

KANSAS FARMER

MAIL & BREEZE

Volume 66

April 7, 1928

Number 14



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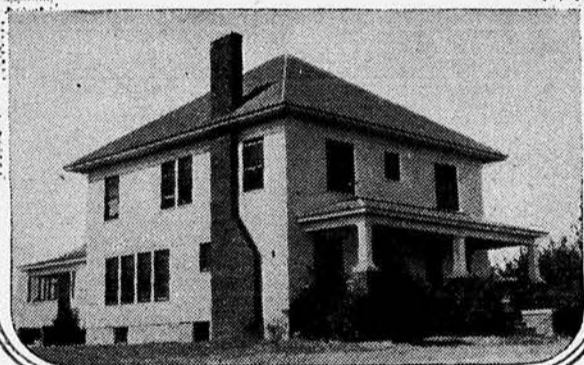
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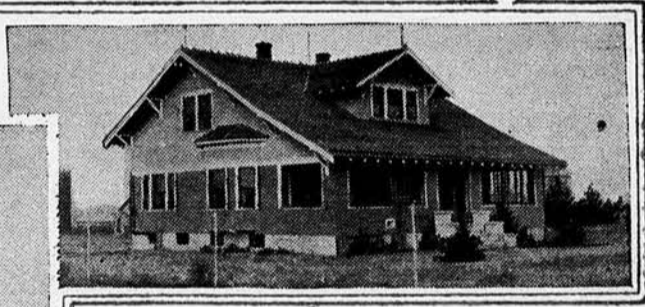
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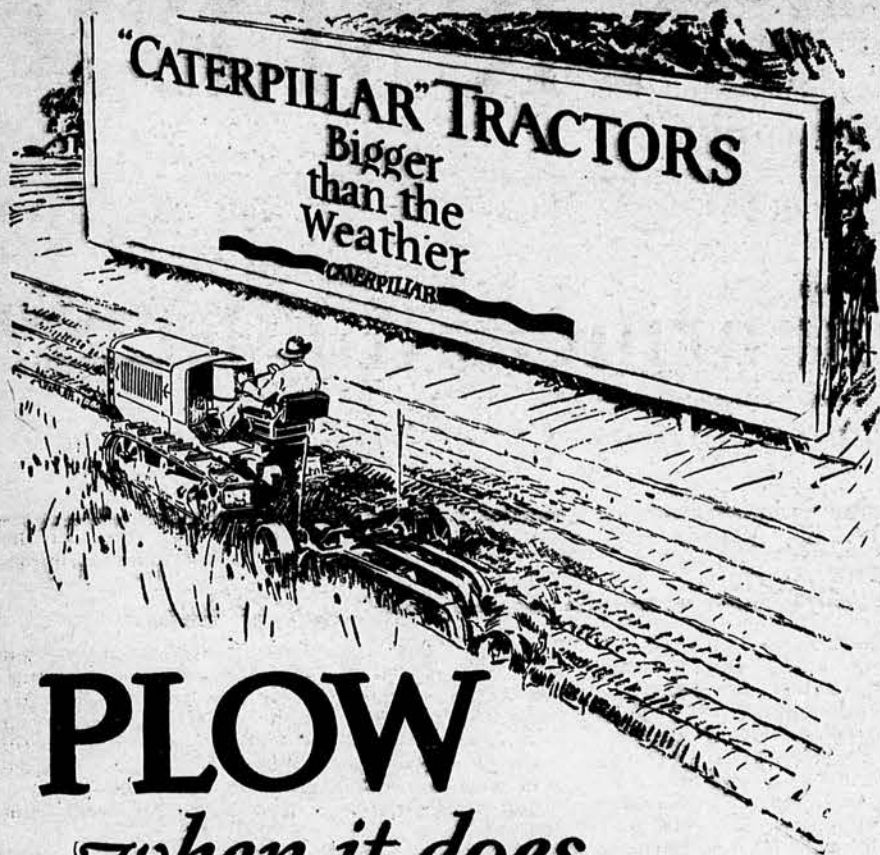
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Frogs Are Happy This Year!

But the Apricot Blossoms Are "Too Previous"; Probably Jack Frost Will Get 'Em

BY HARLEY HATCH

THE frogs have been singing for nearly a month, and there has been but once when cold weather stopped their song for a day or so. According to the old saying frogs have to be frozen out three times before spring is really at hand, and if this saying is true we have two more freezes coming to us before it is safe to plant corn. The apricot trees are coming out in bloom, and probably will be caught by Jack Frost. We have one big apricot tree which has bloomed regularly for 15 years, and in that time it has produced just three crops, frost killing the blossoms 12 years out of 15. If apricots were not so previous in their blooming they would be one of our most dependable fruits; the buds are seldom or never killed by winter freezing, as the peaches so often are. It now seems probable that all the buds are killed on the peach trees, with the possible exception of the seedlings. Other fruit, such as apples, pears and cherries, appear to be in good condition. Owing to a wet fall, strawberry plants made a very thrifty late fall crop.

This spot of an acre or more in extent has been too wet to produce crops in seasons like that of 1927, but in dry years it has always raised the best crops on the farm. But it always has been a nuisance to work around, and so, after all these years, we have it tilled. When we started digging the ditch the top soil was very wet, but not much water was standing. When we got down 2 feet we struck a regular brook, and the water poured out, nearly a 6-inch tile full for several days. The soil on this bottom field is very deep and porous, and in wet seasons the water which comes out of the hill fills the bottom soil full to a depth of 6 to 7 feet when a bed of gravel is struck. This gravel bed is, without doubt, the ancient bed of the creek which now runs several rods away. By cutting this flow of water off with a 6-inch tile we think we can put this land in condition to raise alfalfa.

'Tis Cheap Fire Insurance

The Kansas Grange mutual insurance company, the official title of which is "The Patrons' Fire, Tornado and Hail Association," has had another successful year, and has again, as in every season since 1916, put away a good sum in the surplus fund. This company, whose members must belong to the Grange, has rates adequate to meet almost any emergency and at the same time carry part of the receipts to the surplus fund. This rate is but half that charged by the old line companies. It is low because the local solicitors, who are elected by the local Granges, receive small commissions, as compared with those paid by old line companies, and because in this company there is virtually no "moral hazard," which is the chance that the insured property will be "fired" to collect the insurance. Most Grangers own the roofs over their heads, and are not going to burn themselves out of house and home to collect insurance which, in all cases, is less than the actual value of the insured property. Since 1916 the volume of insurance in force in this company has increased in round numbers from 27 million dollars to 54 million dollars, or 100 per cent. The surplus fund now stands at \$255,000, and is increasing every year.

Another Oats Year, Maybe?

A local rain which extended but a short distance on either side of this farm fell one week ago, and it stopped field work until the last day or so. It has now been resumed, and some oats are being sown. While it is always best to get oats sown early if possible, yet March is not too late to sow. If it is an oats year the late sown will make oats, altho possibly not so good as those sown earlier. Plowing has been resumed on many farms. Owing to the heavy and continued rains last year our heavy soil was well packed down, and most farmers had planned to do more plowing than usual because of this solid condition of the soil. The hard freeze of January put the soil in better condition than seemed possible; there is no agency which will do more toward putting the soil in shape for a crop than frost. Our soil does not take in frost readily and seldom freezes more than 1 foot deep. The same degree of cold would put frost down 6 feet in the open, porous, sandy soil of Northern Nebraska, and water pipes many times are not safe even at that depth. Our soil here in Coffey county would be better if it had more hard winter freezes.

'Rah for Native Bluestem

The sun has shone warmly here during the last week; on three days the mercury rose above 80 degrees, but the heat was tempered by the haze caused by many prairie fires. Nearly everybody burned off both pastures and meadows this spring, owing to the very heavy fall growth of grass. In many pastures a good hay crop could have been cut last fall. To burn or not to burn is always a debatable question here in this country of bluestem meadows and pastures. A pasture not burned will provide feed earlier in the spring, and it will hold moisture much later in the summer than will the burned over lands. For this reason many farmers do not burn unless compelled, as they were this spring. If too much old grass is left in the pasture the cattle tend to eat in spots, and these closely eaten spots are likely to be partially killed out in dry seasons, allowing bluegrass to creep in. I have no quarrel with bluegrass as early and late pasture, but for feed from May until October there never has any pasture grass grown equal to Eastern Kansas native bluestem. Farmers living out as far from town as we do have larger pastures and take better care of them than do the owners of small pastures near town, which have nearly all been taken by bluegrass.

Then Came a Brook

One of the jobs we tackled during the last wet week was the laying of a line of tile thru a wet spot at the foot of a hill on the south side of the creek which cuts this farm almost in half.

Corn Trend is Upward

Nearly all the cattle which have been on full feed in this locality have been moved out. In some instances these last shipments were the second lot which had been fed since last fall. The first shipments which went out about the first of the year were so profitable that more feeders were brought back and the feedlots filled again. These last lots have not been nearly so profitable as were the first; in fact, with the recent rise in price of corn and the \$3 drop in the price of fed cattle, cattle feeding is now about on a par with hog feeding—a case of swapping dollars, with the feeder running all the risk of loss by death, which many times is not small, as all feeders of a heavy corn ration know. So I think we may be assured that no more cattle will go into feed lots in this locality until next fall. Feeders in the Greenwood and West Coffey county districts now have to pay 85 cents a bushel for corn, and the prediction is made that if the spring is unfavorable for planting, corn will sell for close to \$1 a bushel in the locality mentioned. Other farm products bring the following local prices: Eggs, 24 cents a dozen; butterfat, 40 cents a pound; hogs, 175 to 225 pounds, \$7.70 a hundred. Those who ship their butterfat receive on an average about 5 cents more a pound.

Boo-Hoo!

After the wedding the young people left Harper's Ferry for a weeps visit with the bride's parents. —Grafton (W. Va.) paper.

An airplane engine will develop 1 horsepower for each 1 1/4 to 2 pounds of gross weight of the engine.

KANSAS FARMER

By ARTHUR CAPPER

Volume 66

April 7, 1928

Number 14

Who Are the Master Farmers for 1928?

Second Group to Receive Same Recognition as Those of Last Year

THE second group of Master Farmers will be selected by Kansas Farmer during 1928, and these men will receive exactly the same recognition as the 15 Master Farmers of last year. It was the intention to select 10 men for the honor for 1927, but so many nominations were received that the number of awards had to be increased by 50 per cent. We are starting on the same basis this year.

To the 10 men who are adjudged best, using the score card on this page as the standard by which they shall be measured, Arthur Capper and Kansas Farmer will award the degree of Master Farmer, together with a gold medal suitably engraved and a Master Farmer Certificate to be framed.

Nominations for this degree may be made by a neighbor, the county agent, banker, editor of the local paper, business man, teacher, friend, member of the family other than the nominee, or any other interested person. No farmer will be permitted to nominate himself. Men who are nominated will be compared by the score card method, will be asked for certain definite information and will be visited personally by a member of the editorial staff of this publication.

The number of nominations from any community is not limited, so every good farmer in Kansas should have an opportunity to place on this honor roll.

Score your candidate, please, on the score card printed on this page. But before you do this, kindly read the instructions for scoring which appear a little farther along in this article. If you wish additional score cards they will be supplied on request.

Every nomination must be accompanied by a score card properly filled out. The name and address of the person scoring a candidate must appear on the score card, but we shall regard this information as confidential. Names of nominees will not be printed. Only the names of those who finally are selected to receive the degree of Master Farmer will be published.

Who May Be Nominated

The 15 men who received the degree of Master Farmer for 1927 are to hold that title for all time to come, so they should not be nominated again this year. They are: J. C. Frey, Manhattan; H. E. Hostetler, Harper; Henry Rogler, Matfield Green; James G. Tomson, Wakarusa; R. C. Welborn, Lawrence; Fred G. Laptad, Lawrence; Charles M. Baird, Arkansas City; Charles H. Gilliland, Mayetta; A. L. Stockwell, Larned; W. A. Gladfelter, Emporia; A. Yale, Grinnell; Tudor J. Charles, Republic; E. H. Hodgson, Little River; J. F. Staadt, Ottawa, and A. E. Wegener, Norton.

Only those men who live on farms in Kansas, and who operate them as the principal source of income, are eligible to be nominated for the Master Farmer degree. This includes tenants and men who manage farms for others, as well as farm owners. The important thing is that they actually are responsible for the success of the farms, and the farm homes in which they live.

Please remember it isn't how much a man farms, but how well. It isn't how large his house is that counts; it's the kind of home he makes out of it. Quality alone should be your guide in nominating your candidates, and you shouldn't hesitate to nominate the best farmers in your community. All nominations will be acknowledged by letter so that you will be sure your candidates are receiving proper consideration. Every effort will be made toward fairness in making the awards.

Three men of state-wide prominence, and who know farm work and farm life, will be the judges who make the final decisions. No names will go to them. They will know the

candidates by number only. But they will know the county in which each nominee lives. Location of each farm, with respect to the section of the state and the type of agriculture adapted to that section, will be taken into consideration in making the awards.

The Master Farmer Award has been made a national project by the Standard Farm Paper group, which covers almost every state, and Kansas Farmer has the honor and privilege of conducting the work in this state. It isn't unlikely that there may be a national organization of Master Farmers, in time. Degrees of Master Farmer will be awarded at a special meeting called for that purpose. Announcement of this meeting will be made in Kansas Farmer sometime in the fall issues. A special article will be written about each Master Farmer following the selection.

So here is an excellent opportunity to help dignify agriculture, and render unto the good farmers of Kansas the honor they deserve. Please make your nominations without delay, so the judges will have sufficient time to consider every candidate. Nominations will be accepted until June 1. Please

mail all nominations, requests for additional score cards and any questions you may have to the Master Farmer Award Editor, Capper Building, Topeka, Kansas.

Instructions for Scoring

You will notice the first five items under "Soil Management"—a, b, c, d and e—are for the Eastern Kansas farmer, so for him you should score these and skip the second group of five. When scoring the Wheat Belt farmer, you should skip these first five items and start filling his score card with the second group of five items—a, b, c, d and e. Thereafter, please score for every item you can.

A. Operation of the Farm—Total of 285 points.

1. Soil Management—75 points. For the Eastern Kansas Farmer

a. If he applies manure regularly as it is produced, or provides storage so it doesn't lose its fertilizing value, score 15 points. If he fails to do this, deduct 10 points. If he makes no use of manure, score zero.

b. If he feeds or plows under his straw, score 15 points. If he burns or otherwise wastes straw, score zero.

c. If his soil washes and he uses Mangum terraces, soil saving dams, tile, crops or other means to prevent soil washing, score 15 points. If he makes no effort to prevent soil washing, score zero. If his soil doesn't wash, allow full score of 15 points.

d. If 25 per cent of his crop acreage is in legumes, score 15 points. Deduct accordingly as acreage of legumes falls below this percentage.

e. If he follows a definite system of crop rotation, score 15 points. If he does not follow a rotation system, score zero.

For the Wheat Belt Farmer

a. If he returns straw to the land directly or in manure, score 15 points. If he fails to do this, score zero.

b. If he practices control of soil blowing, score 15 points. If not, score zero. If soil doesn't blow, score 15 points.

c. If he practices summer fallow in lieu of crop rotation, score 15 points. If he practices alternate row cropping in lieu of summer fallow, score 10 points. If he practices neither, score zero.

d. If he grows legumes, score 15 points. If he can, but does not grow legumes, score zero. If he is beyond the legume territory, score 15 points.

e. If he follows practices equivalent to crop rotation, such as growing row crops, alternate row cropping, summer fallow, score 15 points. If he grows wheat continuously without fallow, score zero.

2. Farming Methods—25 points.

a. If he diversifies his crop production and follows a rotation; or in Western Kansas, if he follows practices equivalent thereto, score 5 points. If he fails to do this, score zero.

b. If he sows pure seeds, score 5 points. If not, score zero.

c. If he sows seeds of varieties adapted to his section of the state, score 5 points. If not, score zero.

d. If he practices early preparation of the seedbed, score 5 points. If not, score zero.

e. If he practices insect, pest and disease control, score 5 points. If not, score zero.

3. Man, Horse and Machine Labor—25 points.

If he has enough man, horse and machine power to do his farm work, score 25 points. If his power is deficient in any branch, such as men, horses, machinery, tractors, engines, (Continued on Page 82)

Kansas Farmer's Score Card for Farmers, 1928

	Possible Points	Candidate's Score
A. Operation of the Farm		
1. Soil Management	75	_____
2. Farming Methods	25	_____
3. Man, Horse and Machine Labor	25	_____
4. Crop Yields	40	_____
5. Livestock Management	60	_____
6. Tools, Machinery and Equipment	20	_____
7. Field Arrangement	20	_____
8. Farmstead Arrangement	20	_____
B. Business Methods		
1. Accumulative Ability	100	_____
2. Accounting Methods	50	_____
3. Safety Financial Practices	100	_____
4. Marketing Practices and Production Program	35	_____
C. General Farm Appearance and Upkeep		
1. Upkeep of Buildings	25	_____
2. Condition of Fields	25	_____
3. Fences, Ditches and Roads	20	_____
4. Lots and Yards	10	_____
5. Lawn	10	_____
D. Home Life		
1. Convenient House	50	_____
2. Labor-Saving Equipment in the Home	75	_____
3. Character as Husband and Father	100	_____
4. Education and Training of Children	100	_____
E. Public Spiritedness		
1. Neighborliness	50	_____
2. Interest in Schools and Churches	60	_____
3. Interest in Other Community Enterprises	50	_____
4. Interest in Local, State and National Government	100	_____
Total	1245	_____

Name of Farmer Scored

Address

Name and Address of Scorer

Date

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G. E. FERRIS.....Protective Service
 RAYMOND H. GILKESON...Livestock Editor
 FRANK A. MECKEL...Agricultural Engineer
 HARLEY HATCH.....Jayhawker Notes
 DR. C. H. LERRIGO...Medical Department
 A. G. KITTELL.....Poultry
 RAYMOND H. GILKESON.....Dairying

KANSAS FARMER

Published Weekly at Eighth and Jackson Sts., Topeka, Kan.

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F. B. NICHOLS, Managing Editor

RAYMOND H. GILKESON, Associate Editor

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Please address all letters in reference to subscription matters direct to Subscription Department, Kansas Farmer, Topeka, Kan.

SUBSCRIPTION RATES: One Dollar a Year

Entered as second-class matter February 16, 1906, at the postoffice at Topeka, under act of Congress of March 3, 1879.

Passing Comment

By T. A. McNeal

MY FIRST visit to Dodge City occurred more than 45 years ago, when a young man trying to edit a frontier newspaper at the little cattle town of Medicine Lodge, I attended a meeting of the Southwestern Editorial Association at Dodge City. The Santa Fe Railroad, which by that time had built its line thru Southeastern Colorado and down into New Mexico, as far as Secora, proposed to carry the editors and their wives and families free to the end of the road and return, presumably for advertising purposes, while the towns along the route furnished entertainment. It was a decidedly inexpensive and highly enjoyable trip. Even the Pullman Company, which as a rule does not make any donations to travelers, furnished free berths; the only cash the editor really had to dig up was a very moderate tip to the porter.

I was young, unmarried and fancy free. The experience was to me a great adventure. There were several handsome girls with the party, who also were unattached, and, so far as I could learn, still fancy free. I was green enough so that I should not have ventured above the frost line, but happily I did not fully realize my verdancy and the girls were kind. As I let my memory run back over that trip I appreciate more than ever the wisdom of the old maxim, "Where ignorance is bliss 'tis folly to be wise."

It has been a long time since I have seen any of the girls who made that trip along with the editors, but if they are still alive I will venture the guess that they have bobbed their hair, put on flapper garments and appear only a little older than they did back in the early '80's. Perhaps their waist lines are more ample, and it may be that their complexions are more artificial, but I have no doubt they are stepping right along, maybe doing the fox trot with the grace and agility of flaming youth.

And General Wallace Talked

AT THE old quaint town of Santa Fe we were entertained by the city government, or whatever organization was running things. The scholarly, distinguished and polished Gen. Lew Wallace was Governor of the Territory of New Mexico, and was gathering the material for his novel, "The Fair God," a great story, but never so popular as "Ben Hur." General Wallace was a delightful speaker and toastmaster; his welcome was really a literary gem.

The Kansas editor who had been selected to respond on the part of the association was a dignified and imposing looking gentleman, somewhat past middle life and ordinarily of most correct behavior, but he had looked on the New Mexican brand of red liquor, and was lit up like a white way when all the lights are working well. He was in a delightful state of uncertainty as to which one of the boys he was, and saw at least as many as two Gen. Lew Wallaces sitting at the head of the banquet table. Being in a state of mental uncertainty as to what he was talking about, he rambled on for nearly an hour, while the food was growing cold and we were suffering the pangs of unsatisfied hunger. He finally sat down, and we were filled with thankfulness, but just then it occurred to his intoxicated fancy that there was something he ought to have said which he had omitted, and staggering to his feet he meandered along for another half hour. It speaks well for the restraint of the other members of the editorial party that none of them took a shot at him—or it may have been that they had all laid off their guns before they came to dinner.

At that time Dodge City had passed the crest of its hectic career as the wildest cattle town in the United States. In fact we were told that a reform administration had been elected. The reform mayor was running the largest and most ornate saloon in the town, altho the Prohibitory Amendment to the Constitution had been adopted two years before.

A dance hall or two were still operating, and some of the male residents of the town rode about the streets in company with ladies of somewhat tarnished reputation, with no attempt at concealment or apparent shame on the part either of the ladies or their escorts. So far as I could ascertain, the reform boasted of by the residents consisted of the fact that some of the most noted gunmen and gamblers had left town, probably because they had opposed the city administration then in power at the previous election. We were welcomed to the city by the late Mike Sutton, who advised

us that, so far as he knew, very few persons west of Spearville had as yet learned that prohibition had been adopted by the people of Kansas.

The bodies of the men who had died "with their boots on" still rested on "Boot Hill," their graves marked by wooden headboards; the dead unclaimed by relatives, if they had any. Quite possibly many of them were known by names different from those bestowed by their parents. Along with the men who had met with sudden and violent death there were also buried, in this same historic ground, a few of the demimonde who also had died perhaps by violence, but more likely were buried there for the reason that they had been the companions of the dead gunmen, and it was therefore deemed fitting that they should rest in death by the paramours they attended in life with sinful but passionate devotion.

It was only a few years after my first visit to Dodge City that the bodies were moved from Boot Hill, and that eminence was crowned with the largest and most modern school building up to



that time in the town. That building has been torn down, and Boot Hill is to become a sort of historical park owned and maintained by the city.

In this connection there is an interesting incident. Dr. Simpson, an old resident of Dodge City, who seems to be a born sculptor, is making a life-sized statue of a son of the late Mike Shughrue, who was well known in the old days to every cow man and other resident in and about the old-time Dodge City. Doctor Simpson, as I understand, has never taken a course in sculpture, but evidently has great talent in that line. This statue is made of concrete, and those who know young Shughrue say it is a perfect likeness. The figure is dressed in the old-time cowboy costume down to the last detail, and Doctor Simpson knows the typical cowboy dress. The big hat, the handkerchief around the neck, the leather "chaps," the high-heeled boots, the spurs, the roll of the shirt behind, pistol scabbard, the paper of "Bull Durham" in the pocket, the cigarette papers in which the cowboy rolled his own—he would have scorned the idea of "boughten cigarettes"—all these details are faithfully reproduced in the statue, which I understand is to be placed on "Boot Hill."

A Hard-Boiled Egg?

ANOTHER incident of the visit of 45 years ago! The leading hotel then was the Wright House, named in honor of Bob Wright, and perhaps built by him. I sat down to dinner near an open window. A man who evidently had been looking on the liquor when it was red, and still had a bad taste in his mouth, came in and sat down at the same table. He looked at the various dishes of food spread around his plate with a dissatisfied expression, and then taking them up one at a time tossed them out of the window. When only the plate on which he was supposed to eat was left, he called the waitress and gave his order: "Bring me an egg boiled on both sides."

At that time the Government still maintained an army post near Dodge, where the State Soldiers' Home is now located. There was perhaps a battalion of infantry at the post, in command, as I recall, of a colonel, whose name has escaped my

memory. The editors were all invited to visit the post and partake of the hospitality of the officer in command.

If there seemed to be plenty of liquor on tap in the town there was more of it, and I judge of a better quality, on tap at the post. It ranged from bottled beer on ice to sparkling champagne. Did I partake? Why bring that up? My recollection is not entirely clear, but I probably did. The statute of limitations has long since run. That, I may say, was my first experience with regular army officers and their wives. Frankly speaking, they seemed then to be the most affable, courteous gentlemen and about the most agreeable ladies I had ever seen. That was before the days of the khaki uniform. The officers and men wore the old blue, and that day in honor of the visitors the officers wore their army full-dress uniforms. They impressed a green, unsophisticated youth as about the most "splendiferous" outfit I had ever seen. Khaki may be a more serviceable uniform, but for exhibition purposes, dress parade and social events it is not a marker to the uniform of the old army.

All of Western Kansas 45 years ago was a grazing country. The buffalo had gone, but herds of antelope numbering from 15 to 30 in a herd could be seen any day on the prairie. The antelope is perhaps the most speedy animal that runs; swifter even than the deer, but it was possessed of a most dangerous curiosity and a certain stupid persistency. A herd of antelope always ran on the ridges, perhaps, on account of an instinctive desire to be able to see their enemies; and no matter how closely pressed they would make for the ridge on which they were accustomed to cross. Hunters took advantage of this, and headed them off. Even when the antelope must have known that hunters were lying in wait they would insist on following the ridge to their own destruction. They were timid but naturally friendly animals easily domesticated, and in captivity would become as tame as sheep.

Possibly there were men even then who had a vision of the time when the Western Kansas plains would become the greatest wheat fields of the United States, but if any of those editors had such a vision I cannot recall that they said anything about it. Dodge City was simply a cattle town. The buffalo had been succeeded by great herds of cattle, and the Dodge City Globe, the leading paper of the town, pandered to the trade of the ranch owners. It was the first paper to make a business of printing cuts of cows with the brand of the ranchman carved on the cut and below a brief description of the location of the headquarters and extent of the range claimed by the cattleman. The Medicine Lodge Cresset, the paper of which I was one of the editors, followed suit, and afterward published more cattle cuts than the Globe, but was not the originator of that kind of advertising.

These cattlemen divided the country among them like ancient barons, altho they owned not an acre of the soil. Their cattle ranged far and wide. Often Kansas ranch cattle would be found as far south as the Panhandle of Texas, but after all few of them were lost. The cattleman might place his brands on a few mavericks, as unbranded and unclaimed cattle were called, but he respected the rights of property of other cattle owners, and if he discovered cattle with their brands on his range he would notify the owners. There was a free and easy comradeship among them. The stranger riding across the range was welcomed at any cow camp, and so long as he seemed to be attending to his own business no questions were asked. He was fed, as was his horse, without charge either in the way of money or work, remained at the camp as long as he wished and then went on his way rejoicing. Most of the cattlemen were hard riders, free spenders and reckless gamblers. It was no uncommon thing for a cowboy to work six months on the range without going to town. Finally he would take his vacation, draw his six months' wages in a lump, announce his intention of buying another outfit, get into a poker game when he first struck town, and stay with the game until he had lost every cent of his wages, also perhaps his saddle, bridle and blankets, buy another outfit on credit and cheerfully ride back another six months of range line riding, apparently without any regret and not even any hostility toward the card sharps who had robbed him.

The cattle owners were often as confirmed gam-

blers as their employes, the difference being that they generally played with each other and had sense enough to keep out of games with professional gamblers. However, they played them high; the roof was the limit and often thousands of dollars and in at least one instance a whole herd of cattle and ranch horses changed hands in a single night's play.

Cheers for Prohibition Now!

PERHAPS nothing illustrates more vividly the remarkable change that has come about in Dodge City during the 45 years since I first visited there than the fact that at the meeting in the Beeson Opera House last week the remark of one of the speakers that not in a thousand years would the prohibitory law, either state or national be repealed, or the Eighteenth Amendment be stricken from our fundamental law, received the greatest applause of any statement made. If any speaker had made such a statement in Dodge City 45 years ago it would have been greeted with hoots and hisses, and the speaker would have been lucky if he had gotten out of the building without suffering great bodily harm.

Possibly there were residents of the frontier town 45 years ago who were in favor of enforcing the prohibitory law which was then on the statute book, but if so they kept mighty still about it. To have expressed such an opinion then would have meant social ostracism, and probably physical violence to the expressor. It is safe to say that 90 per cent at least of the inhabitants honestly believed that saloons and dance houses were necessary to the prosperity of the town; to close them, in their opinion, would mean that Dodge City would become an abode for owls and bats, a place to be shunned by every man who had red blood in his veins.

Then Dodge City was a crude, unlovely frontier town of perhaps a thousand inhabitants, possibly not that many. There was not a single fairly good building within the corporate limits. There was not a single paved street and not even a brick sidewalk. There were some outfitting establishments that did a large business in furnishing supplies to ranchmen, but even the buildings in which they did business were low and uninviting, altho they covered a good deal of ground. Today Dodge City has 10,000 inhabitants; it is as orderly and law-abiding as any town in Kansas; it has many miles of well-paved streets and is building what will be, when finished, one of the most ornate up-to-date and commodious high school buildings in Kansas. It has at least one church building which has cost \$150,000, and others costing nearly as much. It has one great hospital and another almost completed. It has a miller who buys more wheat, not on margin but for actual cash, than any other individual miller in the United States.

It has one of the most progressive and best edited daily papers in Kansas. It has just completed a new hotel that would be a credit to a city twice the size of Dodge. In place of the old wooden shacks in which men drank and reveled, and bedizened women, lost to shame, added obscenities and blasphemy to the general uproar, there are now handsome business blocks with stores filled with modern merchandise. There are 10 times as many inhabitants as there were in the days when the town enjoyed the questionable reputation of being the greatest and the wildest cattle town on earth, and there is more than 10 times as much real wealth and business as there was 45 years ago. Long ago the business men of Dodge City realized that the saloon and houses of prostitution never built permanent prosperity, and that, leaving out of consideration all sentimentality or even morality, and only keeping in view cold matters of business, it pays to be sober and decent.

Dodge City may be said to be the center of the

district where the "combine" especially flourishes. The climate in that part of the state is especially suited to the use of the combined harvester. Wet harvests are very rare; wheat can stand until it is fully ripe without much risk, and even the first wheat harvested by this remarkable machine is generally fit to go to market without being docked for moisture. The land is not yet broken up into small holdings, and that also is favorable to the combined harvester.

Two months ago the prospect for a wheat harvest was far from bright. That part of the state had been passing thru the most protracted drouth for many years. It appeared as if there would be millions of acres sown in wheat last fall that would have to be abandoned; then one of those seeming



miracles that sometimes happen in Western Kansas weather conditions occurred. Soft falling rains and wet snows, that did not drift, soaked the ground; where the wheat had seemed to be dead it came to life; little green shoots appeared in fields that had been as barren as the desert. It is too early yet to make any definite predictions; a good many things may happen yet to the wheat crop, but just at present I think it may be said that the prospect has never been brighter since the famous spring of 1914.

If weather conditions remain favorable two and a half months from now, hundreds of combines will be sweeping thru golden seas of wheat, singing industry's potential song. The banks will be filled with money; old debts will vanish like melting snow under the beaming rays of a new prosperity.

The old Dodge is only a memory; only a few folks are living who can still recall the picture. Standing on the slight eminence of "Boot Hill" one looks over a fair, modern city, filled with tasty, modern homes and business houses, a city becoming more beautiful as the growing trees embower the homes with comforting shade. Out of the shadows, perhaps, come back the figures of the long ago, heroic figures, some of them, of men of dauntless courage and almost unbelievable daring, others merely sordid gamblers and killers without compunctions of conscience or sentiments of mercy.

Tin-horn gamblers by profession, their harvest was the hard earned wages of the cowboys who had driven the great herds of longhorned cattle over the sun-parched trail from Texas, and who, with their brains stupefied by the vile liquor they had drunk, were as helpless in the hands of these card sharps as would be a tender lamb at the mercy of a gaunt and ravenous wolf.

With these human wolves murder was a pastime, and honor a meaningless word. Some of those who were so carelessly buried on Boot Hill were first provoked to a quarrel by the men who had robbed them, and then shot to death while they were impotently trying to draw their own guns. Sometimes the killers were the victims of other killers; in fact, most of the notorious "gunmen" died by violence.

The picture fades; the silent specters pass into the silence from which they came, and the old timer, as he breathes deep the ozone filled air of the morning, hears the hum of the new industry. The old order has changed, and changed for the better.

No Rebates in Sight

We organized a co-operative store about nine years ago. The company was required to buy the stock of anyone moving out of the community. Later on the members voted not to buy anyone's stock when he was moving or otherwise. Can one or more of the stockholders sue for a division, or can a majority of the members force a sale? When we organized the company we were to get 8 per cent interest on our money and a dividend and rebate. It has paid interest but twice, and only paid a dividend once, several years ago. We have never had any rebates. Please quote the law. C. V.

The law providing for the organization of co-operative societies occupies something over four pages of the Revised Statutes. It would be utterly impossible to quote the entire law. As briefly as possible I will say that any 20 persons may associate themselves together as a co-operative corporation. Second, every such corporation may issue stock to its shareholders in such amounts and with such limitations as are hereinafter defined. No shareholder may own to exceed 5 per cent of the capital stock. Such an association shall be managed by a board of not less than five directors. Each corporation shall formulate bylaws describing the duties of the directors and officials, the manner of distributing profits of its business, the manner of becoming a member and other rules and instructions to its officials and members as will tend to make it an effective organization.

There would be no legal barrier to a majority of the stockholders making a rule that the company itself should purchase the stock of any stockholder desiring to leave—or, on the other hand, the bylaws might provide that it should not purchase such stock. The manner of governing the body would, according to statute, be controlled by the bylaws. With the restrictions which have been mentioned the corporation might run its business as the majority of the stockholders dictated.

All the Members Must Agree

Can a school board hire a teacher who is a daughter or wife of one of the members of the board? Is a teacher's contract legal and could she teach the school if one member refused to sign the contract? J. J. L.

The school board has no right to employ a relative of a member of the board except in a case where the board unanimously agrees to such employment.

What About Children?

If a wife owns land in her own name in Colorado, what share of that will her husband inherit at her death? Or in case the husband owns land what share would the wife get? L. S.

If either one dies without will and if they have no children, the survivor would inherit all. If they have children the survivor would inherit half.

Shall We Save or Waste Millions?

SUPPOSE a man owed \$8,000 and at the end of the year he found he had \$400 on hand after meeting all his current expenses. What had this man better do with the money—spend it for a few things he thinks he wants, or apply it toward paying off his debt of \$8,000? Which course would be better for him?

The question seems almost childish, it is so apparent what the man should do with the money.

Yet the taxpayers of the United States are in the position of this man. There is a dispute in Congress in regard to how much of the 400 million dollars of Treasury surplus shall be handed back to the taxpayers in a further reduction of income taxes, and how much, if any, applied to our interest-bearing public debt of \$18,173,915,467.

Whatever the amount—whether all or part of that surplus is turned back to the millions of taxpayers—it cannot total more than a few dollars at best for each one—just some change to spend. But applied to reducing the public debt it would save millions of dollars in interest charges—not one year, but every year until the debt is wiped out.

Our war debt at its peak, August 31, 1919, was \$26,596,704,648. The payments we have made on it now reduce our interest charges 320 million dollars every year. That is what these payments are now saving us in taxes every 12 months. We are saving virtually a billion dollars every three years in

interest charges alone on this huge national debt.

That is a real tax reduction. It is a tax reduction which doesn't stop. It keeps right on working every day and every year, and it lifts a great load off our shoulders.

Can we in the present instance do better than adhere to this debt-reducing policy? I think not. Our federal income taxes are not now excessively high or burdensome. They afford us means of combining regularly to save something for paying off that huge tax-consuming debt of 18 billion dollars, which by this policy we have already diminished more than 8 billions of dollars.

And yet there are men in Congress who would hand back the Treasury surplus to the taxpayers by making another trifling cut in federal income taxes. The House bill would make the reduction 289 million dollars, altho Secretary Mellon says the cut should not exceed 200 millions, and President Coolidge will veto any measure that will endanger a balanced budget.

The farmer organizations are for having taxes cut in the way that will count most in reducing the debt and its interest charges, as in 1927. Of the 635-million dollar surplus of June 30, 1927, 612 millions was applied to the public debt, effecting an annual interest saving of 24 million dollars a year every year for all time to come.

No tax reductions other than this sort are neces-

sary, declares the American Farm Bureau Federation, if such reductions imperil the ability of the Federal Government to reduce its debt at least 1 billion dollars a year, and this is more than we have done in any one year yet.

President Coolidge recently warned the country that the expenses of operating the Government, which have steadily been reduced in the 10 years following the war, must soon begin mounting again. In fact, they have already begun to climb. The army and navy budget is being increased by millions. Long needed and delayed public buildings will require millions, and flood relief will call for \$25 million dollars.

The place to cut expenses is in the budget. The place to cut federal taxes is to trim them off the 18-billion-dollar public debt, for such a tax cut goes on forever. It is permanent, not temporary. It doesn't just hand the taxpayers a few dollars, then quit, it saves them hundreds of millions, not one year but every year.

I am for this policy, strong.

Arthur Capper

Washington, D. C.

World Events in Pictures



At Left is an Attractive Sports Dress with Delicately Striped Blouse and Pleated Skirt. Right, a Charming, Girlish Negligee. The Material is a French Rayon, Called Fulgurante



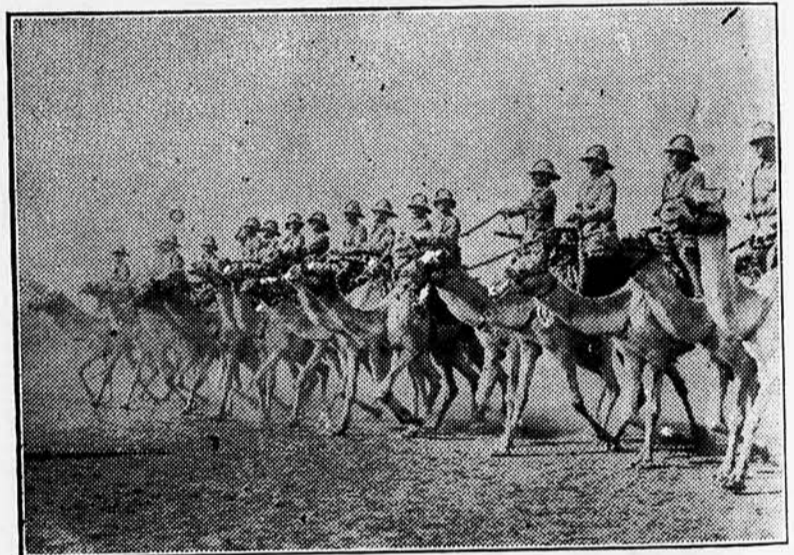
Two New Specimens Introduced to Flower Lovers at the Annual International Flower Show, New York, and Named in Honor of Two Famous Americans. Left, the New White Orchid, Called "Col. Lindbergh," and Right, the New "Mrs. Evangeline Lindbergh" Tulips



Caroline Bishop, Beverly Hills, Calif., Reported to be Engaged to Gene Tunney. She Refused to Affirm or Deny the Engagement. Gene Remarked That the Rumor Was Somewhat Premature



They Have Your Number! Photo Shows Manager R. C. Brewer, of the California Auto License Service, Taking Some Liberty with License Plates. He and His Assistants Are Showing Their Display of Plates Left by Motorists of Every State in the Union



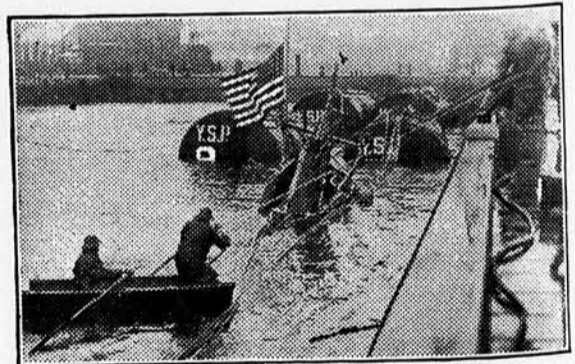
The Camels Are Coming, Yo Ho, Hi Oh! This is a Striking View of the Camel Corps in the Egyptian Army. The Riders Are All Britishers. Impressing the Fact That Great Britain in a Recent Note to the Egyptian Government, Insists on Maintaining Control of the Army



Victors in Japan's First General Election for Males Over 25 Years Old, Celebrating by Drinking "Saki," or Rice Wine, Which is the National Drink. In the Process of the Celebration They Shouted "Bonzai," Which Means "To Your Health"



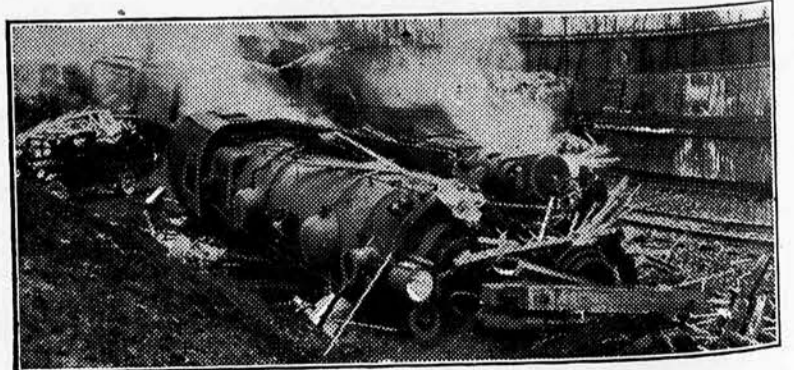
The Flying Peacemaker, Lindy, Receiving the Woodrow Wilson Peace Medal and \$25,000 Prize for His Good Will Flight Thru Latin America



The S-4, with Flag at Half Mast, Arriving at the Charlestown Navy Yard, at Boston, Where it Was Opened After Going Into Drydock. Eight More Bodies of the Crew of 42 Were Recovered. The Boat Bore Mute Evidence of the Fight for Life



First Spring Practice for the Princeton Crew. These Men Have Started Training for the Famous Inter-Collegiate Races and Poughkeepsie Regatta. These Boat Races, or Shells, as the Boats Are Called, Bring Out the Crowds and Generate Enthusiasm Equal to Other Leading Sports



When Three Freight Trains and One Express Train All Try to Occupy the Same Space at the Same Time, Something Happens. In This Case a Freight Train Slowed Down at a Curve Near Harrisburg, Pa., and Before Signals Could be Set, Two Other Freights and an Express Crashed Into It, Blocking All Four Tracks of the Main Line

These Factors Cramp Poverty's Style

Kansas Sheep Men Are to Have a Special Day at the College

THINGS could be worse. For example, after harvesting a wheat crop of 3½ million bushels last summer, Pratt county came thru with a million bushels of corn. For 1927, Cloud county had a record of fewer mortgages for less money than in 1926.

Out in Kearny county, folks point with pride to the farm of Charles Bentrup. The farm includes 1,000 acres, is under irrigation and a well-diversified program is followed. About one-third of the farm is in alfalfa. Bentrup sold \$30,000 worth of products in 1927.

