansas, Hutchinson, April 19
President, H. H. McCandless, St. John.
Vice President, R. L. Evans, R. 2, Hutchinson.
Secretary-Treasurer, H. J. Carey, Hutchinson.

Director for State Association, W. L. Reed, Kanopolis.
Show Committee: R. L. Evans, H. J. Carey, C. C. Kagerice, D. W. Ingle, Hutchinson.

South Central Kansas, Harper, April 20
President, Chancey Hostetter, Harper.
Vice President, Leo Hostetter, Harper.
Secretary-Treasurer, Abram Thut, Harper.
Director for State Association, M. A. Shultz, Pretty Prairie.

Midwest Kansas, Herington, April 21
President, John Gehrke, Herington.
Vice President, N. W. Upham, Junction City.
Secretary-Treasurer, Mrs. E. W. Obitts, Herington.
Director for State Association, L. Barry, Wilsey.
In charge of publicity, Morgan Coe, Herington.
In charge of judging contests, Paul Gwin.

Arkansas Valley, Newton, April 22
President, Clarence Tangeman, Newton.
Vice President, Ed Vetter, R. 1, Newton.
Secretary-Treasurer, E. B. Regier, White-water.
Director for State Association, B. R. Gausney, Mulvane.
Manager of Show, Clarence Tangeman.

Southeast Kansas, Parsons, April 26
President, R. C. Beezley, Girard.
Vice President, C. F. Fickel, Chanute.
Secretary-Treasurer, Raymond Campbell, Parsons.
Director for State Association, R. C. Beezley, Girard.
Show Manager, Charlie Baumgarten, Parsons.

East Central Kansas, Leavenworth, April 27
President, H. M. Chamney, Lawrence.
Vice President, Merle Jamison, Lansing.
Secretary-Treasurer, R. C. Welborn, Lawrence, R. 5.
Director for State Association, H. M. Chamney, Lawrence.
Show Manager, Grover Meyer, Basehor.

Capital Association, Free Fair Grounds, Topeka, April 28
President, Robert Romig, Topeka.
Vice President, R. M. Sawyer, Boys' Industrial School, Topeka.
Secretary-Treasurer, E. F. Dean, Topeka.
Director for State Association, C. L. E. Edwards, Topeka.
Chairman of Show, Robert Romig, Topeka.
Chairman Judging Contest, C. L. King, Farm Bureau, Topeka.

Northeast Kansas, Sabetha, April 29
President, Harry Burger, Seneca.
Vice President, Harvey Bechtelheimer, Fairview.
Secretary-Treasurer, Glen R. Sewell, Sabetha.
Director for State Association, Harry Burger, Seneca.

North Central Kansas, Blue Rapids, April 30
President, Omar Perreault, Morganville.
Vice President, Raymond Appleman, Linn.
Secretary-Treasurer, Willard Kershaw, Washington.
Director for State Association, Omar Perreault, Morganville.
Show Committee, Raymond Appleman,

Linn; Willard Kershaw, Washington; Herbert Hatesohl, Greenleaf.

Guernsey

Northeast Kansas, Hiawatha, May 4
President, George Schuetz, Horton.
Secretary-Treasurer, E. E. Germain, Bern.

Central Kansas, Hillsboro, May 5
President, George Jost, Hillsboro.
Vice President, W. L. Schultz, Durham.
Secretary-Treasurer, Roy Dillard, Salina.

Southeast Kansas, Coffeyville, May 7
President, Carlton Hall, Coffeyville.
Secretary-Treasurer, C. D. Gibson, Thayer.
Vice President, James Dunkin, Columbus.

Jersey

North Central, Manhattan, May 10
President, John A. Bowyer, Manchester.
Vice President, Charles Copeland, Water-ville.
Secretary-Treasurer, B. R. Thompson, Randolph.
Show Committee: W. L. Waganan, Lester Frey, George Schurle, Leonard Rees, Harry Bouck, all of Manhattan.

Central Kansas, Larned, May 11
President, Walter Isern, Alden.
Vice President, Donald Boster, Larned.
Secretary-Treasurer, C. C. Coleman, Sylvia.

South Central Kansas, Harper, May 12
President, I. J. Kloster, Winfield.
Vice President, Frank Young, Cheney.
Secretary-Treasurer, R. M. McClelland, Anthony.

Southeastern Kansas, Oswego, May 13
President, Harley Reece, Earleton.
Vice President, Carl Francisco, Edna.
Secretary-Treasurer, W. Lewellin, Os-wego.

(Continued on Page 20)



Final show window of the Jersey dairy plant, an ideal udder, resembling in general details the working models of good cows in other breeds. This is Wexford's Double Queen, bred by Charles Gilliland, Mayetta.

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Spring Parish Shows Stimulate Interest of Small Herd Owners

JAMES W. LINN
Extension Dairyman, Kansas State College

THE spring show program that carries on into the state fairs in the fall apparently has come to Kansas to stay. About 300 Kansas dairy cattle breeders participate in the spring shows with about 1,000 animals, and more than 125 of them carry thru to the Kansas state fairs in the fall.

Little did the Kansas Jersey Cattle Club, or Fred Idtse, American Jersey Cattle Club, field man, who first suggested the spring parish shows in Kansas, realize the tremendous influence they were going to have, not only on the dairy cattle business but also on the beef cattle business in the Sunflower state. This program that now is known to every cattle breeder within the state, was first definitely adopted as a statewide program by the Kansas Jersey Cattle Club meeting in February, 1934. That year, 3 parish districts were organized and held spring shows. All 3 of them had a herd at the state fair in September.

The Jersey 1934 program was so successful that it attracted the attention of the other dairy cattle breed associations to the extent that they all adopted a similar program and have used it just as effectively as did the Jersey breeders. To illustrate the success in the number of shows held and the number of herds exhibited at the fall fairs, we have used the following table:

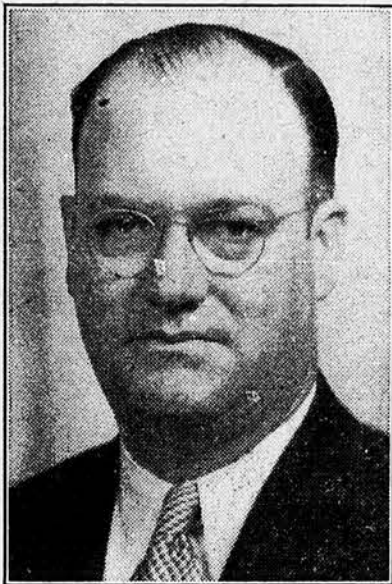
Year	Spring Shows	Herds at State Fair
1934	3	3
1935	19	16
1936	20	19
1937	25 (Including 4 Milking Shorthorns)	

The program not only has been successful for dairy cattle breeders but also was adopted in 1936 by the beef groups and actually used in 25 shows, the majority of which came thru to the state fairs.

Success Thru Organization

There are many reasons back of the success of the program in Kansas, the greatest of which probably is that old overworked word "co-operation." It not only takes a state association for each breed to set up a program, but it also takes a local organization where the breeders actually work closely together. For every spring show held there is a definite organization, not only for the purpose of the spring shows but also to carry out other activities thruout the year.

In addition to co-operation among breeders of cows in the various breeds, there also is an inter-breed co-operation. The program was demonstrated to the Kansas Free Fair and the Kansas State Fair officials in 1934 by the Jersey breed, and ever since then they have been enthusiastic about it, and have co-operated with the various breed groups in setting up premium



James W. Linn, Extension Dairyman, Kansas State College

money to especially recognize the spring show program. Along with the breed association groups and state fairs there has been the co-operation of extension specialists and county agents.

In the case of dairy cattle, the fall fairs have set up a definite amount of money and recognized each group which in a sense guarantees each group participating in the fall fair.

In the spring shows this year there will be 5 breeds working with dairymen in the state and 3 breeds working with the extension beef cattle men. Eight breeds of cattle in all are using this program to advantage now.

Perhaps the greatest good that comes from the spring shows is that each individual breeder in Kansas has an opportunity to participate in a show in the spring that requires a minimum of fitting and expense. He needs only to be away from home 1 day. If he has animals good enough he can co-operate with the other members of his parish or district and get to the state fairs.

If you are a Kansas cattle breeder and never have participated you will feel that your cattle are not good enough to show. But you should bring them out to the early shows and view the cattle that are in ideal condition and the greatest good will come to you by being one of the exhibitors at the spring show. If you are not a breeder, join the other 10,000 or 12,000 people who will attend the spring shows thruout the state in 1937, get acquainted with some breeders, and find out how improvement comes into your herd thru the use of an outstanding sire.



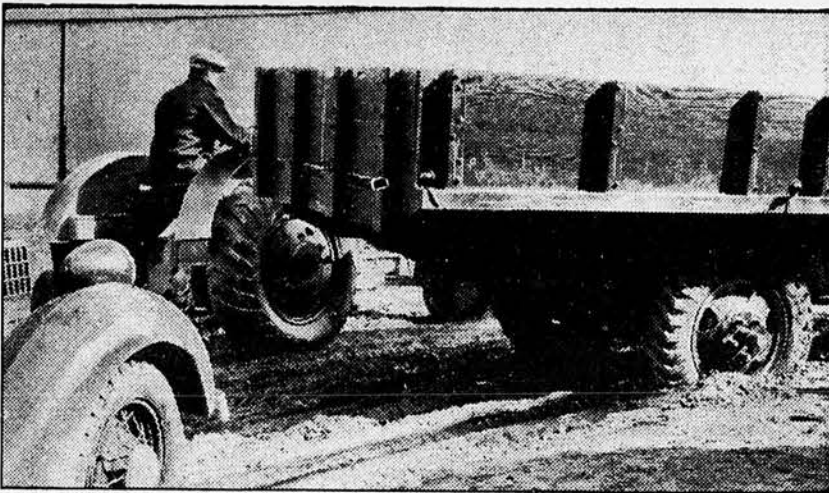
E. E. Germain, Bern, Secretary-Treasurer of the Kansas Guernsey Breeders' Association.



W. H. Riddell, Manhattan, Secretary-Treasurer of the Kansas Ayrshire Club.

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WHEN horses and mules furnished the motive power on farms, the wise farmer took almost as good care of their health as he did that of his family. It is just as important for owners of the motorized farms of today to take good care of their automotive equipment.

It was a good deal easier to tell when a horse and mule were developing an ailment than it is to check an "ailment" in a tractor or truck before it grows bad. You do not know you are getting wear on cylinders and rings until you notice that too

stronger and more adhesive than plain oil film. It can withstand a bigger "load" and it never drains off the parts.

Mr. W. F. Heimsoth, of Guymon, Okla., is one farmer who has found that Conoco Germ Processed oil keeps running and maintenance costs at a minimum. The Heimsoth & Sons farm consists of 1250 acres of fine wheat land. They have nine pieces of expensive automotive equipment—three tractors, three combines, two cars and a truck. Germ Processed oil and other Conoco products are used



Mr. Heimsoth, at right, and his son, Melvin Heimsoth, are shown with part of their automotive equipment.

much oil is being used or you start losing power.

