

Forty Pages

Price Five Cents

The FARMERS MAIL AND BREEZE

Vol. 45

April 10, 1915

No. 15





THE FARMERS MAIL AND BREEZE

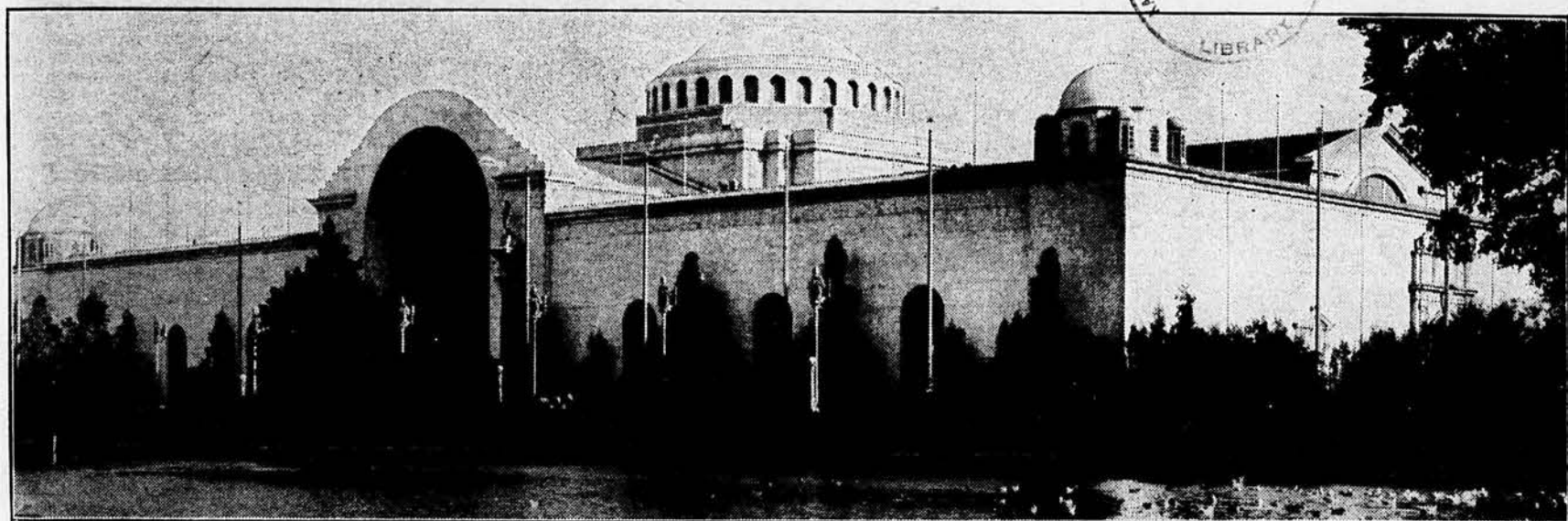
An Agricultural and Family Journal for the People of the Great West



Volume 45
Number 15

TOPEKA, KANSAS, APRIL 10, 1915

Subscription
\$1.00 a Year



AT THE GOLDEN GATE

Agriculture, Including Livestock, Predominates in the Panama-Pacific Exposition--By Leonard Carpenter

FARMER or town man you really ought to figure out some way to see the great exposition at San Francisco. The world has had so many great shows, beginning for the present generation—with the World's Fair at Chicago, that adjectives seem useless in trying to describe a part of what one may see and learn in this wonderful exhibition. It takes much, nowadays, to startle any man or woman whose travels have not been confined to his own state. But the word of old-time globe trotters ought to be worth something—and the most seasoned of them declare that San Francisco has produced something the world never has seen equalled, and may never see surpassed.

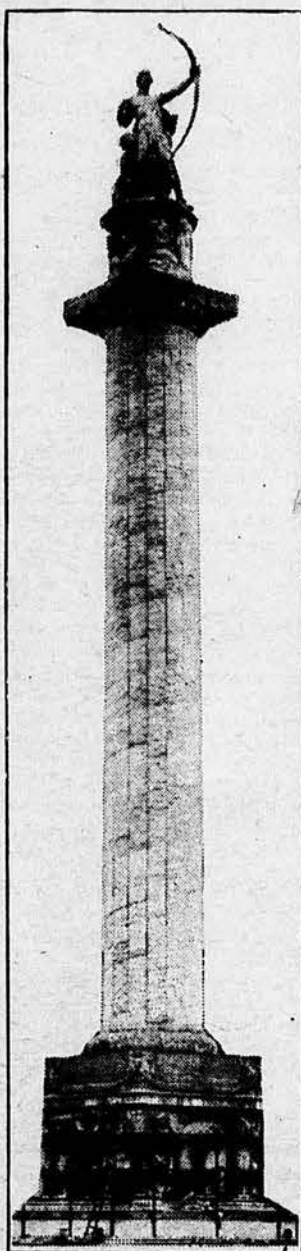
For readers of the Farmers Mail and Breeze it is chiefly important to show the place given agriculture in this exposition. Three of the twelve great exhibit palaces are used to house the displays of that industry and its allied branches. The largest exhibits in all the state and foreign buildings are composed of products of the soil. But, this is only a beginning. The man who needs a suggestion for his jaded appetite can go to the California and Oregon buildings and see the wonderful exhibits of fruit. The kangaroo; wallabys; opossum; and strange birds, including the laughing jackass, which are shown in the Australian building, will provide instruction and amusement. Almost every sort of fish is shown in the exhibits made by Washington, Hawaii, and the United States government. The fish which come from Hawaii are colored like the decorations for an old time Fourth of July celebration.

All new and up-to-the-minute machines used in agricultural work are shown in the Palace of Agriculture. Every sort of machine and tool is exhibited by the manufacturing companies. Firms which make tractors have sent every type from the large to the small, and many of them are mounted so they can be operated by electric motors. Seed drills have been placed so they are shown in operation.

Seaweed is about as poor a material as one could find to convert into food for man. Agar-agar, or kanten, which is a seaweed treated so that it is of great value for food and other purposes, is shown in the Japanese building. The seaweed is boiled and the product is frozen and kept in this state for awhile, after which it is put in the sun and dried. It is translucent when dried and sometimes is called Japanese isinglass. It is favored as a food in the place of the "bird nest" dish, is used for mimeographic rolls, as a starch, and as a coagulating medium.

Oyster extract, which is a product much like beef extract, is another product shown by the Japanese. Cod liver oil, dried fish, and canned goods, also are shown. A display of tortoise shell, imitation shell made from vegetable matter, pearl shell, and the manufacture of pearl buttons forms an interesting part of this exhibit.

The New Zealand exhibit is strong especially in pastoral products. Large amounts of manufactured wools, and many beautiful fleeces are on display. Carcasses of sheep, cattle, and hogs which have been frozen for transportation are shown in a big cold storage room made of glass. This industry created by the demand for frozen meat, which



exists in England and other European countries has grown to enormous proportions both in Australia and New Zealand. Grasses, grains, and fibres are shown both as raw materials and as finished goods.

The United States government exhibit is very large and complete. It is shown under the auspices of the different bureaus which make up the Department of Agriculture. Many of the most interesting points are brought to notice through the use of models and charts as well as by means of the moving picture machines.

Speaking generally there never has been an exposition in which moving pictures took such a prominent part. It would be possible to go to a moving picture exhibit every hour of every day and never once see the same film twice.

The bureau of forestry shows the apparatus used by the forest rangers in fighting fires in the national forests. There are, also, various models showing proper and improper ways of logging in forests both for the conservation of the forests and for the conservation of the water holding capacity of the hillsides. Timber testing machines, and machines for treating posts and piles with different oils for preserving them are shown.

Missouri has an elaborate exhibit of corn. All the decorations, including a portrait of the governor, are in corn. Full ears of corn 6 feet high, in which the kernels are whole ears of full size corn are placed on every post. Various placards attesting to the great wealth and prosperity of the community are shown. Many other states also have great exhibits. These take different forms. Some show dry farming operations while others are mainly the products of the soil.

The foods that are found on the grocery shelves are shown in the Palace of Food Products. Not only the food but the method of making it is shown. The raw grain, for instance, is taken to the Sperry flour mills and there milled into flour which is then taken by the cooks of ten nations and baked into bread and cakes which are distributed to the visitors.

Breakfast foods are manufactured and distributed in the different booths, as well as chewing gum, coffee, wines, fruit juices and Chinese and Japanese foods and drinks.

The livestock exhibits and special features are sure to surpass anything that ever has been done in those lines. Not only are the stock shows, which will be held in the fall, important but the permanent herds which are on view during the life of the exposition are creating great interest. These view herds are composed of typical animals of the different breeds and have been selected by the different breeders' associations as typical of the breeds which they represent.

More than 1/2 million dollars, with many special cups and other prizes, and three miles of ribbons are to be distributed to the winners in the nine big stock shows scheduled for the fall months. This amount of cash for prizes will bring out the very best blood in the country. Added to the shows are several utility contests of great interest to the farmer and stockman generally. All in all the Pacific coast is putting on a wonderful show. You can't afford to miss it.

For Better Sorghums

Careful Attention to Breeding Will Result in Increased Crop Yields

By A. C. Hartenbower

GRAIN sorghum crops have made good in Kansas. Their success is now conceded by the most enthusiastic growers of corn and wheat. The Blackhulled kafir is a type of grain sorghum that is sure to extend its growth over a very wide area. Feterita and milo are growing in favor in western Kansas quite rapidly.

The rapid increase in the acreage of these crops makes more extensive improvement in the grain sorghums absolutely necessary. The yields should be made larger, impurities should be weeded out, evenness of height should be fixed, early maturity, especially in the Black-hulled kafir, should be developed, and the production of side-branches and suckers should be eliminated to the greatest possible degree in milo and feterita. There are also other characteristics, such as drought resistance, requiring improvement, which form such complex problems that the average grain sorghum crop grower has neither the time nor the money to bring about any decided change in them. The first improvements mentioned, however, can be undertaken with a reasonable assurance of success and should form a part of the annual work of the growers.

The first improvement that should be made is in the matter of selecting pure seed. There are few fields of the grain sorghum crops that are even reasonably pure. The kafirs sometimes are mixed with broomcorn, or with the durras, or with the sweet sorghums. Seed has been sold in the market which has contained seeds of almost all of the grain sorghums. In some cases mixed seeds have been due to the fact that the seller has intentionally mixed them, while, in other cases, the farmer has mixed the seed with the intention of using them for feed and then has used them for planting or has sold them to his neighbors. Accidental mixtures have also come from natural crossing in the field, and in threshing. The sum total has served to make mixture extremely common and pure seed rather rare.

The bad results of using seeds that are mixed must be evident to everyone. The use of such seed causes uneven ripening. You know what effect that has. It also makes it difficult for the grower to get a uniform stand. The average planter plates can be arranged to plant seed of the different grain sorghum crops with fair accuracy. Especially is this true with the new types of planter plates that are being placed upon the market. Feterita seeds are large, while kafir seeds usually are small. Mixing these two kinds of seed would result in an uneven planting and in an irregular stand. In the third place, the use of such seed produces an uneven height of plants. You realize that to procure a maximum profit from your grain sorghum crops you should be able to harvest them by machinery. If you have different heights of plants this becomes an impossibility, but in the case of the kafirs, for example, an even height can be maintained and machine harvesting can be practiced.

It is, therefore, evident that mixed seed should be eliminated just as much as possible. Careful selection will bring that result. A second improvement greatly to be desired is early maturity. Some of the grain sorghum crops possess early maturity in a marked degree. Especially is this true of feterita. That this character-



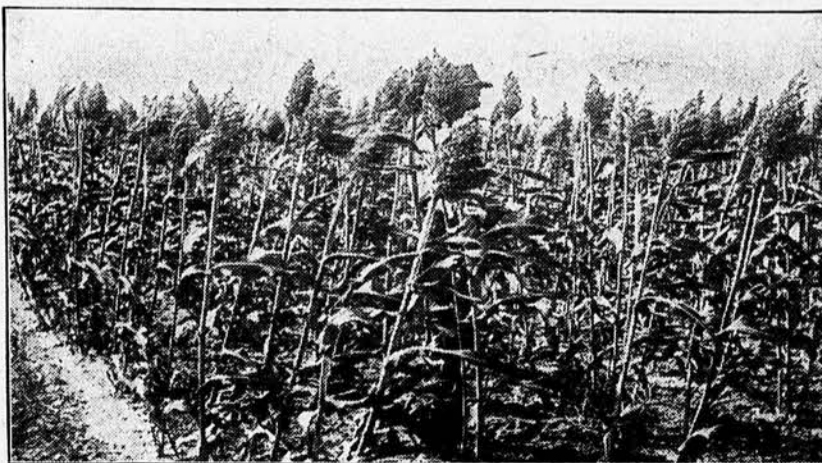
Desirable, High Yielding Heads.

istic has value was well illustrated in 1913 when many fields of feterita, because they had reached an advanced stage of development when dry weather came, were able to go on and mature while some of the other types of grain sorghum crops failed to give remunerative yields.

The early maturing characteristic needs to be improved particularly in the Black-hulled kafir. The principal reason why early maturity is desired is to prepare Black-hulled kafir to go through just such a season as we had in 1913, and to have it in such an advanced stage of maturity when dry weather normally comes that it may go on and develop to maturity. That such improvement is possible is evidenced by the work of the United States Department of Agriculture in developing a strain of Black-hulled kafir known as "Dwarf." This new type has given better yields than any other grain sorghum crop in the Panhandle of Oklahoma, where previous to its introduction and consequent earlier maturity, Yellow milo always outyielded the standard kafir.

A third improvement that should be established and maintained is evenness of height. When you have developed this characteristic in the erect-headed grain sorghum type that you have on your farm you will be able to harvest your crop with machinery. And, just think what such improvement will be worth to you! That such an improvement is not impossible has been proved at the Oklahoma Agricultural Experiment station which has been able to develop a strain of Black-hulled kafir that has practically every stalk of an even height year after year.

A fourth factor that is essential in the improvement of grain sorghums is the elimination of side-branches and suckers in feterita and Yellow milo.



This Crop Was Grown From Well Bred Seed, and the Heads Are Uniform and Compact, With Good Seed Stems.

This will be the hardest improvement to bring about among those suggested, but you can do it! You appreciate the effects of these two characteristics of feterita and Yellow milo. In feterita especially does it lead to undesirable results. One of these is an uneven maturity. This results in the production of seed that is very difficult to store so that it will keep from heating. Another bad feature is an uneven height. We have seen what effect that has. A third bad feature is a poor quality of forage. If you would grow the grain sorghum crops for a maximum profit and grow them so that they will really fill their place on your farm, they must produce good forage as well as grain. Feterita and Yellow milo will doubtless never be able to fill that requirement until you have been able to get rid of their suckering and side-branching tendencies.

A fifth improvement much to be desired is an increase in the acre yield. This insures you more profit because profit comes when the acre yield becomes greater, with nearly the same labor.

There are certain characteristics that all grain sorghum heads should possess. When you grow a grain sorghum crop for grain, in particular, you want the highest yield of grain to the head, or, in other words, you want the head to shell out well. Accurate records have shown that average, carefully selected compact heads have about 75 per cent of grain to "cob," that is, to the main stems and spikelets. In unselected heads the percentage is much lower. Every increase gives you that much more valuable feeding material, or grain. By selecting compact heads for seed and using only these, you can increase the compactness and the percentage of grain and also the profit.

Every grain sorghum grower realizes that shattering is a most objectionable feature in these crops. Feterita is very susceptible to shattering. If the crop is not harvested almost immediately upon maturity, there will be a decided loss in the amount of grain. By using seed heads that do not shatter easily you can hope to bring about a gradual improvement in this character of the head.

In the eastern portion of the grain sorghum belt, over-compactness is possible because it has been found difficult to get such heads dried out completely, and this led to molding and heating. Therefore, in that section, care must be used not to select too compact heads. Over the greater portion of the grain sorghum belt, there is, however, no danger in that particular.

The joints of the main stem of kafir heads should be short, and there should be five or more to the head; this will insure a maximum number of spikelets, with a maximum percentage of grain. Many heads are made up of long joints, and so need decided improvement.