According to the Saline Chamber of Commerce, Saline county boosted her dairy population by 35 per cent during 1927—with profitable cows. Reno county, even if you don't think of that section as a potato-growing area, produced and consumed \$70,000 worth of potatoes, and shipped in a lot more. More spuds are being planted there from year to year to cut down the shipping-in process.

And there are a million other signs that "things could be worse" if we just hunt them out. And the wheat crop this far promises something real in yields.

The Trouble With Milk

AND now there is something wrong with milk. Aggie professors have discovered that it isn't the perfect food we always have considered it to be. R. W. Titus, one of the chemistry specialists at the college, experimented with eight young rabbits. Seven were given milk and iron oxide and the other lonesome bunny received, in addition, ash from lettuce.

The seven died with anemia, and the lonesome one is still more lonesome, but healthy and well. The lettuce, according to Titus, made it possible for the rabbit to utilize the iron supplied in the ration, which is present in very small amounts in milk. X-ray photographs taken of the legs of the rabbits showed the bones to be bent, indicating that vitamin D, which prevents rickets, is low in milk in winter.

Well, milk may not be a perfect food, but just try getting along without it.

Might Solve Help Problem

THERE seems to be a little difficulty at times in spots, in getting hired hands at the right price who will function as hired men should do. It is just likely that W. H. McClure, a Republic county farmer, can help solve the problem.

He has a very unique farm hand in the "person" of a monkey, that he declares is as useful as a good many hands that are considerably farther up the evolution scale. The little fellow helps feed the hogs, closes gates, keeps chickens out of the garden, runs many errands and now and then pitches hay.

Or farmers might follow the example set by Rufus Johnson, Atchison county. He has an elephant which he uses as a beast of burden.

However, about the time monkeys and elephants become real popular and there was a demand for them, somebody might get a corner on the market and make whoever wanted them pay and pay and pay. But still that will not happen, for this is a machine age.

Should File Our Teeth

PERHAPS the savages in the dark ages knew their stuff after all, where dentistry was concerned. They filed their teeth, didn't they? Well, just listen to this.

Tooth decay, according to the Bureau of Education, Department of the Interior, nearly always starts from food particles catching in irregularities in the teeth. Smooth the teeth at the beginning, and much decay would be prevented, the bureau advises. Over a period of years, of persons who were so treated when children in a Boston clinic, only one in 200 has had serious tooth trouble since. One in three of the rest of us has. Of course, having our teeth ground down would be a nice, pleasant sensation.

A Two in One Fowl

DO YOU know what Turkens are? Jack Ashcraft, Morris county, has some eggs to sell for hatching purposes. Turkens are a new American developed fowl, half turkey and half hen. They are said to be as easily raised as chickens and possess the qualities of turkeys. So now you may raise hens, turkeys, or both, pay your money and take your choice.

Had a Hog Hauling Time

PORK movements took on a rapid pace on, or rather from, one Mitchell county farm recently. Earl Burger decided to part with his hogs. Work started at 7:30 o'clock on Monday evening. At exactly 4:30 o'clock on Tuesday morning by

the same clock, work stopped. In the meantime Mr. Burger hauled, weighed and unloaded at the stockyards, 220 hogs. A good percentage of the animals were in the 300-pound class. The work was done with one truck.

Now just compare that with walking the pigs several miles to market, as of old, or hauling them behind a team.

Just Talk Pounds Away

THERE is about "one idea a minute" that guarantees to reduce the plump individuals to that graceful, slender stage that would make the bathing beauties envious. But what do you think of this one? "Talk it off." That is what Ida J. Kain, a Chicago dietitian, advises. "Just talk off your tonnage, ladies."

"Wow! I know a woman who can talk an arm off a statue, but she is the fattest thing in . . ." But wait a minute. That isn't the kind of talk, ex-



actly. "Talk and nobody will notice that you toy with your food," the Chicago lady insists.

What's the use of beating around the bush about it? The idea of taking food and "toying with it." And imagine "toying" with a meal of spring chicken and all the home-grown trimmings. We think maybe Chicago folks keep thin dodging bullets anyway.

Can Boost the Interest

AN ANNUAL investment of 20 to 25 million dollars is made by Kansas farmers in seed, according to H. R. Sumner, secretary of the Kansas Crop Improvement Association. This investment yields a return, he said, of approximately 300 million dollars, or an interest payment of 1,500 per cent.

"The use of certified seed would increase the present yield from 1 to 2 bushels an acre," he adds. It's just a matter of knowing what kind of seed is planted. As important as buying the right kind of livestock or farm machinery.

Maybe Crows Help the Wheat

EVEN crows may be worth something. They have been thoroly despised for a long time and there is a bounty on their black heads. "But hear ye this," a mighty body of crow defenders is about to rise up and shout.

One farmer in Sumner county killed a crow and proceeded to hold a post mortem examination. As a result, 71 army worms were found in the crow. And isn't the army worm a menace of what looks to be one of the best wheat crops in many years? Do you want a nice flock of crows for your wheat field?

An "All Wool" Meeting

MANY farm flock owners and others interested in sheep production in Kansas have urged a "Sheep Day" similar to the Cattle Day in the spring and Hog Day in the fall, to be held at the Kansas State Agricultural College. These requests have become so numerous and so insistent that arrangements have been made to hold a Sheep Day at the college, Saturday, April 14.

A series of demonstrations will be one outstanding feature of the day's program. This will include choosing rams and ewes, winter feed and care, care at lambing time, docking and castrating, creep

feeding, shearing, developing young stuff and sheep pastures.

Later in the day, time will be given for additional discussion of the demonstrations, for talks on what the market wants, and "when it wants what it wants." Other talks will consider marketing wool, farm flock possibilities, and a question box will consider everything.

Sheep production on a farm flock basis is a growing farm activity in Kansas. The net returns from this sideline justify the present interest in it and further expansion if properly handled. Every farmer, regardless of whether he is a sheep enthusiast, is invited to attend the meeting.

Take All You Want

AN AIRPLANE whirred over the farm of W. E. Alderman, Gray county, one day recently. Mr. and Mrs. Alderman went outdoors to wave to the pilot, who dropped a bundle of papers to them. It was their son, Lloyd Alderman, sheriff at Lamar, Colo., who was making a flying trip across country for a prisoner, and he just detoured around over the home place. Thanks, Mr. Alderman. Take all the criminals you want. We'll help you, and other peace officers, with the Protective Service.

Still Need Many More

TREE seedlings, including 14 varieties deemed suitable to the Western Kansas climate, are being distributed by the Fort Hays Experiment Station, in conjunction with the United States Forest Service. This is to induce the growing of windbreaks and woodlots. The varieties include American elm, hackberry, Western Yellow pine, Austrian pine, Russian olive, Norway poplar, Osage orange and Russian mulberry. Best authorities say that trees and shrubs and lakes will make Western Kansas one of our garden spots.

Now for an Orchard Derby

EVER hear of an orchard derby? Atchison and Doniphan counties allowed a "companionate" marriage between their names and now are preparing for the "Don-i-son" orchard derby, or in other words a bi-county fruit growing contest to be conducted this summer.

More than 100 orchardists will keep semi-official records of yields and the most outstanding will receive national recognition. Special attention will be given to development of young orchards.

To Have Women Architects

WOMEN are taking up all lines of work. Now architecture has been added to their list in Kansas thru the efforts of Frances Schopp, a senior in the Kansas State Agricultural College. She is a candidate for the degree of Bachelor of Science in architecture this spring, and the first woman ever to win such a diploma at the Kansas State Agricultural College. Some of her sketches have been published.

\$190 for a Load of Wheat

THE largest sum paid for a load of wheat at Downs, since the war, was received by Frank Noller of Glen Elder recently. For a single truck load he received \$190.53.

Should Use 1928 Model

INOCULATION "dope" for legumes that is old enough to use a cane shouldn't be used, according to C. E. Lyness, Farm Bureau guardian in Doniphan county. A good many times, the county agent believes, undated cultures in tins or bottles are sold to dealers like canned goods and may be passed on to the farmer who must pay the piper. And the moral of the story in the words of Lyness is "that both farmers and dealers should be sure that all inoculation material is fresh."

Another Odd Specimen

AMEADE county ranchman, H. S. Cure, has the latest offering for the mythical "home-grown" menagerie. It was two well-developed calves, perfect in formation but without a head. Where the head should have been was only bone, with two protruding ears. The calves had eight well-formed legs and two tails.

A Perfect Little Lady

ACERTAIN Brown county miss of 5, was escorted to the show by her "sweetie," of 8 summers and winters. Back home again the little girl was questioned by her mother: "Did you behave like a little lady?"

"Oh, yes, mamma. I let him kiss me three times when the lights were off; lots of ladies do that."

More Local Factories Are Coming

A Great Industrial Development Will Take Place Reasonably Soon in the Smaller Towns and Villages of the Middle West

By Walter Burr

Kansas State Agricultural College

ANATIONAL community development program that would involve a period of 25 years is interesting to young men in Kansas now starting out for success in life, because they can expect to profit personally from the improvements achieved.

In that period, science and invention promise us a decentralization of population, due to the scattering of industrial plants away from the great city centers, out over the area of the Middle Western agricultural regions. This will bring the city consuming public near to the farm producing areas. The distance between our great industrial consuming population and the source of their food supply is a large factor in the problem of low profits to the producer and high prices to the consumer.

The problem of agricultural surplus is largely a problem of the Middle West. In certain lines of production it reaches even to the Pacific Coast. From Ohio westward extends the area of inadequate returns, due largely to this difficulty, and this is the section of the country from which the "green rising" is most vocal.

Our biggest domestic markets are east of this line, where the great industrial centers have been located. Our chief foreign markets for agricultural products are in Western Europe, where the teeming millions look to us in part for the supply of their food. In these latter markets we are in close competition with the people of other agricultural producing countries; and in many cases these competitors can produce more cheaply than we, and are in more strategic locations with reference to shipping facilities.

Not only shall we within the next 25 years bring more of our present industrial population in closer proximity to the farmer, but according to our present rate of increase in population, in that period we shall add to our consuming public here at home some 60 million more people.

Where Will the Folks Live?

Where shall this additional population of 60 million reside? If the present trends of decrease in farm population paralleled by increase in farm production continue, it is evident that no considerable number of these people are to live on farms. There are only two other possible alternatives: they may develop the big cities into much larger units of population, or they may scatter over the Middle West and we may become a nation of populous villages and small industrial cities.

Our great cities like New York and Chicago doubtless may continue to grow; but there are many evidences that they will not in the future take up their percentages of the increasing population as they have in the past. The movement to scatter business and industrial plants from the centers to the outer edges of these cities is already on. Boards of Realtors are even now discussing how to retrieve the financial losses which must follow the exodus from congested down-town districts. Water street, Chicago, once called the world's busiest street, picked itself up bodily and moved to the country beyond the city limits, to get away from congested conditions. As the big mail order houses have established branches from city to city, they have invariably built them in the country; and as they have opened up retail departments they have had the advantage of offering customers free parking space, and plenty of it, as long as they want to use it.

"Centralization of industry—which the manufacturer seems to have been no more able to resist than can a moth keep away from a bright light—has in effect made our industrial establishments pay an ever mounting premium in overhead taxes, inadequate facilities, and in other burdens inherent with location at congested centers." This is the statement of a prominent city engineer.

What have been the "bright lights" which have attracted the industrial "moths"? Available power, and means

of transportation. Very rarely have manufacturing plants sought locations near the place of production of raw materials, it being under former conditions more economical to haul the bulk raw materials to the points where power was available and from which the finished product could be readily transported to the world markets. This is the reason for the statement, "A lode-stone of industry always has been, and probably always will be, the presence of power."

Wherever there is available power and ready means of transportation to world markets, we may expect manufacturing plants to locate. Wherever these plants locate, there will be aggregations of population, to engage in the manufacturing enterprises. Wherever there are aggregations of population employed at good wages, there are good markets for agricultural products.

Mills and factories located in New England originally because of the presence of water-falls, which in the old days offered the practicable and ready available means of power. Also, nearness to the sea coast and with world

markets beyond encouraged such a location. Paper mills continued there long after the wood for the pulp was exhausted, and the raw materials were shipped in from a distance. When steam power became available, the mills remained, supplementing the water power furnished by the small rushing stream with the steam engine. The working population had been assembled, lines of transportation had been established, and it appeared as if the old order would remain. Today science and invention have brought sources of power and means of transportation right to the doors of the average home community.

The raw materials are near at hand, land can be secured very cheaply as compared to the high prices in the congested centers, and labor problems are not so annoying out where there is more room.

In an article in "Factory," the magazine of management, W. S. Murray, of Murray & Flood, Engineers, New York City, predicts a scattering of industries over the rural areas of America in the near future. He believes this will take

Prohibition's Growing Chances

IN A STRIKING statistical account of prohibition experiments in all countries in the April World's Work, the point is made that "the first 10 years are the hardest." Everywhere the history is that when prohibition laws, including local option, were repealed it was, with but two or three exceptions in some states, in the early years of the trial, and in the great preponderance of cases in the first three years.

Prohibition is by the nature of the case upsetting. It goes against long established traditions, customs and personal habits. Like a child, it fares well if it can get by the period of infantile diseases. If it gets as far as 10 years old, it sticks.

The World's Work article is historical and statistical and not argumentative or polemical. Hard or distilled liquor, it appears from this account, arrived on this planet as late as the Thirteenth Century of the Christian era, and is therefore a development of some six centuries, in fact an infantile period in human history. But while the World's Work story does not refer to it, and was no doubt prepared before the fact came to light, the most recent oriental excavations proved that beer was brewed in Babylon 70 centuries ago.

In this country the first prohibition statute was enacted by the worthy Governor Oglethorpe of Georgia colony in 1737. It merely abolished hard liquor, and it is of interest to learn that Governor Oglethorpe had the modern wet idea. He reasoned that if the people of Georgia only had plenty of good beer and ale they could be won from rum. "Cheap beer," his slogan was, "is the only means to keep rum out." So he had oceans of beer and ale imported and sold cheap. "It was all of no avail," says the World's Work writer. "In six years the rum drinkers overwhelmed the doughty Governor, and the law was repealed."

This proved to be typical. The same thing followed wherever the "light wines and beer" theory was accepted to drive out hard liquor. England in 1830, during a worldwide temperance period, tried the cheap beer formula to get rid of distilled spirits. Sydney Smith, who at first favored the plan, later wrote: "The new beer bill has begun its operations and everybody is drunk; those who are not singing are sprawling. The sovereign people are in a beastly state." In fact the World's Work reports that "the beer bill died of colic in its first year." Other instances are cited tending to show that drunkenness cannot be beaten by flooding a state or country with what the wets term "light wines and beer." Thus Massachusetts adopted full prohibition in 1854. It did not set well, and in 1868 Massachusetts gave it up. But in 1871 it was tried over again, yielding this time to the wet plea and legalizing light wines and beer. An investigation later brought out that of 2,584 licensed places all but 17 were found to be selling hard liquor. The chief of police of Boston testified: "Beer shops where nothing stronger is kept and sold are as scarce as men without sin." So in Quebec a prohibition law was passed in 1918, but with a wine and beer amendment before it went into effect. Wine and beer places dealt in hard liquor, and the law died within three years.

Despite failures elsewhere the World's Work mentions that "Kansas and Maine stuck to their guns. In Kansas, beginning in 1907, the people began to enforce the laws even in the cities. In Maine a courageous governor did the same in 1913. Certainly laws do not die easily after 10 years."

National prohibition is nearly 10 years old and even the Volstead Act will be 10 years old soon, since there is no chance of its repeal by the present Congress and it has been on the books for eight years. There are 22 states with laws more than 10 years old, and by January of 1930 there will be 32. In five years, remarks the World's Work article, with no changes the prohibition laws of 41 states will have passed their 10th birthday.

While this is not conclusive of anything, yet there is undoubtedly a strong point in the effect of time, when the question refers to changing long-time customs and habits. The World's Work article gives a table of the Congressional situation. The four states with no enforcement state law, New York, Maryland, Montana and Nevada, have 43 out of a total of 129 wet votes in Congress. And states with prohibition laws less than 10 years old have 123 of the total 129 wet Congressmen.

place thru the extension of super-power electric transmission lines. Wherever there is such a line, connected with power centers, there is available infinitely more power in each local community than was ever dreamed of by our early industrialist who located his factory on a little New England stream where he could operate a water wheel.

Mr. Murray says, "Super-power removes the bogey of power uncertainty in the isolated location. With the presence of power lines spread out into present rural communities, the undeniable hold of the industrial centers will weaken. Factories and mills which thru economic pressure have already been driven to the outskirts of the city will scatter and will relocate to secure still greater economic advantages in expansion and in operation. Almost within sight is the presence of power thruout the eastern half of the United States. It also is present on the Pacific Coast and in the Northwest. It behooves every manufacturer to further the movement, and by transplanting his factory, when the time is ripe, to capitalize the utmost on his foresight."

Transportation facilities become the other factor in the location of industries. If the power can be secured almost anywhere, then to locate factories in rural communities will require that means of transportation become generally available.

In the field of world transportation, Hugh J. Hughes, of the Great Lakes-St. Lawrence Tidewater Association, has recently called attention to the fact that conditions up the St. Lawrence River offer possibilities to the mid-western home communities. Work on a 25-mile stretch of that river would bring ocean-going vessels to the Middle West. While this would have a bearing on the shipping of farm produce across the Atlantic, in my estimation it will have a much greater bearing on encouraging industries to scatter thruout the Middle West. Water shipping is much cheaper than shipping by rail, and such a project completed would give continuous water transportation from the mid-western factory directly to foreign ports across the Atlantic, for the shipping of manufactured articles.

Secretary Hoover has recently said, "The construction of a shipway from the Great Lakes to the sea is imperative both for the relief and the future development of a vast area in the interior of the continent." A report of the St. Lawrence Commission of the United States declares, "The values in a single year to the farmers alone would equal the capital cost of the waterway."

When Dreams Come True

Another project which when completed will have a direct bearing on the town and country people of the Middle West also has the endorsement of Secretary Hoover. It is the construction of a deep waterway from the Lakes to the Gulf, providing a freight route from Chicago to New Orleans. Sometime both of these will be completed, and the vision of those dreamers who see ocean-going barges traversing agricultural America will become a fact.

An observer and student of the situation would scarcely dare bring into this transportation picture of the Middle West the airplane for freight purposes, if he did not have the opinion of an expert and recognized pioneer in the field.

A sub-head of a recent article in the St. Louis Globe Democrat states that A. B. Lambert "a St. Louis pioneer in ballooning and aviation, backer of Lindbergh, hero of many thrilling adventures in the air and a useful officer in the World War, has designed an airplane truck, and is going to have the Wright factory make it for him soon."

In a personal letter to the writer Mr. Lambert says: "My contention is that mail precedes express, and express precedes freight, whether or not the community is located on a water front or a railroad. For air mail, air express and

(Continued on Page 35)

Sore throat's easiest victims— reducing women!

Neglecting a cold or sore throat is dangerous business for anyone—doubly dangerous for reducing women weakened by strenuous exercises and "canary bird" diets.

For both colds and sore throats often lead to serious complications if not treated immediately.

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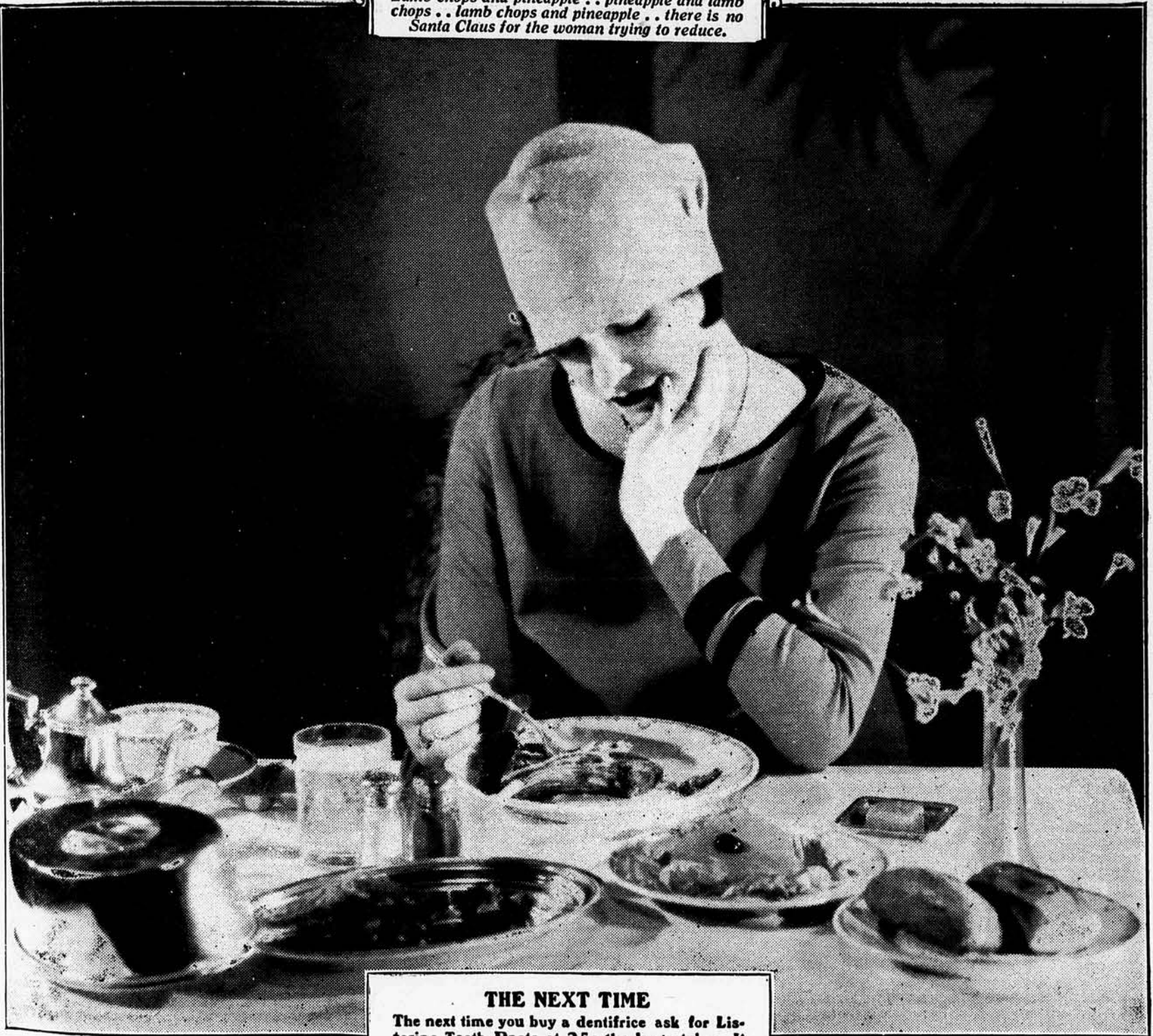
Time and time again, however, Listerine has checked colds and sore throats

before they had a chance to become serious.

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The Farm Outlook Has Improved

Agricultural Products Are Selling on Higher Levels While Industrial Prices Have Declined Somewhat in Recent Months

By Gilbert Gusler

THE farmer is the world's most inclusive shopper. He is, in turn, a tiller of the soil, a stockman, a builder, a manufacturer, the head of a family. Over a year's time, he must enter the market for farm machinery to till his land and harvest his crops, seeds to plant, fertilizer, feed for his livestock, fences for his fields, lumber and paints for buildings, perhaps a new automobile or truck, a gas engine, a cream separator or other farm equipment, certainly tires, oil and gasoline, besides necessities, comforts and even occasional luxuries for his home and family.

Changes in the costs of any or all of these supplies are affected by such a multitude of conditions that one can only state in a general way in which markets the farmer can expect to get more for his money and where it will not stretch as far in 1928 as last year.

The downward trend of wholesale prices which started late in 1925 was halted last spring. They advanced from June to October, 1927, and since then have held slightly below the high point of the rise. The index number of wholesale prices of basic commodities compiled by the United States Department of Labor was 96.4 in February, 1928, compared with 95.9 a year ago and 93.7 in May, the low point last year. Compared with a year ago, farm products were 10 per cent higher and hides and leather products were 24 per cent higher, while foods, textile products and house furnishing goods and metals and metal products were 1 to 3 per cent higher. Fuel and lighting materials, owing to large declines in bituminous coal, coke and petroleum products, were 15 per cent cheaper than in February, 1927. Small decreases were reported for chemicals and drugs and miscellaneous commodities.

Steel Markets Are Lower

The index number for wholesale prices of agricultural implements in February, 1928, was 98.8, compared with 99.4 a year earlier. Prices for iron and steel are now 3 per cent lower than a year ago, but this is not sufficient to make much adjustment in the final cost of the finished product, especially since factory wages have not been reduced. The more extensive use of the combine may bring about some small decrease in prices as a result of increased output. Sales of farm machinery, tractors, harvester-threshers and so forth in 1927 were larger than in the previous year. The shrinkage sustained during the early months because of what appeared to be a poor crop outlook was more than offset by the increased sales during the last five months of the year after fears of crop failures had been dissipated.

A reduction of a cent a pound in the wholesale price of sisal fiber may result in some adjustment in the cost of binder twine. Manila hemp is 15 per cent cheaper than at this time in 1927, but Manila rope at wholesale is quoted only 2 per cent lower.

The fertilizer market has recovered from the depression of last summer, when prices declined sharply to the lowest level in several years, as a result of the falling off in southern demand. Wholesale prices of mixed fertilizers have advanced steadily, but in February, 1928, they were still 3.5 lower than a year previous. Sales of fertilizer, particularly in the South, are larger than a year ago, and there is little likelihood that prices will decline during the spring as they did in 1927. On the other hand, if consumption of fertilizers continues to increase, the cost to farmers may be higher than a year ago. Fertilizer tags sold in the cotton growing states for the seven months from August 1, 1927, to February 28, 1928, covered 1,668,152 tons, an increase of 28.5 per cent over the corresponding period of the preceding cotton year.

Some field seeds are from 20 to 30 per cent cheaper than a year ago, due to the large crops harvested in 1927. Red clover and Alsike clover seeds are \$7.50 and \$10 a 100 pounds lower in the Chicago wholesale market, and tim-

othy seed is \$1.45 for 100 pounds or 30 per cent less. Alfalfa seed is selling on practically the same basis as a year ago. Seed grains, such as corn, wheat, oats and barley, are priced about the same as a year ago.

Manufactured feeds will cost more at least in the first half of 1928 than in 1927. Bran is selling at the highest price since 1920, and nearly 50 per cent higher than a year ago. Linseed meal is quoted higher than at any time since April, 1926. Prices will continue strong until the new crop season is a little further advanced, when crop prospects will be a prominent factor in determining prices. Hay is selling in terminal markets fully 20 per cent cheaper than a year ago. Stocks on farms are still large, and with the close approach of the pasture season there is little likelihood of prices showing any improvement.

Makers of staple hardware items have announced that the wholesale price schedule for the coming season will be practically the same as during the last year. Sales so far this year have been larger than in the corresponding period last season. A price war among the prepared roofing manufacturers is being waged and further price cutting may be seen until these interests bury the hatchet.

Motor Cars on Bed Rock?

Automobile prices appear to be on bed rock, and further reductions during 1928 seem remote. The competition between manufacturers thru the last few years and the lowering of production costs which resulted in substantial reductions in the retail price of all makes culminated late in 1927 and early in 1928 with the introduction of the new Ford car. Production of passenger automobiles last year was the smallest since 1922, and 22.8 per cent less than in 1926. The output of trucks was 7.1 per cent less than in 1926, and also was smaller than in 1925. Production is now on a larger scale, however, and the 1928 output probably will exceed recent years.

Severe competition within the industry as well as sharp reductions in the price of crude rubber have resulted in substantial declines in the prices of automobile tires. In February, 1928, wholesale prices of tires were 13

per cent lower than a year ago and 40 per cent less than in June, 1926. It is probable that prices will continue on this level well into 1928.

Production of crude oil was on a large scale last year, and wholesale prices of petroleum products in February, 1928, were 33 per cent lower than a year ago. Gasoline and kerosene prices are somewhat lower, but the market has steadied and the decline is believed to be over. The output in 1928 will be kept down to a smaller volume, and prices may average a little higher than in 1927.

Building materials, almost without exception, are lower than a year ago. The index number of wholesale prices in February, 1928, was 91, compared with 96.2 a year ago. Lumber in February, 1928, averaged 7 per cent less than a year previous, and brick 4 per cent less, while cement was unchanged. Paint materials averaged 9 per cent lower. Retail prices have not reflected the whole of these reductions at wholesale, and some further decline in prices farmers pay may come in 1928, especially on sales of large quantities.

With industrial employment continuing at a lower level during 1927, there is likely to be a plentiful supply of farm labor during 1928, according to the United States Department of Agriculture. Average farm wages since last summer have been slightly lower than in the corresponding period of the preceding year, and in January, 1928, they averaged lower than at any time since January, 1926. With better prices of farm products prevailing in the South, it is quite likely that the demand for hired labor in that section will be greater than in 1927, and farm wages may be advanced slightly.

Plenty of Farm Labor

Clothing costs are not likely to be any cheaper this year than last, altho the same amount of money may buy better style and workmanship in ready-made garments. Cotton prices reached the lowest point in five years during the first half of 1927, following a large crop. Since last June, however, cotton goods prices at wholesale have advanced, and in February, 1928, they were 10 per cent higher than 12 months previous. Woolen goods may average higher in 1928 as a result of the strong

market for raw wool and slight advances in mill prices for goods. Silk and rayon were on the downgrade in 1927, and in February, 1928, averaged 7 per cent lower at wholesale than a year before. Production of rayon is increasing rapidly from year to year, and in 1927 was 22 per cent larger than the year previous and nearly 50 per cent larger than two years ago.

With prices paid for hides and skins averaging 56 per cent higher than a year ago and leather 30 per cent higher, the increase of 10 per cent in the factory price of boots and shoes does not seem extreme. Retail prices likewise show some gain, and it is unlikely that prices will be reduced during the year.

Altho two-thirds of the farm family's food is supplied from the farm itself, more than \$200 a year is spent on the average for such staples as coffee, sugar and flour. The index numbers of wholesale prices of foods advanced from 95.9 in February, 1927, to 98.7 in February, 1928.

Retail prices of staple articles of food dropped about 3 per cent during the year. In the meat line, all cuts of beef are the highest in several years. Pork, on the other hand, is cheaper than since 1924, due to the large supply of domestic product and reduced export demand. Retail prices of sugar average more than 5 per cent lower than a year ago, coffee, 3 per cent lower and tea is just about the same. Retail prices of flour have declined, and are about 5 per cent lower than a year ago.

Remote But Happy

A thousand miles from nowhere lies the gale-swept rock of Tristan da Cunha in the bleak vastness of the South Atlantic. A treeless rock, a rock on which the sun shines only a few days each year, an island so dreary that to see it is to carry forever a memory of dismal wretchedness. Yet there live contentedly on Tristan da Cunha between 100 and 200 civilized men and women. They were all born there; not more than one or two of them have ever departed from the island. If one does go away it is difficult to come back, for ships call at Tristan da Cunha very seldom. Less than one a year is the average.

A physician, Reed O. Brigham of Toledo, Ohio, is one of the few Americans who have landed on Tristan. Recently returned, he tells of a population which has neither clergymen nor physicians, which has no government, subsists on a limited and unbalanced diet, endures a climate of the utmost rigor, and which is happy, home-loving and moral. Perhaps even more strange is the fact that the people are healthy and many of them attain extreme age.

St. Helena, the nearest land to Tristan da Cunha, is distant 1,320 miles, but when Napoleon was a prisoner at St. Helena the British deemed it advisable to station a garrison on the desolate rock. After Napoleon's death the garrison was withdrawn, but four Scotsmen and the wife of one of them elected to remain. Later two or three women were brought to become wives of the unattached Caledonians. Still later two Americans and two Italians were wrecked on Tristan.

When Doctor Brigham visited Tristan his ship was the first that had called in 13 months. Not one of the Tristaners had the slightest desire to depart. Knowing no other land, having neither postoffice nor telegraph, reading and re-reading their scanty stock of English books, being born and marrying and dying without benefit of clergy or physician, worshipping God very simply and living upright lives, these remotest of all civilization's forgotten children are among the happiest men and women on earth. Their Eden is a chill Inferno, a rain-drenched, fog-shrouded desolation, but they are utterly contented. And in this there is a lesson for moralists to elaborate.

The trouble with a platform promise seems to be that it has no due date.



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What the Folks Are Saying

IT WOULD be well if some of the corn ground in southeastern Kansas were planted to alfalfa. Due to excessive wet weather last fall numerous farmers lost their stands of alfalfa. Glen Campbell of Fort Scott says that in the last winter his barn has contained no alfalfa for the first time in 18 years. He also says that as a result the milk production from his cows declined greatly. He is making plans for seeding alfalfa again. Mr. Campbell says that a successful dairyman must have alfalfa. It seems to me that many more farmers should try growing at least 5 to 10 acres of this legume. Less corn and more alfalfa will produce larger profits.

Fort Scott, Kan. T. F. Yost.

Tax Revision in Kansas

Agriculture is the largest sufferer from the inelastic form of taxation that still rules in Kansas, it coming down unchanged from a period when it was better adapted to economic conditions. When land was the chief and substantially the whole form of wealth and property, the general property tax worked reasonably well. When other forms of property, less tangible, total a value exceeding that of the land, taxation needs to be revised in conformity to altered conditions.

This has been evident to the farm organizations of Kansas for some time, and two years ago the Kansas Farm Bureau Federation outlined a scheme of taxation on a broader basis than the general property tax. Last fall all the farm organizations, including the State Board of Agriculture, indorsed this taxation platform. It now has the support of Kansas agriculture as well as of the economists of the agricultural college who were primarily interested in formulating it in principle. Farmers have the power to name candidates for the legislature this summer who will dominate the legislature on the question of tax revision, and farm organizations cannot do a better job than to urge them to make a point of nominating candidates in sympathy with a better system of state taxation. In a statement from the agricultural professors five "new forms of taxation" are recommended as calculated to yield annual revenue of 10 million dollars, and to that extent relieve the general property tax. The suggested taxes are a personal income tax, gross production tax on mineral products of the state, a tax on tobacco and on theater admissions, non-alcoholic beverages, confections, candy, perfumes, cosmetics and chewing gum.

The Kansas farm organizations probably have been wise in limiting the proposed income tax to personal incomes, leaving corporations out. Such a plan avoids complicated calculations and a question as to actual ownership and has the merit of simplicity. It is the one outstanding feature of the proposed five new forms of taxes that is based on ability to pay, and it is a tax not susceptible to being shifted.

Topeka, Kan. H. T. C.

Price Trends Require Study

The net loss of the farm population of the United States last year was only 193,000 persons, which gave a population on farms January 1, 1928, of 27,699,000. This includes negroes; the white population on the farms of the United States is less than 23½ millions. The Bureau of Agricultural Economics of the United States Department of Agriculture, which is responsible for those figures, found that fewer persons left the farms last year than in 1926, and also that the number which returned from the cities to the farms was much greater.

All of which indicates that the position of agriculture with respect to the lure of industrial life has become more attractive, judging from the average reaction of the folks. Evidently they have decided in a good many cases that the city is "not what it is cracked up to be." I notice that the Kansas Farmer crop correspondents report that there is an ample supply of farm labor this spring, and that practically all farms are rented. Apparently the position of agriculture with respect to the alleged advantages of the city is almost normal, with something like a balance in the movement. In the pre-war era there was a larger movement from the farms

to the cities than from the cities to the farms.

It logically follows that efficiency in production is going to be shoved more into the limelight than it has been recently. That is one of the essential props of an agricultural system, along with profitable marketing. And it is true no matter what changes are made in the economic structure. Probably the McNary-Haugen bill will become a law sooner or later, but this will still leave the relative situation with respect to competition between farmers in the same ratio that it is now—the efficient producers will make the larger profits.

Fortunately some splendid progress has been made in Kansas in increasing the efficiency of production, especially in the last few years. For example, the state now has about 50,000 tractors and 13,000 combines. Power farming has been a big asset on many places in reducing costs and increasing yields. A much further development is possible along this line, and in fact likely will be obtained, for the way has been blazed better than along the other road, which is that of a better balanced production.

The cycles which have been a curse of livestock production indicate a lack of knowledge on the part of the great majority of producers in regard to obtaining and operating on the information which will enable the producers to beat them. It is a matter of common talk among conservative stockmen that prices are altogether too high for stockers and feeders, and that there is grief ahead for many cattlemen—just as there was in 1920 and 1921. Perhaps they are right. Certainly it would seem that declines are inevitable at least next year in the cattle market.

On the other hand, it appears as if the hog market will improve by then. Reports from over Kansas indicate much dissatisfaction with present hog prices, and in the past this has always been followed by an extraordinary disposition to "quit hogs." It would seem to follow that the way to beat the cycle is to slide out from under the hog business as well as possible this year, but to go in strong for breeding sows to farrow next spring.

Changes such as these in the probable future markets indicate plainly the need for plenty of study along this line, as well as efficiency in production.

Hiawatha, Kan. H. D.

The Sheep Man

Sheep are not in any sense a "get rich quick" proposition. Under present conditions they will, if handled properly, return a profit commensurate

with the care and attention given them. Obviously, then, if the success or failure of a sheep proposition is going to hinge on any one factor, that factor would be the man who is handling them.

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

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

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

Dr. C. W. McCampbell.
Manhattan, Kan.

Local Seed is Best

One of the factors that has been responsible for many alfalfa failures in Kansas during the last few years has been the use of seed that is not adapted to the climatic conditions in our state. Previous to the last few years Kansas produced a considerable quantity of seed, and was able to supply the needs of farmers with a good local product. More recently the amount of seed production has been relatively small, and it has been necessary to use supplies from the outside. Seed has been imported from other states and countries to meet the demands. Altho most of this seed was found to be well adapted, other lots proved to be very unsatisfactory. In securing alfalfa seed, therefore, the point of first importance is to secure seed known to be adapted to Kansas conditions. Kansas-grown seed should have the preference.

Some Kansas seed is produced in fields that were seeded with imported seed. In order to avoid such seed it will be advisable to secure seed from fields at least 10 years old, or from fields the history of which is definitely known. The Kansas Crop Improvement

Association, Manhattan, usually is able to furnish lists of growers having such seed.

Seed from foreign countries can now be identified by the fact that it is required by law to be stained at the port of entry. Thus, seed from Canada is stained approximately 1 per cent violet. Seed from other countries which may be adapted to certain portions of the United States, but not to others, is stained approximately 1 per cent green. Seed from South Africa and other countries, which produce seed known to be unadapted for the United States, or seed of unknown origin, is stained 10 per cent red. Canadian seed undoubtedly will give good results in Kansas, but the supply is so limited that none is likely to find its way into commercial channels in Kansas. None of the seed imported from other countries can be recommended.

In buying alfalfa seed, considerable attention should be given to purity and viability, as well as to origin. A large percentage of brown seed indicates low viability. Good seed has a yellowish-green color, and a certain luster or brightness characteristic of all kinds of seed of good germination. Seed containing weed seeds should be avoided, or at least should be examined by a seed analyst for noxious weeds.

A considerable proportion of most lots of alfalfa consists of "hard" seed, that is, seeds whose outer coats are so impervious to water that they will not germinate under ordinary conditions. These hard seeds have in general little value unless scarified. A germination test shows the per cent of such hard seeds. The State Seed Laboratory of the Agricultural Experiment Station, Manhattan, makes germination and purity tests free of charge for all residents of the state, and those farmers contemplating the purchase of alfalfa seed will do well to avail themselves of this service.

S. C. Salmon.
Manhattan, Kan.

Class Work and Profits

The Vocational Agriculture class of the Oakley Consolidated High School has made money handling pullets. Last fall, the boys in the freshman vocational agriculture class pooled their resources and bought 48 Rhode Island Red pullets from Mrs. W. Bull. The pullets were hatched in March, 1927, by Mrs. Bull from eggs purchased from Mrs. Will Kurtz of Oakley. The pullets were well grown and had begun to lay by September. They were free from worms. The boys each brought \$5 from home, and the entire flock was purchased. The boys were out to make money and not to experiment. They used their culling knowledge and banded each hen for trapezoidal. The best hen laid 83 eggs in 126 days. The big thing was that all of the hens laid some of the time. Only one hen was sick. Poultry books were studied to try to locate what was wrong, and the entire flock was handled to see if any more birds were going to get ill, but none did. Then No. 7 was killed and examined. No worms, T. B. or anything out of the way was located until the gizzard was cut open. Signs of poisoning were found.

Each boy received back his original \$5 and \$1.68 more, or 34 cents more than he paid for each hen. While this is not a large amount of money, the boys learned that a good warm open front hen house could be made out of an old outdoor toilet that had been an eyesore on the school grounds for more than 30 years, and that spring pullets will lay in the winter if well grown, housed properly and fed a balanced ration. Local feeds were used, and these included yellow corn, wheat, milk, cabbage leaves and mash. Each boy took his turn for a week caring for the birds, keeping records, buying feed and selling the eggs.

One boy let the oyster shell box go empty. You can imagine how the other members of the class "told it to him" when the soft-shelled eggs began to come and production fell. Another time, the water became low, and the boys learned at their expense that hens must have water to lay eggs.

V. S. Crippen.

Oakley, Kan.

George Washington was one of America's first engineers. Some of the lines he surveyed still stand.



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Europe Is "Coming Back"

Apparently the Folks There Have Decided to Settle Down and Go to Work

BY JULIUS KLEIN

EVERY industry and commercial enterprise in the United States is interested directly or indirectly in the business recovery of Europe. Regardless of the lugubrious lamentations of a few more or less professional "viewers-with-alarm" and doleful "propheteers" as to the trade outlook, whose vocation, incidentally, seems to be quite profitable these days, it is becoming more and more evident that Europe will be an increasingly potent factor in our coming business prospects, whatever they may be, not only as our best customer, but also thru her competitive stimulation of our efforts. Her recovery is by no means solely a trans-Atlantic problem; as we look to our recent gains in the Far East and Latin America, we are faced with the fact that Europe is pacing us in many of these vast and newly awakening markets.

Europe has long taken about half of our exports, and she supplies us with about a third of what we buy abroad. From all angles she is our most intimate foreign trade connection.

Americans realize that fact, regardless of the more conspicuous periodic publicity on trade prospects in other parts of the world. During the last fiscal year 812,000 inquiries were received by the Department of Commerce on European trade matters, as against 576,000 on Latin America and 288,000 on the Far East. Altho some of our best European markets took goods from us at a somewhat less value last year, the decreases were due largely to declines in prices rather than in volume. Our sales to the United Kingdom, France and Italy were about 13.8 per cent below those in 1926, but the percentage which that trade represented in the total imports of the three was quite satisfactory. In fact, we supplied 17.2 per cent of England's total imports in 1927, as compared with 18.4 per cent in 1913. In Italian imports our share was 19.6 per cent in 1927, as compared with 14.4 per cent in 1913, while in France we enjoyed 13 per cent of the import trade last year, as against 10.6 per cent in 1913—on the whole a gratifying indication of our ability to hold our own and even make some gains as against other competitors in these three lucrative fields.