Prevention of "ailments" in trucks, cars and tractors is the only way to protect your investment and get more years of use out of equipment. And the best prevention to use is a lubricating oil that reduces wear on engine parts.

Prevention of engine wear is, of course, the principal function of an oil. Longer life for equipment and fewer repairs mean lower operating costs. But to be really economical, an oil should give long service as well as engine protection.

Many farmers have found that Conoco Germ Processed oil meets both of these important specifications to a degree unapproached by any other oil. This patented oil is different from all other oils. It Oil-Plates the working surfaces of every engine part. This Oil-Plating is far

exclusively in this equipment.

"We use Conoco products 100%," writes Mr. Heimsoth, "and find that we cut our cost of operation by doing so. We are especially sold on Conoco Germ Processed oil."

With so much equipment to keep in good shape, the farm has a complete automotive repair shop, which not only takes care of the Heimsoth equipment but also does work on neighbors' tractors. Mr. Heimsoth is so convinced of the better lubrication from Germ Processed oil that he insists that this oil be used to break-in any tractor he overhauls.

Talk to your own Conoco Agent about Germ Processed oil and try it in your equipment. He can supply it in barrels, handy 5-gallon buckets and in dust-proof 1 and 5-quart cans. You will find that it gives more hours work than ordinary oils, as well as reducing engine wear.

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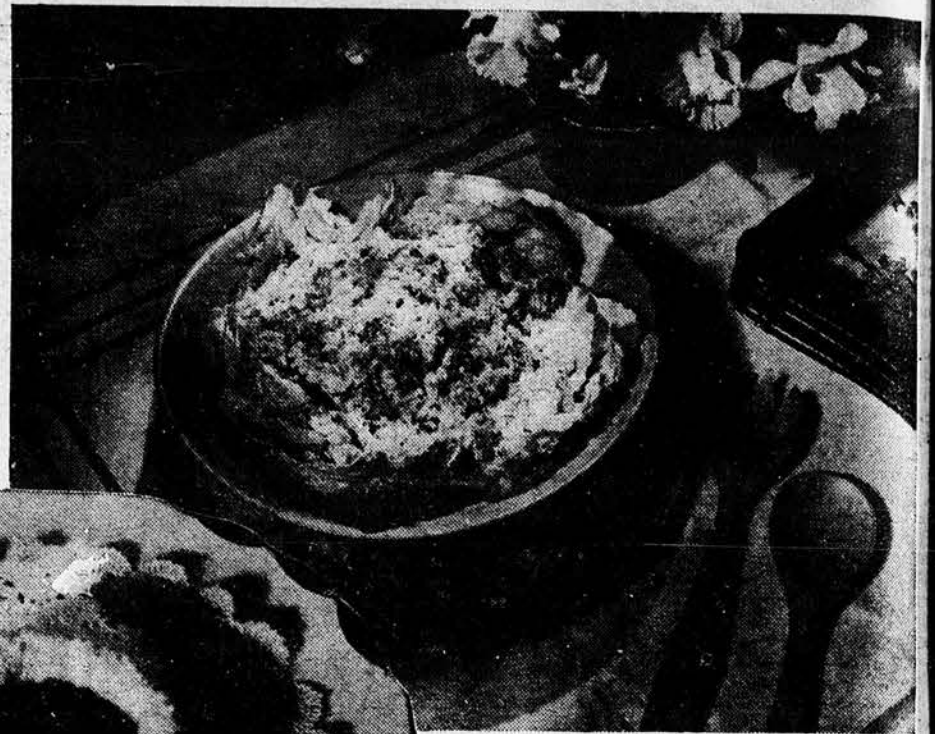
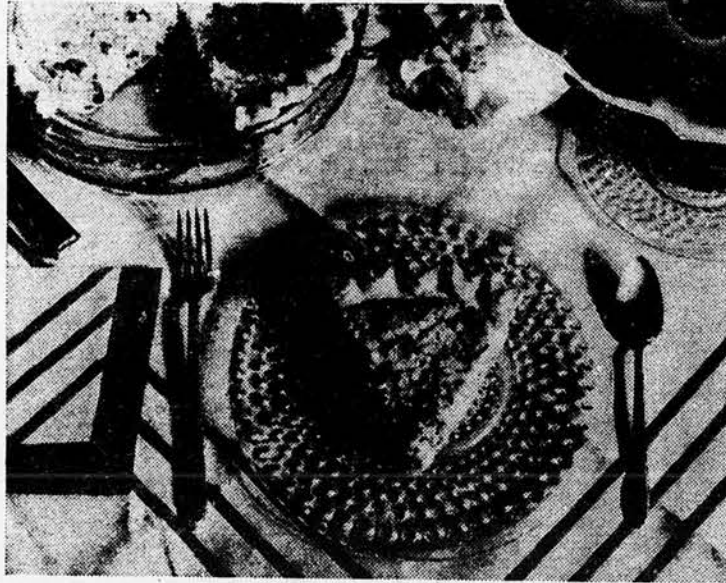


Cottage Cheese In All Its Glory

By RUTH GOODALL

DO YOU ever stop in your busy routine of daily meal-getting, not to mention the eating and cleaning up of the pots and pans afterward, to wonder about the why, the where-for and the how-come of the common, ordinary foods you serve your family? I must confess the possession of an inborn curiosity which often gets me into tight spots, but working one's way out is quite an interest-provoking game, and you'd be surprised at the information to be acquired by the simple method of hunting answers to your own questions.

Take cottage cheese, for instance. Everybody likes it out Goodall-way. Good, wholesome, nourishing food it is, and we serve it several times a week in as many different ways. Yet the other day while I was fixing one of those cottage cheese molds we like so well, up popped the pesky question, "Who started this cottage cheese business?" There I was—off again on a hunt that led thru the dictionary, the encyclopedia, a cheese book or two, and half a dozen bulletins on the subject—and I haven't found the answer yet. If you know, won't you write me?



For too well do we know it is a leftover product of Old Bossy's surplus which as thrifty housewives we sometimes wonder just what to do about. In a way, the very simplicity of cottage cheese and its abundance have been handicaps. We have failed to realize that it may be more than a simple dish served only in its natural state. It blends so perfectly with various fruits and garnishes and adapts itself to so many different forms of serving in either hot or cold dishes, you wouldn't mind would you, if I suggested you use your imagination and dress it up a bit. In other words, let's treat this sturdy, dependable "dairy maiden" to a complete outfitting of new spring clothes.

Cheese Ring with Jam

Almost every farm housewife who has both products always at hand knows what a delightful combination cottage cheese and jam makes—particularly raspberry jam. But, I wonder again, have you fully realized what an attractive and artistic dish can be made of it when placed in ring molds and served as a dessert with coffee and wafers? It is certainly considered "tops" by the Goodall family.

1 pound cottage cheese	Raspberry or any other favorite fruit preserves
1 tablespoon plain gelatin	
$\frac{1}{2}$ cup cold water	

Force the cottage cheese thru a potato ricer or a sieve. Soak the gelatin in the cold water for 10 minutes. Place this gelatin mixture over boiling water—a double boiler is well to use for this purpose if convenient. When the gelatin mixture has melted, allow it to cool slightly then add to the cottage cheese. Pack the cheese and gelatin mixture into greased molds, allow to stand in a cool place until set firmly, then fill centers with favorite fruit preserves. When ring molds are not available, serve the preserves in a side dish or on top of the cheese.

Cottage Cheese Salmon Salad

Have you ever combined cottage cheese with either red salmon or tuna fish to make a salad? It is one recipe which calls for a minimum of ingredients but gives a maximum of satisfaction. In addition to its being a delicious salad, it is exceptionally good to use as a spread for sandwiches. To improve the flavor, it is advisable to prepare it an hour or more before serving and place it in the refrigerator.

1 cup cottage cheese	$\frac{1}{4}$ cup chopped sweet pickles
1 cup minced salmon	Salt and pepper to taste
$\frac{1}{2}$ cup chopped celery	$\frac{1}{2}$ cup mayonnaise

Combine all ingredients in order given. Allow to stand in a cold place for an hour before serving to improve flavor. Serve on lettuce. Ample for six.

Cottage Cheese Pie

One of the most tempting forms in which to prepare this nourishing food is in a cottage cheese pie. You will discover it has an appetizing goodness that is difficult to surpass, and I am sure you will wish to add it to your list of favorite pie recipes.

$\frac{1}{2}$ cups cottage cheese	1 tablespoon flour
4 tablespoons melted butter	Grated rind of 1 lemon
$\frac{1}{2}$ cup sugar	2 egg yolks (unbeaten)
$\frac{1}{4}$ teaspoon salt	$\frac{1}{2}$ cup raisins
	$\frac{1}{2}$ cup chopped nuts

Combine in the order given, mix thoroughly and pour into an unbaked pie shell. Bake at 400 degrees for 10 minutes then reduce temperature to 350 degrees and continue baking until filling is firm—about 30 minutes. Fresh fruit, such as cherries and currants may be used in place of raisins if desired. This recipe is sufficient to fill an 8-inch pie shell.

Doubtless you have favorite recipes of your own for preparing cottage cheese, but even if you have, I hope you will try these and find them enjoyable. Considering their origin was in a lowly pan of sour milk, it seems to me they have plenty of glamor. Of course, it may be personal conceit, but doesn't every mother feel that way about "her children?"

Upper right—Cottage cheese combined with salmon is a delicious salad, and it makes the grandest sandwiches.

Center—Voted "tops" at the Goodall home is this cottage cheese ring mold with raspberry jam filling.

Left—Cottage cheese pie dressed up with nuts and raisins. Wouldn't you like to sink your teeth in that?

I did learn—and the information seems interesting enough to pass on—that cottage cheese was quite generally made in English homes back as far as Shakespeare's time. The supposition is that perhaps one of our early ancestors placed a jar of soured milk near the fire, whereupon it separated to give the solid, compact food which became the forerunner of cottage cheese.

In explanation of the name "cottage cheese," it is logical to assume that it was developed thru the fact that this type of cheese was originally made in small homes or cottages and, therefore, the name cottage was given to it. This seems reasonable enough to me, considering that many varieties of cheese derived their names from the towns in which they became famous, as Roquefort (France), for instance; Gorgonzola (Italy), Limburg (Belgium) and Muster (Germany).

From the famous dictionary authority, Dr. Frank H. Vizetelly, I learned: "Cottage cheese originally was called Dutch cheese because made in and imported into England from Holland in 1858. This is a small, round cheese made from skimmilk. Presumably so-called because made in the home. Origin is not noted by any lexicographer."

I'm still not satisfied. When I find a better answer, I'll let you—all of you—know. Meantime, if you know—any of you—I'd be mighty happy to have you return the favor.