The spikelets, or seed stems, should be covered on both the inside and the outside with kernels, and they should extend outward and then upward from the main head stem. A head in which the spikelets grow directly upward, that is, lie close to the main head stem, has few or no kernels on the inside of the spikelets, while where the spikelets extend too directly outward from the main head stem, it makes an open, flaring head which is exactly the opposite of compactness and leads to undesirable results that are very detrimental.

Fence Your Farm
The
"APEX
WAY"

Save Work
and Money

THESE two books will tell you how you can save work and money and have better looking fence the "Apex Way." Let us send them to you free. They show how easily you can put up APEX fence—how the "swinging joint" lets it fit hilly ground as readily as level stretches, and how it keeps its shape and always looks neat.

Save Post Hole Digging
By Using
APEX Steel Drive Posts

They cost less to use than wood posts and outlast a generation. Can be driven into any soil, gravel or soft shale rock. Made of elastic carbon angle steel—the strongest and toughest post material known. Use Apex Posts for your next fence—save work—save 8 to 10 cents in setting each post—have better looking fence—burn fence rows clean—ground the lightning and protect stock.

Write for Free Books
Read the helpful hints on fence building that we have outlined for you in the "Apex Way."

Janesville Barb Wire Co.
513 S. Franklin St., Janesville, Wis.

FOR LEVEL OR HILLY LAND USE



I'LL SHIP YOU THIS "Cant-Sag"

Gate On 30 Days' Trial
I prove the value of my "CANT SAG" gates before you pay. I want you to see for yourself that they can't sag and that you can't buy or make a better gate no matter what material you use. My gates are Guaranteed For 5 Years.
cost less—last three times as long as iron, steel pipe or wire. Any size you want, sent complete, ready to hang, or you can buy just the Gate Steels, hinges, bolts, etc., and make your own gates and save money. Write now for free Catalog and prices.



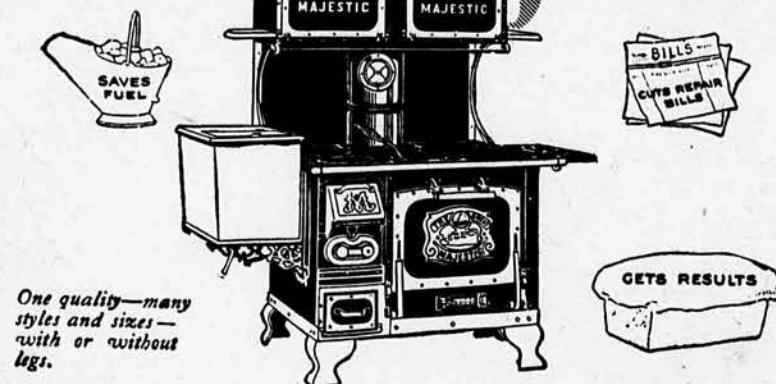
BROWN FENCE
DIRECT FROM FACTORY
Over 150 styles for every purpose—sheep, poultry, rabbits, horses, cattle. Also lawn fence and gates.
13 CENTS PER ROD UP. ALL DOUBLE GALVANIZED
Write now for new catalog and sample to test.
The Brown Fence & Wire Co., Dept. 19, Cleveland, Ohio

FARM FENCE
11 1/2 CENTS A ROD for a 20-inch high fence; 17 1/2 c. a rod for 17-in. stock fence; 28 c. a rod for 16-in. heavy poultry fence. All Open Hearth Galvanized wire. Sold direct to the farmer on 30 days FREE TRIAL. Barbed Wire, 30 rod spool, \$1.45. Catalog free. INTERLOCKING FENCE CO. Box 25, MORTON, ILLS.

Notice The Knot
We'll send you a FREE Sample of Homestead Fence. See it and compare it, before you buy. Get our money-saving book, "Fence Sense," and direct-from-factory prices, 30 days free trial and money-back guarantee. Write today for free sample and book.
HOMESTEAD FENCE COMPANY, 21 Front St., Hannibal, Mo.

WANTED IDEAS Write for List of Inventions Wanted by manufacturers and prizes offered for inventions. Our four books sent free. Patents secured or Fee Returned.
VICTOR J. EVANS & CO., 828-F Washington, D. C.

Great Majestic



One quality—many styles and sizes—with or without legs.

The economy of the best range

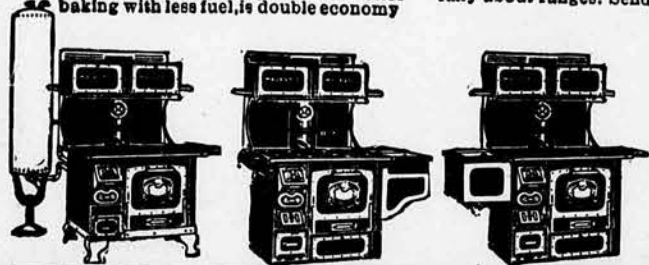
Every bread-baking that fails; every cake that falls, adds to the excessive cost of a cheap range. The range that will produce the best results is the most economical.

The Majestic gets sure baking results because the heating is distributed evenly over all parts of the oven, and is reflected onto the baking by the asbestos lining, thus baking evenly, without turning. Sure baking means economy of both food and fuel.

The heat cannot escape because the oven is hammer riveted and requires no putty. Heat being retained, less fuel is needed to maintain even baking temperature. Better baking with less fuel, is double economy.

The Majestic is made of malleable iron for strength and charcoal iron for rust-resisting—a combination that cuts repair bills and substitutes long service. Preparing better food, with less waste, and less fuel and fewer repairs, over a long period of years, is triple economy, that makes the little extra you pay for Majestic quality and service return big dividends.

The Majestic has many improvements that lighten the labor of cooking and add to its certainties. These are illustrated in "Range Comparison", a little book that will post you fully about ranges. Send for free copy today.



There is a Majestic dealer in every County in forty-two States. If you don't know him, write us for his name.

MAJESTIC Manufacturing Co.
Dept. 229
St. Louis, Mo.



Why the 1915 Harley-Davidson Won the National Championship

THE winning of the one hour National F. A. M. Championship by a strictly stock Harley-Davidson, at Birmingham, Alabama, proved conclusively that the Harley-Davidson was fast—very fast.

But speed alone was not all that was needed. The design, workmanship, and materials used, had to be such that the machine could stand the awful grind of mile after mile at terrific speed. And remember this was not a special machine but a regular stock model, such as you can buy of any Harley-Davidson dealer.

Here is proof that the 11 Horse Power Harley-Davidson motor (H.P. guaranteed) really delivers the power and that the Harley-Davidson automatic oil pump oils as perfectly at 70 miles an hour as at 3. The winning of the National Championship corroborated the experience of thousands of Harley-Davidson riders and was added proof that the 1915 Harley-Davidson had even more "staying qualities" than the models of previ-

ous years. Add to this such comfort features as Double Clutch Control, a simple efficient Three-Speed and extra long Foot Boards and you have a few of the reasons why this is—**Harley-Davidson Year.**

Any Harley-Davidson dealer will be glad to explain to you in detail the many superiorities of the 1915 Harley-Davidson or if you desire we will gladly send you a catalog on request.

More Dealers for 1915

Additions to the Harley-Davidson factories enable us to add more dealers for 1915. If, as a dealer, you are situated in a locality where we are not represented and feel qualified to represent the Harley-Davidson in keeping with the Harley-Davidson name and reputation, get in touch with us at once.

Harley-Davidson Motor Company, 1084 A Street, Milwaukee, Wis.
Producers of High Grade Motorcycles for Nearly Fourteen Years

Fine Days For Road Dragging

A Few Lines By the Jayhawker on Corn Planting Also

BY HARLEY HATCH

WE NOTE that A. Story, the carrier on Route 7, out of Lyons, thinks we were mistaken when we said that Kansas west of the flint hills had good natural roads. Mr. Story says that for the past month the roads on his route have been almost without bottom and he mentions many "moving adventures by flood and field" to show that the rural carrier in central Kansas does not always have a good road to travel. The bad roads in Rice county would not seem bad by comparison, Mr. Story. If you want to see what bad roads really are come to eastern Kansas and travel some of the black gumbo bottom roads of the Neosho valley. The roads in central Kansas never get bad; the people think they are bad, that's all. At times it is true that they have to travel through their roads and not on them, but they never have to pick their road bed up and carry it along with them as we do at times in eastern Kansas.

We have received several letters from Kansas readers regarding the trouble the Bourbon county farmer has with crows pulling up his corn. One farmer near LeRoy says he has been farming in 35 years and in only one instance has he ever seen where crows pulled up corn. That was in a dead furrow where the corn was right at the surface of the ground. He advocates a little deeper planting if the corn is being pulled up. Another farmer who also lives near LeRoy advocates the same treatment and says that in our heavy soil, if corn is planted an inch or more deep crows cannot pull up the kernel. He also says that turpentine is much better than kerosene to put on the seed to prevent vermin from digging it up.

Another writer in Garnett says that coal tar is the best preventive of damage to seed after it is planted. This writer says to put the seed corn in a tub and wet thoroughly with water which has been slightly warmed. Then pour off all the water and add to the corn enough coal tar so that after being well stirred each kernel will be coated. Then dry the corn and it will be ready to plant. The writer says that this process will insure the seed against damage by all animals and that in addition it will protect it in case the weather turns wet and cold. The tar does not injure the seed in the least. We are sure that our Bourbon county inquirer will be glad to get these pointers and we wish to thank the friends for sending them in.

The question of the depth of corn planting is one that will have to be settled by each farmer for himself. It depends on the soil and weather altogether and no exact depth can be given. On sandy soils and in a dry climate, corn should be planted much deeper than it usually is here on our heavy soil which usually is wet in the spring. We have found that on our soil it is best to plant just as shallow as possible and have the seed covered with moist dirt. Deep planting of corn here means a poor

stand should the weather turn wet and cold or wet and hot, for that matter. It is a question which will rot corn the quicker on our soil, wet accompanied by heat or wet followed by cold weather. Perhaps the wet and heat will rot the seed quicker. When the soil is very dry here at planting time we have to guess which is better to do, put the seed down to moist dirt and trust to the weather staying dry or to plant nearer the top and hope for a rain.

While the West has been covered with snow the greater part of the winter the extreme eastern part of the country has had less snowfall than for years. Very likely it all fell out west and the clouds had none to drop when they reached New England. A letter from Vermont this week tells of bare ground and motor cars running on country roads. They are wishing for snow there so they can make maple sugar. Sap does not run unless there is a combination of sunny days and freezing nights. What a sugar season this would have been in Kansas if we had only the maple trees! Lack of snow in Vermont at sugar time, not only means a light run of sap, but it means hard work gathering what there is. The sugar roads are made for sleds and not for wagons and it is hard work for the teams sledding in the sap over bare ground.

The maple sugar makers of Vermont are up against the same proposition that the livestock growers of Kansas are—the market for their product is all in the hands of two or three men. The sugar makers either have the choice of finding an individual market for their product and shipping it in small lots to consumers or of selling to the big maple sugar monopoly which has headquarters at St. Johnsbury, Vt. This monopoly pays the same price to all for maple sugar. It makes no difference what the quality may be it all goes for the same money. In fact, it has always seemed to me that the blacker and stronger the maple sugar was, the better the monopoly liked it. Maple sugar is bought by this concern to flavor other sirup which is sold to us in the West as blended maple and cane, with cane in very small letters. So the stronger the maple sugar, the more cane sirup it will flavor. But, laying the question of markets aside, I would give \$5 this minute if I were in a certain maple sugar place where a batch had just been "sugared off" and had a good big paddle to "scrape the pan."

It is interesting to compare the public sales of farm property of today with those of 20 years ago. The amounts of those 20-year-ago sales seem very small in comparison. For instance, we attended the sale of a neighbor 20 years ago in Nebraska and the whole amount realized was but little more than \$300 and the farmer had what would be thought the usual amount of equipment and stock, too. His horses sold for from \$25 to \$35. They would bring that

(Continued on Page 15.)



The Very Commendable Job With Which the Jayhawker Occupied His Leisure Hours at the End of March.

Long Lease the Only Remedy

W. E. Younkin of Nickerson, Viewing the Subject From Both Sides, Gives Some Enlightening Suggestions—Partnerships

IN DISCUSSING "Farm Tenants and the One Year Lease," before the farmers' institute, at Nickerson, March 20, W. E. Younkin, a farmer, said farmer and tenant should consider themselves partners. Mr. Younkin said he had been a land owner and a tenant for many years. Secretary Mohler, he said, reported that about one-half the farmers of this country are operated by tenants. He continued:

"The first critical and most serious practice among land owners, is the one-year farm lease, based on grain farming and cash rentals. It is wrong. Its results are in time disastrous to all concerned. It leads to soil exhaustion, and to poverty, for both the land owner and the renter. It is destructive to all concerned. This is not only my experience, but is the experience of the best writers of eastern states, where they find these conditions have too long existed. We believe that a farm lease should run from five to eight years in this country, and as far as possible all crops grown on the farm, to be fed to profit growing stock. This would give a chance to put back on the farm, the fertility and prevent any waste matter, of which the soil is in so much need, instead of marketing all that the soil produces in the way of grain, and would, we believe, return as large or larger financial remuneration to land owner and tenant.

Equipment He Must Have.

"We understand there are many farm leases now being made in Missouri and Iowa, in which the land owner and the tenant each provide half the stock to be kept on the farm; the renter puts his labor against the capital of the land owner and at the expiration of the lease, the net profit is divided equally, providing the land is fertile and good buildings are a part of the farm. If these conditions do not exist, the renter's share should be increased, for a renter cannot afford to work on a half-and-half basis, unless he has a well equipped farm, good barns, sheds, water and good fences and granary.

"The renter should obligate himself to haul out manure and straw; keep up fences; keep hedges trimmed; keep buildings painted and repaired; care for, and oil the windmill, in short not let things go to ruin. But the land owner should provide all materials free; he should see that the tenant has a garden and truck patch, and a small pasture for a team free, for his own personal use.

"If the farm has a silo, the land owner should provide the cutter; the renter should provide the power and help. As we said in the beginning, the land owner and renter should be partners, and both should be fair and liberal toward each other, else there might arise friction and this means loss to both.

When It's Home.

"When a renter obtains a long time lease on a farm, he and his family consider that it will be their home for some time. They will be interested and take pride in keeping up the farm and premises.

"As to grain contract or lease, in eastern states, it is customary for the land owner to provide seed and fertilizer against the renter's labor, the land owner to get two-fifths of the crop. This has proved very satisfactory.

"It is alarming to go over the country, and view the many rented farms. They have, perhaps, old dilapidated houses, straw racks or sheds for barns, a wobbly windmill, and a barbed wire fence for a shelter for the cattle, if the renter is fortunate enough to have any cattle. Yet the renter is expected to be a financial success. The renter has no chance to hold his crops for better prices, for there are no buildings to store it in, unless he provides them himself. This he cannot do, especially under the one-year lease.

"We say the land owner is responsible for these conditions. If the land owner does not see the need of a great change in farm leasing, the renter is helpless to better these conditions. Government statistics for Kansas, tell us that from 1875 to 1880 the average corn yield was 41.5 bushels an acre. The average yield

for the five years ending with the year 1913 was 18.5 bushels an acre. Why this great drop in the yield? Is it not because of the one-year farm lease? Land owner and tenant exacting every mite they can get from the soil? We are firmly convinced that if the land owners would give long time leases; equip the farm with good buildings; feed all the stock the farm will keep, and provide for a rotation and diversity of crops, there would be the greatest change among the renters, and land owners, for the better in our country's history."

Wide or Narrow—Which?

Which do you prefer on a muddy road or a soft field—a wide-tired wagon or one with narrow tires? This is what Harley Hatch said about it two weeks ago:

We read an article this week in which it was said that the broad tired wagon improved the roads in a muddy time while a narrow tire would cut deep ruts. We wish that writer could see the ditches made in the middle of some of our roads by these broad tired wagons. They have done more damage in a few trips than the narrow tires have during the entire muddy spell. The wide tired wagon is all right under certain conditions. We have one and like it, but for traveling on the main roads they are not so good as the narrow tires at any time and with any kind of a load.

Another farmer wrote precisely the opposite opinion. Both men are experienced farmers. What do you think about this question?

Need a Cook This Summer?

I would be pleased to confer with a few threshing machine owners who, possibly, would need a good sober, economical cook. I have had years of experience, and have dependable references. I could also secure the service of a good man for separator if desired.