More Trade With Germany

Particularly impressive was the increase of 32 per cent, or more than 117 million dollars in our exports to Germany in 1927 over those in 1926. Taking a group of the smaller European markets, our sales to nine countries were 483 million dollars in 1927, which represented an increase of 15 per cent over 1926. Quite clearly American trade is figuring more and more conspicuously in Europe.

Not only that, but our markets are meaning more to Europe, despite the mournful protestations of some propagandists who have insisted that our commercial policies and economic aggression have been the ruination of the export trade of the Old World. In 1913 we took 5.6 per cent of the total exports of the United Kingdom; last year we raised that to 6.8 per cent. In 1913 we provided the market for 6.1 per cent of the total exports of France; in 1927 this was raised to 6.6 per cent. In the case of Germany, we bought in 1913 more than 7.1 per cent of her total sales abroad; in 1927 our portion was 7.6 per cent. In the case of some of the smaller countries the rise was even more spectacular during the same period; in Belgium, for instance, the increase was from 2.9 per cent to more than 11 per cent of her total export trade which was absorbed in the United States. There is no doubt whatever that the most powerful bonds in international commerce are those that traverse the North Atlantic in both directions.

One of the outstanding features in the "new" Europe is that its business world no longer thinks in terms of calamity. It has ceased to pity itself. Its balance sheet for the last year and for the opening months of 1928 shows largely in black ink, and where the red of the post-war depression still survives is steadily but surely fading.

With the dependence of European nations upon the trade with one another, they have long realized the imperative necessity of obliterating or at least materially reducing those trade barriers which were originally set up along their frontiers as defenses, against the floods of post-war inflated currencies and as shelters to the new-born nations and industries. These currencies have now reached the levels of sobriety in nearly every case; they are 96 per cent stable today, as against 57 per cent in 1922. Furthermore, the fervid heat of nationalistic emotionalism has subsided, and in its place we have had the calm and dispassionate deliberations of the Economic Conferences at Geneva and Stockholm last summer, of which we are now beginning to see the first definite results.

As a sequel to the Geneva Conference, there has just been drawn up a convention of 35 nations, which was signed January 30 by the American representative and has already been endorsed by 26 other nations. This

document undertakes to abolish within six months after its effective date the majority of arbitrary and discriminatory trade restrictions, especially those involving the so-called quota systems, which have handicapped the normal flow of trade on the continent since the war. A further conference is to be held in May at Geneva to carry forward the program of this convention and to clarify various statistical practices, customs, classifications, and nomenclatures, which are hindering trade. These are very material contributions toward further clarification of the general international trade outlook, which means so much to these nations, with their dependence on foreign markets for so large a proportion—anywhere from 50 to 85 per cent—of their total commercial activity.

Financial and currency problems, as already indicated, have been notably clarified in recent months. In Germany, for example, the total savings early this year were more than 4,600 million marks, which represented an increase over the figure for January, 1927, of nearly 50 per cent.

Nor should we assume, as is all too frequently the case in international trade discussions, that the matter is simply one of a traffic in merchandise value. In several cases, as for instance in the trade between the United States and France, by far the largest transactions are those involving invisible items which are not shown in the usual ex-

port and import figures. Another outstanding illustration of this type is the notable gain in the value of so-called middlemen's services performed by the merchants of the United Kingdom for the trade of other nations. This is one of the contributions which has been responsible for Britain's net favorable balance in her international payment, the credit margin which was estimated for 1927 at nearly 470 million dollars, whereas the balance was unfavorable in 1926 to the extent of nearly 35 million dollars.

American tourists' expenditures, to mention another such invisible item, have come to play a notable part in the general economic recovery of Europe. Their total in 1927 probably was not far from 1/2 billion dollars, according to preliminary estimates, more than half of which was spent in France.

Heavy Investments Abroad

European capital is still a potent factor in the exploitation of raw materials and other resources, both of the colonies and of the many economically new lands in Latin America and the Far East. The increasingly heavy purchases of raw material by the United States in those areas provides very substantial contributions, indirectly, to the credit of European owners. British investors have today nearly 20 billion dollars of holdings in foreign lands, as against approximately 13 billion dollars held by private American invest-

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ors. Furthermore, these purchases of raw materials for American industrial needs have stimulated the buying power of many countries in the New World and the Orient, which have thus provided increasing markets for European as well as American manufacturers and specialties.

Industrially, there are some unfavorable spots in Europe, such as the unemployment situation, which is, of course, international in scope at this season; but there are hopeful signs, particularly in Great Britain, of a "peace-in-industry" movement. Strikes have certainly decreased in almost every important industry and manufacturing center, while industrial production has risen. Germany has just avoided a formidable labor clash in the metals trades, the problem of wages and working conditions is still the outstanding one in her industrial and commercial situation.

The Old World is attempting to Americanize itself thru a program of what it calls "rationalization," meaning broadly the organization of industry for the maximum of efficiency, of waste elimination and of mass production. In Germany, particularly, this movement is evident in every manufacturing area. Their industrials are devouring literature on American factory methods and technique, and they have sent many commercial and industrial delegations to the United States to study our methods.

An impetus to this "rationalization" has been given by the international cartels or marketing "pools" in about a dozen commodities, including steel, chemicals, rayon, electric bulbs, glass, rails and dyestuffs, in most of which Germany has taken the lead. They usually involve the allocation of trade territories, sales quotas, and the establishment of uniform prices, but, sometimes, also restriction of production, and, occasionally, the interchange of technical information and personnel, and even of patent rights. Ostensibly, their chief aim is to eliminate distributive wastes and excessive competition and to stabilize prices. As a matter of fact, they are, of course, still subject to all of the usual faults of monopolies—a tendency to protect inefficient factories, and an inclination toward exploitation, either of consumers on the one hand or of labor on the other.

Eating More White Bread

Tho not organized primarily as offensive weapons against the United States, it is obvious that the success of these combinations will encourage them toward more aggressive competition with corresponding industries in this country. For the time being, their chief purpose is to eliminate abnormalities in European business and bring about more orderly trade conditions on the continent. They are a part of the general trend toward greater cohesion among Old World interests, both economic and political, and reflect the increasing belief that collaboration is indispensable if Europe is to be saved. The cartels have undoubtedly contributed some elements of stability to the world's trade, in certain respects, thereby assisting the marketing of similar American products. Their further competitive development and possible antagonism to our business practices,

One of the most impressive evidences of the recovery of old Europe is the fact that, speaking, of course, in broad general terms, she is now producing nearly enough staple food for her population. Furthermore, her rising standards of living and improved buying power are stimulating a gratifying demand for such American food specialties as canned and dried fruit, grape fruit and apples.

The grain lands of Eastern and Central Europe, with the notable exception of Russia, are almost back to normal. Russia, which has been a mainstay of Western Europe for breadstuffs, now exports only some 20 per cent as much grain as she did in 1913—2 million metric tons in 1927, as compared with 10 million metric tons in 1913, according to official Soviet figures—a situation which is working to the advantage of the American farmers.

More than one country of the continent, notably Poland, is advancing at a rapid rate in the livestock industry, particularly in the line of pork and pork products. Partly as a result of this increased European production and partly because of the increased prices in our own market at home, which tempt our producers, our exports of meat to Europe have fallen off some-

what. The older continent, however, is eating more white bread than formerly. This means an opportunity for our farmers and millers to increase their sales abroad.

The increase in our transatlantic sales of fresh fruits and vegetables is a significant index of better living conditions, having risen from an annual total of about 13 million dollars in the period from 1921 to 1923 to 36 million dollars in 1927. The average sale of dried fruit during the last three years also has shown an increase of some 50 per cent, as compared with six or seven years ago. Canned goods likewise during recent years have shown a considerable increase over the period from 1921 to 1923. Sales of tobacco have remained fairly stable during the last seven years. The three most striking increases during 1927 in this group of commodities over preceding years have been in citrus fruits, feedstuffs for livestock and cottonseed oil. The increase in feedstuffs is due largely to the recent increase in livestock in Europe, and the increase in cottonseed oil probably is due to the large crop of cotton in 1926.

A Gain in Motor Car Sales

Europe's comeback during the last year is indicated also by the increased number of motor cars bought—not only the increase of importations from the United States but also the purchase of motor cars of European manufacture. Particularly noteworthy is this in England, in view of the fact that recently a heavy increase has been made in the duty on imported cars. The ratio of motor vehicles to population as of January 1, 1928, was as follows: United Kingdom 1 to 37; Germany 1 to 148; Italy 1 to 254; France 1 to 40, and Sweden 1 to 55; as compared with the present ratio in the United States of 1 to 5. It is evident, therefore, that there is still abundant opportunity for the expansion of our trade in these countries, and our automotive executives are by no means neglecting these prospects.

Our automotive exports have been hindered in several important European markets by unfavorable tariff rates and certain contingent and other discriminatory regulations. But even so, during 1927 our total increase of exports abroad—chiefly to Europe, where domestic automobile manufacturing in seven countries makes the market the most highly competitive in the world—was 34 per cent over the total of 1926. The value of all automotive products exported from the United States to Europe during 1927 reached the impressive figure of 112 million dollars, as compared with about 25 million dollars in 1922.

This truly astonishing increase presents perhaps the most emphatic available evidence of the remarkable economic recovery of Europe during the last seven years. It is significant, furthermore, because of the widespread interest of our country as a whole in the automotive industry, whose prosperity in this increasingly important export field rebounds to the benefit of all of the United States.

As a further reaction to these signs of stirring industrial activity and an increase in the buying power of the populations of Europe, our trade is feeling the stimulus in other lines. American machinery factories, for example, sold 38 million dollars' worth of their products to Europe in 1927. This means that it also sold vastly increased quantities of all sorts of equipment and those specialties in which we excel, to the new lands across the Pacific and below the Equator.

These lands are reacting to improved European demands for raw materials and are now, therefore, in a position to strengthen their general economic development. Mining machinery, farm equipment and road building apparatus (to mention just a few) are needed in opening up new countries, just as they were needed to open up our own. We know how to furnish these.

Every stage of European recovery thus involved immediately or ultimately the advancement of some phase of American business. We have already observed the profound repercussions upon our trade of the stimulation of European living standards, and as the Old World continues to advance, we may anticipate further developments of this sort, which will be of peculiar interest to us whenever the uncertainties of domestic conditions make necessary, as they always do, the further exploitation of overseas outlets.

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A Brighter Outlook for Hog Producers?

Perhaps Next Fall Will Be a Good Time to Breed Sows for Spring Farrow and Thus Be Ready for the Higher Prices

By R. M. Green

THE spring and early summer of 1928 very likely may mark the end of the general downturn in hog prices that began after June, 1926. June, 1928, will be two years from the last high price period. Two fairly small corn crops in succession, taking the United States as a whole, and advancing corn prices in the spring of 1928 will tend to check further expansion in production. As an average since Civil War times, hog prices have been up for about 36 months and then down for about 31 months. The length of the periods varies widely, but usually approximates two to three years.

Number of hogs on farms January 1, 1926, had declined to about 52 million head. This reduced supply and a good export demand for pork in the spring of 1926 contributed to the high prices of hogs up to June, 1926. The spring pig crop of 1926, to be marketed in the fall of 1926, was about the same as the year before. It was reported as 99 per cent of the 1925 spring pig crop. The fall pig crop of 1926, however, showed an increase in pigs saved of 3 per cent. The number of hogs on farms January 1, 1927, had risen to about 54½ million head, compared with 52 million head a year earlier.

Up to 59 Million Head

Following the increased production in the latter part of 1926, there was an increase of 3½ per cent in the spring pig crop of 1927, as compared with the spring pig crop a year earlier. The fall pig crop of 1927 was increased about 11 per cent from the year before. This increase in production in 1927, and the holding back of hogs in the western edge of the Corn Belt because corn was cheap and hog prices low contributed to a supply of hogs on farms January 1, 1928, of nearly 59 million head, compared with 54 million head a year earlier and 52 million head two years ago.

Not only did hog production in the United States increase, but production in European countries also expanded rapidly. Cause of this increased production abroad, there was less foreign demand for the pork and pork products of the United States during 1927. The promise is for still less foreign demand during 1928.

Top prices at Kansas City broke from a seasonal high point of \$11.90 during the second 10 days of September to \$8.45, which was the highest price during the second 10 days of December.

In such years as the present, hog prices have shown some tendency to advance during the last third of December about nine years out of 10. Last December top price at Kansas City did advance to \$8.55 the last part of the month and during the first third of January reached \$8.85. Instead of prices continuing to improve thru January and the first part of February as they normally do, they declined. Since the first of January top hog price at Kansas City has been as low as \$8 several times.

Paid Up to \$13.85

The period from the last of December to the first part of February has on the average shown moderate strength. In the spring of 1926 Kansas City top hog prices advanced during this period from \$12.25 to \$13.85 a hundred before any important break came. A year ago, in the spring of 1927, the advance was from \$12 the last third of December to \$12.35 a hundred during the first third of February. During the same period in 1928 the Kansas City top price declined from \$8.55 to as low as \$8 a hundred pounds.

How much of a breathing spell there will be between declining winter receipts and rising spring receipts depends on how early the fall pig crop begins to move to market.

Increasing corn prices and low hog prices favor an early beginning of spring marketing in the eastern part of the Corn Belt. The smallest increase in the fall pig crop took place in this section. Compared with a year ago, therefore, the early spring market is

not so likely to be loaded down with receipts as the main marketing period in May and June. More abundant corn supplies in the western edge of the Corn Belt, any temporary improvement in hog prices, and a slowing up in corn price advances will likely encourage feeding in this section until about the usual time. The principal increase in movement of the fall pig crop over a year ago is likely, therefore, to come in late spring and early summer.

Corn is not cheap enough and hog prices are too weak to encourage holding back of supplies to midsummer as was done in 1926 following the large corn crop of 1925. On the other hand, there has been a large increase in hog supplies outside the Corn Belt in recent years, especially in southern territory. The earlier movement of these supplies to market will be a factor in keeping early spring markets supplied. It appears that any seasonal price improvement in 1928 between now and next winter is not likely to be maintained over long periods. What happens next fall and winter will depend largely on the size of the 1928 spring pig crop.

An in and out program in hog production seldom pays. Even the man who marches straight ahead without making a change in his business and "takes his medicine" as it comes usually wins out over the first fellow. The best program is one that when lower prices are looming cuts operating expenses, but maintains enough business to contribute to overhead expenses; one that pays debts out of good prices and makes any new debts later on; one that culls, cuts out, and gets rid of hogs that are only good enough to be kept when hogs are high. There usually is enough money in hogs so that the chief danger is in rushing into an enlarged scale of production that taxes every resource right after a period of profitable prices. Profitable prices make the business easy for everybody. What is easy for everybody is not likely to be profitable for anybody.

But Management is Needed

There seems to be every reason for believing that the period is approaching when it will pay the careful producer to get ready to take the place of the fellow who produced more hogs because of the high price in 1926 rather than because of the low cost at which he can produce them. Unquestionably the migration from the hog lot to the

cattle pen, corn field or some other place has begun, just as the migration from farm to town began a few years ago, only perhaps in a little different way.

This migration of producers, almost like that of the birds, makes market history. In July, 1902, Chicago average price of hogs was \$7.65 a hundred. Twenty-two months later in May, 1904, the price was \$4.65. Thirty-three months later in February, 1907, the price was back to \$7.05. By February, 1908, or just 12 months later, the price was \$4.45. In 25 months, or by March, 1910, the price was \$10.55. Twenty-three months later in February, 1912, the price was again down to \$6.20, but in 17 months, or by July, 1913, the price was back up to \$9.05. And so the market has been since 1920. Price was down 26 months from \$21.85 in May, 1920, to \$7.61 in September, 1921. During the eight months, September, 1921, to May, 1922, price rose to \$10.48. In 13 months, or by June, 1923, it was down to \$6.92. By June, 1926, or 36 months later the price was up to a \$14.05 average. Since June, 1926, the general trend of hog prices has been downward.

How the Chemist Helps

BY J. G. LIPMAN

Food and shelter are the primary needs of all men. Game, fish and wild herbs may supply the wants of savage tribes. Flocks and herds may provide for the shepherd wandering over the plain. But when the human population is no longer sparse and scattered, when permanent houses have been built and the land turned by the plow, the need grows strong for thought of tomorrow. It may be that the land will lose its strength. It may be that the grain and the forage will lose something of their virtue. It may be that insects, disease and parasites will come to plague and trouble the farmer.

And, on the other hand, there will be more mouths to feed. Towns and cities will arise. Roads will bring them together. Great numbers of people and vast quantities of merchandise will be moved over the sea, over the land, and thru the air. Nations will exchange goods and ideas and the world will grow small. The old ways and the old methods will fail somehow to replenish the soil run down like the spring of a watch. Nations will face the future with anxiety and will sharpen the tools

of science for dealing with new and complex problems. Among such tools those of the chemist will bring strength and hope to a world seeking a road to a brighter day.

The time has already come for proclaiming our debt to the chemist. Our children read in their school books of rocks and soils, of air and water, of plants and animals as made up of simple chemical elements. In the great crucible of creation these elements are blended and compounded into an endless variety of substances. The chemist tears them apart and puts them together. He examines the soil and finds what may be lacking in it. He examines plants and animals and tells us how their tissues are made. He acquaints us with the raw materials out of which plants and animals are built. And knowing these raw materials he discovers for us deposits of phosphate rock, of potash salts and of nitrates, of sulfur and of lime. He knows that coal contains nitrogen, an element without which plants and animals cannot exist. He teaches us, therefore, how to make ammonia out of coal and peat and how to use it for growing bigger and better crops.

Thanks to the chemist there has come into being a fertilizer industry of imposing magnitude. Acres of chimneys cover the banks of the Rhine, like the giant trunks of a stone forest. They tell us of a new industry which, starting with such common things as brown coal, air, water and land plaster, furnishes the world with millions of tons of sulfate of ammonia, of nitrates, of urea and of other nitrogenous products. Above the fjords of Norway the land rises to majestic, snow-capped mountains. Their sides are rugged and steep and deeply furrowed by the grinding, tearing force of moving ice and water. Torrents rush down their sides with the power of a million horses, power once idle that the chemist has put to work. And as the water tumbles and seethes on its way to the sea it is made to turn great turbines, to generate electric power, and to blend air and lime into nitrate of lime. But all of this is but a part of a bigger job. The force of moving water, be it in the Alps, the Vosges, the Carpathians or elsewhere, has been tamed and harnessed in order that it might do the chemist's bidding in the making of nitrogen fertilizers and of a hundred other products. A million tons of nitrogen taken out of the air in one year for the manufacture of salts of ammonia, of nitrates, cyanamide, urea, cyanides and of other nitrogen fertilizers bear witness to the chemist's miracle-working power.

In our own country more than 7 million tons of chemical fertilizers are distributed to supplement the plantfood resources of our soils. The barren plains of Chile, the coal pits of the Middle West, the air above the Rhine Valley and over Niagara Falls, the cotton fields of the South, the stockyards of Chicago, Omaha and Kansas City are all made to contribute nitrogen for growing our nation's food. But nitrogen is only one of the raw materials used in the fertilizer industry. Bristle deposits from Texas, Louisiana, Sicily and Japan, and pyrites from Spain and other countries supply the sulfur which is converted into some millions of tons of sulfuric acid which is used to treat millions of tons of phosphate rock from Florida, Tennessee, the Rocky Mountains, Morocco, Tunis and other regions. Ancient seas and lakes, dried out and buried, furnish the potash brought from Germany, France and California. All of these are the raw materials of a chemical industry still in its infancy.

On Infectious Abortion

Infectious Abortion of Cattle, Circular No. 135, has just been issued by the state; a copy may be obtained free on application to the Kansas Agricultural Experiment Station, Manhattan.

Fifty-eight countries now maintain a regular broadcast service with the United States.

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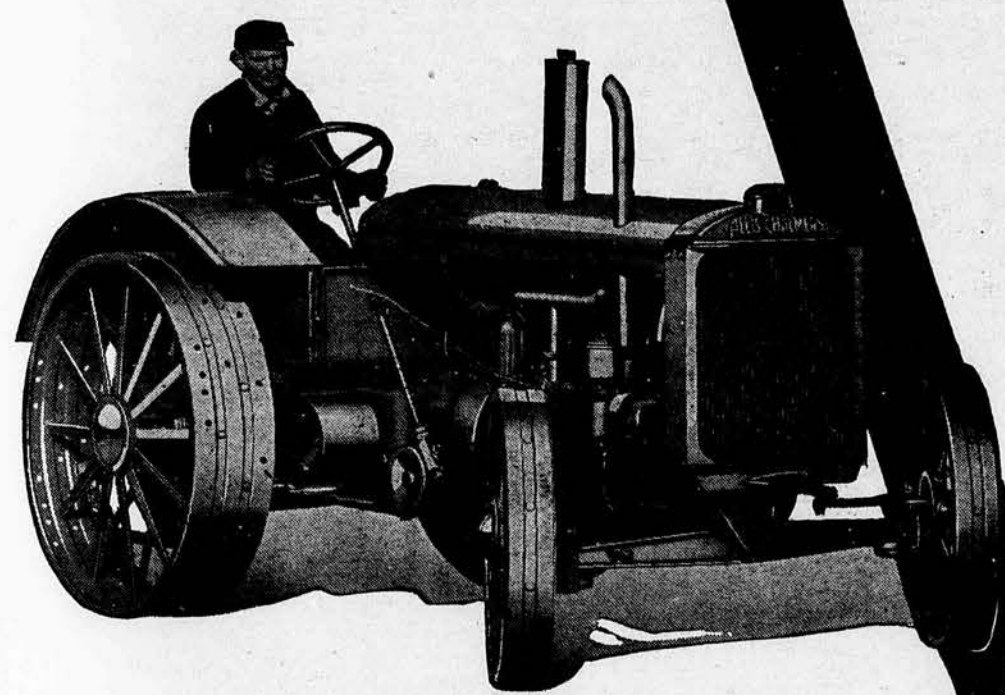
SOILS problems are getting more attention these days in Southeastern Kansas. Substantial progress is being made in the application of lime and fertilizers and in increasing the acreage of the legumes. Excellent work is being done along this line by the county agents, and the soil fields which have been operated by the Kansas State Agricultural College have been helpful in bringing their lessons home to the people. Average yields in that section probably are at the bottom now—they likely will increase slowly.

All of which is a very encouraging tendency in the progress of Kansas agriculture. There is no reason why the folks in that section should not make much better records in crop yields. It is true that most of the soils in Southeastern Kansas which were formed from the decomposition of sandstone and shale are rather limited in fertility, but it is equally true that skillful management will increase the yields. Practically all of them are deficient in humus and in rather poor physical condition. Anything which will add decaying vegetable matter to the soil will help so far as the humus content is concerned. Applications of ground limestone likely will pay on thousands of acres which are not, as yet, sour, merely by improving the physical condition. Obviously the first thing to do with any "run-down" field is to "get 'er full of humus and in good physical condition." If legumes are used considerably in this part of the campaign it is likely that the supply of available nitrates will be increased greatly.

But beyond this, it appears to the Kansas Farmer as if a huge increase in the applications of commercial fertilizer will pay well. This appears to have been the experience of most of the folks who have tried them. We suggest, especially, that the folks who have rather thin soils would do well to start some tests. They cost very little, and even if the results are negative the owner will at least gain the satisfaction of really knowing that he is not overlooking a good bet. If they pay out he will have discovered an easy way of increasing his supply of the great American dollars.

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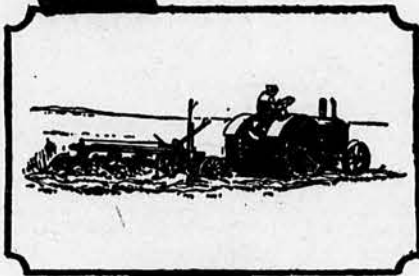
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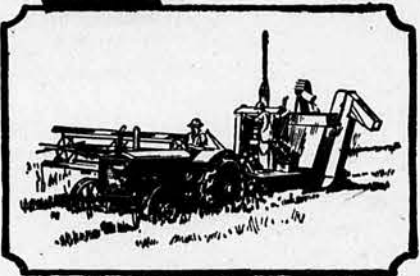
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Good Seed, and Larger Yields

An Efficient Fanning Mill Is an Essential Bit of Equipment on Modern Kansas Farms

BY A. L. STONE

IS SEED quality vital in the cropping system? For the American farmer the answer to this question depends upon several factors. The natural fertility of the soil, the care taken to maintain it by use of barnyard manure and green manure crops, rotation of crops, the use of commercial fertilizers and lime, soil drainage, careful preparation of the soil for crops, measures to prevent insect and disease attacks, freedom of the land from weeds and the use of plump, clean, viable seed, all help to provide the answer.

Each one important, but is not the last mentioned factor one of the most important of them all? It may be argued that if the other conditions have not been provided, the good seed cannot grow and bring forth fruit for the world's teeming population.

On the other hand, all the labor and care taken to provide the most favorable conditions may be lost unless pure seed of high vitality is used. It must be pure or free from other kinds of seeds, if best results are to be secured. If the seed sown contains the seeds of other crop plants, the mixture which is sure to result cannot be sold on the market for as high a price as pure seed of its kind. If it contains weed seeds, the crop plants are at once provided with a competition so keen that it cannot be successfully met, and the fertility, moisture, and careful preparation of the seedbed go largely to nourish the enemies of the crop. A maximum yield of grain or forage and a competing crop of weed plants cannot be produced on the field at the same time.

"Like Begets Like"

Approximately 3.2 per cent of the 30,627,000 bushels of spring wheat used for the production of the crop in this country passes thru the hands of dealers in seeds. In addition 1.7 per cent of the 50,690,000 bushels of winter wheat; 5.3 per cent of the 103,646,000 bushels of seed oats; 4.1 per cent of the 16,478,000 bushels of seed barley; 8.8 per cent of the 7,608,000 bushels of seed rye and 23 per cent of the 1,011,000 bushels of seed buckwheat are handled commercially.

But the great proportion of this grain is prepared and used for seed on the farms where grown. This means that the farmers themselves are largely responsible for the character of the crops produced to feed a hungry world.

There are comparatively few farmers so located as to take advantage of cleaning machinery other than the farm fanning mill or grader. Many farmers have no fanning mill of any kind, either depending on a neighbor for one or putting the seed in the ground with no cleaning except that given by the threshing machine, which usually is inefficient and unsatisfactory. When only 10 million bushels of the 210 million bushels of grain used for seed in 1927 on the farms of America were cleaned for seed by almost primitive methods or not at all, is it strange that yields are lower than they should be?

The seed problem has been an important one to farmers of all generations. Early in the history of agriculture the men who lived on the fruits of the soil learned that "like begets like," and that no matter how gracious was Mother Earth, she could not produce "figs from thistles," or the finest fruits from poor seed. After generations of experience, it would seem the lesson should be sufficiently well learned so that we would cease to insult Mother Nature by asking good returns from an investment in poor seed. She gives in greatest abundance only when the best of her produce is returned to her for increase. "As a man soweth, so shall he also reap," applies as well to agriculture as to spiritual affairs.

Fanning Mills Are Needed

In the last 10 years there has been an awakening, and greater attention than ever before is being paid to the quality of seeds which are sown on the farms of this country. The gospel of good seed has been preached and demonstrated incessantly by agricul-

tural colleges and experiment stations. Other organizations have aided, and the campaign has been reinforced and pushed to our very frontiers by the agricultural press.

In the old days it was impossible to muster this mighty army or to so quickly make its force felt. But today, with all the types of publications by which to push the campaign for better agriculture, it would be indeed strange if no effects of it were to be seen.

The results of all this have been the directing of men's energies to the invention of efficient seed-cleaning machinery, the accumulation of a large fund of information concerning the care and preservation of seeds and the establishment of seed inspection laboratories in practically all civilized countries of the world and even in some countries which we are wont to consider as not wholly civilized.

Thru the invention and use of the improved threshing machine and fan-

ning mill, the handling and cleaning of seeds has been greatly facilitated and improved. The modern fanning mill, equipped with the right sieves and properly run, will do amazing things in the separation of seeds of varying weights and sizes. Such cleaning machinery costs little in comparison to the return on the investment. Many experiments have shown that the yield of grain an acre can be increased from 1 to 6 bushels thru the removal of the lighter and smaller seeds by use of a fanning mill. Such a mill may be purchased for from \$75 to \$80. If by its use wheat can be made to yield 4 bushels more an acre the increase on 40 acres will amount to 160 bushels. At \$1.25 a bushel this increase will amount to \$200 on the one field.

But not only will the mill take out the lighter and smaller grain seeds, it also will remove practically all of the weed seeds in the grain and prevent the growth of a weed crop to rob the grain of plant food and moisture and cost much time, labor, money and worry to destroy. The newer machines also are fitted with sieves to grade seed corn so it will drop a uniform number of kernels to a hill.

A good fanning mill will often more than pay for itself in a single year, if used only to clean the coarser seeds. With the necessary equipment of sieves

and a knowledge of the proper combinations, almost any kind of seed grown on the farm may be properly cleaned and graded. The quality and quantity of crops produced can be improved, or at least kept up to standard, and there will be no "running out" of seeds or need to secure new supplies from some other section of the country, an altogether too common custom.

There are fanning mills and graders of many makes and various types. A very few mills depend on sieves alone, altho with sieves of the right sizes and shapes of meshes fairly satisfactory work in cleaning can be done. Some mills depend entirely on the air blast to remove all but the heaviest seeds from any lot. The process will remove all chaff, light seeds, and light dirt, but will not separate seeds of different sizes but of the same proportionate weight.

'Tis Effective Seed Cleaning

For example, in a mixture of barley and clover seed, the clover seeds are as heavy for their size as the barley kernels and air blasts lift them at the same rate. It is impossible, therefore, to separate them by means of the air blast alone, even where the blast is under almost absolute control.

The best type of a mill for average farm conditions is one in which sieves and air blast are combined. The sieves



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out with special Firestone-designed, cost-saving machines.

Firestone pioneered the Balloon Tire and made it practical by Gum-Dipping. Firestone has also taken the lead in developing dependable secondary lines—Oldfield, Courier, and Airway—giving these tires advantages in design, construction and quality which can be found nowhere else at such extremely low prices.

MOST MILES PER DOLLAR



FIRESTONE
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OLDFIELD
—built according to Firestone long mileage principles.

COURIER
—low price; carries Standard Manufacturers' Warranty.

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—a good tire at a very low price; designed for the light car.

AMERICANS SHOULD PRODUCE THEIR OWN RUBBER. *Harvey S. Firestone*

provide for separating seeds of different sizes, and the air blast takes out all light seeds, chaff and other foreign material. With one of these mills which is up-to-date in type and construction, almost unbelievable things in the way of seed cleaning can be accomplished if the operator thoroly understands its use. It is well to try out the mill and determine what sieve combinations are necessary to clean each particular kind of seed in one's own locality.

All in all, the fanning mill is an indispensable asset to every American farmer, and the crop production of the United States will never be what it should until its intelligent use is practically universal.

Many farmers have hesitated to purchase a fanning mill for use on their own individual farms. Why not combine with three or four neighbors in the purchase of a reliable, high-grade mill with a full equipment of sieves to be used by each in turn? There is the whole winter in which to get the cleaning done, giving each man plenty of time to use the mill if the use of it is properly planned and provided for in advance. The transportation of such a mill over rough, frozen roads will do more to shake it to pieces than any other treatment to which it is subjected. If necessary to transport it over rough roads, some provision should be made to prevent the jarring from affecting the mill. This may be done by means of springs on the bolsters under the wagon box or by filling the box part full of hay or straw and tying the mill in place with ropes.

Equipment is Essential

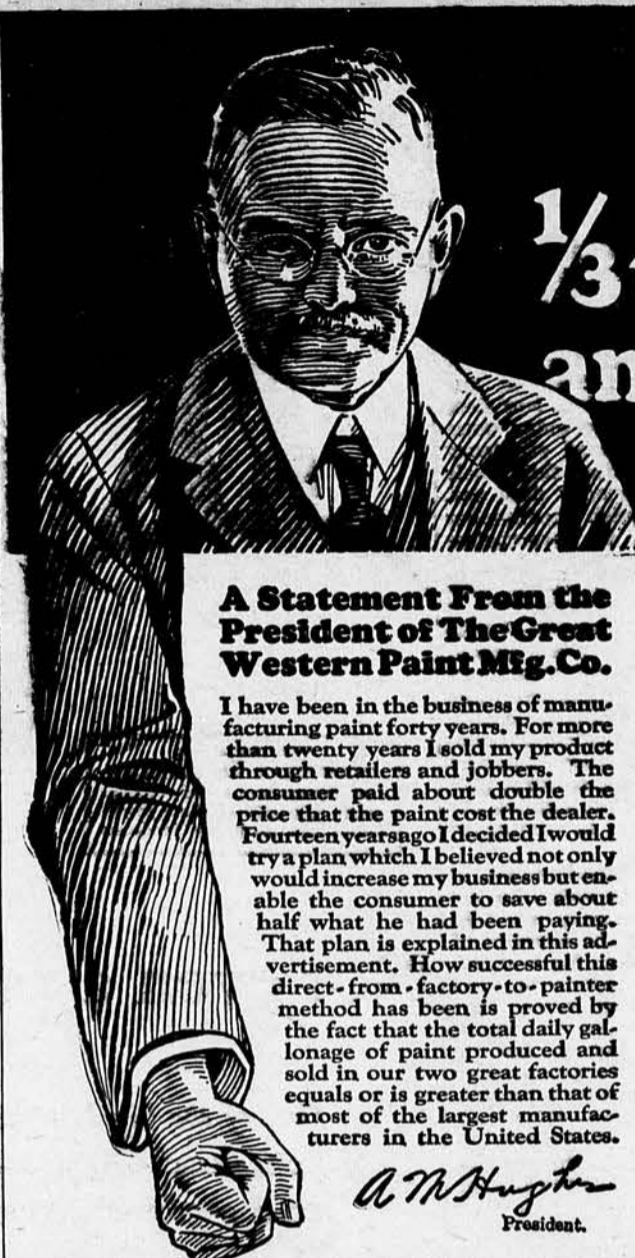
By combining in this way each of four or more farmers will be able to make use of a well-equipped mill at a nominal cost and bring about a decided improvement in the crops of each. Should the grain be sold on the market, the removal of the light grains, weed seeds, chaff and dirt results in the sale of the grain at a better price than can be obtained for uncleaned grain. The farmer who delivers uncleaned grain to an elevator is docked in price because of the impurities in it. He might better keep the shrunken light grain and the weed seeds at home and grind them, thus reducing his bill for concentrated feeds for his livestock. Of course there are some weed seeds, like those of the mustard, which are bitter or acrid in flavor and make the feed unpalatable, or, like the bulblets of the wild onion, impart an onion flavor to milk and other dairy products. Some, like those of the darnel and corn cockle, are actually poisonous, but many weed seeds have much feeding value and might better be separated from the grain and ground for feed.

If the grain is to be used for seed, the fanning mill will separate from it all the plump heavyweight kernels with a surplus of stored food to give the young plant a splendid start, resulting in a more nearly uniform and plentiful crop. The better start in life the young plant is given, the more rapid its development and the greater its chance of escaping the effects of summer drouth or rust attacks. Thus the use of a good fanning mill may result in a greatly increased and better quality crop for reasons which at first thought might not be apparent.

The rise in farm values throuth the less developed portions of this country in the last 10 years has been phenomenal. The states in the Mississippi Valley and westward have been settled and the lands improved until they are famed as one of the garden spots of the world. While this rise in value has increased the wealth of the farm owners, it has also made it necessary for them to adopt other than the old-time farming methods in order to make a fair interest on their investments.

Unless properly treated, seeds have a tendency to lose their producing capacity. Loss in production means a consequent decrease in the farm income. Smaller incomes result in curtailment of social and educational advantages and eventually of the farm equipment, which in turn results in lessened efficiency and still greater loss. The remedy for these conditions lies in modern methods of farming.

Colonel Lindbergh has very calmly flown over and above the advice that he abandon flying, so the chances are it wouldn't do any good to suggest to Senator Heflin that he give up public speaking to conserve his voice.



A Statement From the President of The Great Western Paint Mfg. Co.

I have been in the business of manufacturing paint forty years. For more than twenty years I sold my product through retailers and jobbers. The consumer paid about double the price that the paint cost the dealer. Fourteen years ago I decided I would try a plan which I believed not only would increase my business but enable the consumer to save about half what he had been paying. That plan is explained in this advertisement. How successful this direct-from-factory-to-painter method has been is proved by the fact that the total daily gallonage of paint produced and sold in our two great factories equals or is greater than that of most of the largest manufacturers in the United States.

A. W. Hughes
President.

SAVE 1/3 to 1/2 on Paint and Get Better Paint

YOU can buy it right in your home town too. No letters to write. No orders to mail. Phone for it if you wish. See it. Test it. Compare it with the best paint you know of. Use it according to directions and then if you say it's not as good as we say, you get every cent back. No argument. No letters. Your money will be refunded through the painter in your town from whom you made the purchase.

There's a Great Western Expert In Your Town

Perhaps two, or maybe more. Men no doubt you know personally. For they are local painters or paint contractors—*paint experts who know paint*. The only way the Great Western Company sells paint is through painters. Reputable men in every community sell the Great Western products. The tremendous growth of the company testifies to the success of this plan. It enables the consumer to get better paint than he has been using, at from one-third to one-half less.

COSTLY OVERHEAD ELIMINATED

You simply call up the painter who sells Great Western Paint and tell him what you want. He will deliver the paint or will have it shipped to you direct from the factory. You get the benefit of his expert advice. You don't need to employ him to apply the paint unless you wish to. He will gladly show you the best way to do the job yourself without obligation.

Made Fresh—Shipped Fresh

Better paint than Great Western Paint can't be made. The best materials and the most efficient up-to-date machinery are used in our two great plants. Forty years of paint making are back of our iron-clad guarantee. The paint is shipped the day it is made. You get FRESH paint—not paint that has stood on a store shelf for six months and has settled in balls at the bottom of the can. Great Western Paint works easier and goes further.

Send For the Names of Our Representatives

Mail the coupon today. Take advantage of this better, safer, more economical way of buying paint. Buy direct from a painter who knows paint and save half. The names of our representatives in your community will be sent you as soon as we receive the coupon.



Lowest price quality paint on the market. Equal to much of the \$3.50 per gallon paint. Exceptional covering capacity. Wears and looks well for years.



A better house paint can't be made. It's our leader. Covers better. Spreads farther. Wears longer. It has been tested and approved by ten thousand painters. Equal quality would ordinarily cost you \$4.50.



Actual tests have proved Hawkeye will cover almost 50 per cent more space than other paint sold at the same price. Formerly our first grade paint.



Positively the biggest value in barn paint on the market. Goes on bright and stays bright. Its equal would ordinarily cost you \$2.25 per gallon.

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Please send me the names of the painters in my town who sell your paint.

My Name is _____

My Town is _____

State _____

Buy Your PAINT From Your Painter

What Price Efficiency Now?

'Tis the Margin Between Prices and Production Costs That Determines a Farmer's Profits

BY ARTHUR P. CHEW

WHEN machinery was first introduced into Great Britain's textile industry early in the Nineteenth Century, bands of workmen, fearful for their handicraft jobs, roamed Lancashire and Yorkshire smashing looms and burning factories. Historians noted that the instigator of the rioting was a half-wit. This man, Ned Lud, broke stocking-frames, and set a fashion that produced Luddite riots for many years. The Lud was a half-wit, he raised a question that many wise men have found hard to answer. By acts, if not by words, Lud inquired, "What good is technical progress to the producer, if it takes the bread out of his mouth?" Men who are by no means half-wits are still asking the

Just what is the relationship of the increasing efficiency on Kansas farms to the profits of the owners? Here is, indeed, an important question, and one that has received a huge amount of attention in recent years from the producers. In this article, which appeared originally in Better Crops, Mr. Chew points out that it is the margin between the price received and the production cost that determines the profit of the grower. We have had some excellent demonstrations of that with wheat in recent years in the tractor and combine country of Southwestern Kansas. This article well deserves the careful study of everyone who has the future of American agriculture at heart.

same question with reference to agriculture, as well as to manufacturing industries.

Efficiency in both fields and factories has been increased enormously in the last decade, with benefits apparently much greater to the consumer than to the producer. This is true even of certain powerful industrial corporations, whose managers report a falling rate of profit on a constantly growing volume of business. The relationship between efficiency and profits has begun to perplex industry seriously, particularly in certain branches of it in which unemployment prevails. Technical progress works out today just as it did in the days of Ned Lud. Sumner H. Slichter, writing in the New Republic, notes that in 1927 our factories, with 5 per cent fewer employees than the annual average of the years 1923-25, turned out 7 per cent more goods. Some industries achieved great increases in output with fewer workers.

"We are confronted," says Mr. Slichter, "with what appears to be a new kind of unemployment problem—the problem of unemployment created by technical progress."

As Mr. Slichter's language implies, that is not really a new problem at all. Half-witted Ned Lud defined it, and had his idea as to what should be done. That he was wrong in the idea goes without saying, for countries of mechanized production and technical efficiency are today the most prosperous. In the long run technical progress,

instead of diminishing employment, increases it, by discovering and utilizing new sources of wealth. This is true in agriculture as well as in industry.

This does not imply, however, that the resentment felt by the Luddite rioters against newly introduced machinery had no justification. Nor does it mean that farmers who today question the value of increased efficiency to themselves are talking thru their hats. If increased efficiency does not, in the long run, diminish the number of workers required, it nevertheless necessitates a great many painful changes in occupation. It forces men to make continual readjustments in their relation to the processes of production. That is why in every period when the readjustments are more than usually drastic, somebody inquires what is the good of it all, as was done at a recent convention of agricultural economists at which one speaker asserted that, "the outlook for agricultural production is so good that the outlook for agricultural prosperity is distinctly bad."

When responsible economists talk in that strain, it is time to look into the question of what efficiency does to agriculture. Heretofore the benefits of efficiency have been taken for granted. But it is always dangerous to take things for granted, even when they seem obvious. Efficiency is worth while to agriculture, but it has its price and creates certain problems.

This price may be kept within bounds, and the problems solved effectively only by a thoro grasp of what is involved. It is not, of course, the individual value of efficiency that the farmer questions. Every farmer knows that higher than average costs of production mean lower profits, and that the sheriff is waiting for the man who slips too far down the ladder.

What bothers him is the group or collective aspect of efficiency. He wants to know how the agricultural industry as a whole profits when its costs go down if its output goes up. In the five years 1922-26 the output of American agriculture, as the result of increased efficiency, was nearly 5 per cent greater in field crops and about 15 per cent greater in animal products than in the five years 1917-21. Yet the net earnings of agriculture were very much lower in the later than in the earlier period. What price efficiency here, the farmer wants to know.

On a Declining Market

After the war our farmers reduced their land in crops and their labor force, and cut down their costs of production by using up-to-date machinery and raising better crops and livestock. Instead of getting larger, they got smaller profits. In such circumstances who can blame them for an occasional "What's the use?" even if that query calls in question, as it obviously does, the value of every sort of individual and organized effort to improve cultural and marketing practices.

It has to be confessed, unfortunately, that increased efficiency, whether in agriculture or in industry, tends to put some men out of a job. In prosperous times this tendency is offset by an increasing demand for agricultural and industrial commodities; but when increased efficiency takes place in a declining market, as has been the case with agriculture in the last few years, an acute and difficult problem arises.