But to go on with a more important phase of this cottage cheese subject, that of eye and palate appeal rather than mere curiosity, let us consider it's many, many uses, it's importance in the diet.

Cottage cheese is a food which appeals to every member of the family. It is particularly valuable for children because it supplies protein in the large amounts necessary for their rapidly growing bodies and in a form that is easily digested.

Of interest to us women folk who must watch our waistlines are these facts contributed by Professor R. M. Washburn in his book on "Cottage Cheeses and Other Popular Varieties." Says he, "Cottage cheese is non-fattening because it is almost exclusively a tissue building food. The small amount of fat present in plain cottage cheese is negligible as

far as any fattening property is concerned. In fact, cottage cheese with raw fruits and vegetables forms a suitable part of a reducing diet, because it supplies protein, minerals and vitamins in liberal amounts and thereby eliminates the necessity of eating other foods, which often have a tendency to produce fat."

In summing up its virtues, the U. S. Department of Agriculture says of it: "Cottage cheese is one of the important meat substitutes. It contains a larger percentage of protein than many meats and supplies this material at lower cost. In every pound of cottage cheese, there is about one-fifth of a pound of protein, nearly all of which is digestible."

Surely, possessing so many virtues we should include it often in our menus. To top that cottage cheese is a most versatile food. It may appear on the menu as a main dish, a salad, or a dessert. It is a food, which altho born in a cottage, is welcomed in the rich man's mansion and found on the ritziest hotel tables. Right here, it seems to me, is a good place for us farm women to have a good, big laugh,

All You Need Do Is Ask

The end of the page came too soon, and your 165-pound home editor, who has a weakness for good food, couldn't cram all her good recipes for using cottage cheese into the allotted space. If you'd like to have "more of the same," write Kansas Farmer and ask for Ruth Goodall's complete list of cottage cheese recipes. Also, if you are interested in making hard cheese like that you buy in the stores, you'll find our little booklet "How to Make Cheese on the Farm and in the Home" invaluable. It shows every step of the process nicely illustrated with explanatory pictures. For good measure there are instructions included for making several varieties of cheese. It is yours, free for the asking.

We Drink Milk and Wear It, Too

By RUTH GOODALL

IT LIKELY would "scare the wits" out of little Miss Muffet if she knew how many uses science has discovered for milk since the days of curds and whey. It is an important role that milk plays these times, but it is far removed from the realms of butter and cheese and cookery.

Squeeze the whey out of curds—and you have cheese. Every good housewife who has had personal acquaintance with a crock of clabber milk knows that. But, I wonder, do you know what happens if the curds are squeezed hard and very, very hard? One answer is the steering wheel on the family motor car. And that true story didn't come out of Brother Ripley's column.

But to go back to Miss Muffet's granddaughter. Suppose that ultra modern young lady is invited out to dinner. It is a very smart dinner, of course, and she discovers her hostess has chosen as favors vanity cases that look like ivory only they aren't ivory at all, but are synthetic by-product of milk.

Dinner over, bridge is in order, but before the game begins, little Miss Muffet of generation three, smooths out her curls with a milk-made pocket comb and repairs her make-up with a lipstick protected by a milk-made container. That done, she is ready to play. The cards she shuffles owe their gloss to milk. She keeps score with a pen, which is a barrel derived from milk, ditto the glaze on the score pad paper.

Owe Them All to Mrs. Cow

What is true of Miss Muffet's granddaughter and her dinner party applies to every woman every day in a surprising number of ways. If all the articles whose manufacture is dependent upon by-products of milk were removed from the family closets they would be almost as bare as Mother Hubbard's cupboard. The buttons on mother's new coat and dad's spring suit are most likely milk-made. The fussy ornament that looks so chic on sister's sport hat may be a dairy by-product. The shining buckle on your own belt may owe its existence indirectly to Mrs. Cow; and so do many other popular accessories. It would seem we are not only drink-

ing our milk, we are wearing it, too, and the probabilities are we will be wearing more of it in the future, as science continues to make additional advances in this and related fields of manufacture. There are innumerable articles in daily use that derive from the original milk depot of Madam M-o-o. Parts of the delicately made "internal workin's" of the radio may be milk-made. Cigaret holders, knitting needles, dominoes, book bindings, buttons, even wallpaper are milk by-products.

What Becomes of "Surplus Milk"

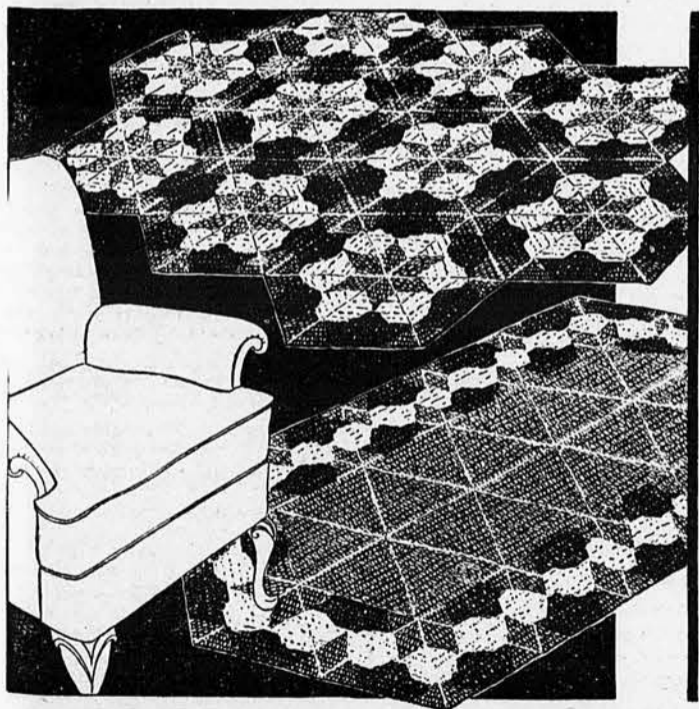
Every efficient housewife has a perennial perplexer—the problem of what to do with leftovers. That also has been the problem, on a gigantic scale, of the dairy industry. To find wider uses for the so-called "surplus" milk and thereby further aid the dairy farmers' income is an important activity in agriculture.

In the industrial world the important by-products of milk are casein, which comes from skim milk, and the various chemicals contributed by the whey—lactic acid, sodium lactate and calcium lactate.

Lactic acid may have helped make that soft drink you bought yesterday down at the corner drug store. It is used in leather goods and in paints, so maybe you had better thank Old Bossy out in the south forty for the fine finish on your living room woodwork. Part of its use is likely over your head—if the ceiling is painted or kalsomined. It is difficult to think of a phase of manufacture into which casein does not enter. It helps men to fly when used in plywood for airplanes. Conversely, used in chemical sprays, it helps insects lose interest in flying. Experiments have been made with it as a synthetic fabric resembling wool—if you can imagine a cow being so "sheepish."

Classified two ways are the casein products—the plastics and the glue family. Beads and buckles, poker chips and pocket combs, even parts of your radio belong in the first class. To mention just a few in the second division are linoleum, leather, book bindings, upholstery, paint and paper.

Rag Rugs—Crocheted and Pieced



IS A NEW RUG on your list of "gifts to the house" this spring? If so, here's the very pattern—a simple one to crochet and put together. Crochet a number of triangles, of wool or cotton rags—fit them together and you'll have the loveliest of rugs. See what varied designs can be made from these figured and plain 6-inch triangles? Then, when you have your rug done, you can crochet an afghan to match. Pattern No. 1414 contains directions for making rugs in various arrangements and an afghan; an illustration of them and of all stitches used; material requirements, and color suggestions. It is only 10 cents and may be obtained from Needlework Service, Kansas Farmer, Topeka.

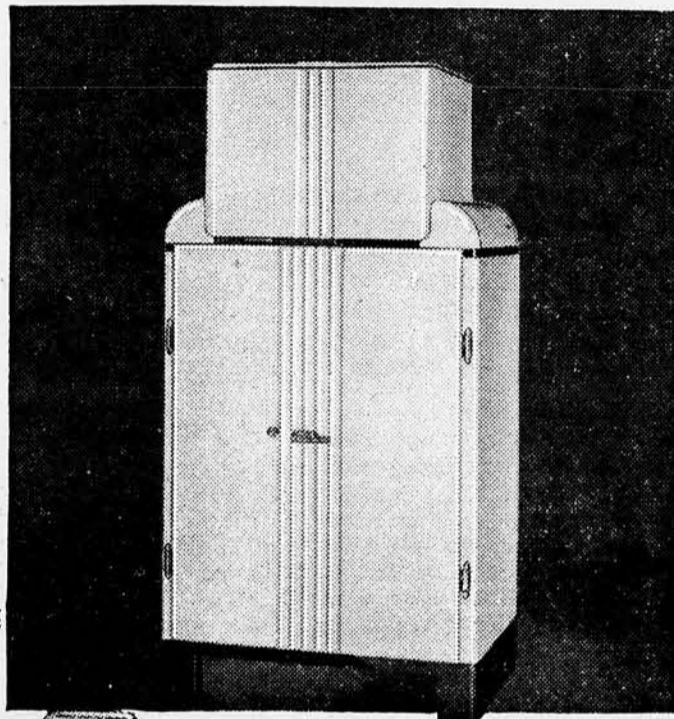
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day's work in only two hours. There is no constant flame.

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Cream Improvement Was Forced

(Continued from Page 14)

straining or their failure to keep a supply on hand.

The practice of cooling new cream before adding to the held cream seems to be quite general and only a few, 2.8 per cent, reported failure to observe this practice.

Milk utensils were washed with hot water, using soap in 81.3 per cent of the cases and a mineral washing powder in 18.7 per cent. In only one case was a chlorine solution used for sterilization. Virtually all reported using scalding water for this purpose. Unless sufficient scalding water is used to thoroughly sterilize the utensils this method is not effective.

Frequency of delivery to the station showed 4.8 per cent not as often as once a week, 70.2 per cent once a week, while 22.8 per cent delivered twice a week and only 2.2 per cent 3 times a week. Cream held a week or longer under average farm conditions has lost some of its most desirable qualities for butter making, and is often well along on its way to becoming second-grade by the time it reaches the station; and it was from such cream that most of the second-grade deliveries were found.

This type of work has now been extended to include Anderson, Miami, Linn, Franklin, Osage and Coffey counties with a total of 172 cream buying stations all under the supervision of Mr. Bair. Plans are being considered by the Kansas Cream Quality Improvement Campaign, of which George S. Hine is the secretary, and which represents nearly all cream buying agencies in the state, to finance further extension of the work by levying a tax of \$1 a month against each buying station in a territory given this service. Kansas which exports 2/3 of its butter is faced on the large butter markets of the country with strong competition, and if it is to retain its "place in the sun" must show a steady improvement in quality of butter. This improvement rests almost entirely on quality of the cream reaching the creamery.