W. M. Surber.

R. F. D., Washington, Kan.

A California man has invented a tackle which will make a tree when cut down pull up its stump.

SOME HARD KNOCKS

Woman Gets Rid of "Coffee Habit."

The injurious action of coffee on the hearts of many persons is well known by physicians to be caused by caffeine. This is the drug found by chemists in coffee and tea.

A woman suffered a long time with severe heart trouble and finally her doctor told her she must give up coffee, as that was the principal cause of the trouble. She writes:

"My heart was so weak it could not do its work properly. My husband would sometimes have to carry me from the table, and it would seem that I would never breathe again.

"The doctor told me that coffee was causing the weakness of my heart. He said I must stop it, but it seemed I could not give it up until I was down in bed with nervous prostration.

"For eleven weeks I lay there and suffered. Finally husband brought home some Postum and I quit coffee and started new and right. Slowly I got well. Now I do not have any headaches, nor those spells with weak heart. We know it is Postum that helped me. The Dr. said the other day: 'I never thought you would be what you are.' I used to weigh 92 pounds and now I weigh 158.

"Postum has done much for me and I would not go back to coffee again, for I believe it would kill me if I kept at it. Postum must be prepared according to directions on pkg., then it has a rich flavour and with cream is fine."

—Name given by Postum Co., Battle Creek, Mich. Read "The Road to Wellville," in pkgs.

Postum comes in two forms:
Regular Postum—must be well boiled. 15c and 25c packages.

Instant Postum—is a soluble powder. A teaspoonful dissolves quickly in a cup of hot water and, with cream and sugar, makes a delicious beverage instantly. 30c and 50c tins.

Both kinds are equally delicious and cost per cup about the same.

"There's a Reason" for Postum.

—sold by Grocers.



"STAR—A Good Thing to Pass Along"

Men Who Chew Are Men Who DO

LOOK at Woolworth's, New York, the world's tallest building. Each of its fifty-one stories was a "job" that required clear thinking, accurate action—the highest mental and physical powers. And the majority of the men engaged in the work were tobacco chewers.

Wherever buildings are being erected you'll find men chewing and boosting STAR, the great American tobacco.

You'll like the thick tasty STAR plug, that gives the utmost in mellow chewing satisfaction. You'll find that a STAR plug won't dry out like a thin plug and you'll like the honest weight—each plug a full 16 ounce pound—all the time. So many men who "do" are men who chew STAR that one day's output would build a STAR plug as high as the Woolworth building and 23 feet broad.

16 oz. Plugs
10c. Cuts

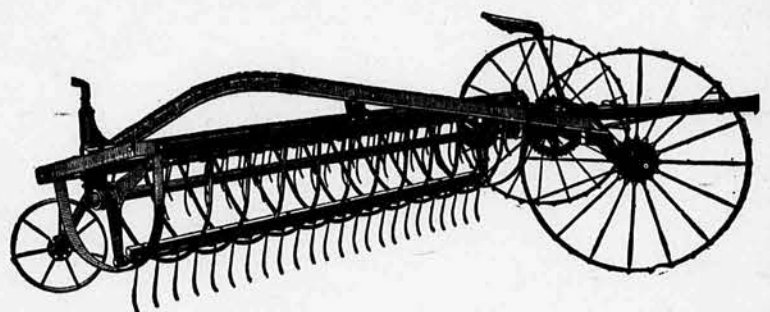
STAR

CHEWING TOBACCO

LEADING BRAND OF THE WORLD

Leggett & Myers Tobacco Co.

International Harvester Haying Machines



YOUR haying tools must be strong and steady in frame; they must work easily and smoothly; they must get all the hay and put it into the best shape possible. That is why you must consider International Harvester hay machines, for IHC hay machines have never been beaten for good work in the field or for durability, at any time or place.

IHC local dealers sell these machines. It is to their interest to see that your hay is put into the barn, stack or bale, in the best condition, regardless of the weather or accident. When they sell you an International Harvester tedder, side delivery rake, self or hand dump rake, stacker, sweep rake, loader, combined sweep rake and stacker, or hay press, they sell you a machine that you can depend upon; that will give you perfectly satisfactory service.

Drop us a line, and we will direct you to the nearest dealer handling our machines, and will also send you interesting catalogues on any one of these machines you may be interested in.



International Harvester Company of America

(Incorporated)

CHICAGO

Champion Deering McCormick Milwaukee Osborne Plano

USA





**It Is Cleaner than Scrubbing
Could Make It—and STAYS Clean**

LINCOLN Floor Paint did it. It was easy for me to apply it, and you can see the ease it means in the future. First I filled up the cracks with Lincoln Crack Filler. With the floor paint on, the cracks have almost disappeared, as you see. There are no rough places to catch dirt. No need to scrub. The beauty of my Lincoln painted floor is that it *stays* clean. It doesn't take half the time or work it used to take to keep it clean."

**Lincoln Paints and
Varnishes**

You can make your old floors new in the same way. Even the inexperienced can get excellent results with Lincoln Floor Paints. There is a Lincoln paint, varnish, stain, enamel or finish for your furniture, your woodwork or any surface, new or old—indoors or outdoors. Give you any shade or finish you desire.

Write Us for Our Booklet "Home Painting Jobs"



and learn about the many easy ways in which you can beautify your home. Lincoln painted, varnished and enameled surfaces take the backache out of cleaning. So easy to keep clean. Lincoln Climatic Paint is made especially to give the most satisfactory wear in your climate. Write today for booklet and name of the Lincoln dealer nearest you. Address

Lincoln Paint and Color Co. Dept. 25
Lincoln, Neb. Dallas, Tex.



The Family Missed "Lorimer"

Here Are a Few of the Scores of Letters From Subscribers Who Enjoy the Serial Story

SHOULD serial stories have a place in farm papers? This has been a hard question for editors to decide, and it was with some doubts as to the wisdom of their course that the editors of the Farmers Mail and Breeze decided last fall to give several columns of every issue of the paper for the next few months to "Lorimer of the Northwest." It was not that they felt the Lorimer story was lacking in anything that makes a story good, as stories go. The question was rather would people be interested in a story at all, or would they prefer to have their farm paper given over entirely to farm topics—silos, livestock, poultry, general farming methods, and all through the long list that in these days must include even garages and electric lighting systems.

Then, as it sometimes happens, an accident settled the question. An unavoidable combination of circumstances made it necessary to leave the story out of the paper for the issue of February 20. The week after, in the editor's explanation of the omission, these three questions were asked in the Farmers Mail and Breeze: "Did you miss the story? Do you like it? Do you like a continued story?" It did not take long to get answers, and the answers were all a big "Yes." The question of serial stories for farm papers is decided forever in the affirmative if 100 letters and postal cards from interested readers can be taken as a guide to what the subscribers like, and we think it can. But the best of the letters was not so much the solving of the editor's problem; it was the fine spirit of friendliness shown by the writers, from the busy housewife who wrote, "Such stories as 'Lorimer of the Northwest' make the Mail and Breeze doubly welcome to those of us who live in the country where we cannot have access to a good library," to the man who said heartily, "Lorimer of the Northwest has been a cracker-jack. We surely did miss it at this place." A reader from Arkansas wrote on a postal card, "Here goes a penny to say that I certainly missed 'Lorimer of the Northwest' last week."

might think we would not enjoy reading stories, but we have to have a little of the bright things of life mixed in with the somber hues.

P. S. My husband says to tell you he thinks "Lorimer of the Northwest" "acted the yaller dog" when he proposed to Grace Carrington at a time of such danger. He thinks she could not have refused him had she wanted to.
Reader of the Mail and Breeze.
Overbrook, Kan.

Other Pages Must Wait.

Most assuredly we missed the story February 20. We looked the paper through and back again, and my wife said, "Write them about it." Little 5-year-old Glenn said, "Send the sheriff," but we decided we would wait till next week. The mail comes to us at the noon hour and the serial story is read right away. Then at night we go over the whole paper. Yes, we like the serial, and the rest of the paper as well.

Charles A. Miksch.
R. 3, Oswego, Kan.

The Neighbors Missed It Too.

At least four members of my family missed the Lorimer story in the issue for February 20. We looked through the paper several times, and looked in the last week's paper too. One of our neighbors was inquiring about it also, so you see we all like the story very much.

Mrs. John Frost.
Blue Rapids, Kan.

So They Both Looked.

You asked if the Lorimer story is being read. I can speak for two, Miss N. M. Hall and myself. Miss Hall looked through the paper three times and thought she might have turned two leaves at once. Then I took the paper and looked it over carefully twice and was disappointed in not finding the story. We look for the Mail and Breeze every week and like to read Tom McNeal's comments. As I am Irish maybe they seem better to me than to some others.

Joseph Condell.
Eldorado, Kan.

They Certainly Missed It.

One or two of the letters said, "I was just ready to notify you to stop my paper on account of its not having the Lorimer story in it;" while another said, "I am always sorry there isn't more of the story in every paper;" and still another bore the message, "We are always wondering how many more days it will be till the story comes." A great many letters told how the writers had looked through the paper several times for the story, thinking they might have turned two pages by mistake, and not a few others repeated the sentiments of the western Kansas farmer who wrote, "A good serial story is a fine thing in a farm paper. While we always read almost everything in the Farmers Mail and Breeze, about the first thing we turn to is 'Lorimer of the Northwest.'"

"If you could have seen every member of our family pick up the paper and exclaim, 'What has become of Lorimer?'" another letter said, "you would know we all read it before anything else."

It is impossible to print all the letters that came in response to the three questions, though the cordial spirit of them all makes it a temptation to do so. The ones here given are enough to show the interest felt by subscribers to the Farmers Mail and Breeze in its serial story, "Lorimer of the Northwest."

No Age Limit For Stories.

We have been reading the story of Lorimer and have become greatly interested in it. When it did not come last week we felt disappointed and actually lonely without it. Because of failing eyesight I cannot read much, but my husband reads and I am an interested listener. We think the story fine and lay it aside to read in the long evenings. I like the story because there is the trust in a Higher Power running through it, and it portrays so vividly the hardships endured by early settlers in a new country. I know something about these things as we are early settlers of Kansas. We are now 70 years old and you

Such a Disappointment.

If you but knew how much this one family missed the serial story in the issue for February 20, you would begin immediately to look for a new story to follow Lorimer. Why, I was so disappointed last week that I even looked among the pages of advertisements for it. I usually read the paper from cover to cover, but the continued story quite frequently gets first reading.

Clyde, Kan. Milo M. Hakes.

First the Story, Then Dishes.

Yes, I like the story and follow the fortunes of "Ralph Lorimer of the Northwest" with the same zest that more than 40 years ago, as a small girl 6 or 7 years old, I followed the fortunes of "Jack White of the Wabash" which came every Saturday evening in the Weekly Cincinnati Inquirer. And if the truth must be told it is as hard now to do the dishes before the story is read as it was then, when an impatient older sister would say, "Oh, you would read if the house was on fire!" I count one of the greatest blessings of my life the enjoyment of good fiction.

Clara Neese.
R. 17, Richland, Kan.

Let's Have More Stories.

I, for one, missed the continued story, "Lorimer of the Northwest," last week. I like a good story, and this is surely that sort. Give us another when this one closes. I think the Mail and Breeze one of the best farm papers I ever saw and it seems to me it grows better all the time. We are always eager to get it every Saturday.

Gurney T. Hadley.
R. 1, Coldwater, Kan.

The average dockage of wheat in North Dakota in 1910 and 1911 was two and one-fifth pounds a bushel. If this is the same for this year it will amount to more than 90,000 tons, or enough to feed 1 million sheep through a fattening period of 13 weeks.

THE Music House. THE Music Maker.
JENKINS-Victrola
Special Outfit Suggestions With Our Prices and Terms



<p>Jenkins Outfit 4-A \$4 CASH \$6 a Week No Interest \$19.50</p> <p>Includes latest Victrola Style 4 with 12 selections on 6 double-faced 10-inch records.</p>	<p>Jenkins Outfit 6-A \$5 CASH \$7 a Week No Interest \$29.50</p> <p>Newest Victrola Style 6 with 12 selections on 6 double-faced 10-inch records.</p>	<p>Jenkins Outfit 11-A \$7 CASH \$9 a Month No Interest \$107.50</p> <p>Newest Victrola Style 11 Cabinet Model with 20 selections on 10 double-faced 10-inch records.</p>	<p>Jenkins Outfit 9-A \$5 CASH \$5 a Month No Interest \$57.50</p> <p>Newest Victrola Style 9 with 20 selections on 10 double-faced 10-inch records.</p>
<p>Jenkins Outfit 8-A \$5 CASH \$4 a Month No Interest \$47.50</p> <p>Latest Victrola Style 8 with 20 selections on 10 double-faced 10-inch records.</p>	<p>Jenkins Outfit 14-A \$15 CASH \$7 a Month No Interest \$157.50</p> <p>Latest Cabinet Style 14 Victrola with 20 selections on 10 double-faced 10-inch records.</p>	<p>Jenkins Outfit 10-A \$5 CASH \$6 a Month No Interest \$82.50</p> <p>Latest Cabinet Style 10 Victrola with 20 selections on 10 double-faced 10-inch records.</p>	<p>Jenkins Outfit 16-A \$25 CASH \$10 Monthly No Interest \$207.50</p> <p>Largest and latest Cabinet Victrola Style 16 with 20 selections on 10 double-faced 10-in. records.</p>

Write to us today and learn more about the wonderful Victrola. It will provide more pleasure, amusement and entertainment for your family than anything you have ever had in your home. Write today.

J. W. JENKINS
SONS' MUSIC CO.
1015 Walnut St., Kansas City, Mo.

Write for our free book on

LIME

its use in Agriculture.

The FREDONIA PORTLAND CEMENT CO. Fredonia, Kansas

PATENT YOUR IDEAS

\$9,000 offered for certain inventions. Book "How to Obtain a Patent" and "What to Invent" sent free. Send rough sketch for free report as to patentability. Patents advertised for sale at our expense in Manufacturers' Journals.

CHANDLER & CHANDLER, Patent Attys.
Est. 16 Years 1086 F. St. Washington, D. C.

HOME DRESSMAKING

These patterns may be had at 10 cents each from the Farmers Mail and Breeze.

Ladies' waist 7111 as illustrated is made with sleeves and side bodies of all-over lace and front and back of crepe de chine, the two stitched together along



the edge. Other combinations may be used. Six sizes, 34 to 44 inches bust measure.

Apron 6867 is cut in five sizes, 4 to 12 years.

Dress 6842 has a two-gore skirt with long tunic. Four sizes, 8 to 14 years.

Two-gore yoke skirt 6837, having tunic and slightly raised waist line, is in six sizes, 22 to 32 inches waist measure.

Dress 7120, having a one piece skirt, is in six sizes, 22 to 32 inches waist measure.

USE THIS COUPON FOR PATTERN ORDERS.

The Farmers Mail and Breeze, Pattern Department, Topeka, Kan.

Dear Sir—Enclosed find _____ cents, for which send me the following patterns:

Pattern No. Size.....
Pattern No. Size.....
Pattern No. Size.....

Name

Postoffice

State

R. F. D. or St. No.....

BE SURE TO GIVE NUMBER AND SIZE.

Cutting the Price of Flour

As the price of flour continues to rise, adding more and more to the "high cost of living," we have hit upon a plan that helps considerably. My husband took a bushel of wheat and winned it well, which took out all the chaff. It had no smut, so it was clean. Then he ground it in a two-horse sweep feed mill with medium sized burr. After putting it through twice we had 60 pounds of splendid whole wheat flour, at the cost of a bushel of wheat, which at last accounts was \$1.25, while mill flour is \$2 to \$2.10 for a 50-pound sack. Our whole wheat flour cost us about 2 cents a pound, while the white mill flour costs about 4 cents a pound. The whole wheat flour is more healthful and just as appetizing. It makes fine gems, biscuits, and bread. Made into a mush like cornmeal mush and served with cream and sugar it makes a fine break-

fast dish. We ground cornmeal the same way, with as much or a greater saving. We could have taken it to the town grinder and hired it ground for 15 cents a bushel. Mrs. J. W. Pugh. Brownell, Kan.