From 1920 to 1926 American agriculture suffered a net loss of 3 million people, a decline considerably in excess of the normal movement of population from the country to the town. Some of it was necessary correction of the over-manning of agriculture that took place during and after the war, under the stimulus of exceptional agricultural prices. This inevitable ebb-tide movement, however, accounts for only part of the unusual cityward flow. The rest of it is attributable to technical progress, notably in farm mechanization, as the result of which fewer men were required to satisfy the market's lessening need of food and fibers.

Agriculture has no more difficult



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It backs up the quality that has made Goodyear the world's most popular tire, and you will find it a prime factor in low cost mileage.

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problem than that of adjusting its acreage and its man-power to market requirements in periods of increasing efficiency and increasing production. It is idle to invoke the solution that Ned Lud would have recommended, namely, the scrapping of machinery, or a slowing up in the rate of technical progress. It is precisely in times of falling markets and heightened competition that the impulse to adopt efficient methods is felt most strongly. Moreover, when the resulting over-production is large no quicker remedy can be had than that provided by the painful elimination of surplus men and surplus land from the farm business. Nevertheless, the farmer is not entirely helpless. There is much he can do to prevent such situations from developing. But before touching on this aspect of the matter it is worth while to glance at a few facts about our increasing farm efficiency.

Improved and Cheapened Methods

Farming methods in the United States have been improved and cheapened since the war in a manner never before equaled. In Kansas the combine-harvester has halved harvesting expenses and solved the harvest labor problem. Cotton growers in Texas and Oklahoma have devised the sled method of gathering cotton, applied power machinery to cotton growing on big farms, and brought cotton growing abreast of other branches of farming in up-to-dateness. Dr. O. E. Baker, of the United States Department of Agriculture, figures that individual productivity in American agriculture was 15 per cent greater in the five years 1922-26 than in the five years 1917-21. He says that in the later period about 20 per cent more milk was produced from only 4 per cent more dairy cows and heifers, and that output of meat and other animal products in relation to feed consumed increased 9 per cent. Many shifts were made toward higher-yielding crops or toward crops with a higher acre value. I mentioned some of these facts recently to a New York banker who said that the trouble with the American farmer is that he is lazy and inefficient.

Accelerated mechanization after the war released for other uses from 15 to 20 million acres of crop land formerly required to feed horses and mules, so that by January 1, 1925, the number of these animals on farms was 1,254,000 less than on January 1, 1920. In the same period the number of tractors on farms increased from 246,000 to 506,000. Use of stationary gas engines and electricity on farms added 2 million horsepower to our farm equipment. Another million horsepower was added by increased use of electricity and windmills, and 4 million horsepower by an increase in the number of motor trucks on farms. Altogether, the increase in mechanical horsepower on farms in the last nine years, exclusive of that derived from the use of more automobiles, is estimated at 14 million. Anyone who, in view of these facts, calls American agriculture backward and inefficient is either stupid or prejudiced.

The object of this increase in efficiency, namely reduced costs of production, was achieved, but this advantage was largely offset by the effect of increased production on prices. Although agriculture reduced both its land in crops and its manpower, its production did not diminish but rather increased. Hence the disparity between agricultural and industrial prices was prolonged. Here is the source of the complaint that efficiency benefits the consumer rather than the producer and, considered from a group standpoint, is a drawback rather than a benefit to the farmer.

On a World Basis

It is undoubtedly true that there is a tendency for the benefits of technical progress to pass from the producer to the consumer thru the agency of increased competition and increased production. This, however, does not always take place. Generally, in fact, it does not, because agriculture is largely on a world basis, and increased efficiency usually is confined to a relatively small fraction of the total number of competing producers. In the case of crops like cotton and wheat, the prices of which are determined in the world market, every degree of increased efficiency achieved by the American farmer brings him an increased profit.

So it is plain that the cure for the

troubles that increased efficiency brings is not to be found in a scrapping of up-to-date methods—a return, so to speak, to the hoe and sickle. That course might reduce production, and therefore raise prices; but it also would increase the costs of production, so that the net gain would be nothing. It is not prices alone, but the margin be-

tween prices and production costs, that determines the farmer's profit. Restricting production is useful only when the operation does not involve an excessive increase in costs, as it always does when output is restricted by blocking technical progress.

The idea that the farmer can be too efficient for his own good is a hasty

deduction from the undeniable fact that the benefits of efficiency have to be shared with the consumer, sometimes in a manner unfair to the producer. It does not follow, merely because efficiency returns a diminishing reward to the farmer as the number of efficient producers increases, that the

(Continued on Page 43)

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Let him explain to you the actual differences that make RED TOP the best fence post value your money can buy. He will also show you how the proper and timely use of fence will save waste and increase farm profits.

RED TOP STEEL POST COMPANY
38-P South Dearborn Street, Chicago, Illinois

Adventures of the Brown Family

BY JOHN FRANCIS CASE

Homeward Bound After an Adventurous Night

IN THE Mexican city of Celaya, Hal Brown had found a young American engineer named Holt who volunteered to assist him in his quest for the missing Isobel Sanchez who had run away from Spain and whom Hal believes is the real heir of the Pettibone fortune. In the plaza at night they meet a girl Hal believes is the maid of his quest, and ignoring Mexican customs and commands, Hal speaks to her and asks if she's Isobel.

"Now you've done it," muttered Holt, and there was both anger and admiration in his voice. "See that young Mexican looking at you?"

"I don't give a rap," replied Hal, and again he asked the girl who had paused and stood irresolutely, "Are you Isobel Sanchez?" for she had merely murmured a Spanish salutation.

To Hal's joy the answer came in English, altho with a marked accent. "I am, senor," replied the girl, "and I, too, am American. How do you know my name?"

"I have great news for you," answered Hal eagerly, "if you will meet me somewhere so that I can talk to you. May I walk home with you?"

Before the girl could answer, a young Mexican with a gaudy serape about his shoulders strode over and rudely shouldered Hal aside, while he poured out a torrent of Spanish words in abuse. Hal caught the words "dog" and "swine," and with the instinct of an American boy to use his fists drew back for a blow when Holt caught his shoulder in a firm grip.

"For heaven's sake, Brown," hissed Holt, "don't start anything here. I like a fight, but we are outnumbered a hundred to one. Adios, senorita," and Holt pulled Hal away, while the Mexican youth resumed his place with the other watchful gallants, all of whom were casting black looks in the direction of the hated "Americanos."

"I don't give a whoop," insisted Hal stubbornly, as he kept an eye on the girl who had said she was Isobel Sanchez. "I'm going to talk to that girl before she gets away from me where I may never see her again. If you don't stick with me I'll go it alone."

"Keep your shirt on," advised Holt. "I'm not one to leave a fellow American in the lurch—but I know these people. It would simply be suicide to keep on here, but I'm game enough to take a chance and follow her home. Here, I'll bribe a beggar to slip her a note that you can write. If she can speak English she should be able to read it, and if anyone else gets the message they won't know what it is. She's probably romantic enough to welcome a visit from a handsome young American. And if she's Spanish or Mexican she won't care especially if you do get carped up visiting her. Tell her you'll follow and signal her after she gets home."

The note was written in a secluded corner of the plaza, and Hal watched with mounting excitement as the beggar, hand outstretched in appeal, paused before the girl he had accosted. Watching her intently, altho from a distance, Hal caught a nod in his direction. "O. K." Hal assured Holt. Then with a chuckle. "I'd add 'MNX'; but reckon you are not up on Barney Google and his Billygoat club. Hope she leaves soon."

"There may not be anything funny about this," admonished Holt. "Keep your gun handy and come on. She's leaving now. We'll slip down this side street but keep her in view."

Stealthily the two Americans followed the retreating form of the dark girl and her companion, down dimly lighted streets, stepping over sleeping babies as they lay outside of barred doors, the family gathered about, past swarthy lovers courting their sweethearts thru barred windows, until finally they paused as the robed figures passed thru the door of a pretentious looking home. "Fine, so far," whispered Holt, "and now it will be up to me. I'm going to tell 'em in Spanish just what's wanted and see if they'll let us in. You stay here in the shadow. That hombre may have followed, too."

Softly Holt called in Spanish, and soon to Hal's joy the barred door

opened and he was beckoned within, where with the girl Hal and Holt found a courtly Spaniard and his senora or wife. As Hal looked at the girl now unveiled it was not difficult to see that she was indeed of American blood nor was there mistaking the fact that there was some likeness to the girl pictured in the photograph shown him by Mrs. Fernandez. With American frankness Hal came straight to the point, while Holt translated for the benefit of the girl's kinsman. "And now," Hal concluded, "will you go home with me and prove you, not the girl who too bears your name, are the true heiress?"

"I will go!" cried the girl with spirit. "It was because Isobel was cruel and abusive to me that I ran away. The good God has sent you to me, Senor Brown, and I will trust you. All shall be well with you when we reach that dear America which I have always longed to see."

"You need have no fear, Miss Sanchez," assured Holt gravely. "Altho I have known Hal Brown but a few hours I know he is a young man you can safely trust. And now we will bid you adios and call for you tomorrow."

It all seemed too good to be true, and Hal heaved a sigh of relief as again they were in the street. "Won't I have some surprise for the folks?" Hal gloated. "And not a blamed thing happened so far that amounted to anything. This is a tame country." But Hal's self-congratulation was cut short.

Out from the shadow of a building came the young Mexican gallant who had attacked him in the plaza. With him was a companion. A rush and they were upon the two Americans, knives flashing, curses befouling the night air.

"No guns!" yelled Holt, "use your fists." Ignoring the threatening knife, Hal met his opponent with a fierce smash to the jaw which stretched him flat. Holt had seized and disarmed his opponent as Hal's man came at him again and again, to be met finally with a crashing blow which this time left him senseless. "We'll get out of here as fast as the Lord will let us," said Holt. "It's no disgrace to fight and run away. These hombres won't bother any more tonight. And tomorrow you'll be on your way."

There was no further attack, and on the morrow Hal Brown found himself accompanying a shy, sweet young woman as unlike Jack Miller's ward as day from night, while Engineer Holt, the American who had befriended Hal, stood by with watchfully open eyes as they awaited the train. "Hey!" said Holt suddenly as he heard his name called, "Here's a message for you, Brown, in my care. Forwarded from the consul at Tampico."

With trembling fingers Hal tore open the envelope. The message was from home, but had been translated into Spanish. Slowly he spelled it out then a yell which woke the echoes again set the Mexicans to muttering about "loco Americanos."

"All well," said the message. "Have captured man who makes trouble. Confessed." Hal's father's name was signed to the message.

(TO BE CONTINUED)

A Texas frog lived 31 years in a corner-stone. It couldn't croak.

We Must Have Safety

The remarkable transformation in the highway system of this country during the last quarter-century is a matter of pride and an epoch in history. It has cost hundreds of millions of dollars—probably nobody knows just how much—and is worth it.

The remarkable thing about its financing is that it was not one supreme effort. The highway resources are cumulative, and with the tendency to increase gasoline taxation and with the continued increase in the use of this taxed commodity, the users of the roads are putting up more and more money annually for road construction and maintenance.

There is evidence, however, that this transportation system needs a new trend in its development. The killing of 26,618 persons in traffic accidents in the last year proves that more thought must be given to safety than to expansion. The highspeed automobile and the highspeed highway are absolute essentials, but a necessity that involves the killing of more than 26,000 persons and the maiming of three-quarters of a million others demands study and absolute reform at the danger spots. The economic losses involved in these traffic accidents are estimated at more than 672 million dollars.

Achievements in safety might easily finance themselves in savings.

Royal Family

Auto Tourist—"I clearly had the right of way when this man ran into me, and yet you say I was to blame."

Local Cop—"You certainly was."

Autoist—"Why?"

Local Cop—"Because his father is mayor, his brother is chief of police, and I'm engaged to his sister."

7 x 2 = 14 x 2 = 28 Billion

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LIGGETT & MYERS TOBACCO CO.

Answers to Legal Questions

BY T. A. McNEAL

B is a banker holding a mortgage on A's horses. The note and mortgage come due. A has a bank account in B's bank. B collects the mortgage from A's bank account without notifying A or having A's signature. Can this be done?
K. F.

ance, and thru ignorance on his part, it being his first transaction, he supposed the mortgage was recorded when the revenue stamps were attached. Recently he noticed that there was no notation of record of the mortgage, and wonders if he has committed an offense by his neglect. A is not worried about collecting the balance, but wonders what he should do.
W. H.

He has committed no offense. When he fails to record his mortgage he only runs this much chance: as against a sale of this property to some subsequent purchaser or as against a creditor who has a judgment against B, his mortgage, being unrecorded, would not be a prior lien. The mortgage is good as between A and B whether recorded or unrecorded, but would not be good as against subsequent purchasers, mortgagees or creditors.

A Bought a Phonograph

1—A buys a phonograph, pays \$90 on it and cannot pay the balance. He tells the man from whom he got it to take it back; the man refuses, and the house and its contents, including the phonograph, burns. Can

the dealer compel A to pay for it? 2—How long can a note run before it is outlawed? 3—In an account for a lumber bill that runs three or four years can a man's wages be garnisheed? 4—If a man rents a farm and the owner makes no contract and the tenant moves away, can he take legal action and collect the rent if a note was signed?
E. M. P.

1—The purchaser of this phonograph would be legally liable for the price he agreed to pay for it, unless the title to the instrument did not pass until all the payments were made and there was an agreement that in case of failure on the part of the purchaser to make the payments the seller should take possession of the instrument. If that was the kind of a contract A had and he notified B to come and take his phonograph and B refused to do so and the house burns, I am of the opinion in such a case A could not be held. But if it was merely a case where A failed to make the payments on an instrument he had bought, he would still be liable regardless of the fire for the amount still due.

2—The statute of limitations on a note in Kansas runs in five years from the time the note becomes due.

3—Where a lumber company or any

other corporation or individual has an account against an individual and sues on that account, it might garnishee his wages to the extent of 10 per cent of his wages in any one month if he is the head of a family. If he is a single man it might garnishee all his wages.

4—Where one rents a farm without any written contract he becomes either a tenant from year to year or a tenant at will, and is liable for the rent from the time he begins to occupy the place until such time as he leaves it. And if he was a tenant under a mere verbal arrangement for a year and leaves without cause, he might be held for the rental for the year. The signing of a note would not change the rights of either the tenant or landlord, except that the note would be evidence of the indebtedness, and instead of suing for the rent the landlord would sue on the note.

"I just want to forget," a young lady out in Indiana, who has just been jilted by a rich manufacturer, is quoted as saying. Well, our suggestion is that she arrange to be called as a witness in the oil inquiry.

What the Law Says

As I understand it, the 1927 legislature passed a law compelling everyone who votes to vote a straight party ticket. Am I correct? Isn't that unconstitutional, taking away the right of the people to vote for whom they please? Surely the people's choice as to whom they vote for should come before that of the political parties. How could the people go about it to get that law repealed?
I. V.

The law to which the writer refers does not apply to the general election, only to the primary election. The substance of this law, which is Chapter 203 of the Session Laws of 1927, reads as follows:

At the next ensuing primary election at which candidates for state offices are nominated, any person shall be entitled to participate therein who is a qualified elector in such precinct at the time of said primary election, and when the voter calls for a ticket he shall indicate the party ballot he desires, and one of the judges of the primary election board shall give him such a primary ballot (unless challenged, and if so challenged, then only in the event that the challenge is determined in favor of the voter), and such person shall thereupon be entitled to vote. The voter's selection shall constitute his declaration of party affiliation, and it shall be the duty of the primary election board to record his name and check his declaration of party affiliations on the poll books used by the clerks of the primary election board, and said list properly certified to by said primary election board shall be returned to the county clerk for preservation. Copies of the names and party entries on such poll books hereinafter provided, arranged alphabetically by surnames, shall be used at subsequent primaries for determining with what party the voter has been enrolled, and no voter enrolled under the provisions of this act shall be allowed to receive the ballot of any political party except that with which he is enrolled, but he may change his enrollment as hereinafter provided. The county clerk shall prepare for each voting precinct two of the above-mentioned lists duly certified by him, and taken from the poll books of the last preceding primary election, which he shall deliver to the succeeding primary election board on the day prior to the day of the primary election, and which lists, together with the poll books of the primary election, shall be returned to said county clerk in good condition within 24 hours after the primary election, to be preserved by him.

Section 2. At any subsequent primary election, any person who has attained majority since the last preceding general election, or who for any other reason has not voted at any primary election where he was required to declare his party affiliation subsequent to the enactment of this act, or any elector who has changed his residence to another precinct, shall be entitled to vote at such primary election, and his selection of his party ballot he desires shall constitute his declaration of party affiliation, which shall then be recorded as provided in the preceding section.

Section 3. Any person who has thus declared his party affiliation shall thereafter be listed on the poll books as a member of that political party, and such person while a resident of the same voting precinct need not declare his party affiliation at succeeding primary elections unless he desires to change his party affiliation. Any elector who, having declared his party affiliation, desires to change the same, may, not less than 30 days prior to the date of any primary election, file a written declaration with the county clerk, stating his change of party affiliation, and the county clerk shall enter a record of such change on the poll books of such preceding primary election in the proper column opposite the voter's name and on the voting list.

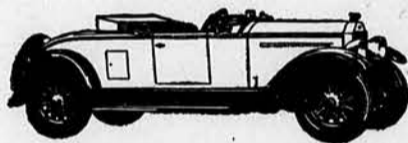
As you will see from this quotation from the law, this does not interfere with any voter's right to vote as he pleases at the general election.

As to whether or not this was a wise change in regard to the primary election, there is room for argument. But, as I said before, it does not interfere with the right of an elector at the general election to vote any party ticket he wishes to vote or to vote part of one ticket and part of another, or to make up an entirely independent ticket if he so desires.

No Offense Was Committed

A sold B some property. B did not have any money, but owned some property. He borrowed enough money on his property and the property which he bought from A. To pay all but a few hundred dollars. A took a second mortgage on his place for the bal-

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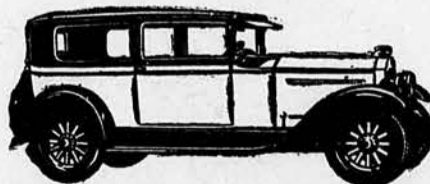
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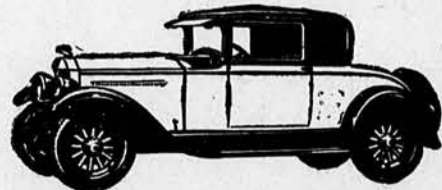
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WHEN BETTER AUTOMOBILES ARE BUILT, BUICK WILL BUILD THEM

To Lend 600 Million Dollars

Modern Co-operative Associations Are Now Able to Borrow Plenty of Money

AN OFFICIAL of the Federal Intermediate Credit Bank of Wichita announced recently that the 12 banks of the federal system were prepared to lend more than 600 million dollars to co-operatives operating under a state co-operative marketing act and a contract which gives the pools the unquestioned right to pledge the commodities of each for the obligations of all. Contrast this with the position of the Kansas Wheat Pool in 1922, its first year of operation, when bankers were backward in offering to handle such accounts, largely because the system was brand new in the Wheat Belt! In making arrangements to handle wheat that year, an attempt was made to obtain a small loan from Wichita banks to meet advance payments on the first deliveries of wheat. This attempt failed, even tho directors of the pool offered to sign the note and even tho the combined value of their property was more than a million dollars. It happened, however, that several carloads of wheat were received and sold before any drafts for advance payments were received. The pool paid the drafts as they were presented and was able to finance its operations thru the remainder of that year and succeeding years. Since the first year it has dealt with state, national and federal banks, borrowing what money it needed at interest rates much lower than can be obtained by individuals and many business firms.

And They Work Together

Two generations or more ago mercantile and manufacturing operations were carried on by individuals, and occasionally by partnerships. The whole system consisted of unco-ordinated and non-co-operating units. It was a time of relatively small business. The capital required was not large and could be furnished by one man or two partners. Competition, unrestricted and blind, was the order of the day. Every man tried to underbuy and undersell his competitor by fair means or foul. Trade and market information and new ideas and new methods were withheld jealously from competitors. Every effort to promote the common welfare was frustrated by jealousy, suspicion and rivalry. Those were the days of intense individualism in commerce. But note the changes that have taken place in such business in the years between then and now. First, there came a need for larger scale business, for more capital than one or two men could supply and for greater risks than one or two men could afford to assume. That brought the corporation, which is merely the agency thru which many men pool their capital and skill to carry on business beyond the resources and ability of a single individual. Next, merchants began to learn that cut-throat competition was unprofitable. Instead of fighting their competitors they began to co-operate with them. They learned they had many interests in common, and that many trade and market services could be obtained only thru co-operation. Today they are even pooling their buying power. Therefore, if competition, unrestricted and blind, did not prove successful for merchants, how can it prove successful for farmers?

Let's Save the Waste

If you owned all the wheat in Kansas would you turn it over to 160,000 farmers to market, regardless of demand, or would you organize a selling agency and merchandise that wheat as consumptive demand dictated? Who is in a better position to drive a good bargain, 160,000 farmers throwing their wheat at buyers, or one seller, representing 160,000 farmers, talking prices with buyers? If you were farming in an irrigated country, and you had barely enough water to produce your crop, would you dump 60 per cent of it on your land before the growing season was one-third over? It would be just as sensible to do that as it is for farmers to dump 60 per cent of their grain into the arteries of trade within three or four months after harvest. If you were given the job of handling all the wheat in Kansas, would you build three

elevators at each delivery point? Would you pay salaries of three managers, the taxes and depreciation on three elevators or would you build one elevator with capacity enough to handle all the wheat that normally came to each delivery point? Why should all the terminal elevators be built in larger cities, where a building site alone frequently costs \$25,000? Farmers waste millions of dollars annually in shipping weed seed, cracked wheat and extraneous matter to market. Why not build a few elevators of large capacity out here in the heart of the Wheat Belt; elevators possessing all the machinery common to a big city terminal? Then why not clean the wheat of weed seed and other foreign material? Why pay freight to Kansas City on cracked wheat and then pay additional freight when it is shipped back under the label of "Chicken Feed?"

But No "Surplus" Now

How California growers disposed of a burdensome surplus of raisins is an old story, but the method by which the job was accomplished should not be overlooked by growers of other commodities. Similar methods can be ap-

plied effectively to crops less perishable than raisins when growers of the commodity unite in large-scale organization. In 1923 the raisin sales agency found itself with more tonnage warehoused by 200 per cent than ever had been sold in a single year. Two policies adopted by the co-operative, one to widen markets and increase consumption, the other to divert surpluses by conversion into other products, helped it up the ladder of success. After a year of exhaustive investigation, Sun-Maid amber type sirup, cream of tartar and stock feed were developed as conversion outlets. A plant for their manufacture was constructed at a cost of \$700,000. This development had a two-fold significance to the trade. First, it meant that the Sun-Maid raisin market never would become overloaded and disorderly no matter what tonnage was produced, and, second, it meant that the trade invariably would receive from the pool only good quality raisins.

A Market 12 Months Long

"Orderly marketing" is a misnomer, if, by that term, one means the marketing of a unit of a commodity in a unit of time; that is, so much wheat a month regardless of prevailing prices. That would be orderly dumping rather than orderly marketing. Such is not the policy of successful commodity co-operative marketing associations. No one, of course, ever will be able to lay down a hard and fast selling policy that can be adhered to under all conditions. That would be manifestly im-

possible. The wheat co-operatives are selling to buyers as consumptive demand develops, and are not trying to force that demand, because, to do so, would mean a consequent lowering of the price. In other words, the co-operatives are attempting to sell the products they handle exactly as the things you wear and eat are sold to you. However, when a commodity is being handled for which there is a consumer demand 12 months in the year, it is only good business to sell the commodity 12 months in the year.

Teamwork Is the Need

"We still have with us," says The Nation's Business, "those men who, because human nature is what it is, have square corners and just can't work with the other fellows. True, they are gradually eliminating themselves, but not fast enough. Teamwork, whether on the baseball field or in the clothespin industry, will make for greater prosperity—and for more fun—at the same time. In ignorant competition, with its half-brother superstition, business, big and little, faces a real hazard. Teamwork is the answer. Congressman Kelly of Pennsylvania recently described the man who refuses to play on the community team as reminding him of the little fellow in the nursery rhyme, who said:

"When I am alone, and quite alone,
I play a game that is all my own;
I hide myself behind myself,
And then I try to find myself;
I hide in the closet where no one can see,
And then I start looking around for me."

A compromise is just a way of delaying the ultimate outcome.



Vern Albrecht,
Smith Center, Kan.

Evidence!

Vern Albrecht is a purebred Duroc breeder in one of the most extensive hog-raising parts of Kansas—Smith County.

Mr. Albrecht has been a feeder of Purina Pig Chow for more than two years.

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Collies Will Learn Rapidly

But a Teacher Must Use Plenty of Patience and Common Sense in Training 'Em

BY DAVID M. FYFFE

A BOOK of fair-sized dimensions could be written about training collies, as they learn something new every day of their lives, either from their trainers or by picking up ideas themselves. It will be a pleasure to a novice trainer to watch his dog after it has gotten past the rudimentary stage. It will give him lots of pointers and new ideas in regard to handling stock either on the road or in the pasture and as to how the dog can take care of itself when coming in contact with livestock.

The same fundamental principles apply to training all field dogs, whether they are collies, setters, pointers or retrievers. The first thing to do is to find out the nature and disposition of the young dog to be trained, whether hardy or timid, and then go ahead with the training according to that nature. The trainer must have a large stock of patience when the collie is old enough to begin training, and that time is after it has passed the puppy stage.

Let the trainer take it when he goes out for a walk either thru the fields or along the road. Teach it to walk at heel, or, at any rate, close to him. By saying "Come in to heel" or "Walk at heel," it will soon learn what is wanted. Never allow it to go roaming by itself or let it get into the habit of chasing rabbits or other animals of its own accord. A dog that has been allowed to do this is never to be depended on, and the habit is difficult to break. It often happens also that at the time the dog is most required, he will be on a chase and will not pay any attention to repeated calls.

The trainer also must teach it to lie or sit down when told, and must keep it lying or sitting there till he has walked off a short distance from it. This requires much patience, but after the dog has worked some around livestock and understands what is said to it, it will soon "catch on," and will either sit or lie for the next order or watch for a movement from the trainer. Motions with the arm or walking stick should be used as well as the voice in training, and by putting up the hand higher than the head and crying "Sit down" the dog will begin to watch for these motions and will soon know what is wanted without being told.

Start Training With Sheep

When the trainer goes to the pasture or clearing to gather up the sheep or cattle, he should not stand at the gate or a distance away and send the dog off by itself by crying, "Sic 'em" to gather them up. Let him walk up to the livestock with the dog at his heels, turn them in the direction wanted and tell the dog to force them forward, or some such expression, and show what is wanted by doing it himself. If the animals go off in the wrong direction, let him say to the dog, "Go around in front," and he may have to run himself to endeavor to head them in the right direction. This will show the dog what is required, and it will begin to help in turning them.

As cattle are much harder to move than sheep, I will go on with the training of a dog for sheep and will make a few comments on driving cattle later on. It is better, if possible, to train a young dog on sheep, as there is no danger of his being kicked.

When starting a dog out to turn sheep, always make it pass behind and never in front. By passing behind the trainer, the dog will be farther away from the sheep and there will not be much danger of any of the sheep being separated or cut from the flock. If it does cut off any, make it come back and start it out again and motion it farther away from the flocks. A well-trained dog should always pass clear around on the outside of the flock and not cut off a single sheep.

That is why I say a dog, if possible, should be trained on sheep. The dog is not required to go close to start them running, and often it lets out a bark or two which starts the sheep. With cattle it has to go right up to them to get them to move, and if it has been taught to drive cattle first,

it will rarely make a good sheep dog, as it will always run too close and will cut off sheep from the main flock.

If the dog turns the sheep at the first start they will very likely run too far in the opposite direction. Then call it by name or whistle for it to come back and motion to it to pass behind and go on in front. By speaking to it at the same time it will soon get into the way of passing behind. When turning sheep in this fashion when the dog is called on to come back it should always turn out away from the sheep. That is, if the dog has gone around on the left side of the sheep, it should turn to the left to come back, and vice versa.

After the dog has learned to turn sheep it will look at the trainer when

it is on the turn for any other motion or call from him, and this is where the interesting part of the training comes in. The dog will, if the sheep go off the wrong way, come around behind the trainer, go off and turn them again and will continue doing this till the sheep find out they cannot get away. Of course, in driving sheep on the road or forcing them into close quarters, then the dog should turn to the sheep.

When a young dog is first started to turn sheep, it will likely run too fast for the good of the sheep. If it does this, let the trainer cry, "Go quietly" or "Take time," and continue doing so till it has learned the meaning of the expressions. When the sheep come to a closed gate thru which they are going to pass, the trainer should make the dog lie or sit down behind the sheep, go forward himself and open the gate and then cry to the dog to bring them on. Some shepherds go most of the time in front of the sheep and teach the dog to bring them on; others go behind the sheep and teach the dog to watch any openings on the roadside or lane.

A dog of a strong, hardy temperament may sometimes have to be pun-

ished for doing wrong, but I have always found it best to spare the rod and use my tongue, threatening vengeance and exhausting my vocabulary of bad names and epithets. The air might be a little blue in the immediate neighborhood, but the dog was not hurt, my temper was improved and the dog and myself were faster friends than ever.

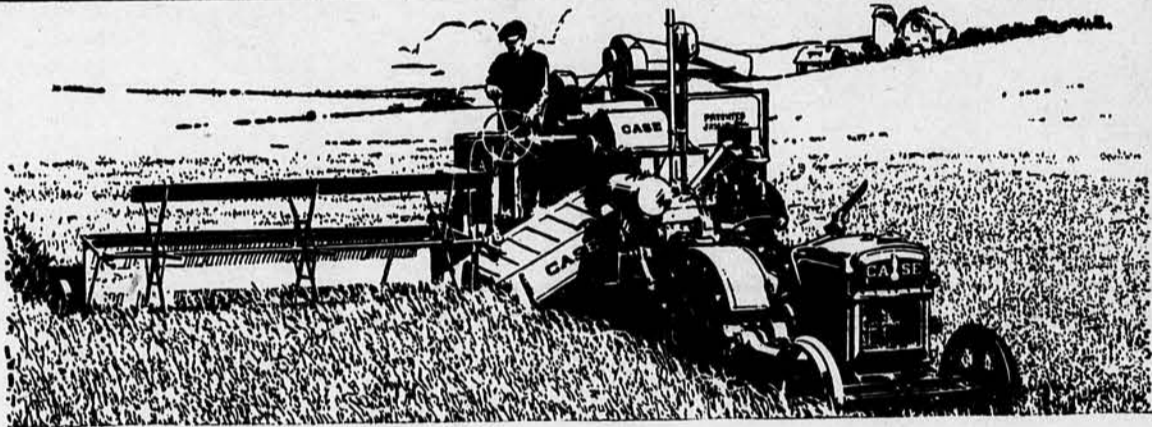
Keeping a young dog on the chain quite a lot tends to make him a little more savage than he might otherwise be, but I cannot say much about training for a watch dog. It comes natural to most dogs in that line.

Ump-ta-ra-ra!

A well-known woman is a famous Mrs. Malaprop as regards her speech. "And what in France," asked a friend, "did you enjoy the most, Mrs. —?"

"Well, I think," said the lady, "it was the French pheasants singing the Mayonnaise."

However, after his experience in the Mississippi Valley, it was to be expected that Mr. Hoover would have dry leanings.



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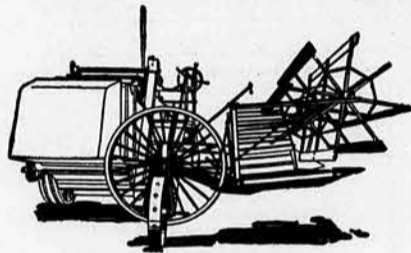
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Combines Cut Wheat Costs

And so the Number in Use in the Middle West Grows Steadily Every Year

A STUDY of the use of combines in Ochiltree and Hansford counties in Texas has been made during the last two years by the Texas Experiment Station. Conditions there are somewhat similar to those in Southwest Kansas, the leading "combine belt" of the state. Data was obtained from 85 growers, who owned 90 combines; it evidently is conclusive for that section, and very similar to the results to be expected in Kansas.

The size of the machines ranged from 8 to 20 feet; the more common ones being from 12 to 16 feet. Two kinds are used, the tractor-drawn auxiliary engine type and the power take-off type. The auxiliary engine combines are those that have an engine installed on the machine to operate both the harvesting and threshing mechanism, the whole being drawn with a tractor. Power take-off combines are those that receive their power from the tractor which pulls the machine. There were no ground-driven types found in the section studied. Such machines have all the combine mechanism driven by power received from a large wheel in contact with the ground. The smallest number of days of harvesting by any one outfit was eight days; the largest number 36; and the average 18.5.

Tho almost all the combines were operated about the same number of days, those of a given size did not harvest the same number of acres. Variation in the number of acres harvested was considerably wider than the number of days. The machines which were kept going most constantly and which harvested grain under more nearly ideal conditions harvested the largest acreage. When one field was finished there were plenty of other fields waiting for the first machine that could pull into the field. A few farmers who grew a larger acreage of wheat than is normally harvested with one combine preferred to harvest all of their own grain, even tho it took longer and tho there was considerable risk from weathering, because the cash expenditure was less and the profits were greater, in their opinion, than if they had hired a part of the harvesting done.

53 Acres in 12 Hours

The rate of travel for all sizes of combines did not vary more than .6 of a mile an hour. The slowest machine traveled 2.2 miles an hour, and was the largest of the auxiliary engine types. The next slowest was the smallest of the power-take-off types. The average rate of travel for all machines was 2.58 miles an hour. The rate of travel was practically the same for both low and high yields. If the combines showed signs of being overloaded in heavy grain, the operator did not slow down, but reduced the width of the swath being cut.

The small 8-foot power take-off combine harvested 15.6 acres in 11 hours, while the 20-foot auxiliary engine type harvested 53 acres in 12 hours. On the whole, all machines were operated about the optimum number of hours during the day. The number of hours, however, probably is greater in this section than in some others, especially the more humid sections of the winter wheat region. Most operators delayed starting in the morning for a short while on account of the grain being

somewhat damp. However, some operators were of the opinion that it would be practicable to harvest 24 hours during the day for a part of the season, as the humidity would not be high enough to affect the functioning of the combine to any appreciable extent.

The amount of work that can be accomplished in a day depends directly on what can be done in an hour. Of course, the acreage cut an hour varies with the size and type of the machine. The acres cut an hour by the power take-off machines showed an average of 1.4 for the 8-foot machines and 2.7 for the 10-foot machines. Combines equipped with an auxiliary engine cut 2.7 acres an hour, while the 15, 16 and 20-foot machines averaged 2.8, 3.6, and 4.4 acres an hour, respectively. The difference in the rate of cutting was due to the difference in size of the machine.

The number of acres harvested a season is affected by the size and type of combine, age of machine, experience and initiative of the operator, and acreage available for harvesting. The 8-foot power take-off combine harvested an average of 268 acres for the season, while the 20-foot auxiliary engine combine harvested an average of 853 acres. The average for all types and sizes was 536.6 acres.

The cost of operating a combine is greatly influenced by the price paid for fuel, lubricating oils and greases. Gasoline was charged at 20 cents, kerosene at 16 cents, and lubricating oils at 80 cents a gallon.

Labor the Greatest Cost

If calculating the cost of tractor power it was assumed that the average tractor would be used 700 hours during the year, and that \$21 a drawbar horsepower would be the annual fixed cost of the tractor. The charge for harvesting was determined by dividing the total fixed cost for the year by the fraction of 180 over 700. As nearly as could be calculated, the average number of hours, for each combine, of actual harvesting during the year was 180. The sizes of the tractors used were a 10 drawbar horsepower for the 8-foot, a 20 horsepower for the 20-foot, and a 15 horsepower for all other combines.

Labor is the largest item of cost in operating the average combine. The size of the crew used to operate a combine varied slightly with the type and size of the outfit. The small 8-foot machine of the power take-off type required only one man to operate both the tractor and the combine. The 10-foot power take-off and the 12-foot auxiliary-engine types required one man on the combine and one on the tractor. A helper was used on a small number of the 15, 16 and 20-foot machines. Five dollars a day was the most common wage reported for both combine operators and tractor drivers; therefore, this amount plus \$1.35 a day for board was used in determining the cost of labor an acre.

An interest charge based on half the original investment at 8 per cent is taken to represent the interest charge for the entire life of the machine, the average of which was 8 years. The average acreage harvested annually is used in calculating the acre cost because the acreage harvested during the 1926 season was exceptionally large. In most cases, combines harvested a greater acreage than the maximum which operators believed should be harvested by one combine.

Repair charges are based on the average charges for the life of the machines. Since it was not known what the repair costs for some of the newer types of machines will be for the complete life of the combine, the average cost a sickle-bar foot of machines on which complete records are available is used. Because of improvements in construction, the newer types of machines will likely show a lower repair cost than the older ones, but none of the costs for repairs exceed 15 cents an acre.

The average cost an acre for the six different sizes of combines used was \$1.62. It is interesting to note that the acre cost does not vary greatly for the different sizes of machines.

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The average yield an acre for 1926 was 28.8 bushels. By dividing \$1.62, the average cost an acre, by 28.8, the average yield in bushels an acre, the cost a bushel is determined for the season of 1926, which was \$.056. However, the yield an acre for the average year is only 15 bushels. The cost a bushel for the average year can be approximated by dividing \$1.62, the cost an acre, by 15, which gives \$.108. Consequently, the cost a bushel varies with the yield. As the yield decreases, the cost a bushel increases. However, the cost will not likely be the same on any two farms, since it will vary from year to year as the different items of cost vary.

When wheat is harvested with a combine, the grain should be sufficiently mature to stand storage. This is necessary because immature grain has a high percentage of moisture and will heat when stored.

Small Losses in Threshing

The number of days harvesting was delayed after a binder could have been started was reported variously from two to 14, but the majority of farmers reported from four to seven days. The number of days' delay after the header could have been started ranged from two to seven days, but the majority of farmers reported only three to four days. The principal disadvantage of depending on the combine for all harvesting is the risk of loss because of hail, rain or windstorms during the four to seven days of waiting for the wheat to ripen enough to use the combine after the binder or header could have been started.

It has been estimated from previous studies made on the cost of harvesting and threshing and also from this study that the total labor for harvesting and threshing would be reduced from approximately 4.6 man hours for cutting with a binder and threshing with a stationary thresher, and 3.8 man hours for harvesting with a header and threshing with a stationary thresher, to about .75 man hours an acre where the work is done with a combine.

Harvesting and threshing losses were not studied in Texas, but they were studied in other states; so the following is quoted from the Preliminary Report of the United States Department of Agriculture on "Harvesting Grain with a Combined Harvester-Thresher in the Great Plains Region, 1926:"

"Losses of grain resulting from the different methods of harvesting were determined in Oklahoma, Kansas, Nebraska and Montana, by actual counts of the number of heads left on the ground in 259 fields cut by combines, 69 fields cut with the header, and 34 fields cut with binders. The yield an acre in fields cut with combines was determined from samples taken previous to harvesting. The losses on headed and bound fields were calculated on the basis of yields obtained from the combine fields.

And for Sorghums, Too

"Forty-one of the 190 fields of winter wheat cut with the combine had losses of less than 1 per cent, 106 less than 2 per cent, and 137 less than 3 per cent. Losses greater than 3 per cent occurred with an uneven or partly lodged crop, on rough land, with poor machines, thru careless operation, or in very windy weather. The average loss from harvesting winter wheat with combines was 2.6 per cent. Fields cut with headers showed an average loss of 3.3 per cent, while fields cut with binders show an average loss of 6.1 per cent. These per cent losses are based on a yield of 20.4 bushels an acre. The loss an acre was 32 pounds after the combine, 40 pounds after the header, and 74 pounds after the binder. Heads cut off and dropped on the ground were the greatest source of loss in combining and heading. Additional losses in heading occurred in loading the header barge and hauling to the stack. The losses in binding include the cutting loss, the loss between the canvasses, losses from the blinding platform, bundle carrier, heads dropped in shocking and hauling, and heads left in shock bottoms. Losses around the stack and incident to threshing are not included."

"Blanket tests" of 33 combines and nine separators were made to determine which type of machine was the most efficient. The loss measured includes only the threshed grain which was blown or carried thru with the

straw. Thirteen of the 33 combines were carrying over less than 1 per cent of the grain threshed and 21 less than 2 per cent. All losses of over 2 per cent probably were due to poor adjustment and operation.

All operators should study the mechanical features of the combine because of their influence on the operation of the machine. Failure to consider the proper type, the size, the attachments and the adjustments on the combine may affect the accomplishments of the machine to such an extent that the efficiency will be materially reduced. A study of the tables giving the number of the different types and sizes of machines shows that the most popular machine in 1926 was the auxiliary engine type.

The larger size machine is most commonly used on the larger farms. In some sections the smaller power take-off machines are attracting considerable interest of the smaller farmers, and to a less extent the larger farmer, because of their general satisfactory service and economy in labor, fuel and low initial cost. By taking the power direct from the tractor the expense of owning and keeping up an auxiliary engine the year round to be used 15 to 20 days during the year is avoided.

The width of the cutter-bar may be varied on most machines by using or removing the extension cut. The use of the extension in harvesting of wheat with low yields, thereby increasing the

number of acres which can be harvested a day and lowering the cost of harvesting low-yielding wheat, is especially advantageous.

Self-feeders and straw spreaders may be used in order to equip the combine better for stationary work. The more common uses of the combine as a stationary thresher are to thresh small fields of wheat and other small grains, or to thresh shock rows of wheat which result from opening up a field preparatory to combining. Special bundle and windrow pick-up feeders have been developed which allow the combine to be used to thresh shock rows and windrowed grain without further handling. This also eliminates the necessity of moving the straw, since it is spread on the ground as the machine moves along.

Threshing small quantities of milo heads and cleaning various kinds of seed for planting purposes are other uses of the combine. A few farmers reported using the combine for threshing grain sorghums which had been cut with a header. Grain sorghums which are harvested with the header are stacked in small ricks so they may cure properly. The combine may be used to good advantage in threshing these ricks, as it can be removed easily from one rick to the next.

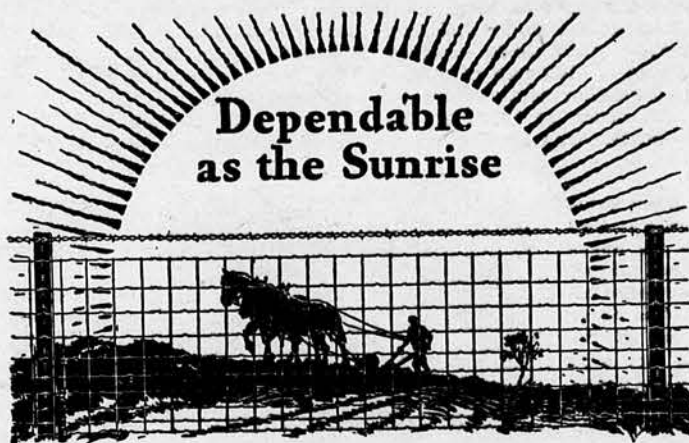
The combine also has been used to thresh the heads from bundles of grain sorghum by laying the bundles across the cutter bar, which has been twisted to an upright position. The heads are

cut off and carried by the platform canvas to the cylinder. The labor of threshing bundles in this way is less, since the combine may be moved along the shock row, thus eliminating one or more handlings of the bundles.