The producer will benefit or lose in proportion to the quality of butter the manufacturers are able to place on the market, and the quality depends largely on the care used in the production of cream and the frequency of its delivery to the creamery.

Deferred Feeding Offers Safety

(Continued from Page 15)

the last 2 weeks. During the entire feeding period, the grain ration averaged about 1 pound daily, while the total ration was about 3 1/2 pounds daily. It easily can be figured that the lambs made a gain of 1/2-pound daily on these feeds, and were able to sell for nearly top prices.

Another lot of 2,165 lambs Mr. Ward fed in 1933-34 weighed 65 pounds on arrival and 94 pounds at market. They were grazed on Wheatland milo pasture and wheat pasture on adjacent fields, and were fed for a time in the feed-lot with 1/2-pound daily of cottonseed meal and 1/2-pound of ground alfalfa hay. Mr. Ward grinds all feed fed to lambs in the lot and usually feeds it in self-feeders.

The next year 1,000 lambs were fed by turning them into a field of rather green Wheatland milo, which they seemed to relish and had no ill effects. After about 50 days in this field, they were run on medium-good wheat pasture for 30 days, and then back on a

field of fairly well headed milo which was reserved for the final feeding period. All the results obtained were good, with no bloating or other ill effects. Some ground alfalfa hay was fed when the lambs were on the best field of milo, but they didn't seem to care for much of it.

Dean L. E. Call, of Kansas State College, who addressed the group briefly, spoke of three types of soil found in Western Kansas which are not suited to cultivation. One is the extremely sandy land, another extremely heavy soil which will not allow penetration of water more than 12 to 18 inches, and soils having a shallow lime formation which does not permit plant roots to penetrate it. He said the solution to wind erosion seems to be growing more sorghums and leaving a large proportion of the plant on the ground to hold the soil. A bad "blow" in Thomas county was checked and finally whipped in a period of 4 years from 1911 to 1914, by this method.

Dairy Judging for "Grown-Ups"

(Continued from Page 16)

East Central Kansas, Iola, May 14
President, Bert Beal, Colony.
Vice President, Albert Knoepfel, Colony.
Secretary-Treasurer, Earl Means, Iola.

Northeastern Kansas, Leavenworth, May 15
President, George Smith, Highland.
Vice President, Russell Rawlings, Birmingham.
Secretary-Treasurer, R. A. Gilliland, Denison.
Committee for Show: C. L. Chacey and Merton Otto, Leavenworth.
Chairman, judging contest, O. N. Williamson, Tonganoxie.

Ayrshire

Effingham, May 17
President, John Keas, Farmington.
Vice President, Karl Scholz, Huron.
Secretary-Treasurer, W. J. Pape, Robinson.

Clay Center, May 18

President, Elmer Gaston, Morganville.
Vice President, Harry Tannehill, Broughton.
Secretary-Treasurer, J. L. Griffith, Riley.

Arkansas City, May 19

President, William Hardy, Arkansas City.
Vice President, W. L. Robinson, Nashville.
Secretary-Treasurer, Maurice Dusenbury, Anthony.

Stafford, May 20

President, Fred Strickler, Hutchinson.
Secretary-Treasurer, B. R. Anderson, Partridge.

Hillsboro, May 21

President, H. H. Hoffman, Abilene.
Vice-President, P. F. Friesen, Hillsboro.
Secretary-Treasurer, Clarence Ainsworth, Abilene.

Milking Shorthorn

Northeast Breeders District, Lawrence, June 1
Leonard C. Kline, 800 Bryant Bldg., Kansas City, Mo.
John B. Gage, 1007 Bryant Bldg., Kansas City, Mo.
Lars Jenson, Everest.

Southeast Breeders District, Chanute, June 2

President, Dwight Diver, Chanute.
Vice President, James Peck, Neodesha.
Secretary-Treasurer, Fred V. Bowles, Walnut.

Central Breeders District, Salina, June 3

President, M. H. Peterson, Assaria.
Vice President, Joe Hunter, Geneseo.
Secretary-Treasurer, Roy Rock, Enterprise.

Western Breeders District, Dodge City, June 4

President, John S. Hoffman, Ensign.
Vice President, W. A. Lewis, Pratt.
Secretary-Treasurer, W. D. Sharp, Great Bend.

When Nicotine Helps Hens

Two types of worms are of major importance in poultry. One is the common roundworm which lives in the intestines of the birds, and there are a number of varieties and variations. Also, there is a tapeworm which lives in the intestines, and both of these kinds of worms reduce the effectiveness of the birds as producers.

Naturally, every effort is made by the poultrymen to eliminate such parasites and many of them are using a nicotine mixture called "Black Leaf" worm powder which is so compounded chemically that it passes thru the crop and gizzard without any change whatever, but is reacted upon by the intestinal juices, the nicotine is released and at once becomes effective upon worms. In the case of the roundworms, they are killed and expelled. There is no known way of removing the head of the tapeworm without injuring the bird. Consequently it becomes a process of knocking off segments from time to time, authorities say.

'What' to Wear With 'Which'

By JANE ALDEN, Stylist



Did you ever wake up on a morning in April and feel like singing out: "Let's air out the whole house today, let's get some plants to brighten up these winter-dusty rooms. I want vividly gay red and white tulips, the fragrance of golden white narcissus, perhaps a silvery sheaf of pussy willow."

Of course, you have. So you know just what I mean when I say: "Let's

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Patterns 15 cents. Our new Spring Fashion book filled from cover to cover with glamorous new spring clothes, 10 cents extra. Address Fashion Service, Kansas Farmer, Topeka, Kan.

air out our clothes closet today. Let's brighten up the things we wear. I want a saucy pink rose on that off-the-face hat, a frothy white jabot for my blue suit, a Kelly green scarf with my new beige coat. I want all sorts of new gay ideas for my new season clothes."

Well, then, here goes! Suppose we start with a suit . . . as most everyone does these days. You may have any one of three styles to be very much in the mode: The fitted-at-the-waist three-quarter length tunic suit, a classic mannish jacket suit, or the new short boxy jigger coat suit, single or double breasted.

Two important new season style rules in choosing your accessories are:

1. Get contrast thru dark accessories with light suits, or light accessories with dark suits. Of course, deep bright colors or crisp white go with either light or dark outfits. It's when you put a pale-colored blouse and hat, for instance, with a light or neutral suit that you get a washed-out effect. Strive for rich, warm combinations.

2. Remember, single or double doses of one bright color, or the use of three colors together in an outfit. If you repeat the same bright color more than once you are apt to get a blotchy effect.

With a black suit, try a very frothy, frilly white blouse, Kelly green hat, green string gloves, shoes, bag and belt in black patent leather. Shiny accessories are favorites this season. There are even amusing fruit boutonnières lacquered to gleam right along with your other patent accessories (see sketch).

For your beige suit, a dark brown blouse and dark brown accessories thruout except for a delectable blue or coral hat to furnish just that fresh note of spring color. Perhaps a pocket-chief to match the hat. You will find this an exceedingly rich and flattering combination.

Navy, as usual one of the most popular spring colors, would trick you up very nicely if worked out like this: Navy blue suit, gay plaid blouse with red in it, a navy blue hat with ribbon or crisp quill feather trim in red, gloves, bag and shoes in navy. However, if you want one set of accessories to wear with all your things, and the rest of your clothes require black, try bag and shoes in black patent leather, keep your hat all navy and pick up the red in your blouse with a pair of red fabric gloves.

Speaking of three color combinations, here is one from Hollywood: Gray suit, deep blue blouse and hat, dark gray or black gloves, bag, and shoes. Then a third accent in the way of yellow violets tucked in at your waist or on your lapel.

(Copyright, Edanell Features, Inc., 1937)

Mother Love Ever the Same

MRS. S. H. HAYDEN

I tiptoed into the white hospital room expecting to find Judith asleep. But she lay wide-eyed, bright-eyed, the tiny three-day-old on her arm. "He's perfect, the doctor says," she whispered, and her tone said she had needed no doctor to tell her that.

"Have you decided on a name yet?" I asked.

"Oh, yes," she answered, smiling, "we had him named a year ago."

To judge by current conversations and advanced magazine articles, one would think motherhood definitely old-fashioned. Yet no one could call Judith anything but a modern. Certainly there is some discrepancy here. Perhaps the "old-fashioned" theory is endorsed by those who never met a Judith!

"Dustless" Cleaning

MRS. BENJAMIN NIELSEN

The cleaning of overstuffed furniture when one has no electrical attachments presents a problem. Beating or brushing fills the house with irritating dust. To clean mine I cover the upholstery with a cloth which has been dipped in water and wrung as dry as possible. Then I beat the damp cloth with the flat beater and the cloth takes up the dust.

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Black Feather

Third Installment

By HAROLD TITUS

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BUT out there, in the candle-lighted, thronged room, was revelry, the abandoned play of winners in summer.

On a table against a long, white wall fiddlers scraped and swayed; elbow to elbow and hip to hip, a hundred couples figured the dance to the rhythm of the melody. At the far end, punch was poured. Voices were already loud and shrill.

Back and forth, in and about, bowing, courtesying, balancing, they went, as the rosin-punished gut squealed; old and young, white and red, military and civilian, robust and fragile, played at *fortissimo*.

A gray-haired woman with pallid cheeks danced with a fiery-faced youth; a bearded trader, frame ill-suited to his coat and pantaloons, twirled some other trader's metif daughter, here at headquarters with its school to learn ways other than those of the interior. A pallid girl from the seaboard, visiting the major's family at the fort, danced opposite a Creole lass from beyond Green Bay. A fan of pink ostrich plumes dangled from one wrist; a trade mirror, worn as a bracelet, flashed from another. Here was the braided blue of an army uniform, there the wine-colored cutaway new in Montreal last winter.

Rodney Shaw's eyes still glowed with that spirit of conflict. For a considerable interval his gaze did not focus on what moved and shifted before it. He breathed rapidly, like a strong runner in from a race.

Old Basile made his way along the wall as the dance ended, intent on his trader. He drew close and with a gnarled hand grasped Shaw's arm.

"The men," he said, "cannot be held much longer. Unless we put out for Bois Blanc at once they will be drunk beyond hope."

He was worried. Sharing his master's desires and prejudices, this place was one of pestilence. For weeks he had argued against Shaw's plan, thru-out the march he had mumbled and fidgeted. Now that the errand was done—and he was wholly incurious about what had transpired—he itched to be gone.

THE plan had been to stop for hours only; to push on before the boatmen were hopelessly gone in revelry, thread the St. Marys, and make arrangements to secure trade goods and a fresh start from smaller traders at the Sault.

His hand trembled, now, as it lay on Rodney's arm; the black eyes glittered with mingled hope and fear.

Shaw said, frowning: "Yes, we must be gone. There'll be no quarter, now." Still, he did not move.