House by the Side of the Road

There are hermit souls that live withdrawn In the peace of their self content; There are souls, like stars, that dwell apart, In a fellowless firmament; There are pioneer souls that blaze their paths Where the highways never ran; But let me live in a house by the side of the road And be a friend to man.

Let me live in a house by the side of the road, Where the race of men go by— The men who are good, and the men who are bad, As good and as bad as I. I would not sit in the scorner's seat, Or hurl the cynic's ban; Let me live in a house by the side of the road And be a friend to man.

I see from my house by the side of the road, By the side of the highway of life, The men who press with the ardor of hope, The men who are faint with the strife, But I turn not away from their smiles nor their tears— Both parts of an infinite plan; Let me live in my house by the side of the road And be a friend to man.

I know there are brook-gladdened meadows ahead, And mountains of wearisome height; That the road passes on through the long afternoon, And stretches away to the night, But still I rejoice when the travelers rejoice, And weep with the strangers that moan, Nor live in my house by the side of the road Like a man who dwells alone.

Let me live in my house by the side of the road, Where the race of men go by— They are good, they are bad, they are weak, they are strong, Wise, foolish—so am I, Then why should I sit in the scorner's seat, Or hurl the cynic's ban? Let me live in my house by the side of the road And be a friend to man. —Sam Walter Foss.

Serpentine Crêpe

For Ladies' and Misses' Dresses

is dyed in plain, solid colors of all the fashionable shades. The soft-finished white and cream shades make especially attractive dresses for misses' wear.

It also comes in many lovely printed patterns, including the rose, wistaria, pansy, and other handsome designs. These are especially suitable for the afternoon frock, while women often choose them when they want a smart gown for social affair.

"Serpentine" can be washed as often as you like, and always keep its "crepey" look, for the crinkle is guaranteed never to wear or wash out.

The new designs and colorings are shown at most all good stores. If not found easily, write us for free samples.

PACIFIC MILLS
LAWRENCE, MASS.

Party Gowns

Ladies' Dress Pictorial Review Pat. No. 6133 Child's, No. 5063

Misses' Dress, Pictorial Review Pat. No. 6037 Ladies', No. 6176

Water for Everybody Bee Supplies

We make wells for cities and ranches. No water no pay. Write us. C. E. KITTINGER, 527 North 17th, LINCOLN, NEBR.

Write for our Big Red Catalog and Premium List.
Clemens Bee Supply Co., 129 Grand, Kansas City, Mo.

Tone and Tone Control

Two Victrola characteristics

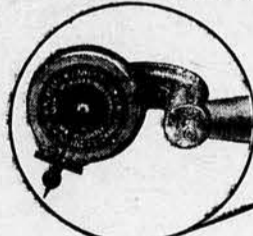
The Victrola tone is a wonderful thing. It is the tone of pure reality—throbbing with life and power. When you hear the world's greatest artists on the Victrola, you hear them just as truly as though they were singing or playing right before you.

Besides this true-to-life tone there is incorporated in the Victrola the important feature of tone-control—the ability to play each individual selection just as you personally want to hear it.

These two distinguishing features demonstrate the perfection of every detail in the Victrola. It not only brings you the world's best music in all its beauty, but enables you to enjoy it to the fullest extent.

There are Victrolas in great variety from \$15 to \$250 and any Victor dealer will gladly demonstrate them and play any music you wish to hear. Write to us for catalogs.

Always use Victrolas with Victor Records and Victor Needles—the combination. There is no other way to get the unequalled Victor tone.



The patented Victor "goose-neck" tone-arm in playing position.

"Goose-neck" sound-box tube—the flexible metal connection between the sound-box and tapering tone arm, which enables the Victor Needle to follow the record grooves with unerring accuracy.

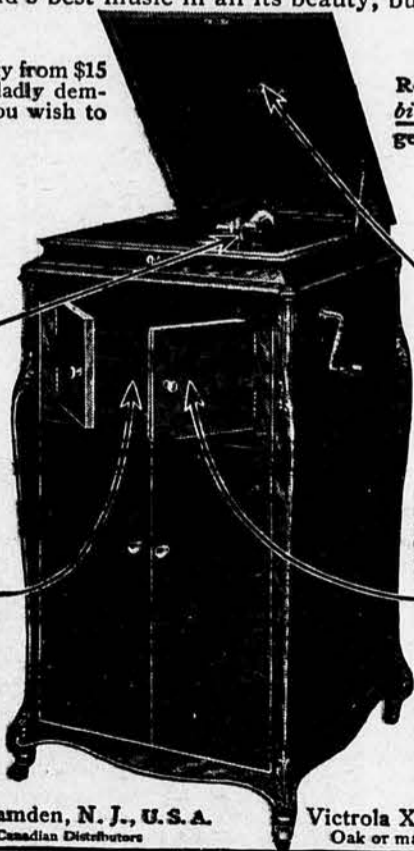


The famous Victor trademark is on every Victrola, Victor, and Victor Record.

Victor system of changeable needles—a perfect reproduction is possible only with a perfect point—therefore a new needle for each record is the only positive assurance of a perfect point. You also have your choice of full tone, half tone or further modification with the fibre needle.

Concealed sound-boards and amplifying compartment of wood—provide the very limit of area of vibrating surface and sound amplifying compartment, so absolutely essential to an exact and pure tone reproduction.

Modifying doors—may be opened wide thereby giving the tone in its fullest volume; or doors may be set at any degree graduating the volume of tone to exactly suit every requirement. Closed tight the volume is reduced to the minimum and when not in use interior is fully protected.



Victor Talking Machine Co., Camden, N. J., U.S.A.
Boston Gramophone Co., Montreal, Canadian Distributors

Victrola XVI, \$200
Oak or mahogany

The Country Gentleman

says: First thing after I bought my place I learned the good old comfy habit of carrying some "PIPER" around with me. While I'm knocking around out-of-doors there's something appropriate about biting off a delicious chew of "PIPER."

PIPER Heidsieck

Chewing Tobacco - Champagne Flavor

"PIPER" fits in mighty handy everywhere—farm—shop—office—sport. You just get the convenient habit of having some "PIPER" tucked away in your hip pocket and you'll get a sensation of 100% tobacco satisfaction.

Smack your lips over "PIPER's" famous and unique "Champagne Flavor"—all the bouquet of the ripest, richest, mel-lowest leaves of the best tobacco. You try "PIPER."



Sold by dealers everywhere, in 5c and 10c cuts—sanitary, foil-wrapped, to preserve the "PIPER" flavor.

THE AMERICAN TOBACCO COMPANY 111 Fifth Ave., N. Y.



FREE Send 10c and your tobacco dealer's name, and we'll send a full-size 10c cut of "PIPER" and a handsome leather pouch FREE, anywhere in U. S. Also a folder about "PIPER." The tobacco, pouch and mailing will cost us 20c, which we will gladly spend—because a trial will make you a steady user of "PIPER."

Farm Trucks Grow in Favor

Where Specialized Production Is the Aim, Power Transportation May Return Good Profits

THERE is a chance for the more extensive use of trucks on Kansas farms. This is especially true on places where specialized production is the aim, such as on fruit and dairy farms. There has been a considerable increase in efficiency in trucks in the last few years, which has made them much more practicable for rural conditions.

Many trucks are in use on Kansas farms; one of the more successful of these is on the Merritt Holstein farm at Great Bend. A very extensive use is made of trucks on the "101" Ranch at Bliss, Okla. One of the most successful of all is on a cream route out of Omaha, Neb. Some very accurate returns on the cost of trucks as compared with horses recently have been obtained in Michigan, by a farmer near Detroit. These results, as reported in Farm Engineering, show that it has paid well to use the power for hauling.

Table comparing Team and Truck costs for moving, standing, distance traveled, speed, and cost per 100 pounds.

In delivering 10-gallon cans of milk to the city dairy the cost was reduced from 27 to 9 cents a can. These figures are not very familiar to many farmers, because complete costs are very rarely obtained. The utmost accuracy was attempted in arriving at the figures shown in the summary, and recording instruments operated by clock work were attached to both wagon and truck. The chart shows that the team was hitched up at 8:25, drew up at the milk depot at 8:35, left for the city at 8:40, arrived at 12:08, left at 1:05 and pulled up again at the milk house at 4:30. The empty cans were unloaded and horses were driven to farm yard and unhitched at 4:40. Hence the total time of 7 hours and 56 minutes is accurately determined above man's chance of error. In like manner the chart shows that the truck was only gone from the farm a total of 2 hours and 20 minutes, or an exact saving in time of 5 hours and 36 minutes.

What the saving in delivery costs will amount to is thus suggested. This sum, great as it is, must not blind the farmer or engineer to even greater benefits that may be secured. Consider that instead of drawing up to the farm at sundown, this farmer sits down to a hot dinner at 11:30 a. m. Have clearly in mind what great possibilities this affords to the dairy farmer who loves his herd and wants to breed the best and have his stable standing full of purebred dairy cattle. Lastly, imagine the happiness and comfort for the wife and children to have the husband back at noon and near them during the afternoon and evening hours. Four horses were needed before in order to alternate teams after the 20 miles of road work; and the attention and care required, the cost of taking horses off to the blacksmith, and the high cost of the feed made the delivery of the milk of more importance than the production of it or the care of the cows. Now this is done away with. The robbers and boarders are located, weeded out and replaced; and when the motor truck gets back to

the farm it can be shut up in a shed and requires no further attention until morning.

The operating costs of a motor truck in the hands of the user or driver will vary somewhat, but the farmer, of all men, is particularly well suited to get the best results. His understanding of ordinary human requirements assures the truck of its due consideration and attention; the other difficulties disappear when common sense is applied to the operation and maintenance of the truck. Referring again to the case of the farmer who reduced his cost of delivering milk in ten-gallon cans from 27 to 9 cents, the itemized operating cost of this truck was as follows:

Table of operating costs for a truck, including body, fixed charges, driver, garage, interest, insurance, depreciation, tires, gasoline, oil, and repairs.

Table of total costs, including fixed charges and operating expenses.

Table of costs for a horse a day, including feed, bedding, shoeing, stable rent, water, and insurance.

Total The total daily cost of \$7.56 was arrived at in the following manner:

Table of costs for four horses and a wagon, including driver's pay, interest, depreciation, and repairs.

These costs were the definite results taken from the books of the Detroit man. Some of the items are high for Kansas conditions, but they are the results that were obtained on this farm. The problem of buying a truck is an individual one of course with every farmer, just as it was with this man. On many Kansas farms the use of a truck will not pay—there is not enough hauling to be done. On many of the places where specialized production is the rule a truck will pay.

Here's Another Jobless

I am 21 years old, without bad habits of any sort. I understand all farm work as I formerly lived in the West but moved to the Ozark region with my father where farm work is scarce, and unprofitable to the hired man. I have several good steady friends here who would like to have places on farms also. State wages when answering. Hunter, Mo. S. O. Skinner.

Don't expect the heifer calf to thrive on corn fodder and oat chaff. Protect her from hard winds and cold rains. Keep her thrifty and growing.



This Truck Is Used on the "101" Ranch at Bliss, Okla., and It Has Helped To Reduce the Cost of Hauling.



Let It Stand Between Your Motor and Deterioration

Hundreds of thousands of motorists in the Middle West alone—all won to POLARINE in the last seven years—know the protection, the efficiency and the pleasure resulting from this scientifically perfect lubricating oil.

Do YOU know this oil? —an oil sufficiently fluid to lubricate and completely cover the remotest friction surface.

—an oil of maximum durability and correct lubricating body at any motor speed or temperature.

—an oil that pays back its cost, not only by saving repairs but by maintaining a high re-sale value for your car.

Why experiment?—when the greatest of all specialists in matters of lubrication have experimented for you. Use Polarine.

STANDARD OIL COMPANY (AN INDIANA CORPORATION) Chicago, Ill. Use RED CROWN Gasoline. It means More Power, More Speed, More Miles per Gallon (318)

WANTED MEN \$75. to \$200 a month!

The demand for capable automobile men exceeds the supply. Our graduates are always in demand to fill good positions as Salesmen, Demonstrators, Factory Testers, Garage Managers, Repair Men, Ignition Experts and Drivers.

\$50 COURSE FREE

Six weeks from the day you enter this great school you will be able to repair any make of automobile or drive any car on the market. All who enroll now receive \$50 course in Lighting and Tractor Engineering Free. Write today for our big Free Book and the \$50.00 Free Scholarship Certificate.



AUTOMOBILE TRAINING SCHOOL Largest Auto School in the World 1142 Locust St., Kansas City, Mo.

Save 1/2 on Paint

Buy Direct From Factory!

No salesmen, no agents, no salaries, no big commissions. Farmers now buy paint from us and save this huge extra profit. Even the mail order houses can't give you such high quality paint or such low prices.

We Pay the Freight

From hen coops to barn, we have just the paint you need. Only one small profit between you and the raw materials. Buying paint this way is good farm management. Send for free color card and lowest known net prices. No mixed paints have as good a reputation as the "EVER-WEAR" Brand. Best Barn Paint, 65c gallon. Finest House Paint, \$1.15 gallon. Quality positively guaranteed. We pay all freight. Write today for book on paints and FREE Sample Offer.

CROSBY-FRANK & CO. 407 Peoria St., Chicago, Ill. (2)

Why Not Build Roads?

As we are confronted with the unemployed problem in every state in the Union, I think it would be the proper time to begin something that would give employment to thousands of idle men. I will give my idea of how it could be done.

In the first place let each county in each state decide on the kind of paving that would be most practicable to use. In some counties where there is plenty of stone, asphaltic concrete might be used, while in other counties where there is no stone the brick would be best. In nearly every county there is plenty of fire clay to make brick.

Second place: Let each county erect a brickyard or stone crusher as the case may be. Then when there is an overflow of unemployed, let each county put the idle men to work at a reasonable wage, making brick or crushing stone and paving county roads. In that way each county could take care of its own idle men.

No doubt you are wondering what this work will cost and where the money is coming from to do it. I will try to estimate the cost—based on city streets. The cost by the running foot for a 20 foot road would be about \$4 a foot; that is for brick according to the city streets with gutter and curbing and contract work.

The asphaltic concrete is considerably cheaper. If the county provides its own material and uses reasonable labor I think it could be done for one half that price or about \$2 a running foot, which would be about \$10,500 a mile.

To pave one road north and south and another one east and west which would be about 60 miles would total about \$638,000 to the county. If there were other roads angling through the county as there are in the county in which I live pave them also; if not, branch out from these four roads and pave 5 or 6 miles to accommodate those who live in the corner of the county. In that way it would accommodate everybody in the county.

This cannot be done in one or two years. My plan is to begin at the county seat and work each way on the different roads and pave as far as the money will go every year. But you will say we haven't the money yet. Which is true. I will try to explain how we could get the money.

There are about 3,600 quarter sections in each county. Assess each quarter section in proportion to the amount of benefit the road is to its owner.

We will say \$300 a quarter. I don't think there is one man in ten who would not be glad to pay for a paved road near his farm, while some would be willing to pay more. This should amount to about \$1,080,000.

Of course there are counties which are rough and thinly settled and could not afford to pay for paving. In that case they would not need it so much.

I would suggest taxing motor cars \$10 a year instead of \$5 and double the tax on motorcycles. This would give each county \$12,000 or \$15,000 a year. It would increase as the number of cars increased. Then if needed we might tax each manufacturer \$5 on each new car he sells, to be paid in the state and county in which it is sold.

With the appropriation we might get from the state and counties, and other donations we could get, I think we could start paving six or seven main roads out of each county seat at one time. With the \$1,080,000 from farmers and \$12,000 from motor car taxes, to say nothing about other donations and appropriations we should have \$1,092,000. The expenses on the four roads would be about \$633,600, which would leave a balance of \$458,400 which would pave about 40 miles more. We would expect the farmers to pay this money as the paving progressed. I am on a rented farm but I would gladly give \$100 in money and the \$10 a year on my car, also \$100 in work to have our main road paved. I am sure there are many renters who would give work and money.

I do not think there are many that would object to paying \$10 on their cars as they would save more than that on tires and gasoline. It would increase the value of farms nearly one-third. And it would lessen the cost of marketing crops about one half.

Subscriber.

Council Grove, Kan.
[We believe this writer has placed his road costs altogether too high. If paving cost

this much in the cities there might be very little of it. We are printing this letter because it is from a sincere, capable farmer. Motor cars, we believe, will be the best influence possible for good roads.]