Many farmers reported using their combines for harvesting oats, rye and barley in addition to grain sorghums. Frequently, the machines were changed from one crop to another without making any adjustments. This practice could possibly be tolerated without serious losses when changing from wheat to oats, rye or barley, but the best results cannot be obtained with grain sorghums. Most of the machines were equipped with a straw spreader to spread the straw uniformly over the land rather than to concentrate it in a narrow windrow. When the straw is not spread, considerable difficulty is often experienced by the failure of the tillage tools to handle it. This is especially true when there is a large amount of straw and stubble on the field.

Strawberries for Market

Preparing Strawberries for Market, Farmers' Bulletin No. 1,560, has just been issued; it should be in the hands of every farmer who grows this crop to sell. A copy may be obtained free on application to the United States Department of Agriculture, Washington, D. C.



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STIFF-STAY OR HINGE-JOINT

So She Made It a Model Kitchen

By Florence G. Wells

MOTHER'S kitchen was all wrong. Mildred Schlickau, Reno county, observed that when she returned from college last June. She had been studying scientific home-making. Most parents dismiss such criticisms after marveling at the way a year or two of college shows



Mildred Schlickau Planned the Changes in Her Mother's Kitchen and Welded the Paint Brush

up the flaws in the old home place, and consider themselves fortunate not to be told by their embryonic P. H. D.'s and R. S. V. P.'s that they are back numbers. But Mrs. Albert Schlickau, wife of last year's wheat king, had been noticing that bread and pies and dishes were requiring too many steps, so she told her daughter to go ahead and make it right. Mildred got out the paint brushes and called in a carpenter. The door into the pantry was made into a double casing and a breakfast table and benches took the dumb waiter. The dumb waiter which had been very convenient in the former pantry was many times easier to use now in a corner of the breakfast room. Things to be served cold are set on the table from the dumb waiter without extra steps. After the meal is over they are returned to the waiter, which resembles a galvanized water tank with a door on one side and wire shelves. A few turns of the handle which draws it up and down, and the perishables are in the basement. For warmer weather a few more turns of the crank will let the waiter

down into a shaft below the basement floor where butter will keep hard on the warmest days. Transformation of the pantry made it necessary to provide storage space elsewhere, and that was the carpenter's part. A work table was built along the north wall with cupboards reaching to the ceiling. This gave the space needed for storing the things that had been kept in the pantry and provided work space convenient to the stove. Mildred was not the only one who had some ideas on how kitchens should be arranged. Earlier in the season Mr. Schlickau had been chosen Kansas Wheat King and was invited to accompany the Wheat Train sent out by the Kansas State Agricultural College. One feature of the train was a model farm kitchen. His Majesty spent most of his time inspecting the kitchen and was convinced that the small sink without drain boards, which his wife intended to put into the work table, would never do. Consequently when he got home, Mrs. Schlickau went to town and brought back the lovely sink with double drain boards which you see in the picture.

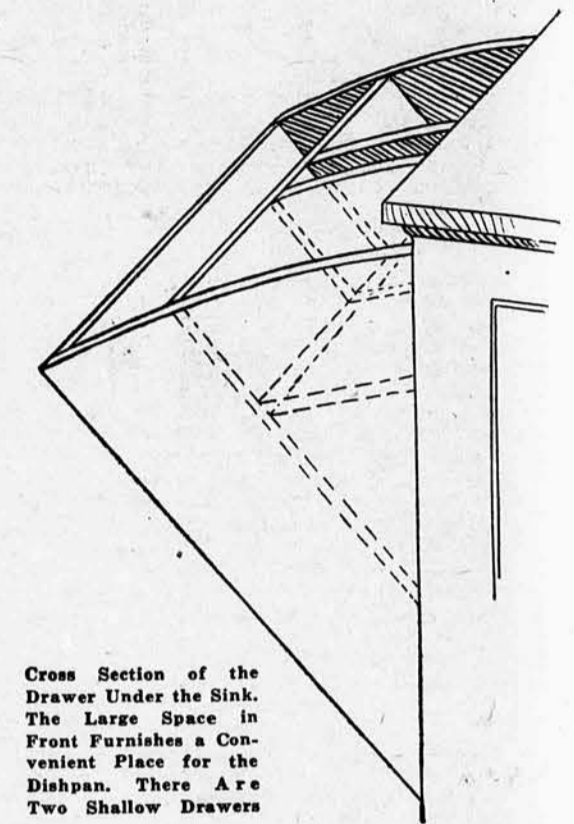
Mr. Schlickau also noticed that the sugar and flour bins on the train were made to balance themselves open so that both hands could be used in taking out flour or sugar. It was a small task to change the swinging drawers in the new work table so that they would balance likewise. The large swinging drawer under the sink is Mrs. Schlickau's idea. It balances itself open the same as the sugar and flour drawers. Inside, it is divided into three sections, a large one in front where a dish pan can be slipped in sidewise, and two smaller sections for pie pans and lids.

In order to fulfill its part in the new kitchen plan, the tiny back porch was enlarged enough to

be used as a laundry room and inclosed. The old sink that had been in the kitchen was reinstalled with a mirror above it so that the men can wash and prepare themselves for the meal before coming into the kitchen. Convenience is not the only element that has been added to this kitchen, for there is beauty in the

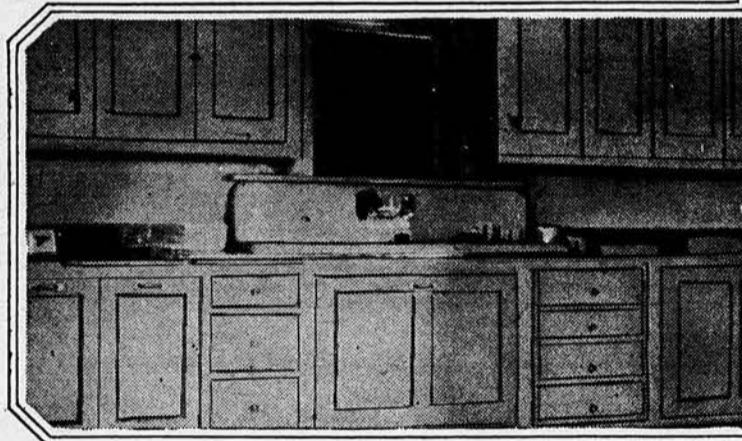
grey enameled woodwork, the gay cretonne pads on the benches in the breakfast room, and the general air of neatness and fittingness of the whole room.

"I don't know how much time my new kitchen saves me," said Mrs. Schlickau, "but I do know that my mileage per meal is cut down considerably."



Cross Section of the Drawer Under the Sink. The Large Space in Front Furnishes a Convenient Place for the Dishpan. There Are Two Shallow Drawers

Below: A Portion of the Work Table in Mrs. Schlickau's Kitchen. The Two Drawers at the Left are for Sugar and Flour. In the Cupboard Above, Spices and Other Things Needed for Preparing Food, are Kept. The Stove is Opposite the Right End of the Table So Cooking Utensils Are Kept in This Part. Picture at Right Shows a Corner of the Breakfast Nook With the China Cupboard and Dumb Waiter



Attractive Dishes Nurture Appetites

BY BETTY BARCLAY

WE WHO like to please thru the medium of our table, are always on the lookout for some new salad, pudding, fruit cup, casserole dish, or sandwich that will not only taste good but will be attractive as well. Put a dash of whipped cream and a cherry on some commonplace dish, and immediately we have a dish par excellence. Toss a sprig or two of parsley and a slice of lemon over fish—and again we are appealing to the eye and stomach together.

The woman who learns to set an attractive table has learned a very important lesson. Her food may really not be prepared or cooked one bit better than that of her neighbor, but the appearance of each dish so appeals to the eye that she soon acquires a reputation that cannot be equaled by that neighbor at all.

Here are several recipes for attractive dishes. Not only are they attractive, but they furnish the oft lacking balance to meals and thus are greatly needed on the table. Try them and see how they will set off an otherwise drab meal.

Star Salad

On individual plates of lettuce arrange, in star pattern, five sections of grapefruit, free from membrane; on these place five sections of orange, free from membrane also. Cut long, slender strips of figs, and place on edge of orange sections. Fill spaces between orange star points with finely-cut dates. Serve with French dressing made with orange vinegar. To make orange vinegar put the

juice from six oranges in a glass jar, add a cake of compressed yeast, dissolved in a little of the juice, cover with cheese cloth, and let stand in a warm place about a month, or until sour enough to use. Strain, and use in place of cider vinegar.

Banana Canoes

4 bananas
2 oranges
2 slices pineapple

Salad dressing
Berries or candied cherries

With a sharp knife cut a section of skin from the concave curve of the bananas, and carefully take out the fruit, leaving the skin in the shape of a canoe. Pare oranges. Remove sections, and cut in pieces. Mix with pineapple (cut in pieces) and an equal amount of banana pulp (cut in pieces). Fill canoes with fruit. Cover with mayonnaise or French dressing. Sprinkle generously with paprika. Lay on bed of shredded lettuce, and garnish with berries or candied cherries.

Plant Back Door Flower Beds

ONE thing I learned last year was the joy of having a bit of bright color in easy view from the kitchen and back porch. Flowers at the front of the house may look well to the passer-by and the occasional caller, but the housewife gets more real enjoyment from them if they are somewhere near her workshop. A row of large dahlia-flowered zinnias under the kitchen window just beside the porch produced beautiful double yellow blossoms all summer long with little care except showering with waste water from the kitchen when it was dry. Another bright spot which was a constant

pleasure was a bed of geraniums and sultanas on the east side where it got just enough shade, and was always full of bloom. A clump of dark red hollyhocks in the back yard has added its bit of cheer.

The west end of the front porch proved to be a good place for the Japanese morning glory vines this summer. The large leaves not only made excellent shade, but the sun was so long in reaching this particular spot that the rainbow-colored blossoms often stayed out until almost noon. Of course we had to gather the seed before it ripened to keep the entire yard from growing up to morning glories.

Short Cuts Around the House

BY OUR READERS

ALL of us are on the lookout for suggestions to make our housekeeping easier or our homes brighter. Perhaps you have discovered some short cut that your neighbor doesn't know about. If so, won't you tell us about it? For all suggestions we can use we will pay \$1. Address the Short Cut Editor, Kansas Farmer, Topeka, Kan. Include postage if you wish your manuscript returned.

German Orange Cake

BEAT well together the yolks of 6 eggs, 2 ounces butter creamed, and ½ pound of powdered sugar. Beat the whites of the eggs into a stiff froth. Stir together ½ pound of flour and a teaspoon baking powder. Mix in the juice, soft pulp and rind of 3 medium sized oranges, leaving out seeds and tough fiber as follows: first stir into sugar, butter and yolks, then add whites of eggs and flour alternately. Pour quickly into little pans and bake in moderate oven.

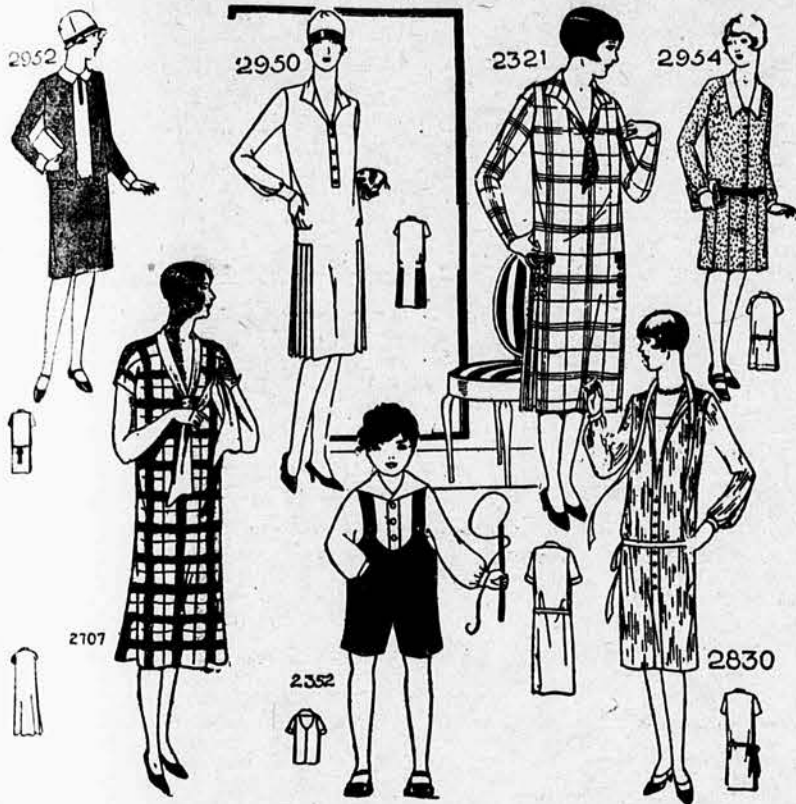
The icing may be made without eggs, which is sometimes a great convenience. Add grated rind of an orange to ½ pound powdered sugar, a tablespoon boiling water and enough orange juice to moisten it thoroughly. Use at once.

Bourbon County. Mrs. Ira Bishop.

They're Bleached and Then Dyed

IN THESE days of a hundred and one shades of hosiery, it is improbable that one will have two pairs of exactly the same tint. This makes matching the mates of stockings that have met with an accident quite a problem. I lay these hose aside until I have two pairs of about the same quality, bleach them and tint any desired shade. The two snagged stockings make satisfactory every-day hose when mended, and the other two are as good a pair as if they were mated at the factory. Most dye manufacturers now have a bleach and I prefer to use a dye that can be dissolved in the rinse water. Wyandotte County. Mrs. C. L. Johnson.

Spring Arrives in Style



2321—Straight Line Styling. Sizes 16 years, 36, 38, 40 and 42 inches bust measure.
 2830—Favorite Sports Model. Sizes 36, 38, 40, 42 and 44 inches bust measure.
 2952—Bolero Effect. Sizes 6, 8, 10, 12 and 14 years.
 2707—House Dress. Sizes 16, 18 years, 36, 38, 40 and 42 inches bust measure.
 2954—Ragland Sleeves. Sizes 6, 8, 10, 12 and 14 years.
 2950—Street Dress of distinctive style. Sizes 16, 18 years, 36, 38, 40, 42, 44 and 46 inches bust measure.
 2352—For Small Lads. Sizes 2, 4 and 6 years.
 Any of these patterns may be ordered from Pattern Department, Kansas Farmer, Topeka, Kan. In ordering be sure to mention sizes and numbers. Price of patterns is 15 cents each.

Dainty Gift for Bride

A DAINTY gift for the bride who will be holding the center of the stage in another month, or for the graduate's dainty room, is this rainbow pillow of voile. The center is shirred to a multi-colored insert and the edge is finished with a wide shirred ruffle, with edges picoté in black.

The package which may be ordered



by No. 5682 contains material for the cushion top and back, yarn for the dainty flower clusters, floss for the outline stitchery which completes the design, and directions for assembling the parts. Price of the package is \$1.10. You may order this package from Fancywork Department, Kansas Farmer, 5th and Jackson Streets, Topeka, Kan.

Women's Service Corner

Our Service Corner is conducted for the purpose of helping our readers solve their puzzling problems. The editor is glad to answer your questions concerning house-keeping, home making, entertaining, cooking, sewing, beauty, and so on. Send a self-addressed, stamped envelope to the Women's Service Corner, Kansas Farmer and a personal reply will be given.

Wax Must Be Removed

My dining room floor was varnished and waxed, but it has been neglected until in spots both wax and varnish have worn off. I would like to put on another coat of varnish. Can this be done over the wax?

R. H. M.

Varnish applied over wax will not dry, but wax is not waterproof so you can remove it and then apply the varnish. The most reliable way to remove wax is with gasoline. Cleanse the floor thoroughly with gasoline, remembering

that gasoline must not be used around a fire, in a closed room, or rubbed heavily because of its inflammable qualities. After the gasoline odor has left apply the varnish.

The Baby's Corner

By Mrs. Inez R. Page



Mrs. Page will be glad to help you with any of the puzzling problems concerning care and training of your children. Her advice is seasoned with experience as a farm mother and years of study. Address her in care of Kansas Farmer, Topeka, Kan.

How Mother Keeps Fit

SOMETIME ago I told you I was a breast-fed baby. When my sister was a baby our family doctor told mother that there was absolutely no food as good for a baby as a healthy mother's milk. He said a mother should do all she possibly can to nurse her baby from seven to nine months. A

breast-fed baby can resist colds and diseases and when getting some illness is better able to throw it off and get well than an artificially fed baby.

Below are some rules my mother follows to keep her fit to nurse me:

1. She gets at least 8 hours of restful sleep every night and an hour of rest and quiet during the day. If it is impossible for a mother to sleep an hour during the day she should at least lie down for 30 minutes.
2. Mother tries to avoid excitement, worry and getting over-tired.
3. She spends some time daily in the fresh air and sunshine. When doing this, mother dresses suitably for the weather and temperature.
4. The mind as well as the body needs rest. When possible mother spends some time with congenial friends and partakes of pleasures.
5. Her diet is well balanced. This is perhaps the most important of the rules. The diet should contain a variety of vegetables, some meat, fruits, both raw and cooked, and from a pint to a quart of milk a day. Also mother drinks plenty of water, never less than a quart daily.

I hope these suggestions will help some other mothers and babies to be as well as my mother and I.

Baby Mary Louise.



"Oh—Mother!
Is it really mine?"

SHEER HAPPINESS! A Mother's experience as she gives her daughter that beautiful new piano for her very own. What a companion... what an inspiration in the years to come!

From many she had chosen this one piano... the gift of a lifetime. Experience in buying smaller things... comparing... selecting... had helped her in making this important purchase. A woman's inherent trait to first compare in buying any article, large or small.

Comparison is also very helpful in selecting the one coffee you like best.

Taste-tempting... palate-pleasing... the marvelous, unmatched flavor of Folger's Coffee delights the most discriminating people. Folger's makes the perfect cup of coffee. It is the supreme of the world's coffees.

Compare Folger's Coffee by making the famous Folger Coffee Test.

The Folger Coffee Test: Drink Folger's Coffee tomorrow morning; the next morning drink the coffee you have been using; the third morning drink Folger's again. You will decidedly favor one brand or the other. The Best Coffee Wins. That's fair, isn't it?

The first thought in the morning

FOLGER'S
Coffee
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Puzzles for After-Supper Hours



Roxy, a cat named Ginger and a pony named Zona. I have a sister and a brother. Their names are Alice and Lester. Alice is in the eighth grade and Lester is out of school. I would like to hear from some of the girls my age.
 Leona Laree Newlan.
 Westphalia, Kan.

Goes to Slattery School

I am 10 years old and in the sixth grade. For pets I have a pony named Goldie. I go to Slattery school. I walk 1 1/2 miles to school. My teacher's name is Miss McGinnis. I have four brothers and one sister. My sister and brothers go to high school. My brother and I go to Slattery school. I wish some of the boys and girls my age would write to me.
 Hazel Donahue.
 Hoyt, Kan.

Plays the Piano and Ukulele

I am 11 years old and in the sixth grade. I play the piano and the ukulele. I go to school at Orion. My teach-

er's name is Mrs. Beougher and I like her very much. I have three brothers and two sisters. For pets I have a dog named Star, a cat named Spot and my brother has a pony named Cap. I enjoy the young folks' page very much and I wish some of the girls and boys would write to me.
 Nina Wheeler.
 Orion, Kan.

A Test for Your Guesser

What is the key-note to good breeding? B natural.
 What word can be pronounced quicker by adding a syllable to it? Quick.
 What is that which has neither flesh, bone nor nail and yet has four fingers and a thumb? A glove.
 Why should the goat's milk be used in the dairy? Because the goat makes the best butter.
 What part of speech are shopkeepers most anxious to dispose of? Articles.
 What is the most popular paper at a summer resort? Flypaper.
 Why is a field of grass like a per-

son older than yourself? Because it's pasturage (past your age).
 What goes around a button? A goat.
 Why is a fly taller than most men? Because he stands over six feet without shoes or stockings.
 Which is the greatest back-biter? A flea.
 What is that which is bought by the yard and worn by the foot? A carpet.

Nature's Notebook



A Swat in Time

A stitch in time saves nine, but a swat in time may save 9 million. Now, when the first few young flies are hovering about, wistfully waiting their chance to get in thru a door or window left unsecured, is the time when swatter and fly paper will do the most good.

For these are the ancestor-files of the swarms that will plague us in August, and every blow against one of these slays an army unborn. It takes less than three weeks, on the average, for a generation of flies to be hatched, grow up, lay their eggs, and thus provide for another generation of the buzzing pests. Each female fly that reaches maturity lays anywhere from a few score to 200 or so eggs at a time, and may produce three or four batches of eggs before she dies. At this rate of propagation, supposing three weeks to the generation, and 100 eggs—a very conservative number—to the batch, anyone with a weakness for the arithmetic of big numbers can conjure up some terrifying statistics. But it is better to do one's calculating with the swatter.

In the country, where stable waste is a necessary and useful material, flies are partly excusable, tho even in the country their number will be kept severely within limits on a really clean farm. In the city, however, where horses are now greatly reduced in numbers and where modern sanitary facilities are supposed to be present even in the poorer quarters, flies are inexcusable.

Julia's Dog is 13 Years Old

For pets I have a cow named Spider, a dog named Joe and a cat. My dog is 13 years old. He is blind and deaf. I am in the fourth grade and was 9 years old in December. My teacher's name is Miss Penner. I have two brothers and three sisters. Their names are Bernard, Madonna, Frances, Margaret and Emmett.
 Julia Buckman.
 Newton, Kan.

Word Square Puzzle

1. _ _ _ _
2. _ _ _ _
3. _ _ _ _
4. _ _ _ _

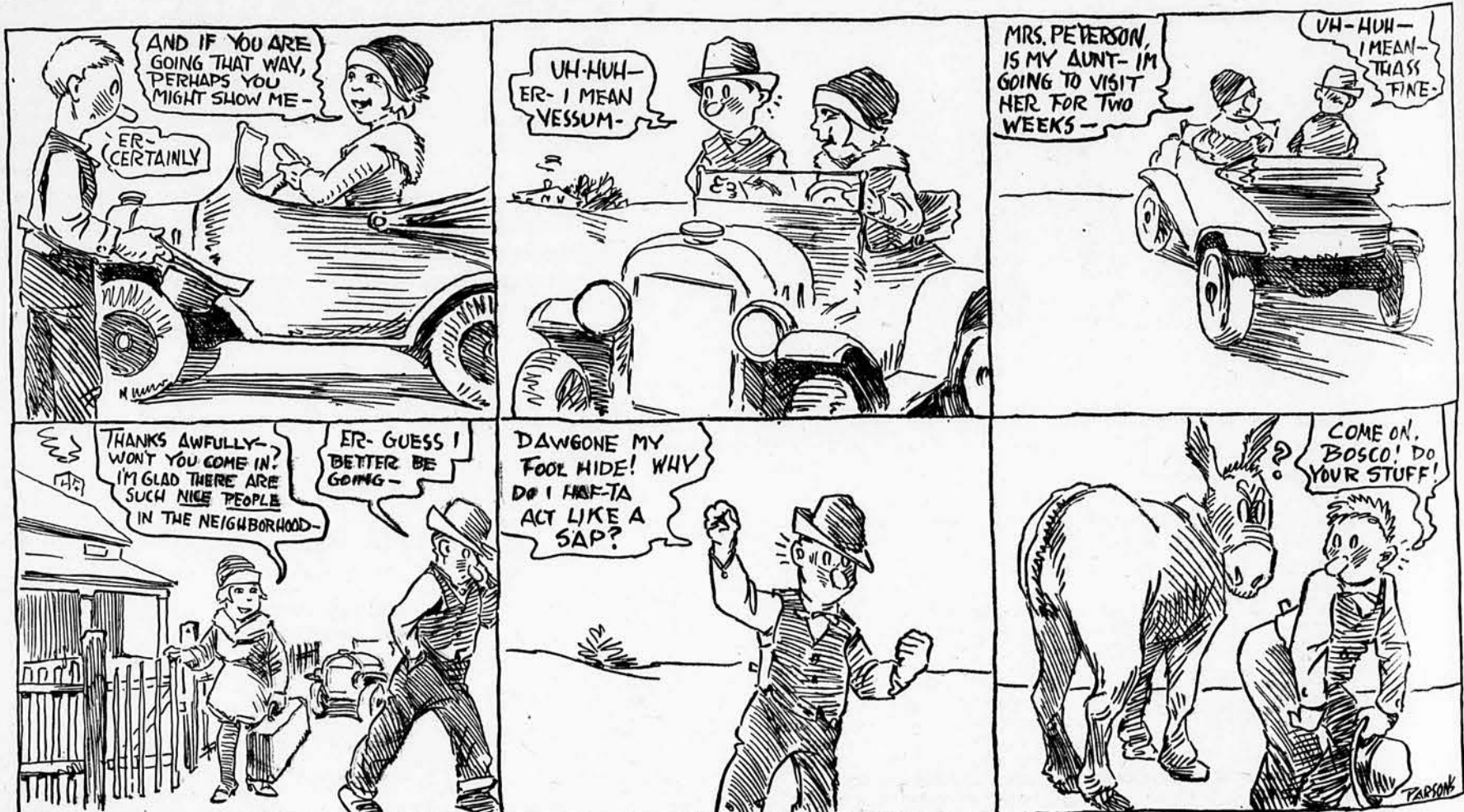
1. Weed, 2. To state, 3. City in Nevada, 4. God of love.

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

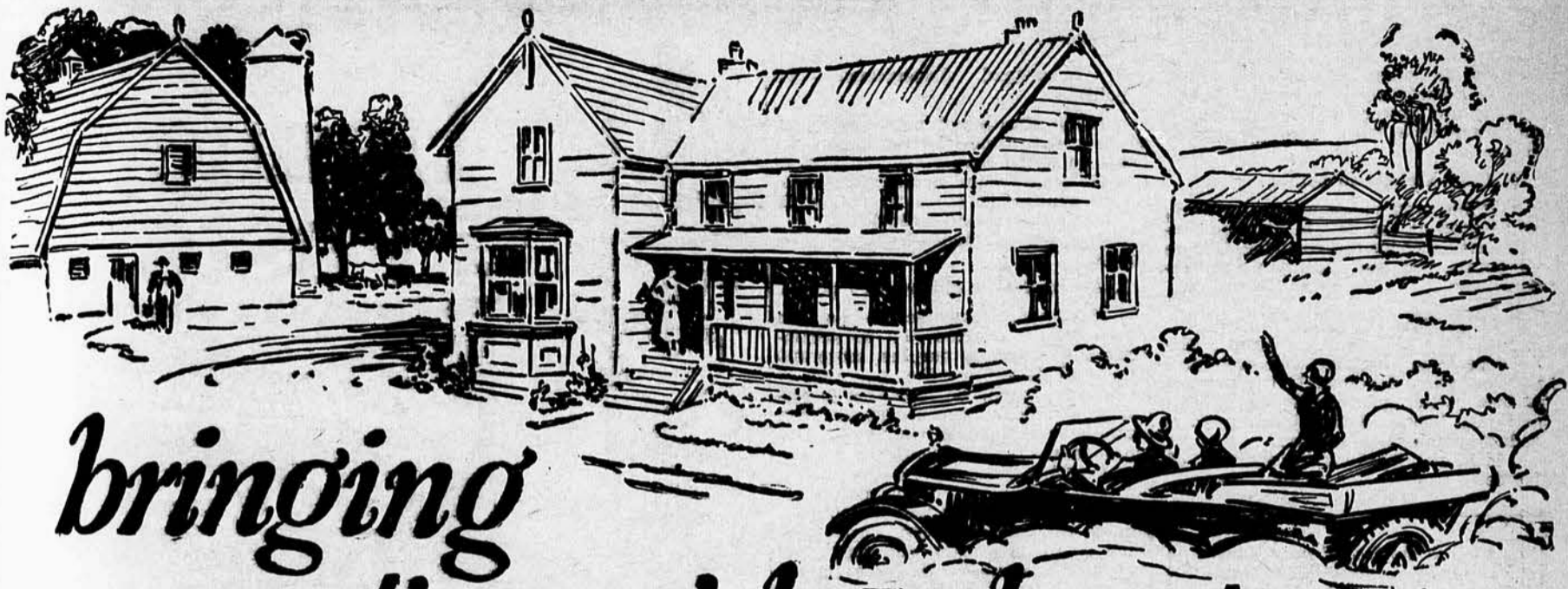
There Are Three of Us

I am 8 years old and in the fourth grade. I go to Cherry Mound school. My teacher's name is Miss Miller. I like her very much. I go 1 1/2 miles to school. For pets I have a dog named

Handsome Harry needs a new outfit mighty bad. He's kinda seedy looking and run down at the heels, as it were, and he's a social lion, too. Let's see you puzzle out the pictures above. Each one represents one of the many things Harry needs. The first one is shoes. Now I'm sure you can guess the others. Send your answers to Leona Stahl, Kansas Farmer, Topeka, Kan. There will be a surprise gift each for the first 10 boys or girls sending correct answers.



The Hoovers—The Bashful Age



bringing nation-wide advantages to the farm-house!

TWENTY-SIX YEARS AGO this month—when this nation-wide retail business was founded by Mr. J. C. Penney—a trip to town meant starting before daylight and arriving back home after dark. In countless instances, the distance was too great for even the long day's trip.

Today the automobile and good roads have changed it into a pleasure spin of a few hours. Gone are the inconveniences of shopping of yesteryears. Gone with the Indian, the scythe, the square piano and the bad roads.

The radio, the automobile and the newspaper are fast making the City and Country one—not only in space, but in needs and desires. Today the family in the farmhouse demand the same up-to-the-minute styles, the same variety to choose from, the same quality and savings, the same advantages of personal selection as their City Cousins.

The J. C. Penney Company Department Stores, located in nearly 1,000 cities and towns over the United States, are supplying this demand in a most satisfactory way. Fast trains thundering

across a continent, carry the styles of New York and the best manufactured goods of the World's markets to the Main Streets of the Nation, placing them in our Stores within easy reach of the most remote homes.

These Examples of Thrift

—assure Quality-Value in all J. C. Penney Company Stores.

Marathon Hats **Waverly Caps**
—for men. Our feature For Men, at.....\$1.98
hat at.....\$3.98 For Boys, at.....98c

Jaciel—Exquisite Toiletries
For refined and particular women, exclusive with our Stores.....19c to 98c

Two of Our Famous Footwear Values
4702—Women's Four-But- 734—Men's Gun Metal or
ton Patent or Kid Low Tan Oxfords, solid leath-
Shoes, at.....\$3.98 er sole, at.....\$4.98

Millinery Modes of the Moment
Chic Hats for Women.....\$2.98, \$3.98, \$4.98

Our May White Goods Presentation
Table Linens, Sheets, Pillow Cases, Spreads and Towels.
Splendid values at our Thrifty Low Prices.

Drive to the nearest town where there is a J. C. Penney Company Store and see for yourself if we cannot save you money on Dry Goods, Clothing, Furnishings and Shoes—everything needed by man, woman and child.

Purchases in carload lots and by the thousands of dozen for our many Stores enable us to give you prices that save you money. Look at the quality of our goods, too, for it is Quality alone that determines whether the price is economical.

"Millions of Customers and All of Them Friends" isn't merely a slogan in our Stores, it's the result of 26 years of giving helpful, conscientious Service. We shall strive to be increasingly worthy of your confidence. Make our Store your headquarters when in town.

Our Spring Store News Catalog is Filled with Such Economies as Are Seldom Found. Write for Your Copy.

J.C. PENNEY CO.
A NATION-WIDE INSTITUTION

"quality—always at a saving"

Men Under 35 Years, Experienced in Selling Our Lines Are Wanted to Train for Co-partner Store Managers. Write for Details.

Home Offices: 330 West 34th Street, New York City—56 Stores in Kansas, Colorado, as Follows—

- | | | | | | | |
|----------------|--------------|---------------|------------|------------------|--------------------|-------------|
| Kansas | Concordia | Junction City | Parsons | Colorado | Denver | Longmont |
| Abilene | Eldorado | Kansas City | Pittsburg | Aguilar | 859 Santa Fe Drive | Loveland |
| Arkansas City | Emporia | Lawrence | Pratt | Alamosa | Denver | Monte Vista |
| Atchison | Fort Scott | Leavenworth | Salina | Boulder | 2020 Larimer St. | Montrose |
| Baxter Springs | Great Bend | Liberal | Topeka | Canon City | Durango | Sterling |
| Chanute | Herington | Manhattan | Wellington | Colorado Springs | Fort Morgan | Trinidad |
| Clay Center | Hutchinson | McPherson | Wichita | Delta | Glenwood Springs | Walsenburg |
| Coffeyville | Independence | Newton | Winfield | Denver | Grand Junction | Wray |
| Columbus | Iola | Ottawa | | 51 Broadway | Las Animas | |

Who Are the Master Farmers

(Continued from Page 3)

trucks or other equipment, deduct points accordingly. If he has an excess of any power units, deduct points in accordance with what he should have.

4. Crop Yields—40 points.

If his crop yields are better than, or as good as the best in his community, fertility of his soil considered, score 40 points. If not, deduct points accordingly.

5. Livestock Management—60 points.

a. If he maintains the proper balance between livestock and crop production, score 8 points. If the number of beef cattle, dairy cattle, sheep, hogs or laying hens is deficient in any way, deduct points accordingly.

b. If the maximum proportion of his feed crops is fed to his livestock,

This is the second year Kansas Farmer has conducted the Master Farmer project. The 10 men selected for 1928 will receive the same honor and recognition as the men in last year's class.

Nominations from any community or county are not limited. Additional nomination blanks will be supplied on request. Anyone who is acquainted with a farmer may nominate him, but no farmer may nominate himself.

The farmers who are nominated will be compared by the score card method, will be asked for additional information and will be visited by a member of the editorial staff of Kansas Farmer.

Three men of state-wide prominence, and who know farm work and farm life, will be the judges who make the final decisions. They will know candidates by number only.

Master Farmers selected last year will hold that title for all time to come, so they should not be nominated again this year.

The accompanying article explains in detail about the Master Farmer Award, who may be nominated, who may make nominations and how to fill out the score card on this page.

Nominations will close June 1. Please mail them to the Master Farmer Award Editor, Capper Building, Topeka, Kan.

score 8 points. If not, deduct points accordingly.

c. If he feeds balanced rations to all classes of livestock, score 8 points. If not, score zero.

d. If he has proper housing for all classes of livestock during bad weather, score 8 points. If not, score according to what he has.

e. If he practices control of livestock parasites and diseases, score 8 points. If not, score zero.

f. If all sires are purebred, score 10 points. If not, deduct points according to the per cent of grade or scrub sires he has. Example: If he has two sires and only one is purebred, deduct 50 per cent, allowing him only 5 points.

g. If he is receiving a net return from his milking herd, beef herd, hog herd, sheep flock, poultry flock, score 10 points. If any of his livestock projects are failing to make a profit, deduct points accordingly.

6. Tools, Machinery and Equipment—20 points.

a. If he has adequate tools, machinery and equipment to do his work efficiently and on time, score 10 points. If not, deduct points accordingly. If he is over-equipped, deduct points accordingly.

b. If he has a well-equipped repair shop, score 3 points. If not, score zero.

c. If his machinery is housed when not in use and is kept in good repair, score 7 points. If not, deduct points accordingly.

7. Field Arrangement—20 points.

If his fields are so arranged as to conserve time and labor in tilling, cultivating and other operations, score 20 points. If not, deduct points accordingly.

8. Farmstead Arrangement—20 points.

If his farm buildings are arranged so as to save time in doing chores, located so as to save time in going to and from fields, and arranged so as to insure sanitation, score 20 points. If not, deduct points accordingly.

B. Business Methods—Total of 285 points.

1. Accumulative Ability—100 points.

If his operations since he has been farming have enabled him to accumulate a satisfactory surplus, score 100 points. (This surplus does not need to be in cash. It may be expressed in discharge of indebtedness contracted thru sickness or misfortune, the purchase of more land, improvements or education.) If his accumulative surplus has not been satisfactory, deduct points accordingly. Note: It is understood that you do not know the candidate's personal financial affairs, and that your score for him under this heading of "Accumulative Ability" will be your personal opinion gained thru observation.

2. Accounting Methods—50 points.

If he uses a system of accounting for his farming, score 50 points. If not, score zero.

3. Safety Financial Practices—100 points.

a. If he invests his surplus money safely in sound securities or more farm land, score 25 points. If not, score zero.

b. If all his farm buildings, household goods, implements, crops and livestock are fully insured against insurable losses, score 25 points. If not, deduct points accordingly.

c. If his life is insured to the extent of his farm mortgage and other indebtedness, score 40 points. If not, score according to coverage.

d. If his life is insured to provide a cash fund for his family beyond his indebtedness, an educational fund for his children, income for his wife and minor children, score 10 points. If not, score according to coverage. Note: It is understood that you do not know the details about your candidate's "Safety Financial Practices," but you should score him to the best of your ability from observation and from any information he may have given you in the past.

4. Marketing Practices and Production Program—35 points.

a. If he uses market information in buying supplies and in selling farm products, score 15 points. If not, score zero.

b. If he adapts his production program to market forecasts and probable demands, score 20 points. If he does this in any measure, score him for what he does.

C. General Farm Appearance and Upkeep—Total of 90 points.

1. Upkeep of Buildings—25 points.

If his buildings are kept in good repair, score 25 points. If not, score accordingly.

2. Condition of Fields—25 points.

If his fields and fence rows are neat and reasonably free from weeds, score 25 points. If not, deduct points accordingly.

3. Fences, Ditches and Roads—20 points.

If fences, ditches and roads are in good repair and free from rubbish, score 20 points. If not, deduct points accordingly.

4. Lots and Yards—10 points.

If his lots and yards are free from weeds and rubbish, score 10 points. If not, deduct points accordingly.

5. Lawn—10 points.

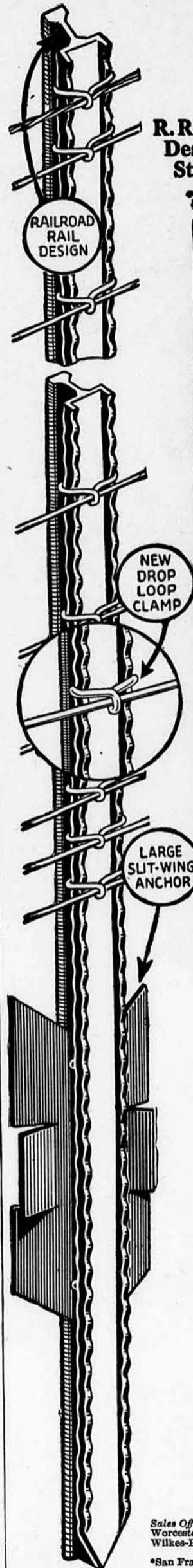
If his lawn is well-kept and has an attractive selection of shrubs and flowers, score 10 points. If not, deduct points accordingly.

D. Home Life—Total of 325 points.

1. Convenient House—50 points.

If his house is convenient and comfortable, score 50 points. If it is lacking in these points, score accordingly.

American Steel & Wire Company's



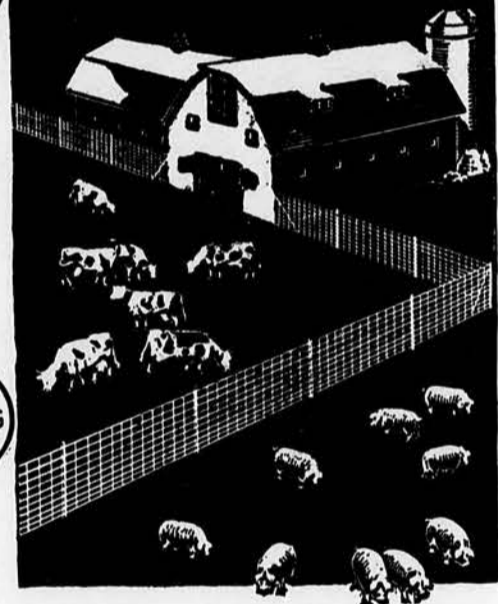
Banner Posts

R. R. Rail Design Steel

The Post With a Backbone

Zinc Insulated

Fences American Royal Anthony Monitor



Dollars Roll Away When Fields Are Not Fenced

Good farm management demands good fences; good judgment prompts your using steel posts with American Steel & Wire Company Zinc Insulated Fence.

Banner Railroad Rail Design Steel Posts are easy to haul, easy to drive and hold the fence true to line because of their solid anchorage.

Note the

New Drop Loop Clamp

Quickly, easily, securely fastens fence wires to the post. Continuous rows of notches on both sides of the face of the post allow attaching any or every line wire. The large slit wing anchor roots the post into the ground as you drive it—anchors like a rock.

Banner Steel Posts are guaranteed by us through your dealer. See our dealer in your community.

AMERICAN STEEL & WIRE COMPANY

Sales Offices: Chicago, New York, Boston, Atlanta, Birmingham, Cleveland, Worcester, Philadelphia, Pittsburgh, Buffalo, Detroit, Cincinnati, Baltimore, Wilkes-Barre, St. Louis, Kansas City, Minneapolis-St. Paul, Oklahoma City, Memphis, Dallas, Denver, Salt Lake City. *San Francisco, *Los Angeles, *Portland, *Seattle. *United States Steel Products Co.

DO YOU KNOW

that you can help both your neighbor and us by asking him to subscribe for the Kansas Farmer and Mail & Breeze? If he becomes a regular reader he will thank you—so will we!

2. Labor-Saving Equipment in the Home—75 points.

If he has a water system, sewage disposal system, furnace, lighting system, power washer, provision for an ice supply in summer or some adequate method of refrigeration, a radio, and any other labor-saving conveniences, score 75 points. Otherwise, score according to the equipment he has.

3. Character as Husband and Father—100 points.

If he has done everything within reason to increase the happiness and comfort of his family, such as providing companionship, recreation, entertainment, music, etc., score 100 points. If not, score according to what he has done.

4. Education and Training of Children—100 points.

If he has given his children proper training and schooling, and has encouraged or helped them to obtain a high school and college education, score 100 points. Otherwise, score according to what he has done.

E. Public Spiritedness—Total of 260 points.

1. Neighborliness—50 points.

If he is neighborly, score 50 points. If not, score zero.

2. Interest in Schools and Churches—60 points.

If he takes an active interest in schools and churches, score 60 points. Otherwise, score according to the interest he does take.

3. Interest in Other Community Enterprises—50 points.

If he takes an active interest in other enterprises for the good of his community, such as farm organizations and civic organizations, score 50 points. Otherwise, score according to his activities.

4. Interest in Local, State and National Government—100 points.

If he votes regularly at all local and general elections, score 100 points. If not, score according to the way he exercises his voting privileges.

Movable Hog Houses

BY W. A. FOSTER

Movable hog houses have been used successfully on many farms for a long time. They are adapted to any class of hogs, but are especially serviceable as shelter for pregnant brood sows and for sows and young pigs on pasture, because they can be moved from place to place.