The crowd out there had given way, fallen back and clamor dwindled to a humming hush. His eyes were on a figure now curtsying to Ramsay Crooks' elaborate bow. She went low to the floor, slowly, gracefully, like a flower stalk drooping over crumpled petals. The girl held so a moment, the high, wide comb in her black hair glistening under the hundred candles which illuminated the room; and then she rose easily, floating erect without evident effort to stand there, half bare arms at her sides, as she smiled on Crooks.

Her dress was of yellow crepe over satin. The cut exposed her shoulders, crowned by filmy puffs which ran, in a series of smaller puffs, halfway to the elbow. From just below her rounded, quick rising breasts, the skirt fell in a flare to its border of white embroidered roses with silver leaves. A tiny slipper, ties crossed at the instep, protruded beneath the hem. A string of scarlet beads was at her throat, her black hair was parted, rising in a high twist at the crown. Her shoulders, so white; her mouth, red as the cherry beads; her arms, so firm. Thus, Shaw's attention flickered over detail.

Crooks was advancing toward her, rosette of ribbons upheld, speaking. Rodney moved down a step to see better, strained forward to hear. The girl's lips were parted, eyes smiling. But as Shaw moved, her gaze, caught by his stir, swung to him and her mouth closed. Her chin came up as it had there on the beach. Regal, she was, and tempting; wondrous tempting to a young man back from the interior after years!

Words, naming her queen of the night—for each night of revelry here must, by custom, have its queen—were spoken by Crooks. He bowed again and the girl, with the rosette pinned to her bosom, courtesied once more. Not so low, this time, and as she inclined her head her eyes swept Shaw and when she rose, mid clapping and cheering, they were still on him.

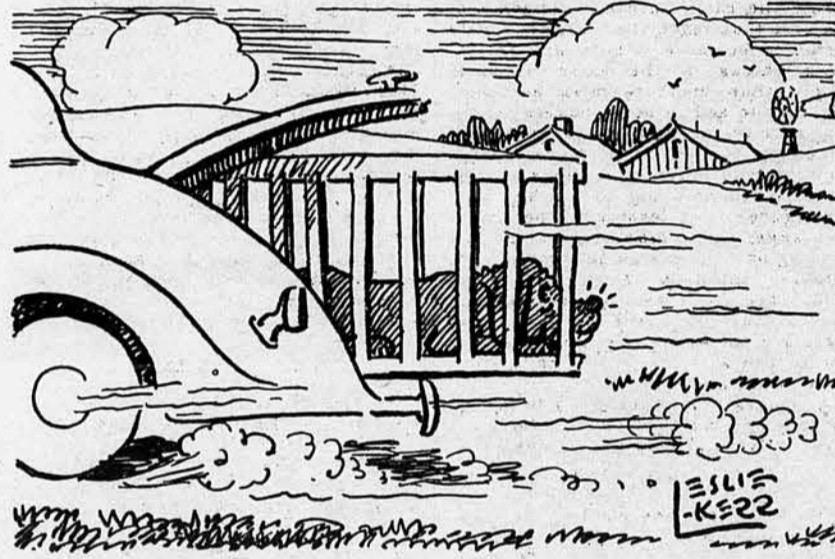
Crooks backed away, bowing repeatedly; the fiddlers were scraping, the crowd closing in and a young lieutenant from the fort, shouldering through the press, offered his arm to the girl and swept her away. But as she turned, her face showed over one white shoulder for Rodney Shaw; her chin was still high and, heedless of the officer's voice close in her ear, she smiled a peculiarly personal, an unmistakably challenging smile. . . .

That smile ran thru him like fire. Down on the beach, this forenoon, she had smiled and heat had spread thru his limbs. But then Ramsay Crooks had stood before him and words were sticking in his throat; he had long-planned things to do. Now that plan had been executed, he had respite, and odd impulses started surging through him, barriers that had held them back for years were smashing down. He had a queer feeling of being alone in the crowd, of being hungry, there. He stirred himself, not thinking following impulse rather than reason, and left the last step. He even shook off Basile's hand, but the hand came again, gripping tightly.

"Yes, Basile?"—halting, and impatient.

"But now, master! In an hour the men will be like dead!"

Shaw sighed and jerked at the long lapels of his coat, heedless of Donald MacIver who had sidled up behind them until he could hear each word, spoken



"I've watched so much road go backward that if I ever hit a trail I'll have to run it backward."

loudly because of the uproar of forming dancers. "Ay,"—frowning. "I'll go. We must go. . . . No . . . wait!" He took Basile's wrist as his eyes followed that yellow gown. "Wait, Basile! Give them this night . . . the men, I mean"—avoiding the concerned eyes of his retainer. "Let them have this night and, at dawn, we—"

"But here? Have you not defied this Company?" "I have. But,"—a hand clapping reassuringly the old one he held—"but there's no danger for the night. Danger, but not here, Basile; nor now. Not here and now, under the eyes of the fort and the agency. You sleep in my tent, Basile, by the packs, and at dawn . . ."

He shoved the man away, gently, and set out across the floor, walking slowly, deliberately, as a hunter might walk, stalking.

PUNCH and music and laughter mingled in his head and desire swelled his heart.

She had eluded him after that first dance; and again, after the next. Others had spoken; his shoulder had been clapped. Trade rivalries and animosities were dead for the night.

It was the lieutenant, Capes, talking rapidly in his ear, now.

"Annette Leclere," he said. He said more, much more; he poured out information in response to Shaw's request for the girl's name, as one gentleman playing host to another, but the echo of that name drowned his other words for minutes. Annette Leclere . . . Annette . . . Annette Leclere.

She danced, yonder, with tall, broad, red-haired Burke Rickman. Rodney had seen the man on his arrival and the description checked with that given him by his *engages* as the one who, for Astor, had looted him of his all, including a partner.

The two had met, later, and bowed stiffly, each concealing from the other his thoughts. But Shaw,

at least, had had little to conceal. The man had ruined him, yes, but only as an agent, a tool. His emotions were too strong then to be vented on tools.

But now a warmth of ill feeling for Rickman ran his spine. In his blue, gilt-buttoned coat, he was too striking a figure. He danced too well; danced as well, probably, as young men in Montreal or Boston or New York danced. He bowed gracefully to Annette Leclere and her smile did not devil him: He had a manner of confidence, as a man who is sure of his woman.

The fiddlers reached down for their mugs of wine. "As I was saying . . ." And, perhaps, the officer went on with what he had been saying, for all Shaw knew. He was crossing the room grimly, following Rickman and Annette Leclere. He jostled a lad, collided with a matron. He reached them, confronted the girl.

"I ask you," he began, and before he could say more she had turned away, drawing her escort into the throng, mocking him with her laugh, and it was not until many had sifted in between them that he was conscious of his blazing cheeks and her easy thwarting.

He pushed through, now, determined, flushed with pique.

"I no longer ask," he cried, overtaking them, commanding her attention by his vehemence. "I observe that one does not ask the favor of a queen. To have such, one takes! We dance!"

His hand was on her arm. Her flesh was cool, when he had fancied it hot. But it was firm beneath his fingers before she drew it away.

Rickman pressed closer to the girl, possessively, and now a glint of something more frigid than coolness was in his eyes. He spoke:

"The dances, Shaw, were all to be mine!"

His voice was smooth, well modulated, the voice of one accustomed to speaking firmly before women, to women.

Annette looked up at him. Her profile turned to Rodney and he was smitten anew by this fresh angle of her luscious beauty. She smiled at Rickman tantalizingly, as she had smiled at Shaw; her breasts rose and she drew herself up.

"Oh-h!"—Long-drawn, with upward inflection, as if, astonished at having been imposed upon. "Oh, sire, I had not been informed!"

Rickman's face twitched and he moved closer to argue but Annette, courtesied to Shaw and lifted a hand to his arm and he bore her away, knowing that she had turned to him only to dismay another, but not caring, taking her on any terms gladly.

Fragrance of her body assailed him; touch of her shoulder set his atremble. The feel of her fingers on his arm was a great weight. He looked down at her and beheld the fairest woman beneath the stars! His heart raced and the coursing of blood was loud in his ears.

She balanced beside him as the music caught up. His arm was at her waist and he swung her close, possessively, and felt her body yield temptingly and tense plaguingly and she was laughing at him, breath soft and warm on his neck . . . soft and warm, setting fresh madness in his veins.

(Continued on Page 27)

In Preceding Installments

Rodney Shaw, last of the independent fur traders opposing the Astor Company, comes to Mackinac to talk terms. He earns the right to wear the black feather, symbol of physical superiority, by conquering the port's bully in a rough-and-tumble fight. He also is honored by a smile from beautiful Annette Leclere. At a lavish banquet Shaw is asked to submit to the will of the company and lose his independence but he flings defiance at Astor, and his lieutenant, Ramsay Crooks. An evening of revelry is beginning at the fort. Now go on with the story.



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I DIDN'T KNOW LITTLE
CHICKS GREW SO FAST!

Ask FOR **NOPCO XX**
FOR "PROFIT-PRODUCTION"
VITAMIN A & D CONTENT IN FEEDS
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HARRISON, N. J.

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SALLY-OURS GET **NOPCO XX**
FULL OF VITAMINS A & D
TO MAKE 'EM BIG
AND STRONG



DR. SALSBUARY'S
CAM-PHO-SAL



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ROUP & COLDS!

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Works Behind ALL Listers
Prevents soil washing. Holds moisture.
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6 inches. Light draft. 1, 2 or 3-row.
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Everlasting **TILE SILOS**
Cheap to install. Free from trouble.
Steel reinforcing every course of tile.
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Write for prices. Special discounts
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NATIONAL TILE SILO COMPANY
R. A. Long Bldg., Kansas City, Mo.

Black Leaf 40 **KILLS LICE**
OUR "Cap-Brush" Applicator
makes "BLACK LEAF 40"
GO MUCH FARTHER
JUST A DASH IN FEATHERS...
OR SPREAD ON ROOSTS

Baby Chicks Camp Out in Tents In New Experimental Method

MRS. HENRY FARNSWORTH

EVER try brooding chicks in tents? Experiments along this line were tried out at the Arizona experiment station and it was found to be practical in that climate. Five trials were made at different seasons, 2 lots of chicks brooded each time. One lot was housed in a 12 by 12 foot brooder house, the other in a 12 by 12 foot tent, with a ridge 7½ feet high, the side walls 3 feet high. The tent was set on a wooden floor and heating was done with electricity. It required less current to heat the tent than it did the brooder house. The tent was warmer during the day, but cooler at night. During the tests the outside temperature varied from 25 degrees to 108 degrees. At times the outside temperature varied 35 degrees in 24 hours. The mortality in the 2 groups was about the same, with what little difference there was in favor of the tent-raised chicks. Less than 10 per cent mortality was recorded for both groups. From experience in camping we know it is easy to heat a tent for living purposes, but we've never tried it for brooding chicks—have you?