Fine Days For Road Dragging

(Continued from Page 8.)

much with \$100 added to each one now. His cows sold for from \$12 to \$14. His corn sold for 12 cents a bushel, his hay for 70 cents a ton, and his farm implements for but little more than junk value. So it can be seen that it took a lot of stuff to bring \$300. Now the average farm sale seldom falls below \$2,000. Property all brings good prices regardless of market conditions. The total of an ordinary farm sale in Rice county, last week, reached \$5,300. Contrary to the general opinion the farmer is a genuine optimist and too often he can see a rosy outlook ahead for livestock, where the packers see only a chance to scalp the market.

A farm sold here at auction, last week for \$41.50 an acre. This farm was ordinary upland soil with fair improvements, containing 80 acres, and lying about 5 miles from a little town. It brought a fair average price for such

places. This is the second time we have seen this farm sold at auction. It was sold for \$35 an acre about four years ago, so it can be seen that these upland farms are slowly increasing in value.

No oats sown—March 30—and no present indications of sowing any inside of a week at least. It is now getting so late that if it were not for other considerations we should not attempt to sow any oats this spring, but unless we are held off until after April 10, we shall still sow the acreage we had intended having.

We have a field of 25 acres fenced in with hedge, lying south of, and adjoining, the farm buildings. Eight acres of this field is in alfalfa and the other 17 was in corn last year. This 17 acres is what we wish to sow in oats because that crop can be taken off in time this summer to plow the ground and sow it in English bluegrass. We want the grass for pasture as it adjoins the prairie pasture, and all we would have to do would be to open a gate to throw the two pastures together. As bluegrass starts early and grows late we believe it would lengthen our pasture season by a month.

Prices of Farm Products

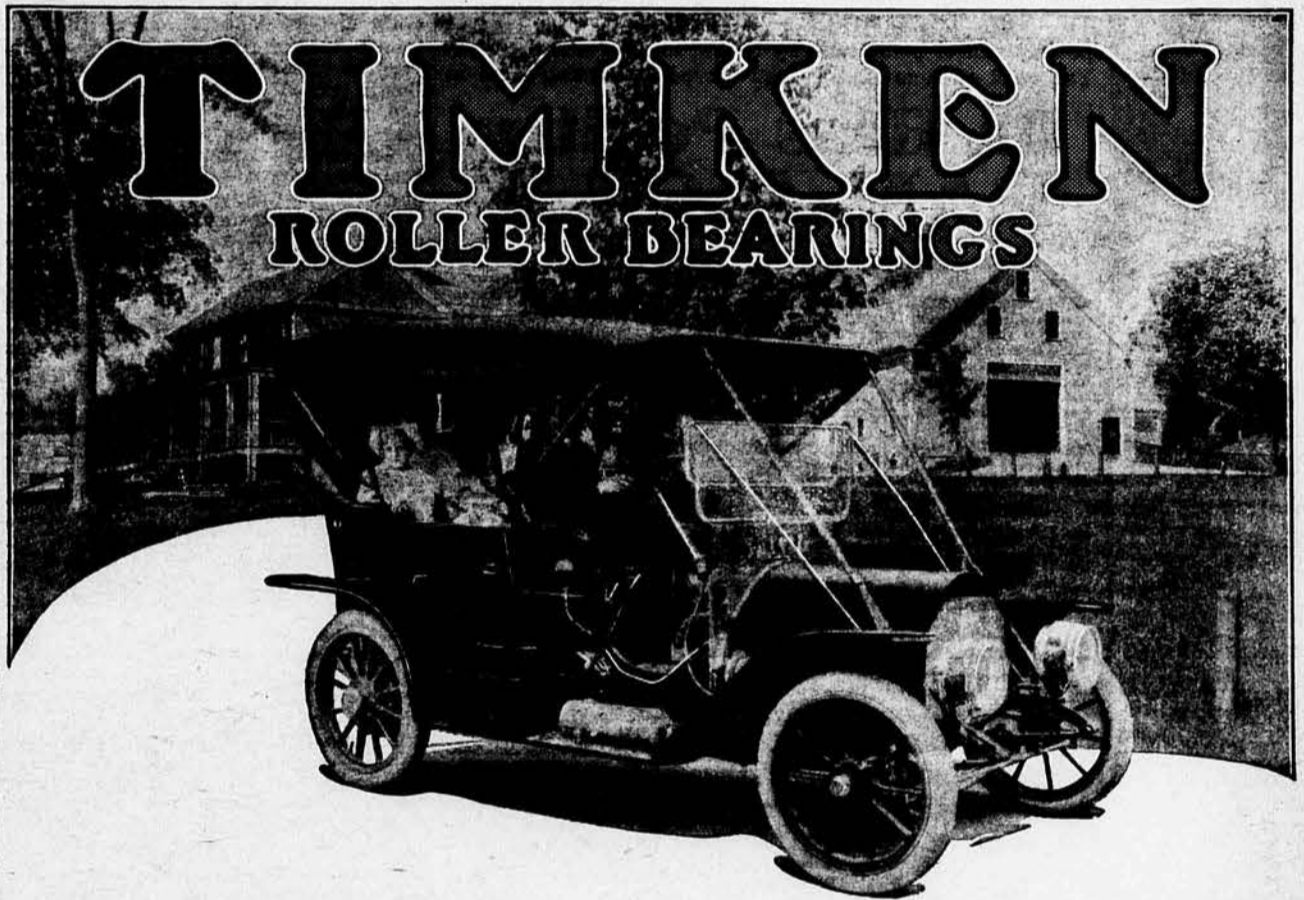
The level of prices paid producers of the United States for the principal crops increased about 2.5 per cent during February; in the past seven years the price level has increased during February 1.6 per cent.

On March 1 the index figure of crop prices was about 7.6 per cent higher than a year ago, 27.1 per cent higher than two years ago, and 12.0 per cent higher than the average of the past seven years on March 1.

The level of prices paid to producers of the United States for meat animals decreased 1.7 per cent during the month from January 15 to February 15. This compares with an average increase from January 15 to February 15 in the past five years of 1.4 per cent.

On February 15 the average (weighted) price of meat animals—hogs, cattle, sheep, and chickens—was \$6.46 a 100 pounds, which compares with \$7.27 a year ago, \$6.70 two years ago, \$5.54 three years ago, 6.19 four years ago, and \$6.71 five years ago February 15.

Never let fowls stand in strong winds. It is better to keep them penned up.



As Your Car Grows Old, Keep It Tuned Up

Retain its smoothness, its quietness and comfort. Retain its quick response, its effective power—its dependability. You bought it for these qualities—keep them in the car as it grows old in your service.

Tune up your motor, adjust the carburetor for weather and varying qualities of gasoline. Adjust the steering gear. Adjust the brakes.

And don't forget to adjust the bearings. For all bearings wear same as other moving parts and need adjustment if you are to keep the full power and efficiency of your car.

Inside Knowledge that will Help You



If wear occurs, leaving slight space between cup and roller, adjustments can be made by moving the cup or cone in the direction of the arrows.

As 1-2 and 3-4 always remain exactly parallel, the adjustment brings the different surfaces into perfect line-contact, and no principle of the bearing's efficiency is impaired.

WHEEL bearings must turn easily of course—to eliminate friction. But they must fit snugly too—to prevent wheels from wobbling.

As bearings wear—all bearings do—they get loose. A little looseness allows the pound that makes faster and faster wear—more and more looseness.

Bearings on shafts that support gears—transmission, driving and differential gears—when they wear (as all bearings do) allow the shafts to drop slightly out of line. The gears on those shafts get slightly out of correct mesh. Imperfectly meshed gears make noise and waste some of the power.

The trouble goes on at an increasing rate unless promptly checked by adjusting a type of bearing that can take up looseness when it develops.

Use of steels best adapted for bearings, extreme accuracy of manufacture, strict following of heat-treat-

ment formulas developed by years devoted to concentrated study of bearings alone—these are producing bearing parts that have wonderful wear-resisting qualities.

And yet bearings—all bearings—do wear.

The Timken Roller Bearing is the one type of bearing that can be adjusted to completely eliminate the effects of its slight wear.

The Timken Roller Bearing carries the load and resists the shocks along the lines of its rollers instead of on the points of balls; its tapered construction enables it to meet side pressure and shocks in addition to direct load; its line contact distributes pressure and hence minimizes wear—these are three great principles that are kept in constant operation for your benefit by the fourth great principle of adjustability.

You can see how important it is to have adjustable bearings in your car if you are to retain its effectiveness as a power vehicle—as it grows old in your service.

Other interesting facts about bearings are told in the Timken Primer No. F-63 "On the Care and Character of Bearings" which, with a list of the Cars using Timken Bearings, will be sent free, postpaid on request.



The Timken Roller Bearing Company
CANTON, OHIO



DETROIT, MICH.

Purebred Cows Are the Best

No Farmer Can Afford To Keep Scrub Animals

BY HARRY O'BRIEN

DO YOU keep dairy cows or just cows? Many a Kansas farmer is satisfied to keep a cow so long as she will produce a calf each year and produce enough milk and butter for the table. If you expect to go into the dairy business this is one of the first things to stop.

Several years ago a well known dairy magazine conducted an investigation of 100 creamery patrons and the records show that one of the patrons made \$2.30 for every dollar invested in feed for his cows, while his neighbor made \$1, or just broke even; and another lost 50 cents. Why is it that one farmer was able to take a certain amount of feed and through the machinery of the dairy cow convert it into products worth \$2.30 while his neighbor with the same amount of feed and practically the same amount of time, lost 50 cents? The answer is in business efficiency and in better cow machinery.

Don't Buy Scrub Cows.

The scrub cow is always a losing proposition. She seldom pays for her keep, and her milk is poor both in quantity and in quality. Never buy scrub stock. Always buy purebred dairy cows and breed them to a purebred dairy sire. Dairying is a business and must be conducted as such in order to make a profit. In the beginning, the adaptability of the man has a great deal to do with it. Success or failure of the dairyman depends first on whether he has a special liking for that particular work. His interest should be so keen that he can form an acquaintance with every cow in his herd and learn to know the individual characteristics of every animal. Then he should lose no opportunity to turn everything to account from a business point of view.

If the man has the proper interest, the next thing is to get possession of good cow machinery for his business. There are three ways by which he can obtain these. The first is to have them given to him. The second method is to buy them. The third is to raise them.

For most men the first is a possible but not a probable method. The second is all right, provided the man knows where to buy and can afford it. The third method is most applicable for the most of us—that is to raise our own cows. In other words, it means to build up a good herd from your own stock by breeding and selection. You will at once say, that you have always selected the calves from the best cows in order to propagate your herd. How do you know that you were selecting the best?

Breeds To Consider.

There is no best breed of dairy cattle—except the one that comes nearest fulfilling your individual needs. Among the several special dairy breeds you are sure to find one that will suit your conditions. In making a selection, bear in mind what disposition is to be made of the milk. If the dairyman is to sell the milk, the Holstein will give a large amount not so rich in butterfat. For the man interested in selling cream or butter, the Jersey or Guernsey will be more satisfactory. Above all, do not get a dual-purpose cow and try to go into the meat production business along with the dairying. Either be a beef man or a dairy man.

More important than selecting a breed is selecting the individuals. It is upon the individual cows that the success or failure of the herd will rest. In considering an individual the first and all important question is what can she produce in one year. Then type, purity of

breeding, pedigree, and health should be considered.

There is just one sure way to determine the butterfat production of a cow and that is by weighing and testing the milk at regular intervals. Some farmers object to this saying that it takes too much time. The Illinois Experiment station determined by actual count that it took about 10 minutes a day to sample and weigh the milk. The total amount of time required in a year to make these records would not exceed 2 hours a cow.

Dairy Characteristics.

Guess work does not go in the dairy business, especially when the yearly production of a cow is in question. Recently a world championship Jersey cow was sold, along with a herd of other average cows. She was singled out from the rest of the herd only by testing. When the testing has been done, then you will have some basis for selecting the calves for the future herd.

Next to butterfat production is the dairy type. At one time all breeds of cattle produced only enough milk to rear their young. The present high production of dairy cows has been brought about by selecting and breeding always with the idea of milk and butter production in view. By reason of this selection, dairy cattle have acquired certain conformation and characteristics.

These characteristics are first the extreme angular form; second, the large development of the barrel; third, a well developed udder. Just why the cow has been bred for this angular form is hard to explain. The idea has been evidently to breed cows that would put every ounce of energy into milk instead of putting it on her back as flesh.

The large barrel is an indication that the animal can handle a large amount of feed. To obtain a large flow of milk, something must be put into the cow machine in order to produce the milk. The udder is the organ that manufactures the milk. It is reasonable to suppose that a well shaped udder would contain more of the milk follicles and blood vessels than a poorly shaped udder.

Like produces like and the offspring tends to resemble the parents. It is upon this law that the dairyman must base his selection of pure breeding stock. It is upon this that he must base his improvement of the herd. This law has a tendency to vary however where the parents are impure or of mixed breeds. With scrub animals there is no certainty about the characteristics that will be transmitted to the offspring.

After the breed is selected and the individuals picked, success still depends upon two important things. The milk must be manufactured by proper feeding and care. Then it must be handled properly after it is produced. There is a right way and a wrong way to do all of this and neglect at any one of several points is likely to bring failure. These must be faced squarely and solved or the dairyman will suffer the consequences.

Powder

She—Why do authors always speak of a smile creeping over the heroine's face?
He—Perhaps they're afraid that if it went any faster it might kick up a dust.
—Penn State Froth.

Dry mash containing 10 per cent meat scraps should be fed to breeding stock, as it will produce strong fertile eggs, and plenty of them.



DE LAVAL Cream Separators are by far the most economical

Real economy is never short-sighted. It never confuses PRICE with VALUE.

PRICE is what you pay for an article.

VALUE depends upon the amount and quality of service the article gives you.

You get by far the greatest actual VALUE for your money when you buy a De Laval—BECAUSE it will give you much better and longer SERVICE than any other separator.

From the standpoint of its greater durability alone the De Laval is the most economical cream separator to buy, and when you also take into consideration its cleaner skimming, easier running, greater capacity and less cost for repairs, the price of the "cheapest" machine on the market is most exorbitant compared with that of the De Laval.

And there is no reason why you should let its FIRST COST stand in the way either, because the De Laval may be purchased on such liberal terms that it will actually pay for itself out of its own savings.

A De Laval catalog to be had for the asking tells more fully why the De Laval is the most economical cream separator, or the nearest local De Laval agent will be glad to explain this and many other points of De Laval superiority. If you don't know the nearest local agent, simply write the nearest De Laval main office as below.

The De Laval Separator Co.

165 Broadway, New York

29 E. Madison St., Chicago

50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

An Opportunity

No field of endeavor today offers so much to ambitious, successful men as salesmanship. The live wires in every line of business are the men who sell things.

The sales department of Farmers Mail and Breeze offers an exceptional proposition on a salary and commission basis to men in Kansas who are anxious to increase their earning capacity. Previous selling experience is not essential. With our offer an income is assured for anyone, size of the income commensurate with the effort expended. We are anxious to explain our proposition to responsible men.

Agency Division

Farmers Mail and Breeze

800 Jackson Street

Topka, Kansas



Dairying With Purebred Cows Will Insure An Excellent Income and Will Soon Pay For the Home, the Barn, the Silo and a Good Farm.

Maybe You Can Win This \$25

The Boys Will Find a List of Corn and Kafir Contest Prizes Given in This Article, Too

IF YOU are planning to win the \$25 prize that Mr. Capper is to give to the Kansas girl who makes the best record in growing tomatoes this year, you should fill out the entrance blank shown below, and you should do it right now before you have a chance to forget.

It costs nothing to enter the contests, and what you grow will more than pay you for your work. It takes only a little ground. A plat 33 feet square is the right size. You have the privilege of buying your plants ready to set out, if you wish. In that case you must charge yourself with the extra cost, of course, and this will make your profits a little less than if you had grown your own plants. Enough hardy well-developed plants for your patch will cost very little, though.

Otis E. Hall, of the extension division of the Kansas State Agricultural college, and agent of the United States Department of Agriculture for the boys' and girls' club work in Kansas, has offered to help our club members in any way that he can. One bit of advice that he will be able to give next summer, and that will be appreciated, too, will be about the cost and operation of



In Her Tomato Patch.

a canning outfit. Girls in many states have made a profit in this way when the market price of fresh tomatoes was not very large.