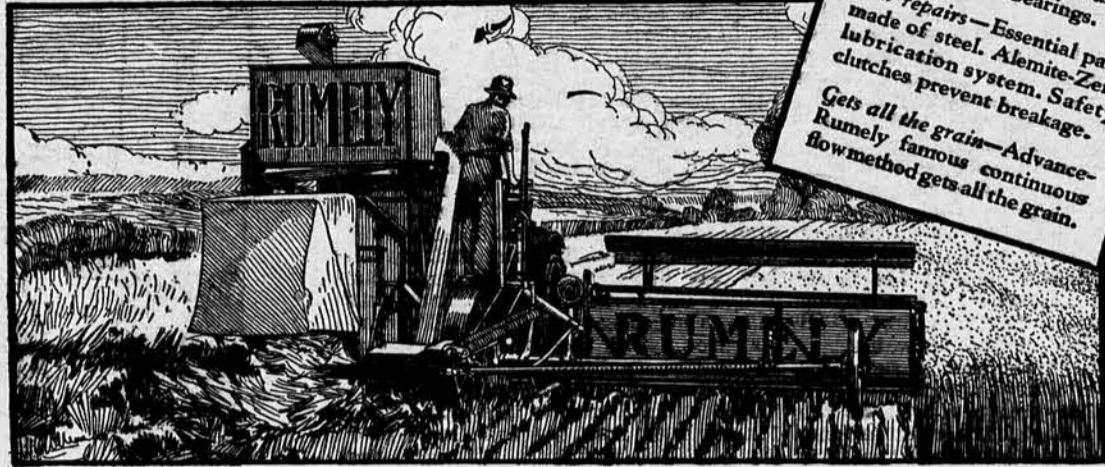
The McLean county system of swine husbandry as practiced on many farms, gives added value to the movable feature of the colony house. In that system the advantages to be gained in not growing young pigs on the same ground for two consecutive years are emphasized. To follow that plan houses that can be moved as needed are practically essential. When the sows farrow directly on the clean pasture, colony houses can very successfully and economically fill the three most important uses of a hog house; namely, as a farrowing pen, as a shade during summer, and as shelter for the winter.

Individual houses are successfully used for early spring farrowing, tho the detailed attention required at the farrowing pen is less easily given because of the scattered nature of the operations and the exposure of the attendants. Such houses also may be used as shelter for fattening hogs, tho the movable feature is not of special advantage for this purpose if other unoccupied shelter is available.

One of the chief advantages of the movable or colony house is that it is adapted to the rotation of hogs necessary in keeping down round-worm infestation. Movable houses are convenient in case it is desired to isolate or quarantine sick animals that may be a menace to the rest of the herd. The houses can be moved easily to an isolated corner of the farm away from the healthy animals. After they have served for this purpose, their cleaning and disinfection for regular use is much less expensive and troublesome than would be the case with a larger structure.

The doom of warfare sounded when patriots began to rob the home folks instead of the enemy.

MAKE 15 TO 20 CENTS MORE PER BUSHEL



Power saving—Liberal use of ball and roller bearings.
Low repairs—Essential parts made of steel. Alemite-Zerk lubrication system. Safety clutches prevent breakage.
Gets all the grain—Advance-Rumely famous continuous flow method gets all the grain.

—harvest with an Advance-Rumely Combine

Farmers tell us of an extra profit of 15 to 20 cents per bushel they get by harvesting with an Advance-Rumely Combine. And because this Combine gets all the grain, the yield is one to three bushels more to the acre.

Harvesting this modern way cuts out waste motions—no binding, shocking and hauling from field to thresh-er. Take an Advance-Rumely Combine into the field and out comes the grain ready for market or storage.

Once over the field and harvesting is done. No more big crews—no waiting your turn. You can wait 'till grain is fully ripened on the stalk—wait 'till it's in condition to get the best grade at the market and then complete the harvest in a few days.

You can make this extra profit on this year's crop if you prepare for harvest now! Use the coupon below to get information and copies of letters from enthusiastic farmers.

Cimarron, Kansas
Advance-Rumely Thresher Co.
Wichita, Kans.
Dear Sirs:
Your Combine Harvester is everything you represent it to be. We used it about twelve days on 570 acres, cutting this in fine shape and threshing a total of 15,000 bushels—averaging 1,250 bushels per day.
Very truly yours
(Signed) Jones & Son

ADVANCE-RUMELY THRESHER CO., Inc., La Porte, Indiana, U. S. A.
Kansas City, Mo. (Incorporated) Wichita, Kansas

ADVANCE-RUMELY Power Farming Machinery

Send the Coupon — Using this coupon now will bring you complete data on how to harvest this season's crop at remarkably low cost. A moment spent with the coupon now may save weeks of labor later on.

<p>The Rumely Line includes kerosene tractors, steam engines, grain and rice threshers, combine harvesters, husker-shredders, alfalfa and clover hullers, bean hullers, silo fillers, corn shellers, and winch tractors.</p>	<p>ADVANCE-RUMELY THRESHER CO., Inc. Dept. F, (Incorporated) La Porte, Ind. Served through 33 branches and warehouses Please send me free literature on the machinery checked.</p>	<p><input type="checkbox"/> Combines <input type="checkbox"/> Oil Pull Tractors <input type="checkbox"/> Silo Fillers <input type="checkbox"/> Bean Hullers <input type="checkbox"/> Clover and Alfalfa Hullers</p>	<p><input type="checkbox"/> Threshers <input type="checkbox"/> Husker-Shredders <input type="checkbox"/> Corn Shellers <input type="checkbox"/> Stationary Motors</p>
Name.....		Address.....	

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The Topeka Daily Capital, Topeka, Kansas

'Tis Hogs and Beef Cattle

And Douthitt Grows the Feeds That Put Them on the Market at a Profit

BEEF cattle have been averaging \$100 a head for N. M. Douthitt, Osage county, for a good number of years. And he maintains that hogs properly handled are bound to make pork in good time. They have for him. "First important thing with hogs," he assured, "is to clean them up, inside and out, and keep them that way. No use trying to grow thrifty pigs on filthy ground." He feeds out about four carloads of porkers a year. Part of them are grown at home, while others are purchased. His home herd is Duroc Jerseys, and he rather favors buying the red hogs, but he picks first of all for the type and quality he wants. Hogs must market part of the crops on the Douthitt farm, but not under a handicap. The pigs produced on the farm are started right on clean ground. Every single field is fenced "so it is good for something," as Mr. Douthitt

roughage. The man who grows the feeds he needs is all right. He will make money."

Mr. Douthitt operates 720 acres, and of this he owns 480 acres. He has been over his land, every single acre of it, with clover, alfalfa, timothy and the like. Most of his farm is in some grass. "This gets it off my hands," he explained. "I can't farm all of it and I don't want to rent it." Having built it up to good fertility he doesn't want it drained again. Timothy and prairie hay are listed as market crops, but alfalfa stays right on the farm, and some is purchased in addition. Particular care is given the alfalfa to get it up in the best condition.

"Maybe you think poultry hasn't helped," Mr. Douthitt queried. "Since I have lived here the hens have paid me \$6,959.09, and it is nothing more than a small, general farm flock. Folks shouldn't overlook poultry. During the same years my grocery bill amounted to \$4,583.56. It isn't difficult to draw your own conclusions from that. Those accounts are from 1897 to 1926, inclusive."

In 1897 Douthitt sold \$36.75 worth of eggs, and the grocery account was \$85.25. The high year, 1919 shows \$625.16 worth of eggs and a \$342.49 grocery bill. "That is how living has gone up," Douthitt advised. Pages for 1926 show \$304.98 worth of eggs and \$205.70 for food. These exact figures are mentioned, not only to remind that it costs more to live today than 20 or 30 years ago, but as well to show that Douthitt has kept accurate records for years. He knows whether his 200 White Leghorns are paying now and what every other farm operation is doing and has done. Those records are a guide to him, and it isn't uncommon for the 'phone to ring and a voice on the other end of the line ask, "What were you paying for corn 12 years ago?"

The books show when crops were planted, what they were, their location, yield, overhead costs and returns. Certain conditions prevail this year. "Well, what was my success in such and such a year that was much like this?" Douthitt can ask, and his books help. The books also show why the farm is in its present good condition. An inventory each year helps to keep things straight, too.

Douthitt's place is neat. The family takes pride in it, and well they should. Its owner came to Osage county in 1888, and worked out by the day. Then he was a renter. Some years of toil resulted in his getting the rented place well cleaned up, and then the rent was raised on him. That made him ask, "Why should I build up another farm, to have the same thing happen?" He didn't. In a short time he was paying on his farm. When he was out from under the debt on one 80 acres, he would sign on the dotted line for more land. And here is the encouraging thing for the present generation. Mr. Douthitt sees a good chance for the young farmer of today who has the desire for ownership. Proper cropping plus livestock eventually will bring a clear title.

On to His Job

Wanted—Experienced dairy foreman, one who is capable of producing grade A milk.—Ad in the Houston Post-Dispatch.



N. M. Douthitt, Osage County, Who Farms to Livestock and Keeps Records So He Will Know What He is Doing

puts it. And that something has considerable to do with pig pasture. "Foreign hogs purchased and brought in from other farms get a good "going over," and when the process is finished they are "cleaned up" inside and out. In the meantime they are not allowed to infect the homegrown hogs. Corn, tankage, pasture and plenty of shade and water make hogs for Douthitt. "When I get hogs to 125 pounds," he said, "it isn't any trouble to make them gain 2 pounds a day up to 100 days. I figure it requires about 7 bushels of corn to finish a hog from 125 pounds, plus 40 pounds of tankage. And it costs about as much to get the first 125 pounds."

Some 50 or 60 head of Herefords are kept as a breeding herd. The herd is purebred and papers are kept up on the best of the animals because there is some call for breeding stock. "I want them good to start with," Mr. Douthitt said, in referring to his Herefords. The best heifers are held to replace the cows that have served their time. Some animals have been held to 15 years old, but the average will be 10 to 12 years. The younger stuff is sold as 2-year-olds as a rule.

All the cattle are fed well. Douthitt believes it pays to keep them in good flesh. They have proved to be one of the most satisfactory markets for the crops. "I have only 60 acres in row crops," he said, "but that is enough for my needs. I think as much of feed crops as I do of grain. I always have been able to buy grain, but not the



The Douthitt Farmstead is Very Attractive, With a Comfortable Home and Conveniently Arranged Buildings. The Huge Green Balls on the Lawn Are Trees, Kept Neatly Trimmed

SILVER TIP STEEL FENCE POST



MAKE THIS TEST Yourself

TEST SILVER-TIP Steel Fence POSTS in comparison with any other. Stand on the back of the post; turn it over and stand on the flanges. You will find that SILVER-TIP will stand the strain from every angle.

Compare the width of steel surfaces. Note that SILVER-TIP is lighter but stronger. The anchors are broader and heavier and will hold the Post securely in the ground.

These important points mean better fence, longer life and greater protection to your stock.

SILVER-TIP Steel FENCE POSTS are made from rust-resisting, copper-bearing steel, further protected from the action of acids, alkali and weather by a special green enamel—the same kind used on the steel work of the Panama Canal and by the Forestry Department of the United States Government to protect steel fence posts from corrosion.

SILVER-TIP Posts will not burn, bend nor break in fence service. Fence wires CLAMP on quickly with steel clamps furnished with each post. Require no post hole digging; drive into frozen ground and when erected, with COLORADO FENCE, give you the utmost in economy and real fence value.

SILVER-TIP POSTS nest closely and are shipped in neat, easy to handle, easy to haul bundles of 5 posts.

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FREE—this new book

A genuine help to the hog raiser; not an advertisement. Profusely illustrated, giving sound facts on how to raise hogs for more profit, by authorities and successful raisers. Get your copy from your dealer, county agent, or write us.



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The Colorado Fuel and Iron Company
 LOS ANGELES DENVER SAN FRANCISCO OKLAHOMA CITY
 SALINA KANSAS CITY WICHITA SPOKANE PORTLAND

To Thriftville and Comfort

After you read your Mail & Breeze, hand it to a neighbor who is not a subscriber. He, as well as you, can profit by the experience of others engaged in similar work.

Sunday School Lesson

By the Rev. N.A. McCune

HOW do we know that Christ rose from the dead? It is a stupendous claim to make. Other religions tell stories of miraculous happenings in connection with the founders of their religions. But to relate such stories is one thing, and to have historical evidence is another. We Christians hold that the resurrection of Christ has as much historical evidence as has any other event in ancient history. For instance, how do we know that Julius Caesar was stabbed to death by Cassius, Brutus and other conspirators? We get this from the Latin writers, such as Plutarch, Suetonius and others. And how do we know that the writings of these men are authentic? Because there are several of them, and while they differ in detail, they agree on the main facts, and we have good reason to believe that in other matters they are trustworthy, and hence we believe them in this.

So with the resurrection. Good reasons are at hand for believing that Jesus Christ died at the hands of government officials, and that He was later seen alive. Paul probably was the first person to write about it. In I Corinthians he says, "For I passed on to you, as of first importance, the account I had received, that Christ died for our sins, as the Scriptures foretold, that He was buried, that on the third day He was raised from the dead, as the Scriptures foretold, and that He was seen by Cephas, and then by the Twelve. After that He was seen by more than 500 brothers at one time, most of whom are still alive, altho some of them have fallen asleep. Then He was seen by James, then by all the apostles, and finally He was seen by me also, as tho I were born at the wrong time." (First Corinthians, 15:3-8; Goodspeed's translation.) Thus we have here a list, tho only a partial list, of the appearances of Christ, after His resurrection. These are widely scattered in time and place. Someone has made out a list of the persons to whom He appeared, as follows: 1. He appears to Mary Magdalene (John 20:16). 2. To other women, (Matt. 28:9). 3. To Simon Peter, (Luke 24:34). 4. To two men on the road to Emmaus, (Luke 24:15). 5. To the apostles, without Thomas, (John 20:19). 6. To the apostles, with Thomas, (John 20:26). 7. To seven disciples by the sea of Galilee, (John 21). 8. To the 11 apostles on a mountain, in Galilee, (Matt. 28:16-20). 9. To more than 500 persons at one time, (1 Cor. 15:6). 10. To James, the brother of Jesus. 11. To the apostles at the time of the Ascension, (Acts 1:4). 12. To Paul (Acts 9:3, 22:6, etc.)

But this is not all. When Christ died, his followers were in utter dismay. They were scattered and beaten. Peter so far forgot himself, the night of the arrest, that he denied ever having known the defendant. But following the resurrection all this was changed. Men who had been timid became as bold as soldiers, openly defying the authorities. The man who had lied about his Lord now declared publicly, "We must obey God rather than men." The depths of despair into which they had plunged was the measure of exaltation to which they now rose. They were like men who had been born over again into a new world. And this was the foundation of the organization which became the church.

When these men went about preaching, they preached the resurrection. On that, arguing from the Old Testament,

they based their faith that Jesus was the Christ. This belief was the inspiration that gave rise to the church. There are a few deductions to be drawn that may not be without interest to us.

I. The early Christians were a glad-some lot. Such expressions as these occur frequently: "And there was great joy in that city;" "and the disciples were filled with joy;" "that I might finish my course with joy;" "Count it all joy when ye fall into manifold temptations;" "they were filled with gladness and singleness of heart;" "rejoice in the Lord always," and so on, a long list that makes one happy even to read it over. It will naturally be asked, where has this note of glee, of exhilaration gone? Why has the church ceased to laugh? Well, I don't exactly know. Your idea would no doubt be as good as mine. Why don't you laugh with delight, when the time comes to go to church, instead of sneaking in late, after the collection is taken? No doubt much of the want of spontaneousness is due to the fact that we are not so fully devoted to the Lord and His cause as those early folk were. When you find a real Christian he is a joyful soul. We must go back to the

primary truths, and ask ourselves, "What are the chief tenets of the Christian faith?" And we will not inquire long until we conclude that it is not so much the teaching as the Teacher. Christ Himself is the inspiration of the believer.

II. He is the Living Lord. Buddha was a good and great man, and founded a religion that is believed by millions of people. But Buddha is dead. Mahomet founded a religion, and he is dead. Jesus founded a religion, and He is alive. That is the foundation-stone of our faith. We worship, not a dead Christ, but a living Christ; not a prophet who lived long ago, but the living and reigning Lord of experience. "He was dead, but is alive forevermore."

Lesson for April 8—The Power of the Resurrection. Mark 16: 1 to 20. Golden Text—John 14:19.

Brilliant Deduction

When Wyman Morse returned from Sacramento and parked his car in the garage, he found one rear wheel gone and a fender badly crumpled, which led him to conclude that he must have met with an accident en route.—Dixon (Cal.) paper.

Didn't Like His Name

New boy Sultan of Morocco orders cacybetaoin-shrdlushrdlucmfwpcmfwy late ruler's friend thrown out of royal palace.—Boston Globe.

More Factories Are Coming

(Continued from Page 8)

passengers, this is now an assured means of transport used by progressive communities in competition to promote business. It is obvious that the first necessary essential is an adequate airport. Classified freight will soon follow! A community could not at present thrive if the only means of delivery were restricted to the plane; however, the day is coming!"

Science and invention are introducing a real program of farm relief by bringing into the rural areas of America the industrial workers to consume the products of the farm, without necessitating the shipping of these products so great a distance. These people will be good buyers of food products, because in factories they will be receiving adequate wages for manufacturing the things the world needs, and these manufactured articles will be carried out to the rest of the world thru the various new means of transportation.

Standing Pat

"Remember," said the serious man, "that money is not the only thing to be striven for."

"Maybe not," answered the other, "but a whole lot of people think it is, and I'm not egotistic enough to try to set any new fashions."



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During the 1927 harvest season thousands of grain growers were unable to secure McCormick-Deering Harvester-Threshers, due to the great demand for these machines. To avoid disappointing customers this year, McCormick-Deering dealers are already taking orders for these 1928 models for harvest time delivery. Ask now for your copy of the new catalog; the local dealer will supply it and explain the new McCormick-Deerings to your complete satisfaction.

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In the No. 11 the change that is most easily recognized is the new position of the engine and radiator assembly on the A frame at the front of the machine. The weight is more centrally located, lightening the load on the grain wheel. Also, the engine in the new position is closer to the operator and is easily accessible.

McCormick-Deering HARVESTER-THRESHERS



Milk, the Ideal Human Food

Greater Attention to Avoiding Sources of Contamination Appears to be Essential

BY EARLE G. BROWN, M. D.

DURING the last few years increasing attention has been given to milk in its relation to the public health, and as a result of this renewed interest, progressive health authorities in cities, villages and even rural communities have succeeded in markedly improving the quality of their milk supply. Undoubtedly more milk is consumed per capita in the United States than in any other country. Milk contains all the essentials of a perfect food: proteins, fats, inorganic salts, carbohydrates and water. Because of the ease with which it may be ingested and the easiness of its digestion, it is in addition an ideal food for the sick and those convalescing from illness. No other single article of food would be missed so much if it were suddenly eliminated from our dietary.

Of even greater importance than the use of milk as a food for adults and the sick is its use in infant feeding. Numbers of mothers are unable to nurse their infants, and the best substitute for mothers' milk is modified cows' milk. However, to be used for infant feeding it is especially important that cows' milk be pure. Infants are least able to resist the harmful effects of impure milk contaminated with disease producing germs. Improved sanitation, scientific methods of prevention of certain communicable diseases, pure water supplies and other advances in public health methods have contributed to a decrease in the general mortality. Unfortunately, the infant mortality, or deaths of children under 1 year old, has not decreased in proportion with the general mortality rate. It is recognized that disease of the gastro-intestinal tract is perhaps the largest single factor determining infant mortality—a condition the result in almost 100 per cent of cases of improper feeding.

Intensive educational work on the value of a pure milk supply has been carried on in Kansas for a great number of years, and I believe the results may best be shown in a study of the deaths of infants from gastro-intestinal diseases. Here is the percentage of infant deaths from diseases of the digestive system and from communicable diseases.

Year	Diseases of Dig. System	Communicable Diseases
1916	19.6	4.7
1917	19.2	6.0
1918	15.0	10.7
1919	12.2	6.6
1920	15.5	9.4
1921	13.0	6.0
1922	11.7	5.3
1923	11.7	9.3
1924	11.7	8.0
1925	12.3	5.7
1926	11.5	11.3

Milk most frequently provides the means of transmission. However, experimentally it has been proved that freezing does not destroy all typhoid bacilli, and outbreaks of the disease have been traced to ice cream. The disease may be transmitted thru butter and cheese. Butter made from milk experimentally infected with typhoid bacilli may retain the germs, according to Bruck, as long as 27 days. Buttermilk, of course, would be equally as dangerous as the cream from which it was derived.

Milk in the udder of a healthy cow is rarely sterile, but if proper precau-

tions are taken it may be removed almost free from germ life. Such milk may be considered normal milk, but is not the milk produced in the ordinary dairy. Upon leaving the udder, the milk comes in contact with air, the vessel into which it is drawn, in many cases the hands of the milker, and with particles of dirt from many sources. Even in a healthy cow, milk may contain germs which are dangerous to the public health, but the sources of contamination most common are:

1. While passing thru the teats.
2. From the hands of the milker.
3. From utensils, such as buckets and bottles.
4. From subsequent handlings.

Perhaps before we continue further, we should discuss the diseases that cattle have which may be transmitted thru the medium of milk. These include:

1. Tuberculosis.
2. Foot and mouth disease.
3. Anthrax.
4. Rabies.
5. Mastitis.
6. Malta Fever.
7. Actinomycoosis.

Of the diseases named, tuberculosis probably is the most important from the standpoint of the public health, and also is the most prevalent. Tuberculosis may effect the udder and the germs thus be carried directly in the milk stream. In a herd of cattle, one or more may have a pulmonary type of the disease with the formation of abscesses in the lungs. There is the possibility that the abscess may rupture, and the infectious material be coughed up and swallowed. This infectious material containing myriads of tubercle bacilli will then be evacuated thru the bowels, and eventually reach the milk thru dust, flies and other means.

John F. Anderson of the United States Public Health Service, about 1908, collected 272 samples from 104 dairies in Washington. He found that 6.72 per cent of the samples contained the germs of tuberculosis in sufficient quantities to kill guinea pigs, and 11 per cent of the dairies whose milk was examined supplied milk containing these germs in sufficient number and virulence as to cause tuberculosis when injected into guinea pigs.

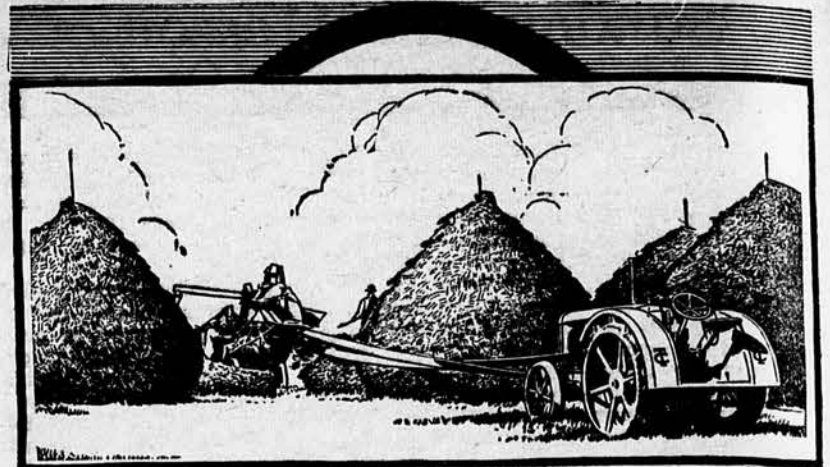
It is to the credit of the state that nearly 100 cities have milk ordinances which require tuberculin testing of dairy herds.

Foot and mouth disease is an acute infectious, highly contagious disease occurring most frequently in cattle and characterized by the development of vesicles on the mucous membrane of the mouth and on the skin between the toes and above the hoofs. The vesicles rupture and form ulcerations which may extend over a considerable surface of the skin. When the disease is fully developed the milk contains inflammatory products and the quantity of milk is reduced. Cows affected with a severe form of the disease lose practically all of their milk. In mild cases, the milk becomes thin, a bluish color develops and the fat content is very low. The disease is transmissible to persons thru milk, buttermilk, cheese and other milk products. It is contracted thru saliva, secretions and other infectious material from animals. Children may be affected by drinking the raw milk. Fortunately foot and mouth disease epidemics have appeared in the United States very infrequently.

And Rabies, Too!

In anthrax, the milk has an abnormal appearance and decomposes very rapidly. The germ of anthrax has been recovered from milk 14 days after it has been taken from an infected cow.

Instances have been reported where rabies has been transmitted to offspring thru cow's milk. It is not probable that cows would be milked after rabies develops. However, in occasional instances, milk may be used from cows that develop rabies. Rabies will not develop following the drinking of infected milk, unless there is a break in the mucous membrane of the gastro intestinal tract. As there is no method



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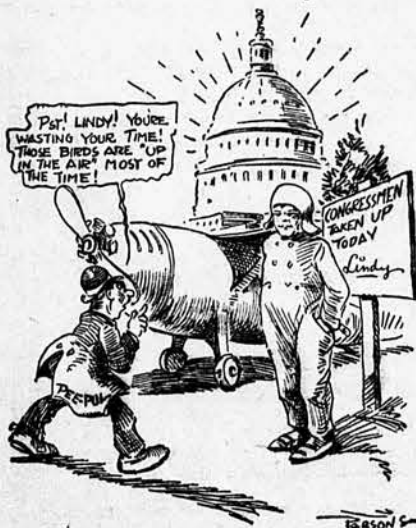
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of determining whether this condition exists, Pasteur treatment should be administered as a preventive.

In mastitis, usually only one quarter of the udder is involved. The part affected becomes swollen, the result most commonly of a streptococcus infection, and the condition is usually very painful. The milk at first is normal in appearance, then becomes watery, it may contain quantities of pus and there usually is a brownish discoloration. The very sight and odor of this milk is distasteful, and the danger in its use lies in the probability of the development of a gastro intestinal inflammation, especially in children.

Malta fever is a comparatively rare disease, or has so been considered in the United States. At the meeting of the American Public Health Association at Cincinnati last October, Dr. Paul F. Orr, epidemiologist of the Michigan State Department of Health, presented a paper in which he reported 16 cases of this disease, the result of infection thru milk. The general opinion expressed was that similar epidemics have occurred in other parts of the country but have not been recognized.

Actinomyces is a disease that affects cattle, but seldom involves the udder. As a general precaution, tho, the use of milk from cows having this disease should be prohibited, because the infection enters the body thru the alimentary tract.

In addition to the diseases named above, the following not originating in cattle may be transmitted thru milk, the source originally originating in man:

1. Typhoid fever.
2. Paratyphoid fever.
3. Tuberculosis.
4. Diarrhea and enteritis.
5. Dysentery.
6. Scarlet fever.
7. Diphtheria.
8. Streptococcus sore throat.
9. Infantile paralysis.

Typhoid or paratyphoid fever, whether a single case or an epidemic, always originates from a previous case. Typhoid fever germs therefore enter the milk only after it has left the udder. Methods whereby the germs enter the milk include from the hands of the milkers, especially wet milkers; from the hands of employes in the care of the milk, or from flies, or buckets, utensils or bottles washed in contaminated water carrying the germs of typhoid.

Milk is a most excellent medium for the growth of bacteria, especially those dangerous to human life. If a small particle of material containing germs is introduced into milk, the germs undergo rapid multiplication and the milk becomes thoroly contaminated. Considering how rapidly the germs multiply, it is readily understood how a small portion of infected milk taken into a dairy and mixed with a large volume may contaminate the entire supply.

In a study of the bacteria count of the Washington milk supply, the United States Public Health Service found a maximum count of 307,800,000 and the average was more than 22 million a cubic centimeter.

Human tuberculosis infection may be transferred thru milk, altho it occurs infrequently as compared with the bovine type. Infection results from a tuberculous person coughing in his hands and the germs entering the milk while milking, or the individual coughing in or near the milk bucket or container and the germs being carried into the milk in the spray from the mouth, then mixed with the milk while it is being prepared for distribution to the dairy customers. There also is the possibility of transference of the germs to the milk by flies.

And Ed Webster Says

Diarrhea and enteritis may be caused from several different organisms, all entering the milk thru some human error. The most common is the colon bacillus, which organism is a normal inhabitant of the gastro intestinal tract of man. The colon bacillus is closely related to the typhoid organism. A germ known as the bacillus proteus, also an inhabitant of the human intestinal tract, may be transferred thru milk and cause acute gastro intestinal disturbances.

True dysentery may be transferred thru milk, the infection caused by germs known as the Shiga or Flexner bacilli. These germs produce disease only when introduced in considerable numbers and after they have an opportunity to multiply.

Scarlet fever and diphtheria may be transmitted by contact of cases or carriers at the dairy in the person of milkers or other employes. There also is the possibility of contaminated bottles being returned from a home quarantined for these diseases, the infection transmitted if the bottle is not properly sterilized at the dairy.

Streptococcus sore throat may be transmitted in the same way as scarlet fever or diphtheria. Because of the possibility of infection by returned milk bottles from homes quarantined for diphtheria, scarlet fever, typhoid fever or other diseases dangerous to the public health, the State Board of Health some years ago adopted a regulation which provides that when a dairyman supplies milk to a home so quarantined, the milk shall be emptied from the bottle into a pan, pitcher or other container. In addition, the dairyman is not allowed to leave the milk bottle. Another precaution that has been taken by the board is that milk served in restaurants and hotels shall be served from individual bottles.

The following quotation on "Contamination" is taken from an article

on Sanitary Inspection and Its Bearing on Clean Milk; Ed. H. Webster, formerly of Kansas, is the author of the article.

"If the mere presence of solid particles of dirt so frequently found in the milk were the only damage wrought, the question would resolve itself into the simple operation of straining or passing the milk thru a clarifier. The presence of solid dirt is, however, an indication of much more serious conditions. Bacteriology teaches that every particle of dirt, whether it seems to the eye a source of contamination or not, carries with it great numbers of bacteria, and that milk at ordinary temperatures, 65 to 100 degrees F., is an excellent medium for their growth. Most of the changes that take place can be directly traced to such action."

"Neither straining nor clarifying will remove the bacteria from the milk, hence the necessity of keeping the dirt out, not straining it out."

Sources of contamination include:

1. During milking.
2. Milk utensils.
3. In the milk house.
4. During handling.

The first act of contamination usually begins with the act of milking. If the milker wears dirty clothes, has not washed his hands and the flanks and udder are covered with dirt, milking will cause an indescribable amount of dirt to fall into the bucket. The amount of filth which enters the milk depends to a certain extent on the condition of the stable yard, the milking barn, the floor and gutters.

The wide top milk pail is the most common type in use, and allows free access of dirt to the milk. Seamed buckets are undesirable, for unless carefully cleaned they allow the accumulation of dirt. Wood or other rough material is undesirable for use as a milk container. The general type of milk house has improved greatly in recent years. Rough floors allow accumulations of filth. Cracks in the wall or ceilings allow accumulations of dirt which may contain bacteria. Openings in any part of the building or unscreened doors or windows allow the access of flies which carry the germs of typhoid, tuberculosis, intestinal or other diseases on their feet.

(Continued on Page 49)



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Upward Goes the Crop Yield!

I Have Found That Making Synthetic Manure From Straw Is a Profitable Farm Practice

BY E. M. POIROT
Golden City, Mo.

THE soil is like a bank account. You cannot continually draw on the account of plant food in the soil without being faced sooner or later with the necessity of making some deposits. One way to balance the withdrawals of fertility which is removed in crops is to add plant food in the form of fertilizers. Excellent and profitable as this may be, I believe that the use of fertilizers should be supplemented with the conservation and use of farm by-products. One of these is manure.

Manure is the one fertilizer that need not be defined. As one old farmer put it, "I have tried this fertilizer and that fertilizer, but to my taste, manure is the best." Every farmer is aware of the fertility value of manure, and at the same time both he and the back forty realize its shortage. There is never enough to go around. The fields nearest the barn are likely to fare the best, and the distant fields are neglected. My theme, therefore, is one of stretching the manure supply rather than extolling its merits.

On thousands of grain farms, straw is a by-product of little or no value. Almost every grain farmer has one or more straw stacks which constitute a liability, rather than an asset. The stacks harbor insect pests. It does not pay to bale the straw, and you can't keep enough stock to use it. It does not rot and it does not pay to spread it on the land. In fact, top-dressings of straw sometimes depress yields, for reasons that have only lately been discovered. And yet these straw stacks contain, locked up, a good deal of valuable plant food. Does it not seem an economic waste to allow this fertility, which you might term "frozen assets" to go unused?

The problem I have been working on in the last two years on my farm is to convert these assets into working capital. I was forced to it by a dire need for manure on my farm in Southwestern Missouri, where livestock could not be kept in sufficient quantities to anywhere near supply the need. The farm had so depreciated in its original fertility that 3 tons of limestone and 200 pounds of superphosphate an acre, our usual application, was insufficient for successful growing of clover where manure was not used. However, this treatment combined with a top-dressing of manure caused it to grow luxuriantly. Our soils need organic matter, nitrogen and potash, as well as phosphoric acid. The possibility of rotting wheat straw and other farm wastes as a means of solving the problem was first suggested to me by R. J. Silkett, soils specialist of the University of Missouri Extension Department.

Cost 52 Cents a Ton

Later, under the direction of Dr. W. A. Albrecht, of the soils department of the university, experiments were begun on the farm to see if the English principles of making artificial manure could be modified to fit our American scheme of extensive farming. The English process consists of the hand application of a patented chemical mixture, at the same time supplying enough water to saturate the pile. Later, the stack must be reworked, and if dry, water again be added. In about six months the material has rotted, and in both a chemical and physical way the product resembles barnyard manure. The essential changes made to fit this method into our grain farming system were, first, supplying a mixture of chemicals by an automatic machine run off the rocker arm shaft of the grain thresher and separator; second, using a mixture of 45 per cent ammonium sulphate, 40 per cent limestone, and 15 per cent acid phosphate in place of the patented mixture which was too expensive for us to use; third, threshing shallow flat piles not over 6 feet high in order to receive and hold the rainfall instead of hauling water for the piles.

The results both in 1926 and 1927 showed that this system was entirely satisfactory from both an economical and practical point of view. It was a simple, inexpensive and rapid pro-

cess by which unsightly straw piles could be changed to a high grade synthetic manure in 60 to 90 days at a cost of 52 cents a ton of the final product, thus permitting the straw of one crop to be used as a manure top-dressing of the next. Such rapid conversion of unusable waste to a highly effective farm fertilizer is in no way associated with a loss of fertility. The nitrogen and phosphate added, as well as that already in the straw, goes back to the soil without loss.

Furthermore, this process makes it possible to manure the furthestmost fields as cheaply as those next to the barn. In fact, the farmer who hauls his straw $\frac{1}{4}$ of a mile to the barn for threshing and returns it again as manure to the same field has paid for the process in labor, without realizing any of its advantages.

In 1927, experiments also under the direction of the University of Missouri to determine the effect of synthetic manure on wheat, and the following clover, were begun. The results so far indicate that it materially increases both the quality and quantity of wheat when used as a top-dressing in December. Alsike clover grew to a height of 40 inches four months after seeding on flat white prairie land that had been under cultivation 45 years and would not grow clover successfully even with 3 tons of lime and 200 pounds of acid phosphate an acre. Wheat top-dressed in the fall of last year shows a decided resistance to winter killing as compared with the unmanured.

Plenty of Water Helps

Results quite as striking as those just mentioned were noted when an attempt was made to check the relative amount of manure produced to the ton of straw by the livestock method as compared with the synthetic method. Records on the same farm showed that the possible amount that should have been produced in the feed lots from 1923 to 1926 was 980 tons. The actual amount recovered from the lots was only 625 tons, or a loss of 355 tons. In 1927, 17 tons of straw on the same basis should have produced 17 tons of manure; the straw, however, was converted into synthetic manure, and 68 tons were recovered, or an increase of 51 tons, or about 333 per cent over what there would have been if the straw was converted by our livestock method. In the same proportion, the organic matter had been lost under the old scheme, and so also was the fertility lost. The synthetic process prevented this waste of plant food.

The details of making synthetic manure are as follows: Make up a mixture of 45 per cent ammonium sulphate, 15 per cent acid phosphate and 40 per cent limestone. Use 150 pounds of this mixture a ton of straw and supply it by means of a simple mechanical device fitted to the grain separator, designed especially for the purpose, so that a perfect mixture is obtained. Hand mixing is not so satisfactory. The piles should have flat tops and not be over 6 feet high, so they will retain all the rainfall, which supplies the necessary water. In most places there is sufficient precipitation from August to December to rot 6 foot piles, but even if there should be a lack of moisture in the fall, spring rains would in that case do the work. Piles 6 feet high rotted to within 6 inches of the ground with 11 inches of rain during last August. Additional rains in September finished the job.

For additional information on the process, write to the Soils Department of the University of Missouri at Columbia, for Bulletin 258, "Artificial Manure Production on the Farm."

I do not mean to convey the idea that this method of using farm wastes eliminates the use of commercial fertilizer, but I do mean that this process offers the farmer a chance to save and apply much fertility that would otherwise be wasted. Furthermore, it allows the return of larger quantities of organic matter than is possible by any other system of manure making. It



This Seed Corn Treatment Proved by 200,000 Practical Corn Growers

BAYER DUST seed corn treatment makes corn growing more profitable. It is *time-tried* and *field-proved*. Four years of actual field use has proven its value.

BAYER DUST prevents rotting of seed in cold, wet weather; improves germination and stand; checks losses from seed-borne and soil-borne diseases; and increases yield from 3 to 10 bushels per acre.

FOLLOW the success of over 200,000 corn growers—use the *proved* seed corn treatment and plant for profit. Some untried treatment may be beneficial, but let your neighbors do the experimenting.

Tested by the U. S. Department of Agriculture

Iowa Experiment Station

Illinois Experiment Station

A summary of reports published by these outstanding authorities show that **BAYER DUST** increased the yield as follows:

Nearly disease-free seed.	3.2 bus. per A.
Average seed.	3.5 " " "
Diplodia-infected seed.	12.1 " " "
Gibberella-infected seed.	15.1 " " "

Proved by 200,000 Growers

Last season, over 200,000 Corn Belt growers used Bayer seed treatment. Let these men tell you in their own words what they think of **BAYER DUST**:

Permits Earlier Planting

"The corn did not decay in the soil but came up and did good in spite of the cold wet season."

One pound treats six bushels of seed corn. 1 lb. \$1.75; 5 lbs. \$8.00

INSIST UPON THE PROVED

BAYER DUST

The Bayer Company, Inc., Agricultural Dept., 117 Hudson Street, New York, N.Y.

Insures Germination

"Never had corn come up so since I have been farming—I had a splendid stand."

Prevents Replanting

"My neighbor planted on the same day and did not treat his seed and had to plant over."

Fewer Barren Stalks

"Had fewer barren stalks than other years—dry rot and mouldy ears very nearly eliminated."

Improves Quality

"The treated corn was much better quality—solid, dry ears."

Increases Yield

"Increased my yield from 5 to 15 bushels per acre." "The corn that was not treated was not as good by ten bushel to the acre."

Easy to Use—Costs Little

You can use Bayer Dust at a cost of less than five cents an acre. No special equipment is required. Simply use as a dust treatment. Two bushels of seed can be treated in less than three minutes.

GUARANTEE

Plant a few acres of **BAYER DUST** treated seed in alternate rows with untreated seed. If, at harvest time, you are not satisfied, return the empty **BAYER DUST** can to us and we will refund price paid.

How to Raise Sorghums and make more money

The growing of sorghums will often change a farm that is losing money to one that is profitable. "Sorghums—Sure Money Crops" is an instructive book written by T. A. Borman, formerly editor of Kansas Farmer. The way to grow sorghum crops at a profit is made clear. We will send this book postpaid upon receipt of 50c, or will give it with a year's subscription to Kansas Farmer and Mail & Breeze for \$1.25. Send all orders to Kansas Farmer and Mail & Breeze, Topeka, Kansas.

offers the opportunity to manure the poorest fields as cheaply as those at the barn, and permanently disposes of the insect harbors and weed patches usually associated with straw piles. If in addition to returning all farm wastes as manure, growing clover, and using a high grade of commercial fertilizer is used to offset the fertility of the farm in grain and livestock, a balance has been reached and fertility is no longer the limiting factor in yields. My rotation is corn, oats, Red clover and wheat seeded to Sweet clover. I have been using 250 pounds of fertilizer on the wheat, but this year I am going to try it on corn. Up to five years ago, when I started my present program, wheat averaged 12½ bushels

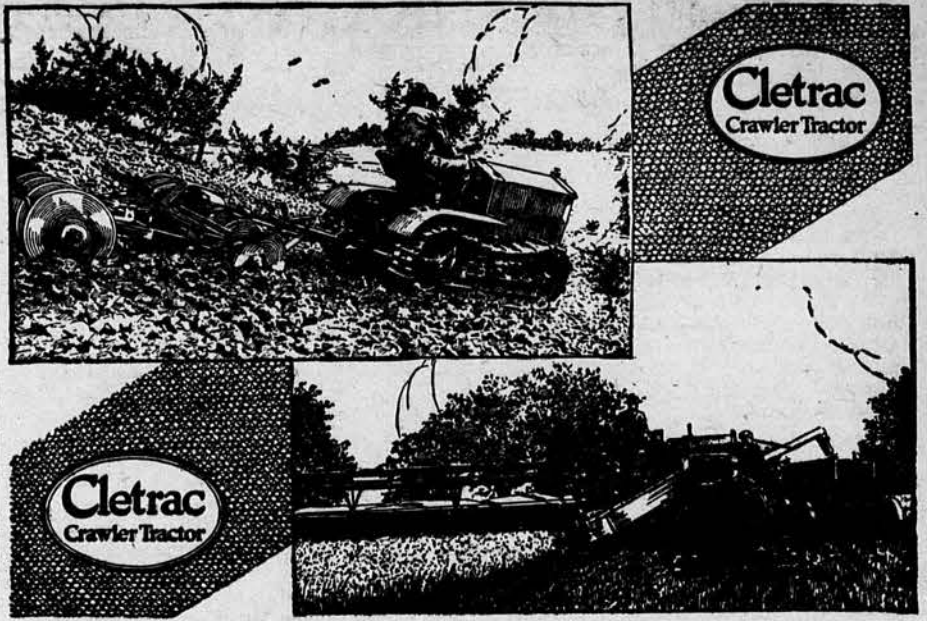
an acre. By using 250 pounds of super-phosphate an acre, I have brought up the yield to an average of 23½ bushels an acre for the four following years. Ten acres of clover following fertilized oats produced twice as much hay as another 10 acres where the oats were not fertilized, and nearly four times as much seed in the seed crop. My soil is a Gerald silt loam—a flat white wet prairie land with a tight hardpan 10 to 14 inches below the surface. It is an exceedingly difficult soil to handle in any system of soil improvement. The limiting elements on this soil type, as reported in Missouri Bulletin 288, appear to be nitrogen, phosphorus and potash, all three of which give profitable returns when applied either in manure or fertilizers.