Mrs. Farnsworth

Broilers to Market Soon

Early hatched chicks will be ready for the broiler market this month. As a rule the early hatched broilers are the best that reach the market. There seems to be more vitality and fewer weak chicks in the early hatched broods than in those later hatched. Whether to sell to home buyers, or to ship to city markets, must be determined by the producer, since conditions vary in different sections of the state. When shipping to market one can figure on at least a 10 per cent shrinkage, and it may be greater, depending on the distance to market and handling methods. April and May usually are the largest broiler months, but this may not be true this year since there are not so many early broods in the country and later chicks have been more in demand.

A remark that a dealer made to me not long ago is a tip to the broiler producer. "Every grower should know his flock," he said, then advised hatching only from stock known to be of good vitality, so that the chicks will start good growth and feather quickly. One reason for barebacks in some flocks is that bareback chicks finally feather out and if not marked their owner allows them to get in with the rest of the flock, only to pass this slow feathering quality on to their offspring.

Hybrid Chicks in Demand

Quick growth and rapid feathering are 2 of the qualities that have made the hybrid chick so much in demand. The crossing of the 2 purebred strains

make for greater vitality, more rapid growth and better feathering. It depends on the strain and the kind of parent stock as to how effective the mating will be in producing chicks with these qualities. The government experiment station, at Beltsville, Md., reports that the Rock-Red cross at their plant produced broilers that outweighed either of the purebreds as much as 20 per cent at 12 weeks old. If one makes a business of broiler raising then he should know the strains of purebreds that produce his hybrid chicks.

It is important, too, that broilers be hatched from good-size eggs, because it takes a good-size hen to produce extra large eggs. On our farm we have marked the chicks that were hatched from the largest eggs, and invariably they were the ones that were ready for market first—but these large eggs were from our largest, finest hens so it was the large-size frame that was inherited from their parents that made the broilers ready for market from 10 days to 2 weeks before some of the other broilers from smaller stock.

Pullets or Older Hens?

Thinking back over years of poultry raising do you recall your outstanding flock of chicks? Were they hatched from matured pullets or were they from yearling hens or older? What qualities can hens pass on to their chicks that pullets cannot? Certainly if a pullet is a good producer and has a large, well-developed body with the vigor to continue to lay a large number of eggs every month in the year, what more can we ask than that she pass these qualities on to her chicks? The greatest value in using hens from which to hatch lies in that we have her pullet record to guide us, and as she continues her good work in the flock thru several seasons we know her to be long lived, an additional character that we certainly want to propagate in our flocks. However, the hen cannot pass on to her chicks anything but what she could have done as a pullet. But as many pullets drop out of the flock each year we learn to prize the older hens for proved stock.

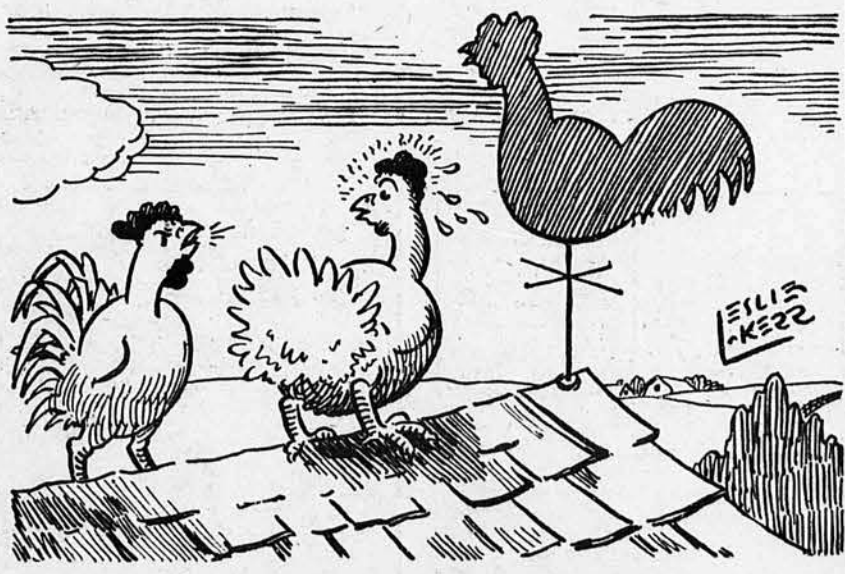
Hints for the Ration

Rations for growing chicks show a protein analysis of 18 to 22 per cent. The most popular ones seem to be those that show about 20 per cent. Those too high or too low in protein do not seem to give good results.

Cod liver oil at the rate of 1 pint to 100 pounds of mash makes a lot of difference in the condition and growth of a flock of chicks. It eliminates leg weakness, is an appetizer and satisfies the vitamin needs of the growing chicks.

Ever try growing rape for chicks from seed that is used for canary feed? It is said to make a better growth than the ordinary rape seed, which means more green feed for the chicks.

Provide plenty of hopper room and also water fountains for young chicks.



"So—I've caught you up here mooning with that guy again!"

Wonderful Success Raising Baby Chicks

Mrs. Rhodes' letter will no doubt be of utmost interest to poultry raisers who have had serious losses raising baby chicks. Read her experience in her own words:

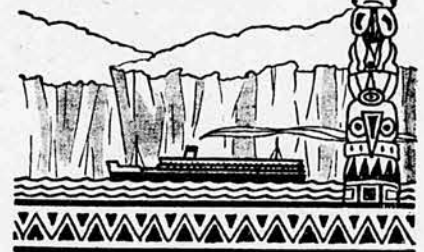
"Dear Sir: I see reports of so many losing their little chicks so thought I would tell my experience. My chicks, when but a few days old, began to die by the dozens. I tried different remedies and was about discouraged with the chicken business. Finally I sent to the Walker Remedy Company, Waterloo, Iowa, for a 50c box of Walko Tablets. They're just the only thing to keep the chicks free from disease. I raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."—Mrs. Ethel Rhodes, Shenandoah, Iowa.

You Run No Risk

Buy a package of Walko Tablets today at your druggist or poultry supply dealer. Give them in all drinking water from the time chicks are out of the shell. Satisfy yourself as have thousands of others who depend on Walko Tablets year after year in raising their little chicks. You buy Walko Tablets entirely at our risk. We guarantee to refund your money promptly if you don't find them the greatest little chick saver you ever used. The Waterloo Savings Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of our guarantee. Sent direct postpaid if your dealer can not supply you. Price 50c and \$1.00.

Walker Remedy Company
Dept. 22, Waterloo, Iowa

CAPPER'S
1937 CRUISE
TO ALASKA



July 28 - Aug. 16

A more extensive, more fascinating Capper Tour than ever before offered—almost three weeks of varying scenic wonders through the most fascinating part of North America—that's this summer's Capper De Luxe Tour.

Visit the Pacific Northwest in a palatial all-pullman train. Then the climax—embarkation for Alaska on the S. S. Alaska, chartered for the cruise to Seward, hundreds of miles further than the conventional Alaskan trip. You will see a land of eternal beauty, constant variety and amazing contrasts.

Every important Alaskan seaport will be visited. You will be in time to witness the salmon run—well-worth the cost of the entire cruise. You will sail thru the picturesque Inside Passage and then the vast bosom of the Pacific will unfold itself as the S. S. Alaska leaves Juneau, the capital, for its run to Seward.

That in brief is the program for this summer's sponsored tour of the Capper Publications. It's not a commercial venture—merely a good-will tour with every travel luxury. Trained travel experts accompany the party. No baggage worries. Everything provided for.

Those interested should make early reservations for space is limited. Return from Seattle is optional either thru Canada or California. Stopovers far into autumn.

THE CAPPER PUBLICATIONS
Topeka, Kansas

Board Special Pullmans at Wichita, Hutchinson, Manhattan and Topeka. Special train from Kansas City.



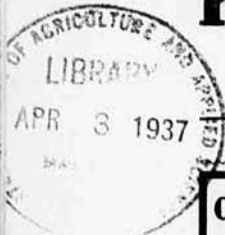
Tour Director, Capper Publications
Topeka, Kansas
Please send me illustrated booklet on this summer's cruise to Alaska.

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Address.....

Kansas Breeders of Purebred Dairy Cattle Can Show

Attend Your District Dairy Cattle Show and Take the Family



AYRSHIRE CATTLE

Charter Members of the DHIA

Woodhull Ayrshire Farm

One of our foundation cows, Good Buttercup, was a granddaughter of Finlston. Her sons have gone to head many of the best herds in the country. Seventy-five per cent of our herd are descendants from this great cow. Our 1936 herd average 346 lbs. of butterfat. Our herd was founded in 1916 and our first herd sire was a grandson of Finlston, the first Century Sire of any breed. Our junior herd sire is a grandson of Good Buttercup, our foundation cow. Our senior sire, Sycamore Jim, comes from Sycamore Farms. See our cattle at District Show, Stafford, May 20, and State fairs next fall. We have young stock for sale.

Fred Williams, Hutchinson, Kan.

Henderson's Dairy King Ayrshires

Herd established in 1926 with a JEAN ARMOUR heifer. I have never bought but one female since. That one was a full sister to MRS. THISTLE OF SOUTH FARM (champion cow of the breed for production). We have used a bull from the AM. College of Okla. But through the use of HENDERSON DAIRY KING bulls our herd is largely of that strain and the ARMOUR breeding. Our herd is Tb. and abortion tested. See our Ayrshires at District show at Arkansas City May 19, and both Kansas big fairs. Breeding stock for sale.

B. M. Dusenberry, Anthony, Kansas

Kow Kreek Ayrshire Farm

We know which cows pay. The D. H. I. A. records tell the story. Our herd has been on test for seven years. Herd average, last two years, 355 pounds of butterfat and the top cow made 577 pounds of fat and also won grand championship honors at the Kansas Free Fair. Several of our cows are making nice lifetime yields.

Many cows in our herd are daughters of the Proven Bull, Jean's De Soto.

In type and production our cows and heifers compare favorably with the best.

We can usually spare a few good ones.

See our cattle at the spring district show at Stafford, Kan., May 20, and the state fairs next fall.

Fred Strickler, Hutchinson, Kan.

Registered Ayrshires

Our 1936 Herd Test, 14 cows in herd, 8,973 lbs. Milk, test 3.93%, 352.89 Butterfat. Nine of these cows out of Beckey's Majesty of Fernbrook, a proven bull at the state reformatory, Hutchinson. We have several bull calves for sale. Write for production and price. Herd founded with daughters and granddaughters of Canary Bell, Thistle Gem of Kansas, our Alta Crest-Pembury bred herd bull, reserve senior champion both big Kansas state fairs, is proving himself when mated with our heavy production cows.

R. E. STARK & SONS, Abilene, Kansas

Ayrshire Bulls for Sale

Ayrshire Digest, March, 1936, says: "No bull is greater than his family background." Few herds have used 12 sires with so many high producing, outstanding ancestry giving a family background of the best. 4 to 8 cows, average 18,000 milk, 750 fat.