The rules of the Capper tomato contest are simple. You grow the tomatoes, and we will see to it that the \$25 prize is ready to send to you when the contest closes next fall. It will be necessary for you to have some mature, disinterested person help you measure the ground next fall and vouch for the correctness of your report. This is a little trouble, but it is a protection to you, because you will know that no one else will get the prize unless she really makes a better record than you do. We are always mighty careful to make sure that the winning reports are correct.

Accurate records of all expenses and receipts must be kept so that a correct report can be made of net profit. In case some of the fruit is used on the home table, a record either by weight or by dry measure should be made of the amount so used, and credited to the account at market price.

Basis of Award:
Largest yield 50 per cent
Largest profit 25 per cent
Records and Story..... 25 per cent

You can make a lot of spending money from your tomato patch. Eloise Parsons of Clarinda, Iowa, is the young woman whose record in the Department of Agriculture's garden and canning clubs was the best in the 33 northern states last year. Miss Parsons obtained a yield of 5,318 pounds of tomatoes from her tenth-acre plat. Her costs were \$15.61, and her net profits were \$115.57. Her costs cover every item of expense in raising the crop, including rent of land, her own time, estimated at 10 cents an hour, fertilizers and sprays. Here is what she says about the work:

"I hoed my tomatoes after every rain and whenever I thought it necessary. As we moved to this place in the spring, and the garden was not plowed in the fall, many weed seeds were not destroyed, and I had a very hard time keeping the weeds down. The plants did not grow very large, and as it continued very dry, I decided it was not best to stake the plants. The plants did not make a very great growth and very few needed pruning. I hoed them until the tomatoes began to ripen and the plants were too large.

"After school began I was kept very busy in picking the tomatoes. For several weeks it took me three evenings of the week to get over the entire patch and often gathered more than 10 bushels. During the second and third weeks of September we had so much rainy weather that I could not gather the tomatoes, and after the rains they began to ripen so rapidly that many of them split. On October 12 and 13 I had to gather the green tomatoes. I gathered 1,083 pounds. There was no sale for these. We used all we could and I gave some to the neighbors, and still a great many went to waste. They were wet when they were gathered, and as it turned warm again, they rotted very fast. We had a great deal of company this summer, and our other garden vegetables were not as good as usual, so we used a great many tomatoes fresh."

Here are the prizes for the Capper boys' and girls' contests for 1915:

BEST ACRE YIELD OF CORN.

1. Silver trophy cup.
2. Bronze medal.
3. Bronze medal.

BEST ACRE YIELD OF KAFIR.

1. Silver trophy cup.
2. Bronze medal.
3. Bronze medal.

BEST EXHIBIT OF 10 EARS OF CORN.

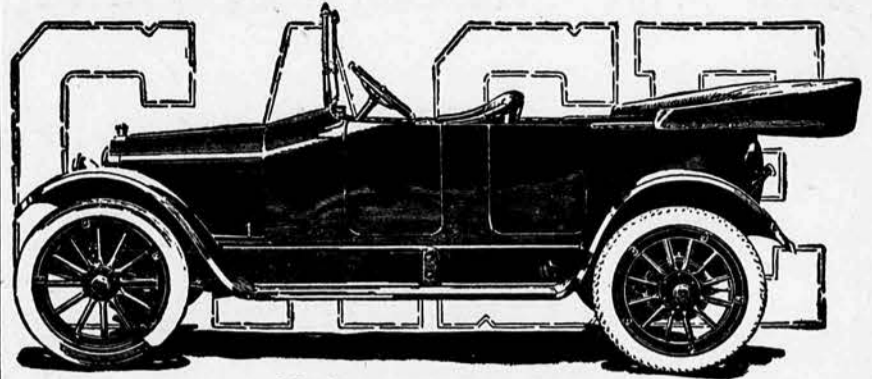
1. Cash prize \$25.
2. Bronze medal.
3. Bronze medal.

CAPPER GIRLS' TOMATO CONTEST.

1. Cash prize \$25.
2. Bronze medal.
3. Bronze medal.

Horses should be fed at exactly the same hour every day. They will fret if they are fed at irregular hours. If you are compelled to work them before they have finished eating do not feed them again until the next feeding time to avoid colic.

The extension division of the college of agriculture, University of Wisconsin, is offering farmers courses in automobile work for drivers.



The Name Behind the Goods

Judge Your Car Year-After-Next

Time is the big test that your car must meet. No matter how well it performs the first year—it is next year and the year after that tell the story of service or disappointment.

The time really to judge the CASE "25" is at the end of the third or fourth year. Then you will fully understand why we are so particular to build mechanical perfection into every CASE car.

Our catalog tells in detail of the many parts of this car where we spend just to keep your cars out of the repair shops and to give you complete confidence and satisfaction in your investment.

Least in Price—Greatest in Value

Of the popular-priced cars the CASE "25" costs you least, we maintain, because we include extra accessories to the value of \$110.25. Our price is \$1350—less 5 per cent if cash—and the CASE comes equipped with Extra Tire and Tube on Rim with Tire Cover, Weed Non-Skid Tire Chains and 8-Day Clock.

These items are necessary—particularly for country driving. Other cars do not include them. Deduct their value—\$110.25—

from the CASE price, and then compare it with other cars.

CASE cars offer an extra value because we can afford to put more money into their materials and workmanship. We save on selling expense where others must spend, for CASE cars are sold by the same world-wide organization that handles the entire CASE line of farm power machinery. And this saving goes into the cars in added value.

Send for Catalog and learn about the CASE—"The Car With the Famous Engine."

Case "25" Complete \$1350—5% Discount if Cash



CASE



The Car With the Famous Engine

NOTE: Ask us for 1915 catalog picturing and describing our entire line of CASE Steel Threshing Machinery, Steam, Gas and Oil Tractors, CASE-RACINE Tractor Gang Plows, Corn Shellers, Baling Presses and Road Machinery. Yours on request. Mail a postcard.

J. I. CASE T. M. COMPANY, Inc. Founded 1842 Dept. 534, Racine, Wis.

Branch Houses at

Great Bend—1512 Main Street
Wichita—402 South Wichita Street

This Enters You in the Contest

ARTHUR CAPPER, 800 JACKSON STREET, TOPEKA, KAN.

Please enter me in the
Best Acre Yield of Corn contest.
Best Acre Yield of Kafir contest.
Capper Girls' Tomato contest.

My name is.....

P. O. or R. F. D.....

My age is.....

Properly filled and mailed as directed, this blank entitles the signer to the full benefits of the club and contest, without further notice or formality.

ZENOLEUM

A Remedy for All Live Stock

A Standardized coal-tar disinfectant, insecticide, animal dip; always the same.

Use Zenoleum; get more milk from your cows; more pork from your hogs; more wool from your sheep; more eggs from your hens; more work from your horses. In short, make more money in the Live Stock business by using this great preventative.

Used and Endorsed by 50 Agricultural Colleges

Our guarantee: If Zenoleum is not all that YOU think it ought to be, you can have your money back; no letters, no talk, just money back.

Prices: postpaid—8 oz. 25c; qt. 50c; gal. \$1.50.
Ask for our free 1915 Live Stock Life Insurance Policy.

The Zenner Disinfectant Company
327 Lafayette Ave., Detroit, Mich.
Use Zenoleum Lice Powder for Poultry.






Style, refinement, service, comfort and wear are represented to the utmost degree in our fine shoes for ladies.



Mayer

HONORBILT SHOES

No matter how much more than our price you are willing to pay, better material and workmanship positively can not be secured. We buy the market's best of both—try them.

WARNING— Always look for the Mayer name and trade mark on the sole. If your dealer cannot supply you, write to us.

HONORBILT

We make Mayer Honorbilt Shoes in all styles for men, women and children; Dryox, wet weather shoes; Yerma Cushion Shoes, Martha Washington Comfort Shoes.

F. Mayer Boot & Shoe Co., Milwaukee

The Giant Painter Says—

"A Shabby Man can take a back street, but a shabby house stands right there and advertises lack of paint or lack of good paint."

"I always recommend

Lucas Paint

Purposely Made for Every Purpose

for folks who take pride in a home. Comes always the same—best materials, mixed by perfect machines, in a factory where they've been practicing good paint-making 66 years. "Way cheapest in the long run, too."

FREE Transparent Color Scheme Demonstrator, greatest convenience ever devised for selecting color combinations. Also latest bulletin, "How to Save Money on Paint" and Home Book of Painting Hints. All free on request. Write

Office 84, **John Lucas & Co. Inc.** Philadelphia Pa. 14



Big Ben

Made in La Salle and Peru, Ill., by Westclox



—there's Big Ben

What if some important job calls for a get-up long before sunrise?

What if the household must be astir for a prompt breakfast right on the scratch?

—there's Big Ben.

Big Ben will get you up and out either way you tell him—with a straight five minute call or ten successive taps at half-minute intervals.

His pay for service is \$2.50 in the States—\$3.00 in Canada. If your jeweler hasn't him, a money order addressed to his makers, Westclox, La Salle, Illinois, will put him in your employ.

The "Why" of Artificial Light

Artificial light is produced by heating a substance to a very high temperature, at which it incandesces, or gives off light. Some substances are better adapted to produce light than others. Either they incandesce at a lower degree of heat or produce a light of a higher quality.

In the electric lamp, the filaments resist the electric current. This resistance or friction generates heat that incandesces the filaments. Tungsten is a metal substance better adapted for electric lighting than the carbon filaments originally used. It incandesces at a lower temperature and accordingly uses less electric current, and at the same time it produces a higher quality of light.

The Common Oil Lamp.

The oldest source of illumination is the yellow fire light, and it generally is recognized as the poorest quality of light of any of the sources of artificial illumination.

With the introduction of kerosene in 1859, when the first oil refinery was opened up at Oil Creek, Pa., there was a slight improvement in yellow flame lighting. The kerosene burners were cleaner and more convenient to handle than the pine knots or candle dips previously used, but the quality of the light and the efficiency of illumination were about the same.

The earliest kerosene lamps were generally of the flat or the solid wick type and burned in an open yellow illuminating flame. Later what is generally known as the Rochester center draught lamp came into use. This lamp used a cylindrical wick and allowed air to get into the flame from both the inside and the outside of the wick and was an improvement over the flat wick types.

Light from a fire flame is produced by the incandescence of carbon particles just as they are burning; when carbon is heated to 2000 degrees Fahrenheit it incandesces, but at 3100 degrees, it burns. The point at which the carbon gets hot enough to incandesce and become useful as a source of light is so close to its burning point that its activity as a lighting medium is very brief, and fresh carbon must always be in turn heated up to produce a continuous light. This is the reason for it being very inefficient.

How White Light is Produced.

The blacksmith may heat a piece of iron or steel in his forge to such a high temperature that it will incandesce and produce light. The quality would be poor and the manner of production very inefficient, because iron is not adapted for use as a light-giving substance.

The incandescent mantle was invented by Count Von Welsbach, about 20 years ago.

It consisted of a combination of two metals, thorium and cerium, in an infusible state. These earths when mantled or covered over a flame or other source of heat become incandescent very easily and give off a beautiful light. The thorium and cerium metals are twice as efficient in giving off light as the tungsten metal and 16 times as efficient as carbon and perhaps 100 times as efficient as the blacksmith's iron.

One of the greatest improvements in kerosene oil lighting since its introduction has been to employ an incandescent mantle in place of the yellow flame. Such lamps are especially constructed for the use of the mantle and designed to burn the oil in a blue non-luminous flame instead of the yellow flame. This blue flame is hotter, does not require as much oil, does not emit the bad odor and is better adapted in all ways for use under an incandescent mantle.

Since crude oil or petroleum has been refined, it has yielded three principal fuels which have been adapted for lighting purposes, naphtha, gasoline and kerosene. Naphtha and gasoline have never been commonly used in regular wick lamps, because of the extreme danger of fire and explosion, and have found their greatest use in pressure systems, especially for street and other exterior lighting.

Kerosene Has High Fuel Value.

Since the advent of the automobile and other gasoline engines, the demand for gasoline has been very large, greater than the available normal supply, consequently oil refiners have reduced the quality of gasoline by mixing with it heavier oils, as kerosene, and at the same time increased its cost above kerosene.

This reduction in quality of gasoline has been a very serious one for lamps designed to use a good grade of gasoline and has resulted in the generators and nozzles of such lamps clogging.

It is because of the high fuel value of kerosene that it has been difficult to burn it in a blue flame and realize its full value. Only within the last two years have satisfactory blue flame kerosene mantle lamps been on the market.

The first kerosene mantle lamps were put on the market six or seven years ago and were imported from Germany. There were many different kinds, but none of them were satisfactory. The first German mantle lamps were sold throughout the country by agents who sold for cash and moved to the next town. The development of the mantle lamp in the last few years has been very marked. Some manufacturers are willing to send a lamp to a customer for trial without any deposit being made by the customer. This surely indicates that the lamps are giving satisfaction, and the kerosene mantle lamps are here to stay.

Cow Is Unthrifty

One of my cows has been standing around with her head down and her ears drooped for the last month. She does not go off with the other cows, sometimes, and when she does go with them she eats only a little before she lies down. She seems to eat all right when I feed her but her hair stands the wrong way and she is getting thin. Can you tell me what the trouble is and give me a remedy?

W. A. F.
Woodward County, Oklahoma.

The symptoms submitted are simply those of unthriftiness. This may be due to any number of chronic ailments. The cow may be suffering from tuberculosis which would be disclosed by a tuberculin test. She may have chronic lung fever and this can frequently be diagnosed by carefully listening to the lung sounds, though it usually requires an expert to interpret these sounds correctly. There are many other diseases having the same symptoms as described by this correspondent and I would suggest that he consult a graduate veterinarian.

Dr. R. R. Dykstra.
Kansas State Agricultural College.

Money for the Church

(Continued from Page 7.)

We have our annual bazaar and chicken pie dinner the first or second Saturday in December. Besides the chicken pie we serve bread, butter, mashed potatoes, cold slaw, cranberry jelly, cake or plum pudding, and coffee. We serve from 4 to 10 p. m.

On one side of the dining room are the booths decorated in Christmas colors. At our last bazaar we had a Santa Claus store in one booth, which was for dolls and toys, and it was in charge of Mr. and Mrs. Santa Claus.

We had a booth for readymade clothes, laundry bags, clothes pin bags, tea towels, kitchen towels, aprons and dust caps of every description, children's aprons, dresses and bibs. All were given, and little was added to the cost for making.

The fancy work booth brings in the most money, as many busy people want these handmade things for Christmas presents and know they are much more reasonable in price than they could be bought at the city stores. The homemade candy booth is well patronized, as there always is a nice variety.

The food exchange has a good patronage. There are pies of all kinds, cakes, bread, butter, canned fruit, jellies, fruit salads, baked beans, dressed chickens, sometimes ready-cooked chickens, all these ready for the Sunday dinner. We made \$95.20 last December.

We served dinner in our church dining room last summer to the "Boosters" from a neighboring town. We charged 35 cents, as there was considerable expense, and it netted the society \$29.40. We served plenty of bread and butter, roast beef with brown gravy, mashed potatoes, fried chicken, slaw, pickles, fruit, pie, and iced tea.

We make comforts for 50 cents, and quilt quilts for \$1 a spool. We consider this the hardest-earned money we get. It all takes work, but where all are willing to do their share it is not a great burden on any one. And we have many social times together.

Mrs. F. R. Wycoff.
Wilsey, Kan.

The man who has always bowed down to one political idol never realizes how absurd his devotion appears to others.

Foot and Mouth Notes

BY TURNER WRIGHT.

The foot and mouth situation in the United States continues to improve. The United States Department of Agriculture announced last week that the disease has been practically eradicated. The government report issued April 1, showed only one infected herd in the country at that time. This herd was near Syracuse, N. Y. Two other infected herds were reported late last week. These were in Winnebago and Kane counties in Illinois. Only a few infected herds have been reported since March 25.