Leaders Chosen This Month County Pep Clubs Soon Will Organize and Good Times Will Begin

BY PHILIP ACKERMAN

ONE of the boys or girls who is a club member will be selected for county leader. A leader will be appointed in each community in which there are three or more members. The county will be a division of the club. Now let us consider which member will be selected for each club. Surely, we want a leader who is showing much interest in the club work, one who has an interest in his project whether it be pigs or chickens, and one who is making an effort to get acquainted with the other folks in his club. Some boys and girls have worked hard to fill up the ranks in club membership in their communities. They have been responsible for many more folks joining, and in this way have taken upon themselves the responsibilities of leadership. Do you think it is only fair that these folks be appointed leaders? Of course, the age of the member and his general qualifications will be considered. You may wonder why we choose a boy or girl for leader rather than someone in the community who is mature. By choosing a club member we develop leadership in boys and girls. The leader is near the same age as other members in the club and they do not feel backward about asking his help with their difficulties. One of the first duties of the club leader is to arrange for a get-acquainted meeting. The club manager sends each leader a list of the names and addresses of the folks in his club, so that he may write to them to arrange a place, a time and a date for the first meeting. At business sessions the leader should act as president or chairman of the meeting. Other officers may be elected by the club members, these to include a newspaper reporter. All members are allowed to assist the club reporter in getting some interesting items for the local newspaper, and for the club's literary paper one is written. Another important duty falling on the leader is aiding his associates to get acquainted. His tactfulness will help to make folks feel "at home." The leader may call other meetings, but it is better to arrange for a meeting to follow before any meeting is adjourned. The president may notify members who are not present of the time of the next meeting.

Any encouragement that the leader can give unfortunate members of his club is appreciated by the individual who has met with misfortune, and also by the club manager. This makes the club leader of value to the community. Excellent leadership is rewarded with prizes. It also enables individuals of the club to reach higher achievement, and frequently a record that merits a prize. Who remembers the records of Dorothea Nielson, Rubie Mae Guffey and Merle Crispin? They were some of our excellent leaders in recent years. Marshall county won the cup under the leadership of Dorothea Nielson last year. If it is decided that meetings are to be held at the homes of members, each club family will have the club in its turn. This is best because then the whole family becomes interested, and club folks feel more free to talk at a friend's home than at a public place. Every club family should strive to place the local club in the lead for prizes. This assistance is due the club leader. Meetings are for the social side of club work. Too much time should not be given to a business session. Club folks may discuss plans they are following in raising pigs and chickens, and new ideas may be presented. It is well to have a talk by the county agent, vocational agriculture instructor or a local livestock or poultry breeder. Also have parties, ball games, picnics, fishing and programs. At one of the meetings in Lincoln county where your club manager was a member, we decided to have a "wienie" roast at the home of one of the boys. An uncle of this member was with us and he taught us a valuable lesson. We built a fire with small sticks, but they made a great deal of smoke and soon were burned out. We learned from this uncle that the best kind of a fire for roasting "wienies" is a bunch of glowing coals. So he placed a large log on the fire, and we waited until it was burning well. Then we had much heat and little smoke. Uncle Fred also taught us how to cut green sticks to hold the "dogs" over the fire. And, say, we had marshmallows toasted over this fire, too. After our lunch we went to the creek on a hunt for wild violets.



Make Farming Easier and More Profitable!

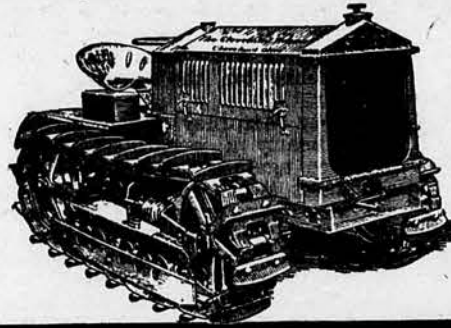
ANOTHER farm year lies ahead of you. Will you be satisfied with small profits—or are you determined to make this year the biggest paying season you have ever had!

Right now is the time to decide this question—and to find out definitely how CLETRAC can help you. Thousands of farmers and orchardists say CLETRAC is the finest farm power unit ever built—that it is a labor saver and a money-maker without equal—that it is a sure producer of bigger, better crops and larger farm incomes.

Note These CLETRAC Features

Here are a few of the outstanding advantages that CLETRAC offers you: **Greater drawbar pull** than any other tractor of equal weight. **Light ground pressure** that cannot pack the soil. **Low build and short turning** for work in close quarters. **Proper distribution of weight** for safe hill-side operation, up, down or across. **"One-shot" oiling** that does away with time-out for lubrication. **Low gas and oil consumption** that cuts costs to bed-rock.

These and numerous other CLETRAC features demand your careful study. Get all the facts now and give them thorough consideration. Mail the coupon—or write—for all the facts.



The Cleveland Tractor Co.
Cleveland, Ohio

THE CLEVELAND TRACTOR CO. K.F.
Cleveland, Ohio.
Send full information about CLETRAC for the farm.

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Address _____

MAYBE YOU ARE BUYING NEW IMPLEMENTS OR EQUIPMENT THIS SEASON. Use the Farmers' Market Page to sell the old.



Tractor Speed Changing with PICKERING Governors

Tractor speed can be increased or decreased while the motor is running—if the tractor is equipped with a Pickering Governor. That's because of the Pickering built-in Speed Changer. It means time and money saved when you change from one job to another.

The built-in Speed Changer is only one advantage of a Pickering Governor on your tractor. Others are steady, smooth power, elimination of engine racing, considerably reduced fuel bills. Pickering Governors are built for Fordson, McCormick-Deering, Twin City, Hart-Parr and all other tractors.

Clip coupon for free pamphlet. It tells how Pickering Governors put pep and power into your tractor and take out wear and tear and expense.



THE PICKERING GOVERNOR CO., Portland, Conn.

Send me free pamphlet 47F.

Name _____
Address _____
Tractor _____
Dealer's Name _____
Address _____

Capper Pig and Poultry Clubs

Capper Building, Topeka, Kansas.

I hereby make application for selection as one of the representatives of..... county in the Capper Club.
(Write Pig or Poultry Club.)

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

Signed Age

Approved..... Parent or Guardian

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

Age Limit: Boys 10 to 18; Girls, 10 to 18.
Address—Capper Pig and Poultry Club Managers

Out This Coupon and Send it to Philip Ackerman, Capper Building, Topeka, Kan., and Get a Start for Profits in 1928



Protective Service



Don't Be Fooled by New Schemes Crooks Use to Cover Up Their Crimes

AN OLD saying declares that you can't teach an old dog new tricks; but there is a record in the district court of Neosho county and evidence at the Kansas penitentiary at Lansing that crooks can fix up their old tricks in a new dress.

J. C. Goyette, who is serving a seven-year sentence in the Kansas penitentiary for stealing cattle from a Kansas Farmer Protective Service member, dressed up his stealing activities. He



L. D. Wheeler, Kansas Farmer Representative in Neosho and Wilson Counties, and Thomas Cook at Whose Public Sale Goyette Tried to Work His Stealing Scheme

did such a good job of it that only the efficient and effective work of Sheriff C. E. Yockey and his associates in Neosho county prevented Goyette from being free now to continue hauling away livestock belonging to some hard working farmer.

Old Crime in a New Dress

Goyette's new dress for the old crime of stealing livestock was that of going to a public sale where he was not known, there bidding in a truck load of cattle, hogs or sheep, and giving the sale clerk a name not his own and a check written on a bank where he had no money deposited. After he had made settlement for his truck load of live-

Notify Officers Immediately

Members of the Norton County Poultry Growers' Protective Association who fail to report the theft of poultry to association officers later than 48 hours after the theft has been discovered may not expect the help of the organization in attempting to locate the stolen property or the thief.

The ruling was made because in the past there have been cases of thefts not being reported for several days or even two or three weeks after their discovery. The association executives feel that if the poultry raiser fails to give proper co-operation the purpose of the association is defeated.

Every Kansas Farmer Protective Service member should report to his county sheriff all clues and information regarding a theft just as soon as it is discovered. The most thieves are caught when the theft is reported to the sheriff by a personal call or by telephone.

stock he was free to make his getaway in such a manner as to make it difficult for the law to trace him. His profits always amounted to all he received from the sale of the livestock he stole.

Before Goyette instituted his plan at public sales he made several purchases of livestock by issuing worthless checks. Allen county law officers have information that he bought hogs worth \$200 from a farmer in that county, for which he gave a worthless check. Goyette may be tried in the district court of Allen county when he finishes his seven-year term at Lansing. A similar case has been reported from Crawford county. Sheep were stolen by this plan in Neosho county.

Stealing Scheme Broke Down

At a public sale held last December by M. L. Tennis of near Chanute, Goyette inaugurated his plan. He bid in two Chester White sows, giving the name of C. A. Jones to the clerk and the auctioneer. Later, when the sale officials were busy in another section of the same lot, Goyette loaded the purchase made by C. A. Jones and made away with the hogs.

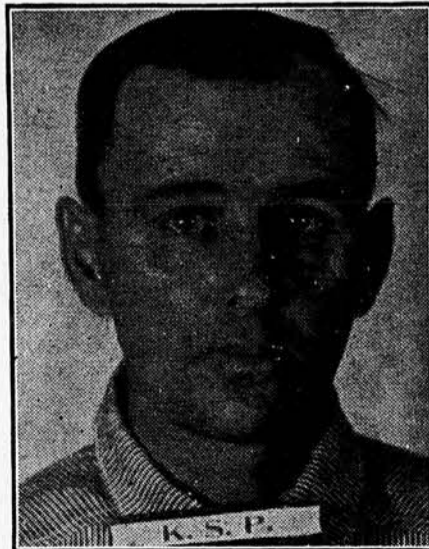
The last time Goyette worked his plan was January 17, at the public sale of Thomas Cook, who lives southeast of St. Paul. For the purchase of a heifer and two calves, B. B. Fitzsimmons of St. Paul, who was clerk at Mr. Cook's sale, accepted a check made out on a Parsons bank and signed by Roy Clark. This check was protested and returned from the Parsons bank. Fitzsimmons then took the check to the office of Sheriff C. E. Yockey at Erie, where Deputy John Bivin identified the handwriting of the signature as that of J. C. Goyette. Bivin was familiar with Goyette's handwriting from having previously investigated worthless checks Goyette had written.

County Attorney Got Conviction

Mr. Cook and Mr. Fitzsimmons learned from Goyette where he had sold the stolen heifer and two calves. They went to the farmer to whom he sold for \$55 the cattle for which he had given a \$72 check, and made arrangements for the recovery of the animals.

County Attorney Hugo T. Wedell spent nearly a week assembling the evidence against Goyette and filed a complaint sworn to by Thomas Cook, charging Goyette with grand larceny of cattle. Previously one or two cases against Goyette had been cleared up by money payment. However, County Attorney Wedell saw the unfairness of such settlement, and his determined and efficient efforts are responsible

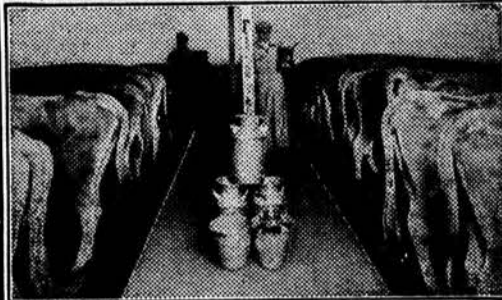
(Continued on Page 47)



J. C. Goyette Who Has Begun a Seven Year Sentence at the Kansas Penitentiary for Working His Livestock Stealing Plan at the Thomas Cook Sale

"A BIG HELP"

Says Mississippi Farmer of Dr. LeGear's Stock Powders



Mr. Gable has only 16 cows but Dr. LeGear's Stock Powders is a big factor in the success of his business.

West Point, Miss., Jan. 7, 1924. Dr. L. D. LeGear Medicine Co., St. Louis, Mo.

I am engaged in the dairy business, and nothing has been of such a big help and wonderful benefit to me as Dr. LeGear's Stock Powders. I mix it with the feed. It keeps my cows healthy, and they give more milk than ever, and I get a much higher test.

An milking sixteen Jerseys, but expect to add to my herd from time to time. My barn is concreted, has electric lights and other conveniences. I would never be without Dr. LeGear's Stock Powders. It has helped me to make a success of my business. Route 1, Box 8. A. W. Gable.

Read his letter

It is one of thousands received from farmers and dairymen having small herds. Big breeders write in same way.

Dr. LeGear's Stock Powders

—MINERAL-IZED—

THOUSANDS upon thousands of farmers, dairymen and stock raisers have used this old reliable prescription for the past 35 years. Get a pail or package from your dealer today. If you do not find that your cows give more and richer milk and your horses and mules do better work, return the empty container to your dealer and he will refund your money.

Dr. LeGear's Stock Powders—Mineral-ized contains the proper minerals and ingredients needed in winter, which are lacking in winter feeds—**TONICS** to sharpen the appetite, aid digestion, purify the blood—**LAXATIVES** to correct bowel trouble—**VERMIFUGES** to expel worms—**MINERALS** for bone and blood.

WHITE DIARRHOEA—Protect your chicks against this deadly disease which kills millions annually. Save them with **Dr. LeGear's Chick Diarrhoea Tablets**. Get a can from your dealer. If not satisfied with results, your money will be refunded.

EGGS—**Dr. LeGear's Poultry Prescription—Mineral-ized**, keeps hens healthy, vigorous and laying. Insures better fertility. Contains all the essential minerals for egg production, rich blood, bone tissues and feathers—tonics for blood, nerves and egg organs—conditioners for the digestive organs—laxatives for the bowels. Get a pail or package from your dealer. Use all. If not satisfied, your money will be refunded. **FREE!** Dr. LeGear's Big Stock Book: "Care and Treatment of Stock and Poultry"—128 pages; 50 illustrations. A scientific treatise on diseases, treatment and care of horses, cattle, hogs, sheep and poultry. Ask your dealer for free copy, or send us 10 cents to cover mailing.

Dr. L. D. LeGear Medicine Co., St. Louis, Mo.



Dr. L. D. LeGear, V. S., in Surgeon's Robe Graduate Ontario Veterinary College, 1892. Veterinary practice for 30 years. Poultry expert, author, lecturer and authority on ailments of Stock and Poultry.

— GUARANTEE —
"Get any Dr. LeGear product from your local dealer. Use it all. If not satisfied, return empty container to dealer and he will refund your money."

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|-----------------------------------|----------------------------|
| For Poultry | For Stock |
| Poultry Prescription—Mineral-ized | Antiseptic Healing Powder |
| Lice Powder | Stock Powders—Mineral-ized |
| Worm Pills | Hog Prescription |
| Chick Diarrhoea Tablets | Heave and Distemper Remedy |
| Poultry Worm Powder | Worm Remedy |
| Cold Tablets | Gall Remedy |
| Poultry Bowel Regulator | Biliter (Spavin Remedy) |
| Head Lice Remedy | Antiseptic Healing Oil |
| Sore Head Remedy | Colic Remedy |
| Roup Remedy | Eye Water |
| Roup Pills | Liniment |
| Fly and Insect Powder | Fly Chaser |
| Garden Insecticide | Scow Worm Killer |
| Dip and Disinfectant | |

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at this Special Reduced Rate

8 Months, (Daily and Sunday) only \$3.50

Election Year! And you do not want your home to be without a daily newspaper.

Less than a cent-and-a-half a day will bring the Topeka Daily Capital every day for eight full months, if you subscribe within the next 15 days. Nowhere else can you buy so much for so little.

Read the Topeka Daily Capital this year during the Presidential Campaign by subscribing now and getting advantage of this low price. We will send the Topeka Daily Capital, anywhere in the state of Kansas outside the city of Topeka, eight months, Daily & Sunday for only \$3.50.

The Topeka Capital gives you the best Market Page, prints the most Kansas News, and is packed from cover to cover with interesting features, including comics, and a big Sunday paper.

Subscribe today while this Special Offer lasts. The price is actually less than a cent-and-a-half a day.

Eight Months for \$3.50 if Ordered Within 15 Days (Rate not good outside Kansas nor in city of Topeka)

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THE TOPEKA DAILY CAPITAL, Topeka, Kansas. Gentlemen: For the enclosed \$3.50, please enter my subscription to the Topeka Capital, Daily & Sunday, for 8 full months, starting my paper by return mail.

Name..... R. F. D. or St.....
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(NOTE: This offer is good for either new or renewal subscriptions)



Rural Health

Dr. C.H. Lerrigo.

Millions of Dollars Have Been Wasted on Medicines Alleged to Cure Rheumatism

A GOOD friend who signs himself "M. D. requests the name of a 'medicine company' in Chicago that sells rheumatism medicine. If I knew of the 'medicine company' about which he inquires I would give him the address, but as I do not I shall make the liberty of using his letter as a text for a health sermonette. M. D. must put away the idea that there is a 'medicine' that will cure any and every form of rheumatism. Our fathers wasted millions of dollars on patent medicines under that old delusion. They used to figure that for every disease there was a remedy, and if they could match the name of the disease with the name on the bottle of medicine they would get well. All the medicines helped—for about two days to two weeks, depending on the degree of credulity possessed. After trying a dozen or so they would either be disgusted with all medicines or turn to a quack doctor for 'treatments.'

The present generation is a little wiser. Take rheumatism, for instance. We'll say it is a collection of aches, pains and stiffness in the joints. Very well! What causes it? Poison! A poison that we ourselves manufacture in some diseased organ. What organ? We do not know, but experience teaches us to look at teeth, tonsils, nasal sinuses, appendix and bowels, in the order named. One man finds abscessed teeth. He has them extracted and his aches and pains vanish. Another man has sound teeth but a frequent sore throat reminds him that he always has had a little trouble with the tonsils. They are taken out and he is well. And I'll admit that I know persons who have had teeth out, tonsils out, appendix out and practically everything out and still they are no better.

That, however, does not change the principle—it simply means that in the case of that particular unfortunate there is an offending substance that remains hidden. It does not change the fact that since we have quit taking 'rheumatism medicine,' and begun to look for causes the rheumatic patients in hospitals have decreased 60 per cent. Please note that I am not writing about acute inflammatory rheumatism, which is a germ disease and another matter entirely. The point I wish to drive home for the benefit of M. D. and other oldtimers is that money spent for 'rheumatism medicine' without finding out why you have rheumatism is money thrown away. I have a special letter about 'rheumatism' that I will send to subscribers. It is not necessary to write me a long letter about your symptoms. Just ask for my rheumatism letter. And be sure to send a stamped and self-addressed envelope for reply.

Operation is Not Needed

I am 40 years old and am advised to have an operation to remove the uterus because it is in a bad position. Would it do me any harm?
B. P.

At 40 years old an operation that removed the uterus probably would bring on an early menopause tho the doctor might leave some ovarian tissue to check it. There would be no possibility of pregnancy afterward. I think the mal-position of the uterus in your case probably can be remedied without its removal.

But Do You Know?

Please advise what is the cause, effect and cure for a continual discharge of albumen in the urine.
S. R. W.

Continued albumen in the urine in appreciable quantities usually means Bright's disease. How do you know that it is albumen? The deposits that you see with the eye are more likely to be mucous or a mineral precipitate.

Write to Doctor Kenney

My daughter has tuberculosis, the doctor says. I took her to a specialist who placed her in a sanatorium. The least I can get for is \$27.50 a week. I am not able to keep that up very long. Is she any better off than at home?
R. T. E.

Yes, I think a patient with tuberculosis is better off at a sanatorium than

at home for several reasons. The chief one is that the sanatorium gives skilled supervision 24 hours a day. It won't do a thing for her that she couldn't do at home, but the point is that at home she would neglect the simple things needed for a cure. She would not stay in bed long enough. She would have too much company. She would not stay persistently in the open air. She would not get her diet with absolute regularity. After a patient has been in the sanatorium a few months she learns to appreciate the necessity for strict attention to routine, but it is quite impossible to impress it in any other way. The rate at the State Sanatorium is \$14 a week for those able to pay. Write to Superintendent C. S. Kenney, Norton, Kan.



Mess of Junk

Dismal Patient—Yes, doctor, my head is like a lump of lead, my neck's as stiff as a drainpipe, my chest's like a furnace, and my muscles contract like bands of iron.

Doctor—"I'm not sure you shouldn't have gone to a hardware dealer."

When the Worm Turned

"Wife—"John, how could you speak so roughly to mother at the table? She was only telling you how to cut the turkey."

Hub (disgustedly)—"Those back-seat carvers make me tired!"

Protecting the Lizzies

County Policeman Grizzle requests us to state that all persons caught running a car under 16 years of age, or a person running a car drunk will be prosecuted.—Georgia paper.

Wet's the Word

Closest personal attention given to reservations on steamers for transatlantic sailing and cruises to Wets Indies, Bermuda.—Ad in the Philadelphia Bulletin.

A Bitter Vendetta

May Martin bought over \$100 worth of hides of neighbors in 24 hours. No wonder when Bud Neal killed 12 skunks in one day.—Lamar (Col.) paper.

Whoppers!

Aunt Jane—"Well, Ethel, I see you've landed a man at last."
Angler's Daughter—"Yes, auntie, but you ought to see the ones that got away."

Coals of Fire

DEAD ROBBER BRINGS \$5,000 TO HIS SLAYER —Portland (Me.) paper.

Out Where Men Are Men

Being too lazy to milk and my wife having refused to milk any more I will sell all my extra good milk cows and some other stock and implements at public auction.—Handbill printed in Lamar (Col.)

Warbling Birdman

Six hundred school children cheered Lindbergh Thursday as he entered one of the biggest public schools and sang the Mexican and American national anthems, "Old Folks at Home," "Old Black Joe," and Mexican folk-songs.—Omaha Bee-News.

Watch Your Average

Q.—4. In what line of enterprise did James J. Hill make a vast fortune?

A. (on another page)—4. Joan of Arc.—Toronto Daily Star.

For Quick Growth and Early Maturity

Makes 2-lb. Frys In 8 Weeks

56 Days, 2 Lbs.

"I used only START to FINISH for my chicks. This R. I. R. cockerel weighed 2 lbs. at 8 weeks. When photo was taken it was 5 mo. old and weighed 6 1/2 lbs." Mrs. Tyler, Mo.

2 Weeks, 1/4 Lb.

"My Red and W. Rock chicks 2 weeks old, weigh 1/4 lb. each. Used only START to FINISH." T. H. Brain, Mo.

6 Weeks, 1 1/2 Lbs.

"Chicks 6 weeks old weigh over 1 1/2 lbs. each. Fed START to FINISH only." G. E. Miller, Kans.

60 Days, 2 1/4 Lbs.

"50 Red chicks 60 days old, fed only START to FINISH, average 2 1/4 lbs. each." Oscar Hoffman, Kans.

4 Month Pullets Lay Right Along

"I have 4-month pullets, fed only START to FINISH and RED SPEAR Egg Mash, that lay right along." Chas. Bergman, Mo.



THIS famous "all-in-one" mash produces the utmost growth in the shortest time, reducing the feeding period between shell and maturity. That is why it is cheaper to use than home mixtures or inferior feeds. It builds flesh for the lowest cost per pound and gives you better profits.

Minerals, Dried Buttermilk and Cod Liver Oil

Saves chicks. Stops death losses. Helps prevent white diarrhea, bowel trouble and leg weakness. Makes chicks live and thrive.

Starts Pullets Laying Weeks Earlier

Feed START to FINISH to your pullets until they begin to lay—then put them on RED SPEAR Egg Mash. You will have vigorous pullets, laying regularly and heavily all next winter when eggs are high and profits large.

F. W. Bump, Oskaloosa, Ia., Says:—"My results have been splendid. It reduces losses and increases the growth of chicks, also the stamina and egg production of pullets."

Ask the Spear Brand Dealer



STARTS·GROWS·MATURES

DR. J. E. SALSBURY

Charles City, Iowa,
SPECIALIST AND WRITER ON
POULTRY DISEASES,
Consultation by letter free.

The night the barn caught fire

SAME old story—the lantern upset and it cost me a pretty penny for a new barn. I carry a good flashlight now—a genuine Eveready. It gives me the kind of light I want and it's SAFE. I wouldn't leave the house at night without one.

I keep mine in prime condition with the same brand of batteries—genuine Eveready Batteries. I don't know anything that holds so doggedly much usefulness for its size. They're crammed full of pep and long-lasting power.

The flashlight habit's a good one on the farm. I've found it the best kind of fire-insurance.

The Rocky Mountain Transmission

FORMER PRICE \$110.00
Now \$60
DIRECT FROM FACTORY

Doubles the hauling capacity of your MODEL-T FORD TRUCK and increases road speed

Bring your truck up to date—make it equal to the new trucks by equipping it with a Rocky Mountain Transmission. Now you can secure one at a real saving—about half of the former price. The Rocky Mountain gives you 6 speeds forward and 3 reverse—85% more power and 25% higher gear ratio. It makes a two-ton truck out of a one-ton job. The gears are always in mesh, preventing clashing and injury to gear teeth when speed changes are made.

EASY TO INSTALL

A special worm coupling makes installation easy—no special tools are required—no brazing, welding or machine work. Original Ford 3-point suspension is maintained. Freight prepaid when cash accompanies order. Mail your order today.

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Yeh, We're Still on the Trail!

But the Roads in Africa Are Not Like Those From Topeka to Kansas City

BY FRANCIS A. FLOOD

YOU'LL have to ship your motorcycles a few hundred miles by rail from Ilorin to Kaduna," the government officials in Lagos, West Africa, told Jim and me when we were planning our motorcycle trip across the Dark Continent. "There are no roads in that part of Nigeria at this time of year." And they were dead right about the roads.

But they were wrong about our having to ship the motorcycles. "No, we'll take 'em ourselves all the way from the Atlantic Ocean to the Red Sea if we have to pack 'em over the rivers on native canoes and push 'em thru the jungle and the desert sand ourselves," said Jim, who normally decides things entirely on impulse and then does the best he can afterward. We haven't reached the Red Sea yet, nor even the Nile River, but we've done all we expected to do already, and a good deal more besides.

In the jungleland about the Niger River in Equatorial West Africa, they have what the people there optimistically call "dry season roads." This means that if you have good luck you may be able to make a trip over those roads during the proper season after the bridges are all built and before they wash out again. The difficulty is to find out just what day that "season" is.

By a "Head Carrier"

Since practically all of the freight traffic in that bush land is by head carrier and all the passenger traffic is by foot, there is little need for a permanent, all-year road—except for the fool boys who want to see whether it can be made by motorcycle. And if the road were guaranteed good in Nigeria, the boys would go to Timbuctoo or Siberia or some place else where the roads were not good.

"Bad Roads," my traveling partner on our Alaska and Klondike trip five years ago and on many others since, has always insisted that he detests a paved highway, but since we began this trek thru the black heart of Africa, thru the desert and jungle and bush, many times on no roads nor even caravan trails but just somewhere "in Africa" I've heard him sigh for the paved streets of Khartoum in the Egyptian Sudan in East Africa. And when—and if—we get there, I'll be glad to see 'em, too.

"Road closed, Ilorin to Jebba," wired a missionary from whom Jim inquired, following his custom of deciding on a course of action and then searching for advice on the subject until he gets just the kind he wants. He failed this time. If a hundred residents had told him the road was closed and one had said it was possible, Jim would have ignored the hundred and depended on the one he wanted. But this time he couldn't find the one, so we just won't anyway.

A few miles north of Ilorin where the road was supposed to end—and did—the sudden tropical darkness settled over the jungle and we prepared for our first night in the bush.

"Ware the Northern Nigeria robbers," and 'ware the snakes and all the other things that lie in wait for the

traveler in the African interior—mostly in the imagination we found. But that night we cautiously parked the two motorcycles side by side, with our bed safely between, and all our baggage pushed warily under the bed, except for our two big .45 revolvers, and our money, which we stowed where our pillows should have been.

With a Big Machete!

Maybe it was the big lump of revolver (no, not money) under my head that kept me awake that whole night long. Or maybe it was the soft pattering of jungle noises shifting here and there and continually reminding me that it was night in the African "bush." Or perhaps it was the zipping jungle song of the myriads of mosquitoes, most of them outside our thin white netting which hung like a flag of truce between our bikes. Or perhaps it was our bed, made of three long poles with canvas stretched between, the ends resting on cases of gasoline, and the middle propped by our luggage underneath.

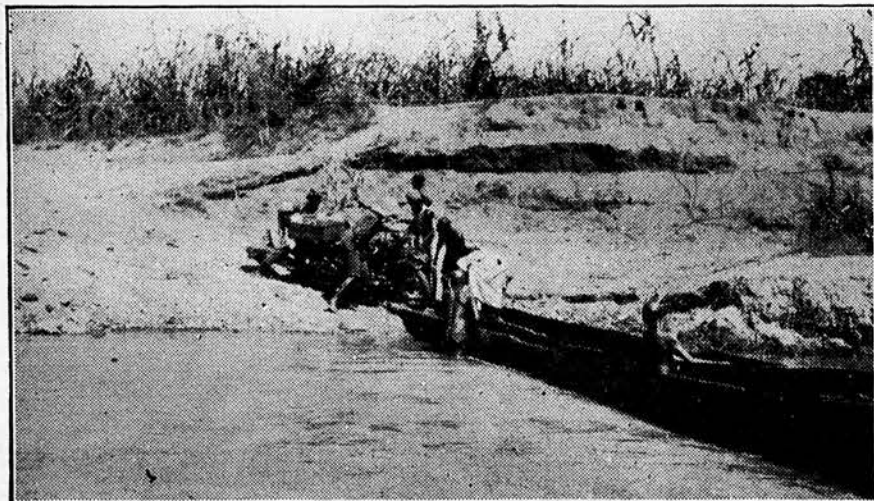
Perhaps it was the story told us two nights before by a British District Officer of how the Northern Nigeria night robbers always work in pairs, one to steal the money while the other black savage stands stealthily at the head of the victim's bed with a raised machete ready to split his skull if he wakes too soon. Or perhaps it was the peaceful snoring of my partner Jim, who slept soundly thru it all! My, what he missed that night!

Early the next morning, a dozen peaceful natives cautiously stepped out into the little clearing where we had made our camp and "ohed"—and "ahed"—at the funny white men who handled their own baggage and prepared their own breakfast. That was all the effect our presence had on the "bad men of the North." And before our trip was over we learned to sleep on the ground in little grass huts in isolated villages or in lonely places in the bush or desert, without guns, and without thought of worry. A white man traveling in the African bush is far safer from robbery than he is in civilized America.

Then the Oshun River

Then the battle with the road began. No car or motorcycle had been thru for months—and I am sure none will be for some time to come. All of the bridges, and most of the roads as well, were spread over the Niger Valley and a new road was being built. We would clatter and stumble along over a stumpy, rocky trail and there, voila—a place where a bridge should be. Perhaps a perpendicular drop from the edge of the washout to the rocky river bed below with anywhere from no water at all to the depth of a tall negro's head, and then all we had to do was to get up on the other side.

Sometimes we'd chop out a road around, with our hatchet and machete, worry across the river somehow, and then lift the machines up on the other side. Sometimes we'd wait for the obliging natives to collect about the scene and, with a few well-distributed pen-



The Motorcycles Were Taken Across the River on Two Canoes That Were Tied Together

She Noticed a Suspicious Light

An Advertisement of the American Telephone and Telegraph Company

ONE night a farmer's wife living near Elmer, New Jersey, noticed a suspicious light near her home. She suspected chicken thieves. Going to her telephone, she called the operator at Elmer. The operator notified a number of people attending a grange meeting there. A constable and posse went at once to the farm and caught the thief. He had nearly 3000 stolen chickens penned up near his place of residence. He was convicted and sent to prison.

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Gosh!

I'm excited—our annual school meeting is next Friday and the 13th too, but I'm not a bit superstitious 'cause my Uncle Jim is on the school board and he says he is going to see that we get a Karymor Merry-Go-Round for our school. I wish all the other kids had a "regular fellow" like my Uncle Jim on their school board. As soon as he got that illustrated folder about Karymor he said it was the best thing he had ever seen for a bunch of kids, and every school should have at least one.

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pies and words of encouragement, our black villagers would help us for miles. But there weren't always these folk around, and then Jim and I, in the sweltering equatorial sun, would hack out our own rocky stairsteps down to the river bed, and then tug and push and practically lift our heavily loaded machines up the other side. If we couldn't splash thru the river under our roaring motive power we'd take off our shoes and socks and push 'em thru that way.

Finally we came to the Oshun River, 40 yards wide and 5 feet deep. It looked bad. We thought of inflating all our spare tires and tubes, tying them to the side cars and then using the side cars as boats to carry our baggage and motorcycles across. But before we had to try that stunt a dozen babbling blacks appeared with two lop-sided canoes hollowed out of a mahogany log. Their headman was a wizened old tarman with one ear off and the stub of one arm encased in a long piece of calabash that looked like a baseball bat. A doubtful dozen whiskers were rooted on either side of his chin, and, most of the time, he wore a piece of bright purple cloth about his withered loins.

Crew Couldn't Speak English

None of his crew could speak a word of English, nor therefore follow our directions, which probably accounted for the ultimate success of the undertaking. They lashed the two awkward crafts together with some bits of grass rope and then, with four men bailing all the time, we rushed one motorcycle down the almost perpendicular bank to the water edge, loaded it on the canoes and actually reached the other side safely. Then the other machine and our baggage and gasoline and the expedition had crossed the Oshun River. It cost us about a dollar and about 3 hours' time—but we were still going.

That was the hardest day of all up to that time—and when we finally reached Jebba, on the banks of the mighty Niger River, which we hoped to cross on the railroad bridge, we were tired indeed. It was just dark; we'd eaten but little that day in our effort to reach Jebba before dark; and our supply of boiled water had given out long before. We weren't as hardened to roughing it then as we are now, and life looked dark. But just as we sighted the towering bridge at Jebba, the railroad supervisor, one of the only three white men in town, hailed us from his little round bush house and invited us in to dine, bathe, shave and sleep—all in the world that a man needs to make him good as new.

Our experiences from Jebba on farther into the African interior will be described next week.

What Price Efficiency Now

(Continued from Page 21)

reward disappears altogether. On the contrary, as every farmer knows, the advantage of improved methods is great to those who first adopt them, and does not become negligible until such methods are in practically universal use. That situation arises very seldom. Efficient methods are practically never in force thruout the entire competitive field, and the opportunity to gain special profits by superior efficiency is present constantly. Efficient farming communities, like efficient individuals, have important advantages over their competitors.

Nevertheless, Ned Lud's problem, a very real one, persists. Increased efficiency, thru its effect on production and prices, lessens the number of farmers required to produce a given amount of food and fibers. This does not mean, however, that the less efficient farmers should be callously told to get out of the farming business for their own good and that of the agricultural industry in general. It would mean that, of course, if the demand for farm products were destined never to increase. Fortunately that is not the case. In the United States we can count on a steady increase in the agricultural market, not only thru the increase of population at home but also thru intelligent selling abroad. Consequently, all that is necessary in order to cope with the effects of increasing general efficiency is to control the future manning of the agricultural industry, not necessarily by forbidding expansion but also by discouraging unwise or unnecessary expansion.

In other words, it is less important to get surplus land and surplus men out of farming than it is to prevent additional surplus land and surplus men from being brought into the business. Our markets are expanding so rapidly that demands will soon catch up with production, if production is not overestimated by premature "back-to-the-land" movements. It is particularly desirable to discourage ambitious colonization and reclamation schemes, and to keep would-be farmers well-advised as to what they are tackling. Intelligent publicity as to the economic difficulties of farming probably would do more to hold undue expansion in check than any amount of legislation.

Remember that agitation for unnecessary farm expansion is ceaseless. Recently a bill was introduced in Congress to authorize the Secretary of the Interior to establish settlers on "swamp, cut-over, neglected, abandoned, or poor land" in certain of the Southern states—that is to say, on land that the commercial farmer rejects. Altho some of our reclamation projects are in distress, new projects have been tentatively chosen. It is planned to extend the federal reclamation policy to humid areas in the South, with a program of drainage, clearing and soil restoration. These proposals fail to reckon sufficiently with the fact that American agriculture, thru increasing efficiency, is expanding production fast enough.

After nearly a decade of struggle, our farmers are moving into a strong position. They have reduced their costs of production, reorganized their crop and livestock enterprises to suit market needs, cut down their acreage in crops, mechanized their work to an extraordinary degree, and made a good start in scientific marketing. Increase of population is putting more of their business in a position to profit from the tariff. Price relationships between agriculture and industry are being slowly restored to an equitable basis thru the force of increased production and increased efficiency in manufacturing industries.

In a Strong Position

What is in preparation should bring tangible fruit to agriculture, provided there is no stampede back into farming at the first sign of reviving prosperity. Thru painful steps the farmer has got his business into a position in which, to all appearances, it is no longer overexpanded or overmanned. He has paid the price, in necessary readjustments, of the increased efficiency that he has brought about, and is well situated to reap the appropriate reward. To get it he must continue forging ahead in efficiency, while doing everything possible to mitigate the heightened competition that efficiency produces.

Ten years of restraint on undue expansion would work wonders. How to get such restraint is, of course, a problem. In the United States it is traditional to regard agricultural expansion as necessary to progress, and we have not yet waked up to the fact that intensive development, thru increased mechanization and better crops and livestock, has made further extensive development temporarily superfluous. Much educational work among bankers, real estate men and legislators, as well as among farmers themselves, will be necessary to get the facts generally recognized that for a few decades restraint rather than promotion will pay the best returns. But it ought to be possible to get the idea across. Its propagandists should be the farmers themselves, who are unquestionably barking up the wrong tree when they blame increased efficiency for overproduction. That is Ned Lud's Nineteenth Century notion. This is the Twentieth Century.

Fertilizers From the Air

Chemical fixation of nitrogen derived from the air is an industrial process that has advanced rapidly in recent years. This infant industry is now producing synthetic nitrogen salts in such quantity that it supplies, it is estimated, at least one half, if not more of the world's supply of inorganic nitrogen. Fifteen years ago much less than 10 per cent of the world's supply was derived from the air by chemical means. These comparatively new products are becoming more important, year by year, in the fertilizer industry.

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CITIES SERVICE OILS AND GASOLENE

Farm Crops and Markets

Is This Going to Be a Good Season in Kansas for the Grain Crops?

THE winter wheat crop in Kansas continues to make excellent progress. Oats and barley also are doing well. This ought to be a fine season for the grain crops in Kansas if there is anything in the theory that a good start is helpful. Excellent progress has been made generally in preparing land for corn, and some fields have been planted in the southern part of the state. Spring pigs, calves, lambs and chicks are generally doing well.

A statement showing farmers' planting intentions for 1928 was issued recently by the crop reporting board. The following review of the intentions reports has been prepared by the staff of the bureau of agricultural economics.

Farmers are planning a cropping program for 1928 which, in general, corresponds to the outlook as analyzed by the Department of Agriculture in January, but for some crops changes from present intentions appear desirable.

As indicated by the intention-to-plant reports of some 50,000 farmers in March, they plan to grow an acreage of the main crops (not including cotton) 3 per cent larger than that harvested last year. With average yields, the total production from this acreage would be about the same as last year, when yields averaged better than usual.

Farmers plan a marked shift from hard spring wheat to other grains. Changes in the outlook, which have taken place since the January report was issued, indicate that this intended shift may be somewhat too great for maximum returns.

The combined acreage of the four principal feed grains, corn, oats, barley and grain sorghums, now planted is slightly higher than last year. If these intentions are carried out and average yields obtained, farmers who grow these crops for sale are likely to meet a less favorable market than that which has prevailed to date for the 1927 crops.

Potato growers are planning to plant an acreage almost 12 per cent larger than harvested last year despite the warning that any increase probably will result in lower returns.

Farmers report an intention to increase their corn acreage in 1928 nearly 3 per cent over the acreage harvested in 1927. The intended increase is general throughout the country, being 5.2 per cent in the North Atlantic states, 1.9 per cent in the South Atlantic states, 1.7 per cent in the North Central states, 6.1 per cent in the South Central states, and 1.7 per cent in the far Western states. Should these intentions be carried out and average yields for the last five years be obtained in the different sections, a 2,750-million bushel crop would be produced, as compared with 2,734 million bushels in 1927, 2,692 in 1926 and a 10-year average of 2,826 million bushels.

The consumption of corn to March 1, 1928, was greater than in the corresponding period in the preceding year. The farm disappearance from November 1, 1927, to March 1, 1928, was 1,883 million bushels, compared with 1,741 million bushels during the same period in 1926-27. The stocks of corn on farms March 1 are less than this year than last, being 1,920 million bushels on March 1, 1928, compared with 1,134 million bushels last year. With an active market demand now prevailing for corn, and the larger number of hogs on farms this year, it is likely that the carryover of old corn on November 1 this year will be less than that of 113 million bushels November 1 1927.

The higher prices of corn this year, in comparison with a year ago, are largely the results of the abnormal geographic distribution of the 1927 crop resulting from one of the smallest crops on record in the Eastern Corn Belt and a large crop in the Western Corn Belt. A larger pig crop in 1927 and the increased demand for feed crops in Europe, where the production of feed grains was materially less than normal, also tended to strengthen corn prices during the 1927-28 season.

Should the present intentions to plant corn be carried out and average yields be had, it is likely that the corn supplies next fall will be more evenly distributed than they were in 1927. This, together with the possibility of a larger supply of feed grains in Europe in the 1928-29 season, and the possibility of a smaller pig crop this year both in the United States and Europe, indicate that if intentions are carried out and average yields are secured, growers of corn for sale in sections which were short of corn last year are not likely to meet so favorable a market as that which has prevailed to date for the 1927 crop.

A slight increase in the grain sorghums acreage is intended. Since this crop is used to replace abandoned wheat acreage in some sections, it is a little early for farmers to have very definite plans as to what acreage they will finally plant.

Prices for this crop have shared the generally strong position of feed grains caused by the short feed grain crops in Europe. In fact, considerable quantities of this crop have been exported this year. The probability of a similar foreign demand situation for feed grains in 1928 is not large, and growers should base their acreage plans on usual conditions rather than on the present relatively high prices, which reflect the unusual foreign demand.

Some Poor Seed Corn

Farmers in the United States as a whole have expressed an intention of reducing their tame hay acreage about 1.4 per cent from last year's large area, from which a record crop materially larger than domestic requirements was produced. About the same acreage as last year is intended in the South Atlantic and Eastern states, but an increase of nearly 3 per cent is indicated in the South Central states, where production of local hay has not equaled local requirements. A reduction of about 2.5 per cent is reported for the North Atlantic and North Central states, where a large proportion of the timothy and timothy and clover mixed hay for market is produced. The large crop in this area last season, together with increased production in the Southern states, which materially

reduced the demand for other than dairy hay, was largely responsible for the unsatisfactory prices, which were the lowest since 1915 for these classes of hay.

The proposed increase in acreage in the South Central states will tend to further restrict the market demand in that area for hay from the North Central states. This, together with a prospective large carryover and a continued decline in the number of hay consuming animals, will tend to restrict the demand next season, particularly for timothy and timothy-clover mixed hay. It, therefore, appears doubtful if the proposed reduction in the North Atlantic and North Central states will sufficiently reduce production to restore hay to an equality in purchasing power with other farm products.

The market demand for high quality alfalfa and clover may be expected to continue active because of the increasingly larger amounts of high protein hay being taken for dairy cattle, particularly by producers of fluid milk.

Results of corn germination tests made by the Kansas Seed Laboratory at the Agricultural College within the last few weeks indicate that Kansas farmers may expect to have trouble with seed corn this spring unless it is carefully tested before planting.