FRANK WALZ & SON, HAYS, KAN.

Where to See Spring Dairy Shows

THESE are the dates and locations of the spring dairy shows. Contests to select the district judging teams will be held at these shows. Every Kansan is invited.

Holstein-Friesian

April 19—Central Kansas, Hutchinson.
April 20—South Central Kansas, Harper.
April 21—Midwest Kansas, Herington.
April 22—Arkansas Valley, Newton.
April 30—North Central Kansas, Blue Rapids.
April 26—Southeast Kansas, Parsons.
April 27—East Central Kansas, Leavenworth.
April 28—Capital Association, Topeka.
April 29—Northeast Kansas, Sabetha.

Jersey Parish Shows

May 10—North Central Kansas Parish, Manhattan.
May 11—Central Kansas Parish, Larned.
May 12—South Central Kansas, Harper.
May 13—Southeastern Kansas Parish, Oswego.
May 14—East Central Kansas Parish, Iola.
May 15—Northeast Kansas Parish, Leavenworth.

Guernseys

May 4—Northeast Kansas, Hiawatha.
May 5—Central Kansas, Hillsboro.
May 7—Southeast Kansas, Coffeyville.

Milking Shorthorn Districts

June 1—Northeast Kansas, Lawrence.
June 2—Southeast Kansas, Chanute.
June 3—Central Kansas, Salina.
June 4—Western Kansas, Dodge City.

Ayrshire Spring Shows

May 17—Effingham. May 19—Arkansas City.
May 18—Clay Center. May 20—Stafford.
May 21—Hillsboro.

AYRSHIRE CATTLE

AYRSHIRE CATTLE

Buy Ayrshires Now

Invest in Kansas' Fastest Growing Dairy Breed



Ayrshires are red and white in color. Cows weigh 1100 to 1400 pounds. Steers make good beef.

1. Heaviest Producer of 4% Milk and Butterfat—at least feed cost.
2. Wears like iron—More 100,000 pound producers of 4% milk than any other breed.
3. Milk in demand for special market purposes.
4. Good Grazers—hardy—rugged—best of rustlers.
5. Correct type—sound udders—the buyers' choice.

For Literature or Help in Locating Stock Write

Ayrshire Breeders' Association, 260 Center St., Brandon, Vermont

See the District Ayrshire Shows May 17-18-19-20-21

Melbourne Farms Ayrshires

Quality and High Production. 12 years continuous testing by DHIA and 12 consecutive years' tests, average 327 pounds butterfat. Our foundation, Melbourne's Brown Kate Canary Bell and Alta Crest Farms.

Tb. and abortion tested. Federal supervision. Our bulls have gone into many sections and have always given satisfaction. We have young stock for sale and visitors are always welcome.

W.C. Ainsworth & Son, Elmo, Kansas (Dickinson County)

RED POLLED CATTLE

Red Polled Cattle



The Real Dual-Purpose Breed

The Red Polled Cattle Club will gladly furnish any information desired about this excellent Dual-Purpose breed. Address

Red Polled Cattle Club, Richland Center, Wis.

Nordayr Ayrshire Farm

Herd established in 1916. Our first bull was a son of the noted cow ELIZABETH GOOD GIFT, and our foundation females came from the ADAM SEITZ famous herd in Wisconsin. The herd has been on DHIA test much of the time since it was founded. Present bull in service is from the Reformatory herd at Hutchinson. The original herd had a lot of Henderson DAIRY KING breeding and many of our present animals trace to him. The Melrose family have also had a part in the building of our herd. Visit our herd and see our exhibits at the District shows and state fairs. Stock for sale.

OSCAR NORBY & SON, Pratt, Kan.

RED POLLED CATTLE

Melbourne Farm Red Polled Cattle Since 1913

Bred for milk and beef. For 10 years our cattle have won heavily at the best state fairs and big stock shows, including the Chicago National. Choice young bulls and heifers for sale.

(Just over the line in Nebraska)

F. A. SLOAN & SONS, Burchard (Pawnee Co.), Nebr.

GUERNSEY CATTLE

GUERNSEYS PRODUCE ... and REPRODUCE



Green Meadow Melba 38121 with her Coronation Melody 45588

In her first lactation period—15342.9 pounds of milk, averaging 6.28% butter-fat—963.3 pounds of butter-fat in a 365-day test, with a gem of a calf dropped at the completion of the record! That's how "Melba" produced—and reproduced—to set a new world's record for her age.

More and more dairy-wise farmers are saying "The trend is to pure-bred Guernseys!"

You can watch the great progress of this premium breed through the *Guernsey Breeder Journal*—published bi-monthly. All the news of the breed, including records of every Guernsey cow on official test. Handsomely illustrated. Send for a free copy—no obligation. Address: American Guernsey Cattle Club, 250 Grove St., Peterborough, New Hampshire.



Wiebe's Guernsey Farm Whitewater, Kan.

Our foundation cow, Wiebe's Ella Oakes, has produced 688 pounds of butterfat average, for the past six years. The entire herd, on DHIA test, has averaged 350 pounds of butterfat for the six consecutive years. Our present herd bull, the proven sire Calma's Polly Ann Star, promises increased production in our herd, his first five daughters averaging 416 pounds of butterfat. Our previous herd bull in use was of Jo-Mar breeding. Nothing but tops offered for breeding purposes. Herd Tb. and abortion tested. Young bulls for sale. See our cattle at our district show, Hillsboro, May 5.

JACOB H. WIEBE, WHITEWATER, KAN.

Meadowlark Farm

Wanted: Someone to help prove a real bull, a son of Flourie's Prince of Kansas and out of a daughter of this proven sire. Will sell a half interest in this 2-year-old bull to go into a clean herd.

Meadowlark Farm is proving four bulls, all sons of proven sires and dams are all out of proven sires.

See our cattle at the Spring Show, Hillsboro, May 5.

W. L. SCHULTZ & SON, Durham, Kan.

Golden Glow Guernsey Farm

Our herd of registered Guernseys is increasing. We can now spare a few good high grade cows and bred heifers. Entire herd clean and in good condition. DHIA Records. We also have for sale a few registered bull calves whose dams have A. R. and DHIA records.

E. E. Germain, Bern, Kan.

Two Pine Guernsey Farm

The best of Langwater breeding. The two nearest dams of our present Langwater bred bull have an average test of 550 lbs. of butterfat. Our junior bull, also a Langwater, comes from the Hende herd in Connecticut. Our herd has been on continuous DHIA test for seven years. Our last year's average profit, per cow above feed costs, was \$60.00. Herd Tb. and abortion tested. We offer heifer and bull calves and females, bred or of breeding ages. See our stock at the Hiawatha district show, May 4.

GEO. W. SCHUETZ & SONS, Horton, Kan.

Cattle Supply Foundation Stock for Any Kansas Farm

Good Dairy Cattle Make Profits More Certain Any Year on Kansas Farms

JERSEY CATTLE

Shady Grove Farm JERSEYS

We have three cows with acceptable lifetime butterfat records of approximately 2,500 pounds each. Am offering for sale, one yearling and one 2-year-old bulls, from above dams, sired by Coronation Volunteer Poppy 359177. These are good calves and priced reasonable. Also a few good cows for sale. This herd has been on DHIA test continuously for the past seven years. They have a yearly average of 17 cows that show an average net profit, above feed cost, of \$70.00 per head per year, or a total profit of \$7,740.00, selling butterfat at local station.

Frank L. Young, Owner
Cheney, Kan.

Twenty Years Breeding Jerseys

Has proven their worth. We continue with DHIA tests and the use of approved blood lines. NOBLE MAJESTY and RALEIGH breeding predominating. RALEIGH SWEET MAJESTY is now in service in our herd. His dam has RM. record 671 lbs. fat. We have 16 good young cows and springer heifers, bred to the above bull and will sell any 6 of them for reasonable prices. Our herd average last year with only four full age cows in herd and contending with short dry feed and hot weather was 290 lbs. fat. Tb. and abortion tested. You are invited to attend our big parish Jersey show at Harper, Kansas, May 12. Plenty to eat, ice cream, etc.

R. M. McClellan,
Anthony, Kansas

Kloster's Jerseys

Carry the blood lines of the best Jerseys on the Island. Combining production and exhibition qualities. Young bulls from tested dams for sale at prices that are right. Herd Tb. and blood tested for abortion. See our cattle at Harper Parish show, May 12.

GOLDEN GLOW ACRES
I. J. Kloster Winfield, Kan.

Jersey Breeders

It doesn't take a five-generation pedigree to show production records back of our bulls.

Over 450 cow years of continuous tests.

Windmoor Farm
Edna, Kansas

Isern's Island Bred JERSEYS

Our senior herd bull is a grandson of CORONATION OXFORD KING. His heifers now coming into milk are very promising. Senior herd sire is a son of CORONATION HULL (this sire was a Silver Medal bull and his dam has just qualified for a Gold Medal.) No bull is too good for use in our herd. Making DHIA records. Tb. and blood tested. See our Parish Show, Larned, Kan., May 11.

W. C. Isern, Alden, Kan.
(Rice Co.)

You Are Invited to Be a Judge

THE dairy judging contests, sponsored last year by Kansas Farmer, for men and women interested in dairy cattle, are being continued this year. Every dairy enthusiast may enter in one of these contests, and if he "makes the team" will take part in the statewide contest at the Kansas Free Fair at Topeka, in September. The contest will include the Milking Shorthorn breed this year in addition to the four breeds of 1936. Prizes offered in five different breeds by Kansas Farmer for the state contest, are \$25 for first place; \$15 for second; \$10 for third; and \$10 to the high-scoring team.

JERSEY CATTLE

JERSEY CATTLE

Out at Hutchinson Romancing with Jerseys

Come out and see old Eagle, mightiest of Jersey sires! Come and admire Longview Repeater, seven times a Grand Champion . . . and come out to see their understudies: Blonde Celebrity, a son of Pedro of Oakwood; Sam's Final Edition, the last of Volunteer's Dreaming Sam's famous sons, and Volunteer Bouquet Observer, a son of Afterglow's Observer out of a daughter of Estella's Volunteer.

Twelve daughters of old Eagle—each a flash of beauty—form the base of our future. These are being bred to "Blonde," "Sam" and "Observer" . . . He who serves best will be used most.

A. LEWIS OSWALD Rotherwood Jerseys Hutchinson, Kansas

JERSEY CATTLE

Laburnum's Blond Lad

Grand champion bull, both Kansas state fairs. At home,

SHADOW LAWN FARM
Holton, Kan.