Figures compiled by the United States Department of Agriculture show that 124,141 animals were slaughtered from the time the disease was discovered until March 25. The cost to the federal government for animals slaughtered is estimated at 2 million to 3 million dollars. The federal government paid only 50 per cent of the value of the animals, and the state governments, in most cases, paid the other 50 per cent. This makes the total value of the animals slaughtered between 5 million and 6 million dollars. It should be remembered, however, that this is not the total loss caused by the disease. It is too soon to obtain an accurate estimate of the total cost of eradication.

There has been no outbreak of the disease in Kansas since March 16. The infection seems to be under control in this state. The quarantine officials are

The great need in our public life is more earnest men, more patriotic men, broader men, men big enough to sink their individualities and their differences of opinion in team work, and for the sake of team work in any right direction. And we greatly need that high appreciation of a public trust which should inspire every party man elected to serve the people, with a passion to approach his duties and do his work, not as a party man, but as a true, devoted, steadfast representative of that public to which he has in his official oath sworn to give his allegiance and the best there is in him.

becoming more hopeful with the improved weather conditions. The "cleaning up" process is being pushed in the infected districts as rapidly as possible.

It was reported in several newspapers last week that J. H. Mercer, livestock sanitary commissioner, had issued an order prohibiting the shipment of cattle to Kansas pastures unless the owners would agree to bear all loss from any outbreak of foot and mouth disease which might occur. Mr. Mercer denies making such an order. His denial follows:

"I see that a report that I will install a rule prohibiting the shipment of livestock into Kansas for grazing purposes unless the owners will sign a release from any obligation on the part of the state to pay for the destruction of such livestock in case they were destroyed on account of becoming infected with foot and mouth disease has been circulated in some newspapers. I do not know where this originated as I have authorized no one to give out such a report. In fact I have made no such statement. I am not going to issue an order on this subject but I am going to ask the farmers and pasture owners of the state, especially those of Cowley, Sedgwick, Sumner, and Butler counties, to make a special effort this year to burn off all premises such as pastures, meadows, and ravines where rubbish may have accumulated; and to clean and burn all rubbish in corrals; and to haul all manure out on the farm. This will give the sunlight a chance to disinfect the premises."

Mr. Mercer also points out that it is very important for the property owners along Satchel creek and Walnut River to burn all drift wood and rubbish along these streams. Burning this rubbish will be an effective measure in preventing further spread of infection. This work should be pushed without additional notice and all premises cleaned at least by April 16.

The quarantine against the shipment

of all livestock except horses and mules, from places where foot and mouth disease has existed, into Kansas probably will be maintained. This applies to practically all states north of the Tennessee line and east of the Mississippi River. Mr. Mercer states that the rule will not apply to any great extent against the shipment of dairy cattle and purebred breeding stock. Normal shipments from states north, west and south probably will be restored in a short time.

While the situation is more promising than it has been for several months it is still too soon to remove restrictions. Men who are contemplating buying dairy or other breeding stock should remember there will be danger of bringing in infection for several months. It will be well to avoid purchasing any stock in territory which has been infected or which must pass through territory which has been infected, this summer.

Coin Harvey's Book

"The Remedy," by the author of "Coin's Financial School" and "A Tale of Two Nations," has been received from the press of the Mundus Publishing Co. The book is unusual, as everything from

this writer's brain is certain to be. It is not for the idlers. It is a volume for persons who think and do things, and it contains in the back, several detachable blanks on which readers may enter their names for contributions to be paid when Mr. Harvey shall have accumulated \$250,000. This money is to be used in financing an educational campaign whose object is to be character building. Mr. Harvey is planning and working at his beautiful home at Monte Ne, Ark., where he may be addressed by those interested in his book. It would be a good idea for every voter, especially women, to read "The Remedy" before casting another ballot.

Meat Competition is a Myth

(Continued from Page 11.)

were more smaller packing houses situated nearer the places where the stock is grown and the meat consumed. A large waste in needless freight charges and commissions could be eliminated. This probably will be the final result of the movement to develop co-operative packing plants in this country.

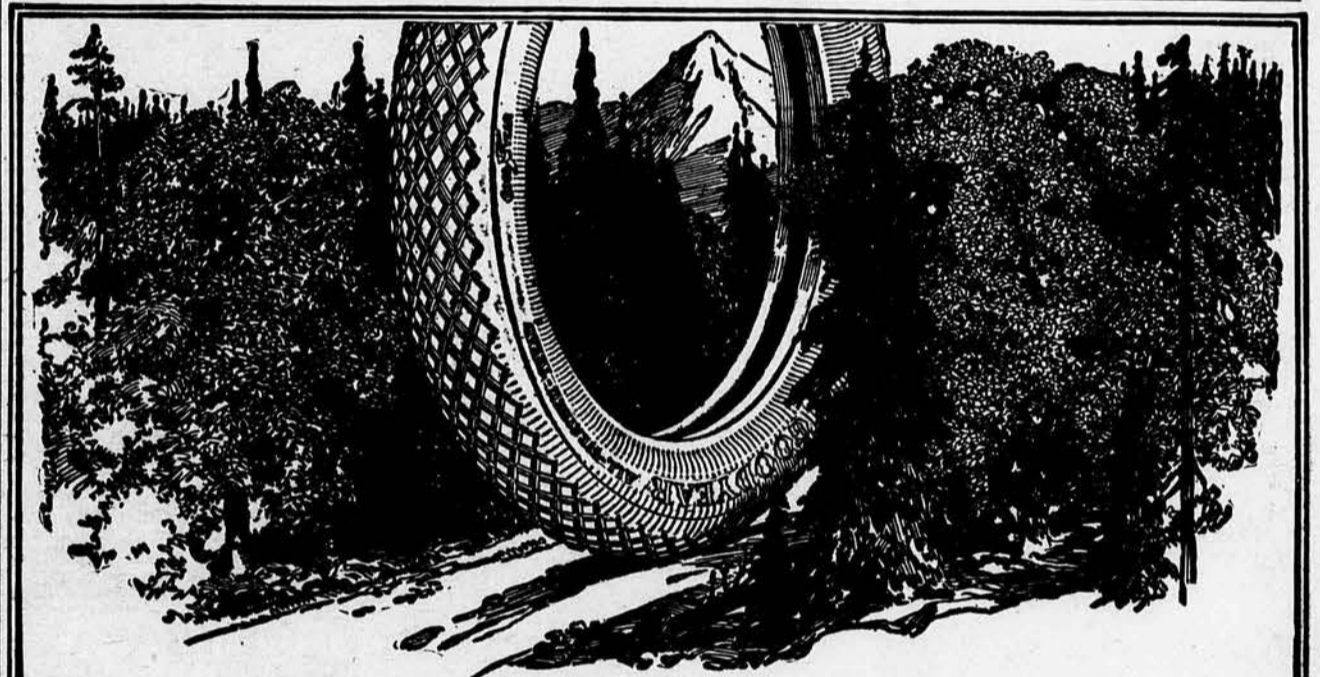
More immediate relief, however, would be obtained by placing the packing com-

panies under the jurisdiction of a public utilities commission. They are in reality public service corporations and there does not seem to be any good reason why they should be exempt from public supervision. Advertisements of large profits made by the packers for the purpose of selling bonds, and newspaper reports that "In the packing centers the greatest activity in 16 years; forces working day and night; all products contracted for a year ahead at highest prices" do not seem quite in harmony with the prices farmers have been forced to take for their stock.

The hope is that the Federal Trades commission will take up this question of livestock and meat prices as soon as possible notwithstanding some eastern politicians think "Big Business" should not be regulated in any way.

Plant the kind of vegetables you like—the important thing is to get in enough of them, and to give them good care. If this is done it will reduce the living costs, improve the quality of the food on the family table and make country life more agreeable.

It is a good practice to give the horse a little hay before it eats its grain.



The Maximum Tire
Yet Price Reductions for Two Years Total 45%

Since the beginning there have been two policies on tires. One has been to skimp tires to make the price attractive. The other has been to secure lowest cost per mile.

Goodyear started many years ago to build the best tire possible. We went to extremes. We created a department of experts—costing \$100,000 yearly—just to find ways to build tires better.

We created the Fortified Tire.

That means a tire protected against trouble in five exclusive ways.

These features were costly. For a long time, these Fortified Tires cost users one-fifth more than other standard tires.

Jumped to the Top

Yet Goodyear tires, despite the price, became the largest-selling tires in world. They have remained so ever since.

Their success is amazing. Last year we sold about one Goodyear tire for every car in use. Yet we have a hundred rivals.

Then came price reductions.

Multiplied output brought down our cost. Rubber and fabric also

came down. Within two years we made price reductions totaling 45 per cent. Our last one was on February 1st.

Tires Never Skimped

Yet never in one item have we skimmed these tires. Every year something has been added. And we still are spending \$100,000 yearly to find ways to better them.

They still excel in these ways:

In our No-Rim-Cut feature. In our "On-Air" cure, which saves countless blowouts. That alone costs us \$1500 daily.

We form in each tire hundreds of large rubber rivets to combat loose treads. In each tire base we vulcanize 126 braided piano wires to make the tires secure.

Our anti-skid tread—the All-Weather—is made double-thick and tough. That combats wear and puncture. The grips are sharp and resistless.

You need these protections, and you ought to get them. They mean less trouble, more mileage, less expense. Men all around you are enjoying these savings. Ask them what they mean.

This quality tire at today's quantity price is the greatest value in Tiredom. Any dealer will supply you.

GOOD YEAR
AKRON, OHIO
Fortified Tires

Fortified Against {
Rim-Cuts—by our No-Rim-Cut feature.
Blowouts—by our "On-Air" cure.
Loose Treads—by many rubber rivets.
Insecurity—by 126 braided piano wires.
Punctures and Skidding—by our double-thick All-Weather tread.

THE GOODYEAR TIRE & RUBBER COMPANY, AKRON, OHIO
Makers of Goodyear "Tire Saver" Accessories; also Goodyear "Wing" Carriage Tires and Other Types

dent that he had allowed his passion to master him.

"Will you all turn against me, you dividend-hunting traitors?" he thundered. "You whom I brought here, and spent the best of my life for, squandering my daughter's patrimony on this colony until she too sets her will against me. Then listen to me. You shall do none of the things you say. By heaven, you shall not. There shall never be a factory in my settlement. In spite of you—I say—you shall not—do—one—of them!"

His voice broke, and his jaw dropped. The hand he had swung up fell to his side, and I heard a faint cry as he sank limply into his chair. He lay there with his head on the carved back gazing at his rebellious followers with glassy eyes.

I do not know who was the first to move, but in a moment I was standing near his side, and while a confused bustle commenced behind us I saw Lyle slip an arm beneath his neck.

"Bring water, somebody! Ask Miss Carrington for brandy—don't tell her what it's for," he said. "Hurry, he's either in a fit or choking."

A man brought the spirits, and Lyle mopped Carrington's forehead with a wetted handkerchief, which was probably of no great benefit, while when with the assistance of somebody I managed to open his clenched teeth and pour a little brandy down his throat, a faint sign of returning sense crept into his eyes. He looked at us in a puzzled manner, saying in short gasps, "Lorimer and Lyle! You shall not—I tell you!"

I believe this was the last time he ever recognized us. When his face grew expressionless, Lyle, who laid him back again, turned to me.

"Did you notice that he moved as though he had no power in his left side?" he said. "Foster and Broomfield, come here and help me. Armadale, you go and tell Miss Carrington tactfully."

We left consternation behind us when after the return of the unwilling Armadale we carried the Colonel into his great bedroom, where he lay breathing stertorously while Foster remained to assist his sister. Then the murmurs broke out as I returned, and each man looked at his neighbor in dismay, until there was once more stillness when dressed in some clinging white fabric Grace stood with a stern, cold face in the doorway.

"You have spoken sufficient for one day," she said, and some of those who heard her afterward observed how like her voice was to her father's. "Enough to kill my father between you. May I ask you, now that you can do no more, to leave this house in quietness?"

The climax had filled them with consternation. They had acted in all honesty, and I cannot think they were to blame, but the riders of Carrington, stalwart, courageous men, slunk out like beaten dogs under the gaze of the girl. When they had gone, she beckoned me.

"Ride hard to the railroad, and don't return without a doctor from Winnipeg. I wish to hear no excuses or explanations. Every moment is precious—go!"

I went, much as did the others, and found Lyle, who looked very shamefaced fumbling with his saddle cinch outside.

"It's an unfortunate business, but of course we never expected such a sending—heaven forbid!" he said. "Well, if the wires will do it we'll bring out the best doctor they've got in Winnipeg. With all respect to them I shouldn't like to be Foster left behind to face those two women. Go home, and abuse me for making an unprecedented mess of it if you like, the rest of you!"

It was a hard ride to the railroad, for we did not spare the beasts, and when the instrument clicked out a message that the doctor was ready but could not start before the next day's train Lyle wired back, "Come now in a special. We guarantee expense."

Then he turned to me. "I think we were justified in what we said; but he was our chief, and a good one for a long time. Now I'd give up the whole scheme to set the thing straight again."

In due time we brought a skillful surgeon to Carrington Manor, and waited very anxiously until he descended in search of us.

"It is by no means a common case," he said. "Mental aberration and partial paralysis. Miss Carrington refers me to you for the possible cause of it. I gather that Colonel Carrington was a headstrong man who could brook no opposition to his will and was subjected to great excitement at a meeting you held."

"Yes," replied Lyle. "Without going into unnecessary details, he strenuously resisted a project we had decided on, and the defeat of his wishes apparently came as a shock. He was speaking vehemently and collapsed in the middle of it."

"What one might have anticipated," said the doctor. "I scarcely think

the result will be fatal, but Colonel Carrington will never be the same man again. It is quite likely that he will not recover the use of his mental faculties, though it is rather premature to speak definitely yet, and I should not unduly alarm the two ladies." Then, perhaps noticing the genuine distress in Lyle's face, he added, "I don't think you need attribute too much to the incident you mentioned. It was only the last straw, so to speak, for I fancy the patient had been under a severe mental strain for a long time, and from what his sister tells me he was predisposed to attack, while some other cause would probably have precipitated the crisis."

I sent word asking whether Grace would see me, and receiving an answer that she would see no one I rode moodily back to Fairmead. As Lyle had said, we were sorry, and should have given much to undo what had been done, but it was too late, and I felt that Colonel Carrington who could never have admitted a public defeat had, unyielding to the last, made a characteristic ending.

The New Ruler of Carrington.

A MONTH slipped by, and though I rode over often to the Manor it was seldom that I had speech with Grace, and never saw her father. The attack had left him with intellect clouded and limbs nearly powerless on one side, while he would hardly permit either his sister or daughter, who were the only persons he apparently recognized, to leave his sight. It was also with some trepidation that I awaited the first interview with Grace, but this vanished when she came in showing signs of an anxious vigil but only pleasure at my presence.

"I am sorry that I spoke so to you, Ralph, that awful day," she said. "For hours together I have thought over all that happened, and though it was hard to overcome a feeling of resentment against the others, and even you at first, I tried to judge them fairly; and, if it is not disloyal to say so, I think they were right. Some day, when there will be many things to settle, I hope to tell them so; but I cannot do it yet."

She would say nothing in the meantime as to her own plans, beyond that before she could consider herself there was much to be arranged that concerned her father and the Manor, and with this I had to be content. Lyle also showed his regret in a practical fashion by visiting the Manor constantly and supervising the farming, though I knew his own holding suffered in consequence, and by his advice young Foster had been appointed bailiff at a salary. Meanwhile, Harry and I were busy almost night and day, for when the sowing was finished I brought out carpenters and set them to work extending Fairmead, while with our own hands we hewed wind-felled timber where we could find it in the bluffs ready for them and the creamery. It was often necessary to ride long leagues for birches stout enough, and we frequently slept on the bare earth or in the wagon beside our work.

To please a friend in Winnipeg I had accepted the services of a destitute British mechanic, who, when he arrived at Fairmead, with his fare advanced at our expense, demanded the highest wages paid in Canada, and then expressed grave doubts as to whether he could conscientiously undertake the more laborious parts of the framing, because he was a cabinet joiner, and this, so he said, was carpenter's work. We had met others of the kind before, who had made their employers' lives a burden in the old country, but they were the exception, after all.

"You can please yourself," said Harry. "I'm a land-owner and ploughman; but if I hadn't my hands full already I'd tackle anything, from making bricks to framing bridges, for the wages you're getting. However, to please you, we'll call the operation joinery."