For 292 samples of 1927 corn from 57 Kansas counties the average germination test was only 91 per cent. To be suitable for planting it should test 95 per cent or higher, according to J. W. Zahnley, professor of farm crops. This is because under test conditions the circumstances for growth are controlled and are favorable, while under actual field conditions continued cold and wet weather may provide extremely unfavorable conditions and only the stronger plants will survive.

Wool Production in 1927

The tests ranged from a maximum of 99.5 per cent down to a zero test. In the entire lot no sample had a perfect test, an unusual condition, Professor Zahnley said. Ordinarily a few samples grade 100 per cent.

He attributes the low test to late maturity of the corn crop last fall, followed by zero weather which struck the state early in December. Late planting, slow growth during prolonged rains in the spring and wet weather in the early fall left the ears of corn with a high moisture content as late as the zero weather of December. During this cold snap germs of the kernels were frozen and killed. It is this process which will cause Kansas farmers trouble unless seed corn is selected by test.

The State Seed Laboratory at Manhattan will test free of charge samples of corn or other field crops sent in. Samples should number at least 200 kernels, also if twice this number are sent, a check test can be made if necessary.

A summary of seed corn tests available to date follows:

High test, 99.5 per cent; low, 0; average, 91; number above 95, 169; per cent above 95 per cent, 58.

It is the last figures which tell the story, Professor Zahnley said. Corn is considered good seed if it tests 95 per cent or better, and with 42 per cent failing to test that it means that nearly half the corn to be planted is poor seed, and trouble will follow before farmers get a satisfactory stand.

The total amount of wool shorn and pulled in the United States in 1927 was 328,137,000 pounds, of which 278,037,000 pounds was shorn wool and 50,100,000 pounds was pulled wool, according to the estimate of the United States Department of Agriculture. This estimated amount in 1926 was 310,576,000 pounds of which 260,976,000 pounds was shorn wool and 49,600,000 pounds was pulled wool. The estimated average weight a fleece shorn was 7.74 pounds in 1927, and 7.77 pounds in 1926. The estimated weight of pulled wool a skin was 3.24 pounds in 1927 and 3.33 pounds in 1926.

Direct Buying of Cattle Increases

Increasing use of the system of direct buying of feeder cattle by Corn Belt feeders is reported by C. G. Randell, a United States Department of Agriculture economist connected with the Division of Co-operative Marketing. This has been brought about, Mr. Randell states, because a considerable number of ranchmen wish to sell their stock at home, and many feeders desire to buy their stock direct from the range.

Mr. Randell says that although the auction method of marketing still prevails to a limited extent, it is almost entirely in the hands of the speculator, and it is doubtful if either the producer or feeder desires a return of the auction system.

There are advantages and disadvantages of direct buying as applied to feeder cattle, Mr. Randell says, but the disadvantages are not insurmountable. The advantages include the elimination of terminal market expense, the arrival of animals at the feed yard in better physical condition, a gradual trend toward the elimination of speculation in livestock marketing, and a better appreciation on the part of both producer and feeder as to mutual problems and interests.

Objections to the direct buying method include the difficulty of obtaining uniformity as to size and quality among animals purchased, greater shrinkage en route, greater opportunity for delay in transit, and the loss of identity of cattle in carlot movement.

Cattlemen with whom Mr. Randell has discussed the subject have mentioned the need for a standardization and grading program. They declare they can make their cattle good and uniform, provided they are rewarded for so doing, but no



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cattleman can afford to buy high-priced bulls and carefully cull his herd only to have his good cattle sell at a flat price along with other cattle not of the same quality and grade.

Many feeders feed good to choice cattle. Others prefer a medium quality grade. Some feeders want a good quality animal, but are not particular about his being a white-face. There could be a grade for each group, Mr. Randell says. Three grades would about fill the bill. The pool could then cater to all classes of feeders, and also "clean up" pretty well the herds of the cattlemen.

Experience in handling the cattle pool, according to Mr. Randell, has definitely established the fact that permanency of direct contact depends to a considerable extent on the manner in which purchases are made. The per-hundredweight basis will offer a greater degree of satisfaction to those involved. This eliminates the element of personal judgment as to weights which is highly speculative and which in most cases causes dissatisfaction on the part of at least one party to the transaction.

752 Ton-Litters in 1927

The 1927 hog-raising contest, in which swine growers in 29 states competed, was won by Pennsylvania with 126 litters that reached a weight of a ton or more each in 180 days, according to Dr. C. D. Lowe, extension animal husbandman of the United States Department of Agriculture. Indiana and Tennessee tied for second place with 80-ton litters each. Illinois produced 53, Texas 46, Kentucky 43 and Minnesota 40.

Kansas produced one.

Wisconsin produced the heaviest litter reported, 12 pigs that weighed 3,593 pounds at 6 months old. Pennsylvania is credited with the largest litter, one of 18 pigs. A total of 752 ton-litters were produced in the 29 states.

This year's results again demonstrated the value of well-bred hogs for pork production, for no litter in which pure breeding did not predominate reached the goal of a ton at 6 months old. The selection of sows having the ability to farrow large litters, as well as the application of improved practices to save every pig farrowed, also was an important factor in the production of these ton-litters, most of which consisted of 10 pigs or more.

Feeding tests long have indicated that pigs make the cheapest gains when "growed" from the time they begin to eat until ready for market. The shorter feeding period lessens the feed required for maintenance and reduces the disease hazard. Another reason for the practice of finishing pigs within six months is that March pigs will be ready for market before the seasonal drop in prices which usually comes about the first of September.

The experience of the 1927 ton-litter producers not only proved the advantages of a short feeding period for securing cheap gains and in reducing disease, but also demonstrated the distinct advantage of having the pigs ready for early marketing. Live prices "broke" from \$2.50 to \$3.50 a hundred between September and December, causing reduced returns and in some cases heavy losses to growers whose hogs were not ready for market before this period.

Altho last year's contest produced 56 fewer ton-litters than were produced in 1926, this falling off, according to Doctor Lowe, is partly because of the fact that many farmers sold their hogs when prices began to drop in September. The fact that four of the leading hog-producing states are now giving more attention to the so-called pig crop contests than to time for the fewer ton-litters last year. Pig crop contests are becoming popular as a natural follow-up of ton-litter work in improving pork production, and have for their objective the production of a maximum amount of pork from every sow in the herd.

Chick Remedies and Fakers

BY C. E. BUCHANAN
Control Division, State Board of Agriculture

At this season farm wives and daughters are busy setting the incubator, and caring for the downy little chicks, and no doubt anticipating a nice lot of fries later. But, alas, not every little chick reaches that age. The poultry specialists from our colleges and experiment stations tell us of the more common diseases which usually cause the loss of little chicks, such as worms, coccidiosis and white diarrhea; and how these diseases get into the flock. They also tell us what are the better methods of treatment and prevention of these common ailments.

It is not my purpose to discuss diseases or specific brands of remedies, but to tell you something about what the inspectors of the control division have found, and suggest a protection against the faker.

While there are a few worthwhile, reputable chick remedies on the market, there are many so-called remedies for which extravagant and high sounding claims are made by the manufacturer. Some of these manufacturers send representatives thru the country to call on the farmers and represent themselves as poultry specialists working in the interest of better and more healthy poultry, and ask to be allowed to examine the flock without charge to the farmer. That sounds reasonable, so permission often is given.

The inspectors from the control division

of the State Board of Agriculture find many cases where such agents, after what appears to be a scientific investigation, make the farmer believe that disease is rampant in his flock, and that such and such is the cause of their poor hatches, or the death of the hens or the little chicks. He may tell the farmer that if he will use a certain product made by so and so, he will be rid of his disease troubles, and as an accommodation, he (the agent) will take the order and send it to the manufacturer; or he may say that he will send to the manufacturer a report on the condition of his flock, and the manufacturer will send a specially prepared article for the treatment of his chicks. The price is so and so, and the farmer is influenced to give an order and make a payment in advance. You know you get a better price if bill is paid in advance, according to the agent. Our experience has indicated that the actor story usually is that the so-called specialist is no poultry specialist, but a specialist in getting your money.

In most of the Kansas counties there is now a county farm bureau agent, or a graduate veterinarian; or a qualified poultry specialist may be available. The control division of the State Board of Agriculture would suggest that if farm women have any suspicion of a diseased condition in their flock, they should see their county agent or veterinarian; or write full details of conditions to the Poultry Department of the Kansas State Agricultural College, Manhattan. We would also suggest that if one of these representatives says you need his remedy, you tell him you will think about it a few days, and to call again when you will give him an answer. Then get busy—ask the county agent what he knows about such a remedy, or write or wire the control division of the State Board of Agriculture at Topeka about it. The probability is that the agent will not call again.

The Kansas statute provides for the registration and labeling of all remedies sold or distributed in the state to be administered internally to any animal except man. Each retail package of a registered remedy should show on the outside thereof, in the English language, the name of each ingredient of the mixture. The declaration of the ingredients on the package is to give you some information as to the value and purpose of the remedy, but it should be understood that the State Board of Agriculture does not guarantee any product, and the fact that a remedy is registered and labeled according to the Kansas Live Stock Remedy law is no evidence of its value. There are certain drugs which are recognized as effective worm expellers, and others which may be of some value in combating other diseases, but usually these so-called remedies contain more or less other ingredients which have no value whatever in the mixture, and are sometimes used to give the impression that the more things present, the more valuable the product. Every poultry raiser should acquaint herself or himself with the knowledge of the value and use of the common drugs, and thereby be able to judge, to a certain extent at least, as to the value of the offered remedy. Good sanitary conditions and proper feeding are of more importance than drugs. Our inspection department, known as the control division, is at your service to investigate the sale of all livestock remedies. We shall appreciate your calling or writing us regarding any remedies being sold or offered for sale in Kansas. The Kansas Live Stock Remedy law is for your protection—use it.

Cherokee—Wet weather in the first part of March delayed field work, including oats seeding, somewhat. Wheat fields are greening up and the grass is starting to grow. Farm women are busy taking care of baby chicks. Eggs, 22c; heavy hens, 18c; corn, 80c; mixed feed, \$1.80 a cwt.; hay, \$12.—E. R. Smyres.

Cloud—Oats seeding was delayed somewhat by wet weather. Wheat is making a fine growth; alfalfa and grass also are doing well. Livestock in excellent condition, and there is plenty of feed.—W. H. Plumly.

Decatur—The soil contains plenty of moisture; we received 4 inches of snow recently on top of a fine rain. Good prices are being paid for livestock at the public sales. Corn, 74c; wheat, \$1.28; cream, 46c; eggs, 22c; hogs, \$7.25.—Marvin C. Bell.

Douglas—A great deal of Sweet clover was planted here this year, and also mixtures of Sweet clover and oats, and other combinations, for pasture. The weather has been fine for all kinds of spring work. Much interest is being shown in farm bureau club work.—Mrs. G. L. Glenn.

Elk—Grass and other vegetation have made fine starts. Farmers are up with the season's work very well. Southern cattle are arriving to fill the pastures. Trees are in bloom; little chicks are arriving in great numbers.—D. W. Lockhart.

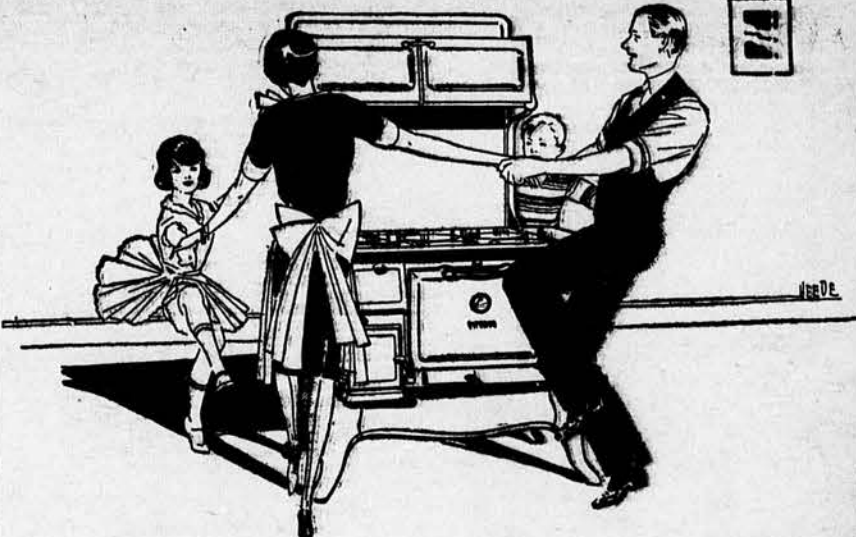
Finney—The weather has been springlike; considerable moisture fell here recently, which was of great benefit to the wheat, oats and barley. Early wheat is doing very well; some of the late sown fields are spotted. A good many farmers have planted trees this year. Roads are in fairly good condition. A few public sales have been held recently, with fairly good prices. Livestock wintered well.—Dan A. Ohmes.

Jefferson—Oats are all sown, and many farmers are planting Red clover. Cattle have been wintered very cheaply. Many farmers are selling shotes. Chicks are hatching very well. Jefferson let a contract recently for 44 miles of sand-gravel roads. Corn, 76c; eggs, 23c; whole milk sold on a butterfat basis, 59c.—W. H. Smurr.

Johnson—We have had very little rain recently; more moisture would be welcome. Potatoes and gardens have been planted, and much of the "garden stuff" is up. Oats sowing has been completed. Grading has been started on the road from De Soto to the Douglas county line. Hay is plentiful and cheap. Horses are advancing in price. Large numbers of chickens are being hatched. Eggs, 24c; butterfat, 47c; whole milk sold on a butterfat basis, 60c; apples, \$2; cottonseed meal, \$2.35 a cwt.—Mrs. Bertha Bell Whitelaw.

Labette—We have been having some fine spring weather recently; oats fields are almost as green as the wheat fields. Labette county is making considerable progress in the building of chat roads, which are very popular with farmers, as they think such surfaces are easy on the feet of horses. The Kansas Farmer Protective Service has done a good deal to run the farm thieves out of this county. There is an increasing activity in the oil and gas fields. Early Ohio seed potatoes, \$3.40 for a sack of 2 bushels; Cobblers, \$3.90; eggs, 25c; cream, 50c.—J. N. McLane.

Marshall—Oats, wheat and pastures are making a fine growth. There is a good demand for work horses. Farm labor is plentiful. Roads are in excellent condition. Corn, 90c; wheat, \$1.20; oats, 60c; hogs,



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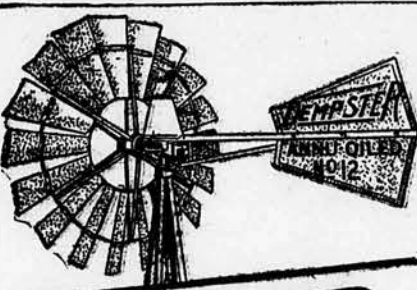
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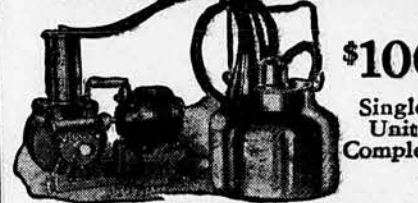
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Company, a subsidiary, was buying the stock in the open market at around \$150 a share.

The economist with the Cleveland Plain Dealer, who usually is a very level-headed man, seems to be inclined to exclaim, in the words of the modern flapper, "Horse Teeth." At least he observes:

"Everyone who has followed the trend of events in the market this year and has not been content with reports of large gains in this stock and that has been impressed by the fact that most of the grains of this year have been confined to a relatively narrow list of shares. And he has observed at the same time that while advances of many points were being made in this list, an unmistakable trend toward recession has been in evidence elsewhere. At no time this year has this been more pronounced than in the last week. If these were normal stock market conditions it would be reasonably safe to say that a general reaction would follow the hillside events of the last three weeks, in the light of what has taken place in the stock market in the last year, prediction as to its probable future movements would be unwise.

"Gold exports already have established a new high record, and in view of France's determination to stabilize her currency after the spring elections, continued heavy gold losses are reasonably to be expected. Already this year this country has suffered a net loss in gold of close to 100 million dollars, a constructive loss from the point of view of economic welfare throughout the world, no doubt, but likely to be of far reaching significance for speculation if long continued.

"It may or may not be significant, but it is a fact that money rates hold well above the level of a year ago, and that the usual spring decline has not appeared. A resumption of security sales by Federal Reserve Banks would seem to indicate that the reappearance of an increase in the brokers' loan account is not welcome, and that the Reserve System is still desirous of checking the stock market."

A Glance at the Markets

Following several weeks of mostly rising prices, the farm markets took on a weaker tone after the middle of March, and the course became irregular and hesitating without any very severe decline in price. Wheat, rye, linseed and cottonseed kept on rising. Other grains and most feeds have sold unchanged or slightly lower. Vegetables and livestock lost a little ground here and there. Dairy and poultry products have not changed much the last week or two. It is one of those waiting spells that usually follow times of general advance, such as took place in early spring. The moderate receipts of wheat in the domestic markets are being readily absorbed by mills at nearly unchanged prices. Soft winter wheat is becoming scarce, but supplies of other kinds are adequate for current requirements.

There has been some slowing up in the demand for corn as a result of recent high prices and the prospect of early pasturage, which would tend to reduce feeding requirements in Kansas. High prices of mill feeds are said to be causing Eastern buyers to turn to oats.

The linseed meal market continued quite firm, and prices advanced \$2.50 to \$3 a ton in late March. Cottonseed meal crushers continue to hold their stocks for steady prices, and with the supply of seed for the remainder of the season limited, the price went higher. Hay markets are holding steady, with offerings limited. Alfalfa has continued in good demand, with prices steady. Prairie hay has shown a slightly stronger tendency as a result of light offerings.

Most of the fed cattle now reaching the shambles are still uncovering a decent margin of profit, since current arrivals represent for the most part cattle that were taken out as feeders before December 1. The new crop has not started to run in numbers, and finishers who bought subsequent to the turn of the New Year may be more inclined to hold, since, at current somewhat lower fat cattle levels, heavy feeders laid in early last winter would not pay original costs and their head bill. It is doubtful whether the country will unload many of these higher priced cattle at a loss until the position of the early summer market has been more definitely indicated. Most light vealers closed at \$11.50 to \$12.50 at Chicago last week, while choice selected veals sold on average at \$15 to small killers.

An increased proportion of unfinished light hogs and the appearance of a number of hogs of pig stuff, representing fall litters, together with smaller arrivals of choice medium weight butcher hogs have tended to depress the price range a little. In trade opinion, the recent advance in the corn market and the fact that supplies of corn are becoming short in some sections

were factors responsible for the increased percentage of pigs and light lights that showed a pronounced lack of finish.

A price jump in late March carried the top at Chicago on heavyweight fat lambs up to \$17.65, put best clipped lambs to \$15.25, shearing lambs to a \$16.25 top and permitted the sale of fat ewes upward to \$10. Current values on woolled lambs, both fat and feeder classes, are \$1.50 to \$1.75 higher basis than at the corresponding time last year. The current liberal allowance on pelts and its effect on woolled lamb prices is reflected by a market on wool lambs showing about twice the margin over shorn offerings as compared to the trade of one year ago. A few small shipments of California dressed lambs reached Atlantic seaboard markets, and the initial shipment of new crop California lambs on foot reached the Missouri River and a direct shipment to packers arrived in Chicago at the week-end. Since the mid-January low spot fat lambs have advanced around \$4 a hundred at Chicago, and have reached a peak that will not easily be subject to further elevation. There are, indeed, conditions suggestive of weakness developing in the not far distant future, although it is believed that the residue of the fed-lamb crop will find a remunerative market, since depletion of feed lots is expected to be fairly well accomplished by the latter part of April, a date in advance of generous marketings of the new crop.

Wools for future delivery have become an important feature in Eastern markets to supply large worsted mills, which have received orders on certain lines of goods and have come into the market to cover their requirements for raw material. Prices on the wools that are not available for delivery until summer were estimated at approximately the going prices for spot wool, the most active lines of which show a slight strengthening tendency.

In the butter market not much has happened to change the situation or the price. Supply and demand in March were about like the season of 1927, and cold storage holdings are not large enough to weaken the position. Probably the usual decline will appear when production reaches the full spring volume. The present tone is merely hesitating, without much direction. The cheese market acts much like the butter market, but with only slight changes in price.

Egg buying for cold storage has continued in a moderate way, at prices a little higher than last season. Production being no heavier as yet than a year ago, the situation appears well enough, although heavy mid-season production might still cause trouble. There is an increasing demand for poultry, especially for live fowls, and prices are fully maintained.

Produce markets are rather unsettled. Many of the Northern and Western states have reported haulings of potatoes very light and sales few. A general range of \$1.90 to \$1.95 has prevailed in Wisconsin and Minnesota producing sections, and a few sales were made in Colorado around \$1.70. City prices were mostly 10 to 20 cents lower. Northern Pound Whites declined 25 cents on the Chicago carlot market to \$1.85 to \$2, and Idaho Russet Burbanks declined 50 cents to a range of \$2.15 to \$2.35. New Bliss Triumphs were considerably damaged by cold weather in the low Rio Grande Valley of Texas, but f. o. b. prices held steady at \$5 a 100 pounds sacked.

Apples have held nearly steady in the East, but Northwestern shipping points reported a slight decline on boxed stock. Strawberries from Florida advanced to a jobbing range of 45 to 80 cents a quart in city markets. Texas 24-pint crates were selling at \$5 to \$6 in Chicago and Kansas City. First cars of strawberries have rolled from Louisiana, about a month later than last year. Total production in four early states, excepting Florida, is estimated at 51 million quarts, compared with 28 million last season. Louisiana has a huge crop of 37 million.

Old cabbage closed lower in Western New York at \$10 a ton, and Southern Texas shipping points were weaker on new cabbage at \$35 to \$37.50. New stock held firm in city distributing centers, but northern storage stock was weak. About 60 additional carloads of onions arrived from South America in late March. Lettuce was selling at a wider range in the Imperial Valley, but city dealers continued to maintain a firm market for this stock. Florida lettuce was selling lower. Florida celery also declined about 25 cents a 10-inch crate, at \$6.50 to \$7. A sharp decline occurred in tomato prices. Original 6-basket crates from Florida dropped to \$5 to \$7 in city markets. Sweet potatoes have held mostly firm.

Protective Service

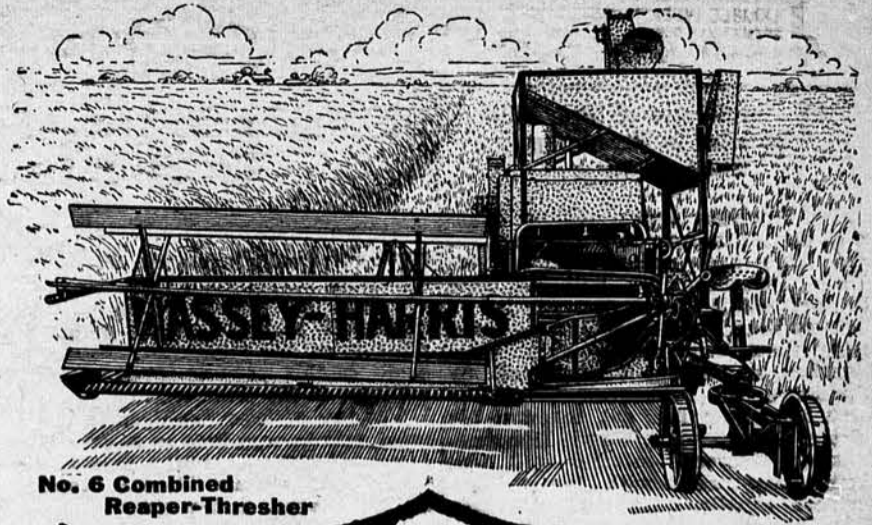
(Continued from Page 40)

for Goyette now being in the state penitentiary. District Judge S. C. Brown sentenced Goyette, who is 45 years old, to not more than seven years in prison. This sentence from Judge Brown is the second to the state penitentiary for Goyette. Once before he was sentenced to five years in prison for breaking into a box car at Parsons.

Report Thefts to Sheriff

The help that was obtained from Sheriff Yockey's office in the arrest and conviction of Goyette is a very good example of why it is best for Protective Service members to notify their sheriff as soon as the work of some thief is noticed. In this case Sheriff Yockey's office was familiar with Goyette's handwriting from previous worthless checks which he had written, and in the case of other thieves the sheriff's office likely will have information available that will lead to the arrest of the thief. Law officers generally are doing a mighty good job in Kansas, but their work cannot be as effective as possible unless they are notified by the property owner as soon as a theft is discovered.

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PROFITS



Speaking of Overhead!

White Diarrhea

Splendid Success of Mrs. Ethel Rhoades in Preventing White Diarrhea

Mrs. Rhoades' letter will no doubt be of utmost interest to poultry raisers who have had serious losses from White Diarrhea. We will let Mrs. Rhoades tell it in her own words:

"Dear Sir: I see reports of so many losing their little chicks with White Diarrhea, so thought I would tell my experience. My first incubator chicks when but a few days old, began to die by the dozens with White Diarrhea. I tried different remedies and was about discouraged with the chicken business. Finally, I sent to the Walker Remedy Co., Dept. 48, Waterloo, Ia., for a \$1.00 box of their Walko White Diarrhea Remedy. It's just the only thing for this terrible disease. We raised 700 thrifty, healthy chicks and never lost a single chick after the first dose."—Mrs. Ethel Rhoades, Shenandoah, Iowa.

Cause of White Diarrhea

White Diarrhea is caused by microscopic organisms which multiply with great rapidity in the intestines of diseased birds and enormous numbers are discharged with the droppings. Readers are warned to beware of White Diarrhea. Don't wait until it kills half your chicks. Take the "stitch in time that saves nine." Remember, there is scarcely a hatch without some infected chicks. Don't let these few infect your entire flock. Prevent it. Give Walko in all drinking water for the first two weeks and you won't lose one chick where you lost hundreds before. These letters prove it:

Never Lost a Single Chick

Mrs. L. L. Tam, Burnetts Creek, Ind., writes: "I have lost my share of chicks from White Diarrhea. Finally I sent for two packages of Walko. I raised over 500 chicks and I never lost a single chick from White Diarrhea. Walko not only prevents White Diarrhea, but it gives the chicks strength and vigor; they develop quicker and feather earlier."

Never Lost One After First Dose

Mrs. C. M. Bradshaw writes: "I used to lose a great many chicks from White Diarrhea, tried many remedies and was about discouraged. As a last resort I sent to the Walker Remedy Co., Dept. 48, Waterloo, Iowa, for their Walko White Diarrhea Remedy. I used two 50c packages, raised 300 White Wyandottes and never lost one or had one sick after giving the medicine and my chickens are larger and healthier than ever before. I have found this company thoroughly reliable and always get the remedy by return mail."—Mrs. C. M. Bradshaw, Beaconsfield, Iowa.

You Run No Risk

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

WALKER REMEDY CO., Dept. 48, Waterloo, Iowa

Send me the [] 50c regular size (or [] \$1 economical large size) package of Walko White Diarrhea Remedy to try at your risk. Send it on your positive guarantee to promptly refund my money if not satisfied in every way. I am enclosing 50c (or \$1.00). (P. O. money order, check or currency acceptable.)

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Town

State.....R. F. D.....

Mark (X) in square indicating size package wanted. Large package contains about two and one-third times as much as small.

Always War on Poultry Ills

Disease Lurks Around the Corner to Destroy All Profits If One Is Not Careful

BY HAZEN C. ROSS

TWO weeks ago, Mr. Ross, who lives at Junction City, wrote the first installment of this article. It dealt with such poultry ill as cholera, diseases of the respiratory tracts and colds. In this issue he takes up the remainder of the most common ailments. The two articles combined in one reprint will be sent free to anyone interested. Merely address the Poultry Editor, Kansas Farmer, Topeka, Kan., enclosing a 2-cent stamp for postage.

ROUP—There are four kinds of roup: Diphtheria roup, contagious roup, canker roup and chicken pox.

Symptoms—By opening the beak of the fowl you will note a very foul odor.

DIPHTHERIA ROUP—Diphtheria roup is about the same as diphtheria in human beings. It affects the lungs and windpipe. Lumpy substances will form in the wind pipe. Birds will gasp for breath.

Treatment—Use 15 per cent solution of argyrol. Dip a feather in this solution and force down the wind pipe. Give a quick turn and pull it out.

CONTAGIOUS ROUP—Neglected colds will turn into contagious roup. It is not profitable to treat this kind of roup only in cases of high priced birds, as it will spread very quickly.

Treatment—Put 10 per cent solution of argyrol in the eye. Massage with mentholatum over the eyes and on the head. Remove infected birds from the flock.

CANKER ROUP—It is very infectious and spreads quickly. Look over the birds often. The canker will form in the mouth.

Treatment—Iodine and styptic pencil.

CHICKEN POX—Head raw and sore. Will scab over. Chicken pox is accompanied by wart-like growths that go down into the flesh.

Treatment—Scrape off scabs and paint with iodine.

ASPERGILLALES OR BROODER PHENOMENA—Mouldy litter or mouldy feed will cause this disease.

External symptoms—Chicks will have leg weakness. This will affect the chicks until about 6 weeks old. For post mortem split the windpipe open and you will find mould growing in it.

Treatment—Clear litter and feed. Keep the chicks warm.

PIP—Pip is caused from roup; the birds will breathe thru the mouth and their tongues will be very dry.

Treatment—Open up the nostrils, put mentholatum or some salve on the tongue to soften it.

CROP BOUND—Is an impaction of food or some other object in the stomach. Lack of water will cause this. The crop will be very much enlarged.

Treatment—For light cases massage the crop and give 1 teaspoonful of castor oil, for the adult. For cases more severe make an incision in the crop and remove the obstruction; sew up the incision with silk thread and feed mash or some light feed until it has fully healed.

GASTRITIS (BABY CHICKS)—Chicks will refuse to eat, gasp for breath and will throw off white mucous at the mouth. Cause of the disease is feeding sweet milk and changing to sour milk or vice versa.

Treatment—One pound of common baking soda to 1 gallon of water. Leave this before the chicks for an hour only; then feed all sour or all sweet milk.

PERITONITIS—Peritonitis is caused by an infection around the abdominal cavity. In post mortem the abdominal cavity will be filled with fluid. Liver will be enlarged and hemorrhaged. The intestines also will be hemorrhaged.

FOWL PESTS—Very infectious disease resembles cholera.

External symptoms—Loss of appetite. Bird will isolate itself and will be unsteady on its feet. In post mortem the liver, heart and spleen will be enlarged and hemorrhaged. Intestines will be filled with mucous and enlarged. The nasal cavity will throw off a bloody mucous. Throat and windpipe will be filled with mucous.

Treatment—Give bichloride of mercury for eight days in drinking water.

On the sixth day give 1 teaspoonful of salts to each bird, mixed in wet mash.

GOING LIGHT—Birds will stagger; will sit around with eyes closed; will form a greenish scale around the head and possibly the rest of the body. In post mortem the intestines will have canker sores and whole inside of body will be diseased.

DISEASED LIVER—Disease of the liver is caused by overfeeding of carbohydrates. Fat will form on the liver, abdominal cavity and intestines; will infect heavy birds more than light breeds.

Treatment—Correct your ration. **OBSTRUCTION OF OVIDUCT**—Part of the oviduct will be closed.

Treatment—Open with the finger or some other object.

RUPTURE OF THE OVIDUCT—Will be caused by a broken egg in the oviduct, which will cause an infection to set in.

TUMOR (INTESTINAL)—These are caused by some organic matter in the intestines. The bird may swallow a small nail or stone and the tumor will form around the object.

BUMBLE FOOT—It is an abscess on the fleshy part of the foot and is caused by bruises. Roosts too high from the floor will also cause this.

Treatment—Make a large incision and disinfect with iodine and vaseline for three or four days.

GOUT—Gout is caused by too much protein in ration.

Symptoms—The bird will be swollen in the hock joints; this probably will contain water.

Treatment—Correct ration and treat same as bumble foot.

LEG WEAKNESS OR PARALYSIS—It is most common in baby chicks and young birds and is caused from not having enough sunlight and lack of mineral matter in feed. Always feed bonemeal. Moving chicks from dirt floor to cement floor will also cause leg weakness.

VERTIGO OR LIMBER NECK—The bird will try to step on its head; loses all control of its neck. This is caused by eating decayed vegetable matter or animal matter.

Treatment—Five grains of calomel or 2 teaspoonful of castor oil.

HEMORRHAGE OF THE BRAIN—Will affect heavy breeds in hot summer months. Trapnests will cause hemorrhage of the brain.

EPILEPSY—This affects the spinal cord; it is not infectious. No treatment.

POLYNEURITIS—Caused by damp cold or drafts in house; neck will be stiff and curved. No treatment.

GANGRENE (WET)—Affects bird's feet. Caused from frozen toes; it will turn foot green and secretes pungent serum.

GANGRENE (DRY)—Foot will be green; will have scales. Sometimes will affect caponized birds if a disinfectant is not used.

Treatment—Kill all affected birds; gangrene is very infectious.

FROZEN COMBS OR WATTLES—Use carbonated vaseline and remove birds to a warm place.

INTERNAL PARASITES—Consists of four kinds of worms; round worms which measure from 1 to 4 inches long, infect large or small fowls and absorb the food that the birds should get; and tape worms jointed. You also will find the hair worm which is not injurious to fowls.

Treatment—Clean yard and houses; disinfect and move birds to another yard if possible. Use 1 pound of Granger Twist tobacco. Will treat 500 birds. Starve the birds one day before feeding this tobacco mixed in a wet mash. Give the birds all they will clean up in 20 minutes, the next day make a wet mash consisting of a teaspoonful of salts to each bird and feed this; if the first treatment does not get all the worms you should repeat the treatment in a week.

GAPE WORMS—Gape worms are

\$500.00

In Cash Prizes For "Jenny Wren" Letters



\$500 in CASH prizes will be paid for the best letters on "The one biggest reason why Jenny Wren (ready-mixed flour) appeals to me."

JENNY WREN FLOUR is a short cut to better baking. All the dry ingredients are ready mixed in it according to proper proportions. Jenny Wren saves time, temper and worry—and it is healthful too!

THE PRIZES ARE: 1st prize—\$100; 2nd prize—\$75; 3rd prize—\$50; 4th prize—\$25; 5th prize—\$15; 6th prize—\$10. Also ten prizes of \$5 each; 20 prizes, \$2.50 each; and 125 prizes, \$1 each—Total \$500.

CONTEST RULES: Anybody, anywhere, may compete. Submit as many letters as you wish. Each with name and address of your grocer. Those tying will receive full award. You need not buy Jenny Wren to be eligible. Letters must be postmarked before midnight, April 30, 1928. Address Contest Editor, Dept. KF, Jenny Wren Co., Lawrence, Kansas.

Tune in on W-R-E-N. 1180 kilocycles—254.1 meters—for Jenny Wren Cooking School, 10:45 a. m., Central Standard Time. Entertainment programs (Blue Network) afternoon and evening.

Jenny Wren Ready-Mixed FLOUR

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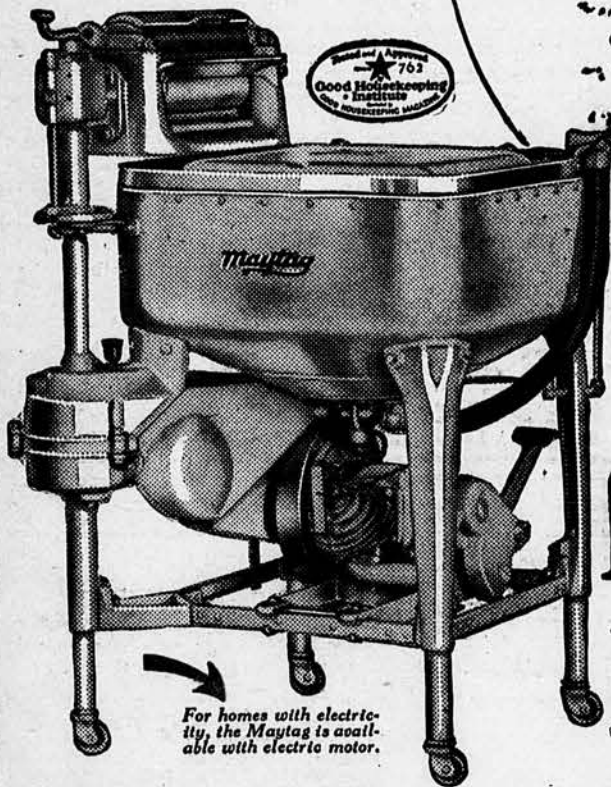
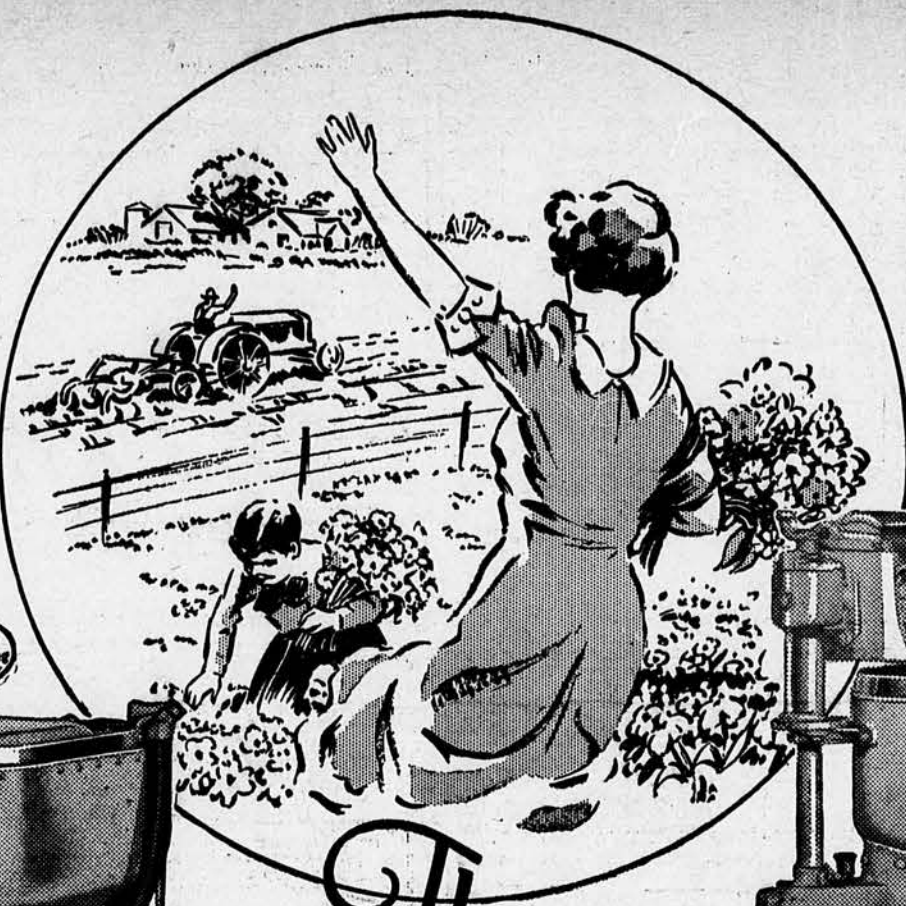
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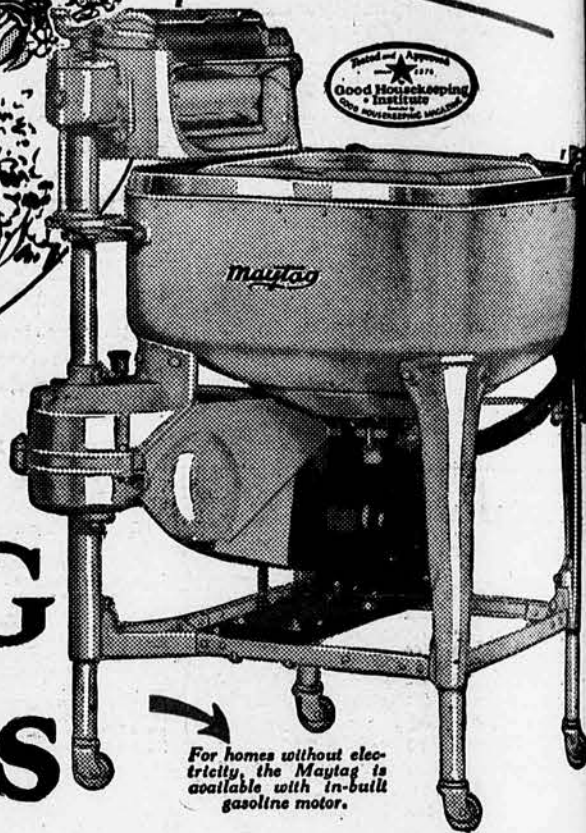
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For homes with electricity, the Maytag is available with electric motor.



For homes without electricity, the Maytag is available with in-built gasoline motor.

The
MAYTAG
brings

New Freedom for the Farmwife

**For Farm Homes
Without
Electricity**

The Maytag Gasoline Multi-Motor is a skillfully made, modern, dependable little gasoline engine, exclusively a Maytag feature, and so popular with farm homes that have no electricity, that Maytag has become the world's largest producer of engines of this type and size.

Compare the two washers above and you will see that the Multi-Motor takes about the same space as the electric motor. There are no belts to line up. It is a part of the washer and starts with a step on the lever.

IT IS like adding a day of leisure to the farmwife's week when the Maytag does the washing. Of course, she will probably spend the extra hours with her garden, her chickens or her children, but it's a valuable gain anyhow.

There will be no more hand-rubbing when the Maytag comes—not even on the edges of collars, cuffs or wristbands, on overalls smeared with machinery grease. The Maytag flushes out the grimeiest dirt by water action alone. That is why the daintiest clothes are safe in its satin-smooth, cast-aluminum tub—the tub that keeps the water hot for an entire washing, then empties and cleans itself.

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Founded 1894

Kansas City Branch, 1005 McGee St., Kansas City, Mo.

Maytag
Aluminum Washer

**The New Roller
Water Remover**

has large soft rolls that spare the buttons, remove both the surplus soap and water evenly regardless of lumps and seams in the clothes. It automatically adjusts the tension for a thick or thin garment, swings and locks in seven different positions, has a handy feed board, a self-reversing drain-board, and an instant safety tension release.

There are some other valuable Maytag features and you can learn all about them by a free trial washing.

**FREE TRIAL for a Week's
Washing**

Write or telephone any Maytag dealer. Ask him to send you a Maytag, either powered with an electric or a gasoline motor. Do a big washing—it will take an hour or so, and you will see why the Maytag has been awarded first place by the farm and city women of America.

Maytag Radio Programs



WHT, Chicago, Tues. Wed., Thur., Fri., Sat., 9:00 P. M. WCCO, Minneapolis, Fri., 8:30 P. M. WHO, Des Moines, Sun., 7:15 P. M. KDKA, Pittsburgh, Tues. and Wed., 10:00 P. M. WBAP, Fort Worth, Mon., 8:30 P. M. KEX, Portland, Ore., Tues. and Sat., 8:30 P. M. KSL, Salt Lake City, Mon., 7 P. M. KZL, Denver, Mon., 7 P. M.

Hours designated are standard time at the stations named

IF IT DOESN'T SELL ITSELF, DON'T KEEP IT