Roy Gilliland Jr., Manager
D. L. Wheelock, Owner

MILKING SHORTHORN CATTLE



ANNOUNCING
Our New Herd Bull
Woodlyn Bates 1836840
A deep red, intensely bred Bates bull, sired by Woodlyn Duke, whose dam has an RM record of 17135 pounds of milk and 533 pounds of butterfat. The best of Healy and Barrington breeding. Heavy production shown in the close-up brackets of his pedigree. His dam milked 8,100 pounds as a 2-year-old, 9,800 as a 3-year old. His sire was first at Illinois state fair and a heavy winner at many other leading fairs and shows. We are mating this bull with our heavy production cows bought at the McKelvie, Lincoln, Nebraska sale last season. We have young bulls for sale.
Mueller & Halleck, Manchester, Kan.

Type and Production

Show Winners and Record of Merit cow included in the ten head of young females we offer until May 1st, at \$800. Five are sired by REGAL KNIGHT, 37 R. M. in 5 generations average 11,994 milk. Five are bred to MOUNTAIN REEVES, 3 nearest dams average 16,081-625 fat. Also bulls by these sires. Buy where you get exact, record proven

"Dual Purpose-Dual Profit"
HARRY H. REEVES, Pretty Prairie, Kan.

My Clay-Bates Milking Shorthorns

Professor M. 1817983, is a deep red and a fine combination of Bates and Clay breeding and is in service in my herd. Twenty daughters of Lord Wild Eyes (1536520), the most intensely bred Bates bull in Kansas. Deep red and weighing 2270. We hand-milk 20 cows during the year. Young heifers and serviceable aged bulls and baby bulls for sale. See us before you buy.

J. R. (Bob) Huffman, Abilene, Kan.

MILKING SHORTHORN CATTLE

Hardy - Efficient - Popular from Bluegrass to Dustbowl

World's butterfat record and heaviest bull, lowest cost dairy and beef production, cheapest raised and highest sale price, "Best For Kansas Farms"

Private and public offerings
thru
MILKING SHORTHORN SOCIETY
Pretty Prairie, Kan.

Announcing Our New Milking Bred Shorthorn Bull

His color is a nice deep red. He was bred by Walgrove Farms and is a son of the noted Walgrove Charming Knight. His dam, Walgrove Roan Lucy, averaged 14,270 pounds of milk, 557.78 pounds of butterfat in six lactations. His seven nearest dams averaged 12,500 pounds of milk and 516.66 butterfat. His dam's sire, Walgrove Conqueror, has 22 daughters that average 11,135.9 pounds of milk. He traces close to Brookside Doris, Walgrove Graceful and other cows that stand at the top for heavy production. We are mating him with Otis Chieftain cows. See him at the fairs this fall. Bulls and heifers for sale.

Lawrence H. Strickler,
Hutchinson, Kan.

Pilot Knob Farm Shorthorns

Bred for both milk and beef. Established 10 years. First bull a grandson of PINE VALLEY VISCOUNT (A Clay bred bull of great merit.) Present herd bull PEARL DUKE M-198867, a grandson of the world-famous cow, GLENSIDE PEARL CLAY, 18,007 milk and 719 butterfat in one year. Our bull's dam has a record of 10,050 milk and 425 fat. We have young bulls for sale by above bull and NORTHWOOD DON. Also a few by Walgrove Lewis. Our herd is strong in the blood of Walgrove Conqueror and Norwood Pride. Come and see us. Tb. and abortion tested.

W. A. LEWIS & SONS
Pratt, Kan.

LONG ACRES Milking Shorthorns

FAIR ACRES JERRY, M-1820642 in service. Deep red and bred along the most approved lines for heavy milk production and beef combined. Bred by BORG FARMS. His dam had a record of 12,000 milk and 488.70 butterfat in one year. His 12 nearest dams are heavy production Register of Merit cows. Mating him with Clay-Bates bred cows. Six good young red bulls for sale, out of our best cows.

Bigwood & Reese, Pratt, Kan.

MILKING SHORTHORN CATTLE



A typical Retnuh Farms Shorthorn cow.

Retnuh Farms Horned-Polled Our Large Herd of Beef Type Milking Shorthorns

have been developed from old established families through Hand Milking. They are smooth, beef types, with correct udder and teats and have been heavy milkers for generations. Type and milking ability are fixed factors.

40 to 60 of these true Dual Type cows hand milked the year round. The entire herd is a bred up herd, not a bought one, and has 25 years constructive breeding back of it. D. H. I. A. records are made under farm care. Persistent sales permit us to offer only young bulls with occasional females throughout the year. Write for prices or visit us.

Hunter Bros. & Dwight Alexander
Geneseo, Kan.

HOLSTEIN CATTLE

SUNNYMEDE FARM



B. I. S. Mercedes Walker Korndyke
Holstein-Friesian Mt. Hope Index
20,380 pounds milk, 721 pounds fat
This high record proven sire in service.

A Daughter



Sunnymede Korndyke Hartog

HER RED BOOK RECORD
Twice-a-Day Milking—Class "C"
2 yrs. 15,502 lbs. milk 505 lbs. fat
3 yrs. 17,306 lbs. milk 609 lbs. fat
4 yrs. 15,809 lbs. milk 553 lbs. fat
5 yrs. 20,166 lbs. milk 655 lbs. fat
Just fresh as a 6-year-old and on twice-a-day milking producing 80 lbs. per day.

Sons and grandsons of B. I. S. Mercedes Walker Korndyke for sale.

C. L. E. EDWARDS
Topeka Kansas

Thonyma Holstein Farm

Seven of our senior herd sire's nearest dams have average butterfat records of 953.2 of butterfat and the 15 nearest dams average 879.5. His sire was the second honor sire of the breed for 1934 and 1935 in the United States. Our bull has 30 ARO daughters, 13 of them average 600 lbs. of fat.

Our Junior sire is a grandson of the All American sire Man-O-War 62. Herd on continuous DHIA test. Last year's herd average, 399 lbs. of butterfat. Everything Tb. and blood tested for abortion. Young bulls for sale.

ERNEST A. REED & SON
Lyons, Kan.

**WE
KNEW HOW
GOOD THEY
WERE BUT.**

KANSAS

POULTRY RAISERS AMAZED US BY WHAT THEY SAID!

"Successful poultry raisers everywhere will be interested in NUTRENA Chick Mash Pellets, because they will save from 15 to 25 percent on their feed bill."—Mrs. Noah Merritt, Washington, Kans.

"I will never go back to mash feed again for I like NUTRENA Chick Mash Pellets a great deal better and they mean more profits—which is the main thing poultrymen are interested in."—Harvey A. Dueker, Woodbine, Kans.

"Everyone knows a farm woman's chief worry, during the Spring is saving and growing a flock of chicks. It was a great relief this time, since NUTRENA Chick Mash Pellets lifted the load. I have raised my chicks this year with less work than ever before."—Grace L. Garard, Olivet, Kans.

"From the first day, chicks actually start on NUTRENA Chick Mash Pellets easier than mash. They develop better, grow faster, take less attention, less cleaning and a great deal less feed. The chicks are not only easier to raise, they are easier to sell."—Elson Thayer, Ottawa, Kans.

"NUTRENA Chick Mash Pellets not only take the guesswork out of feeding, but so far as I am concerned, they have taken the guesswork out of buying. They are the last word in a starting ration, just good sound chick insurance."—Mrs. Sam E. Rose, Louisburg, Kans.

"At last I found a feed that was simple and easy to feed—NUTRENA Chick Mash Pellets."—Mrs. Lillian Smith, Gem, Kans.

"You are saving the poultry producers a lot of money by selling them feeds that do the best job in less time. At the end of 8 Weeks, it has only cost 3 1/2 pounds of NUTRENA Chick Mash Pellets per bird."—Art Whitney, Jewell City, Kans.

"NUTRENA Chick Mash Pellets is the most successful feed that I have ever used, and much more economical, producing much larger body weight for the number of pounds of feed used. I am decided on two things—first, buy good chicks, second—feed them NUTRENA Chick Mash Pellets."—Mrs. Marie Ettridge, Hope, Kans.

"In our 13 years experience, we have never had a bunch of chicks, adopt themselves to a feed so quickly. At the present, we have lost 8 chicks out of 310 started and it is by far the best flock we have ever raised—not a bare back in the crowd and plenty weighing 2 1/4 pounds at 8 weeks. NUTRENA Chick Mash Pellets raise better chicks with less worry, less work and less feed."—Mrs. C. A. Low, Fontana, Kans.

"My chicks are large for their age, more thrifty and much better than any I have ever raised during the 21 years I have been raising chicks. I have never fed any feed that was so economical."—Mrs. Clyde G. Parks, Delphos, Kans.

"NUTRENA Chick Mash Pellets are easy to feed. All you have to do is have plenty of feeders—keep them well filled—a good supply of water and you will have excellent results."—Mrs. Helen Hatfield, Navarre, Kans.



CHICK MASH PELLETS

POULTRY RAISERS OVER THE ENTIRE MIDDLE WEST ARE PRAISING NUTRENA CHICK MASH PELLETS AS THE SAFE--EASY AND ECONOMICAL FEED TO USE

A BIOLOGICALLY CORRECT RATION

"NUTRENA CHICK MASH PELLETS must be biologically correct, just as you advertise, because after 7 weeks on them, our chicks are certainly physically correct."—Mrs. Elsie Dill, Eskridge, Kansas.

MAKES MORE PROFIT

"I raise poultry for a profit—that's the reason I feed NUTRENA CHICK MASH PELLETS. My results are the best I ever had."—Mrs. Frank A. Swenson, New Richland, Minnesota.

LESS MORTALITY—EARLY LAYERS

"We lost so few chicks it's hardly worth mentioning. We got our first pullet egg at 4 months and 1 day."—Mrs. E. O. Griesel, Waukonis, Okla.

HER SECRET OF RAISING CHICKENS

"Many of my neighbors ask, 'What is your secret of raising chickens?' My answer is, 'Feed NUTRENA Chick Mash Pellets if you really want the best results for your money.'"—Maggie Hutchison, Neosho, Mo.

EASIER TO FEED—NO WASTE

"I prefer NUTRENA CHICK MASH PELLETS 10 to 1 to Mash. There is little or no waste—they are much easier to feed and I find the troughs are always clean."—Jake Diel, Pilot Grove, Missouri.

JUST RIGHT FOR DAY OLD CHICKS

"My day old chicks started just as readily on pellets as on mash. You surely simplified feeding."—Mrs. Henry Fischer, Adams, Nebr.

THE MODERN WAY TO FEED

"The modern, clean, simple and complete feeding method. It does the job 100 per cent."—Mrs. E. H. Oehlson, State Center, Iowa.

FED NUTRENA CHICK MASH PELLETS FROM START

"We have fed our chicks NUTRENA Chick Mash Pellets from the very start. These chicks have done fine and we certainly cannot praise NUTRENA Chick Mash Pellets too highly."—J. Frank Holmes, Prairie Grove, Ark.

See Your NUTRENA Dealer or Write for FREE Literature

COFFEYVILLE, KANSAS

Nutrena Mills, Inc.

KANSAS CITY, KANSAS