We had further trouble with this individual, who continually lamented he had ever come to a country wherein there was no beer, and derided his Ontario comrade for doing too much. The longer a job lasted the better for those employed on it and the rest of the profession, he said; to which, as we heard later, the Ontario man replied: "If the job lasts too long in this country they pretty well fire you out of it."

At last, returning one morning wet with dew from a damp bed on a bluff, where we had slept after toiling late the night before, we decided to dispense with his services.

"Good heavens, man! if you get on at that rate it will take you two years to finish," I said, when I found him tranquilly notching the ends of some beams with mallet and chisel. "How long do you spend over one? And didn't I tell you to use the axe?"

"Half a day to make a good job! There's no man in Canada can teach me what tools to use," he said; and,



60,000 FRUIT TREES AT LESS THAN COST

To advertise Dyer Bates trees to Mail and Breeze readers 60,000 Apple, Peach, Plum and Grape reserved for this offer.

I grow trees by the million—that's why I can afford to send out 60,000 trees at less than cost, to advertise the Dyer Bates way of selling trees fresh, straight to the people who plant them. My customers everywhere are saying, "Never saw finer trees, how can you sell them so cheap?" Seeing is believing—that's why I am making this big advertising offer. Look at my prices. This stock is strictly A-1, guaranteed to please you—don't forget that. Money can't buy better trees.

HERE'S WHAT I OFFER YOU:

Apple Trees

Table with columns for variety, quantity, and price. Includes varieties like Gano, Jonathan, M. B. Twigg, Ragan, Rome Beauty, Stayman Winesap, and Winesap.

Peach Trees

Table with columns for variety, quantity, and price. Includes varieties like Champion, Blood Cling, Chinese Cling, Crawford's Late, Elberta, Mamie Ross, Late Elberta, Salway, and Mayflower.

Apricot Trees

Table with columns for variety, quantity, and price. Includes varieties like Moorpark and Royal.

Grape

Table with columns for variety, quantity, and price. Includes varieties like 5000 Concord No. 1, 1,000 Worden, and 2,000 Niagara.

ORDER NOW—DON'T DELAY

Now get a pencil and paper—make out your list—pin your check to it and send it in right now. Get that orchard planted this spring. Remember you don't risk a penny when you order from Dyer Bates. If the stock isn't exactly as I say—if you aren't more than satisfied, send it back and I will refund every cent. That's fair and it makes you safe. Send the order today.

TERMS Cash with order, packing free, you pay freight or express, stock guaranteed to reach you dormant, and in first class condition.

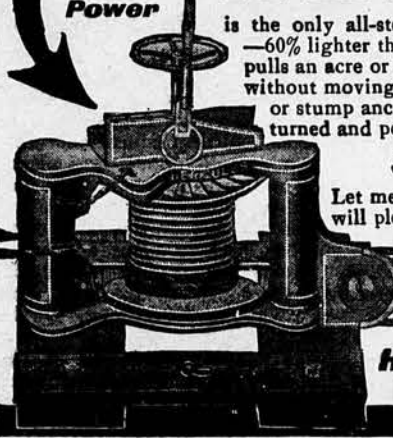
THE DYER BATES CO., 906 East 9th, Winfield, Kan.

Get My Price on this Great Stump Puller Now!



Stumps cost you too much money. Pull them out! Get Hercules. Now is the time. I'm making a very special sacrifice-price offer. Only a few men will get in on this proposition. Never such an opportunity before. Same 30-day free trial offer—same 3-year unqualified guarantee against breakage. Write me

All-Steel Triple Power HERCULES



is the only all-steel triple power puller made. 400% stronger—60% lighter than others. Pulls biggest stump in 5 minutes—pulls an acre or more of stumps a day—pulls 3 acres of stumps without moving machine. Has double safety ratchets—is self or stump anchored, built low to the ground and is carefully turned and polished to make light draft.

Send In Your Name

Let me send you my fine book and price. My book will please you. Read all the letters and see all the photos sent in by Hercules owners. Compare the regular catalog price with the special figure I'll quote you and see how much you save. Address me personally—a postal will do.

B. A. FULLER, President HERCULES MFG. CO., 328-23rd St., Centerville, Iowa.

His Silo Story

I purchased a one-piece stave silo, and an interest in a cutter, two years ago. We got along fairly well filling the silo the first year, except that we had some trouble in getting an engine to pull the cutter. Alfalfa threshing was in progress at that time and that was more profitable for the engine owner. We had a gasoline engine and a saw rig and we purchased another engine; last year we pulled the cutter with two gasoline engines, one on the ban pulley and one on the cutting pulley. This method worked fairly well. We filled eight silos, cutting about 8 or 10 tons of silage an hour into 1/2 inch lengths. We had to pay about 3 1/2 cents a ton for the gasoline used. I consider that the cash income paid all the expenses.

I cut 140 tons this year at an expense of \$20, not counting my own work. I exchanged work with neighbors and saved hiring teams and corn binder. I had three men in the silo, five teams and three extra helpers, one at the cutter and two in the field. In August, I cut 13 acres of corn and put it in the silo, making about 70 tons. I began feeding September 12, and about October 15, I began filling the silo with cane and kafir. I made an extension of 7 feet to the silo with common 1 by 4 flooring with two hoops around it, which makes about 30 tons more capacity. After the feed settled a few days, I cut a few loads more and then let it settle a few more days when I put in a few more loads.

I have fed silage every day since September 12, and I have never fed anything except alfalfa hay that is nearly as good for stock as silage. Alfalfa is quite expensive at present, and I find that silage makes a cheaper feed. I do not think that it costs any more to put 20 acres of corn in the silo than to put corn in the bin and fodder in the stack and it certainly is worth two or three times as much to the stock.

Corn or kafir are good for silage. I prefer to use that with the least grain, and my guess is that corn will prove the best feed. I am feeding silage quite largely to my horses, taking care that no moldy silage gets to them. Half their ration is silage. I have just sold a team of mares that were fed on silage at a satisfactory price. They did not have any grain except when they were working.

If the hot winds come in July and August and the rain stays away, we can still smile for there has never been a year so bad that we had nothing to put in the silo. If the rains come in November and December, it does not matter to us because our silage will not rot and the cattle cannot tramp it in the mud. If the storms and blizzards rage in January and February, we do not worry for our feed is warm and convenient. In April when other cattle are running the fence lowing for grass, we are fixed because we can give our cattle silage. I am convinced that I never made a better investment than when I purchased a silo and an interest in the machinery that goes with it.

Don't be in a hurry to fill your silo. Many farmers have not been well satisfied because they filled their silos too early. Plan early for help and be sure that your machinery is in good condition. If you do not own your machinery, engage it early. Remember that the size of your herd should determine the size of your silo and the length of the feeding season, the height of your silo. Some men are dissatisfied because their silo is too large for their herds. It is like opening a half gallon of canned fruit for a family of two. It spoils before it is eaten. Nathan Pickett.

R. 3, Augusta, Kan.

Wages of Farm Labor

The money wages of farm labor averaged during the last year about 1.7 per cent lower than during the preceding year, but about 9 per cent higher than five years ago.

The wages a month without board averaged, for the United States, \$29.88 during the last year, which compares with \$30.31 in the preceding year, \$27.43 five years ago, and \$19.97 fifteen years ago. State averages last year ranged from \$16.50 in South Carolina to \$56 in Nevada.

Wages a month, including board, averaged \$21.05, compared with \$21.38 in the preceding year, \$20.01 five years ago, and \$13.90 fifteen years ago. State

averages last year ranged from \$12 in South Carolina to \$39 in Nevada.

Day labor other than harvest, without board averaged \$1.45 a day, compared with \$1.50 the preceding year and \$1.29 five years ago. State averages ranged from 82 cents in South Carolina to \$2.54 in Montana.

Day labor other than harvest, with board, averaged \$1.13, compared with \$1.16 a year ago and \$1.03 five years ago. State averages ranged from 64 cents in South Carolina to \$1.80 in Montana.

Day labor at harvest time, without board, averaged \$1.91, compared with \$1.94 a year ago and \$1.71 five years ago. State averages ranged from \$1.06 in Mississippi to \$3.25 in North Dakota.

Day labor at harvest time, with board, averaged \$1.55, compared with \$1.57 a year ago and \$1.43 five years ago. State averages ranged from 82 cents in Mississippi to \$2.68 in North Dakota.

Stocks of Grain on Farms

The Crop Reporting Board of the Bureau of Crop Estimates, from reports of correspondents and agents, estimates that the amount of wheat on farms March 1, 1915, was about 152,903,000 bushels, or 17.2 per cent, of the 1914 crop, against 151,809,000 bushels, or 19.9 per cent, of the 1913 crop on farms March 1, 1914, and 156,483,000 bushels, or 21.4 per cent, of the 1912 crop on farms March 1, 1913. About 60.7 per cent of the crop will be shipped out of the counties where grown, against 53.9 per cent of the 1913 crop and 61.6 per cent of the 1912 crop so shipped.

The amount of corn on farms March 1, 1915, was about 910,894,000 bushels, or 34.1 per cent, of the 1914 crop, against 866,392,000 bushels, or 35.4 per cent, of the 1913 crop on farms March 1, 1914, and 1,289,655,000 bushels, or 41.3 per cent, of the 1912 crop on farms March 1, 1913. About 18.6 per cent of the crop will be shipped out of the counties where grown, against 17.2 per cent of the 1913 crop and 21.8 per cent of the 1912 crop so shipped. The proportion of the 1914 crop which is merchantable is about 84.5 per cent, against 80.1 per cent of the 1913 crop and 85 per cent of the 1912 crop.

The amount of oats on farms March 1, 1915, was about 379,369,000 bushels, or 33.2 per cent, of the 1914 crop, against 419,476,000 bushels, or 37.4 per cent, of the 1913 crop on farms March 1, 1914, and 604,216,000 bushels, or 42.6 per cent, of the 1912 crop on farms March 1, 1913. About 29.4 per cent of the crop will be shipped out of the counties where grown, against 26.5 per cent of the 1913 crop and 30.9 per cent of the 1912 crop so shipped.

Hardy Bermuda Grass

Bermuda is a southern grass where it has grown for hundreds of years. It grew wild needing no cultivation but yielding abundantly of nutritious food for stock. During later years it has been introduced into more northern districts. Taking it out of its latitude it became necessary to improve it in quality and hardness. The difficulty was that it would winter kill. As the value of the grass became better known the desire for its hardier qualities increased. The time was when it would not grow successfully in central Oklahoma. Now it is acclimated or hardy.

It grows here now without even the fear of its freezing out in winter or drying out in summer. Twenty years ago the agricultural station at Stillwater, Okla., began some experiments with all kinds of grasses. After twenty years only the Bermuda grass remains to show for the trouble. It alone has adapted itself to our conditions.

When first planted the grass grew. Soon a dry cold winter came and a very large per cent of it winter killed. From the few remaining stems the plat was re-established. Again a cold winter killed a part of the roots but not so many. From these the plat was soon re-established. Now it is growing bountifully upon all types of soil in central Oklahoma. We got our start of Bermuda from the station by selecting the hardiest and most thrifty plants. These have been improved every year by selection and improved cultural methods. Without question it is the most useful of all pasture grasses. Once established it will stand the hardest of tramping and grazing. "Bermuda" Mitchell. Chandler, Okla.

Send Your Address

Here's Good News

For Every Farmer Who Has Manure to Haul

No more back-aching, hand loading of manure for your farm. No more waste of time needed in tending your crops, or waste of valuable fertilizer, by not getting it out on the ground. The hardest job on your place is made easy by the

Anderson Loader

This is a strong dependable, practical tool. It is not an experiment but has been tested out under all kinds of conditions by farmers from Texas to Minnesota. Here is what one of them writes.

"Your Loader does all that is claimed for it in manure of every description. It saves time, muscle and money on one of the hardest jobs on the farm." (Signed) Geo. W. Townsend

It will save your time, and your money, and your muscle. My Make Good or Money Back Plan gives you the privilege of trying it out and seeing it work on your farm at my risk. Send your address for my big illustrated Circular, telling all about the machine and my trial offer. Mail coupon or a postal today.

Fred E. Anderson, Mgr.

Anderson Mfg. Co.
530 Market St.
OSAGE CITY,
KANSAS



The NEW DROUTH-RESISTING, STOCK-FEEDING CROP

"FETERITA"

50 to 80 BUSHELS PER ACRE!

The newest discovery in the way of a feeding crop is "Feterita" which last year—its first real test year—produced an average yield of 24 1/2 bushels per acre. It is claimed to be the one most successful drouth-resisting crop ever discovered, and properly planted and with very little rain, should yield from 50 to 80 bushels per acre—some yields last year were said to reach 100 bushels with only two rains.

Here is an Opportunity to Experiment With It on Your Own Farm

This is a new crop. The editors of Farmers Mail and Breeze, as our readers know, are not claiming everything for it. It has not yet been sufficiently tested as to its feeding value, nor as to its adaptability to our territory. It is certain that it has great drouth-resisting qualities. It is worth experimenting with. Thousands of farmers in Kansas and the Central West are going to try it out this year on a small scale. Some farmers are very enthusiastic over it.

Here is what one successful planter writes about "Feterita." "I raised a crop of Feterita and am well pleased with the results. The grain is larger than Milo, fully as soft, and much whiter than Kafir. Its feeding value is equal to either Kafir or Milo and does not contain the dust that accompanies both Kafir and Milo. The head is erect on the stalk. It branches out from the roots, is a good drouth resister, and matures 25 days earlier than Kafir. Two crops have been raised this year on the same ground. The second crop was planted from the ripe seed of the first." Another farmer says: "We were more than delighted with the fact that the chinch bugs did not bother us. We had Milo maize planted in the same field with it and the chinch bugs took it completely, working right up to the Feterita but stopped there."

One Pound FREE! The supply of this seed is limited, but we secured a sufficient quantity to enable us to offer one pound free to every one who sends \$1.00 to pay for a new, renewal, or extension subscription to the Farmers Mail and Breeze. One pound should plant about half an acre and raise a crop of seed for a second planting. Send us your subscription at once and get one pound free and postpaid before the offer is withdrawn.

Farmers Mail and Breeze, Dpt. FS-10, Topeka, Ks.

- - Use This Coupon or Letter Paper - -

FARMERS MAIL AND BREEZE, Dept. FS-10, Topeka, Kan.

I enclose \$1.00 to pay for a new, renewal, or extension subscription for one year to the Farmers Mail and Breeze. You are to send me free and postpaid one pound of "Feterita" seed as per your advertised offer.

My Name

Address

Bagworms Are Destructive

BY GEORGE A. DEAN.

The bagworms are dark-colored larvae ("worms") which live in grayish or brownish bags covered with bits of leaves and twigs.

For several years the bagworms have appeared in damaging numbers in the eastern and southeastern parts of Kansas and have defoliated evergreens, shade trees and fruit trees.

The eggs are deposited in the fall in the bag which has already served for the protection of the larva and pupa. Such a bag may contain as many as 2,500 eggs.

When full grown they attach their bags to the twigs and pupate within them. Late in the summer the male moths, which are winged, emerge and fertilize the wingless females, which remain partly inside the bags.

When the trees are small and few in number it is practicable to pick off the bags and burn them. This should be done while the trees are in a dormant condition, because the bags are then easily seen.

The insect may be successfully controlled by the use of an arsenical spray applied when it first appears, and by following this with a second spray within about two weeks.

Stumps

When President Wilson urged the American farmer to get every available foot of ground under cultivation, this year, he was taking a broad view of the biggest chance the American farmer ever had.

They are going to quit fighting over in Europe one of these days. When spring comes and the great armies begin to move things will happen. More towns, cities and fields will be destroyed and there will come, perhaps, the greatest battle of all and some kind of peace.

And after peace, what? When again the seas are free and ships can come and go what will happen? The greatest cry for American foodstuff in our history, the best prices, the opportunity of a lifetime for the farmer to make money - lots of it.

Get the fields at work. Let the money-making grain wave where the stumps now stand. Do it now. It means dollars to you.

In this country there are millions of acres of land under stumps. This land is many times the best land in the field. It is virgin land, rich with fertil-

ity. And this land doesn't all lie out at the edge of civilization. In many cases it is right on your own farm. An old stump here and there in fields already under cultivation, a stump field at the edge of the woods. Make that land work.

Get out the stumps. Put in every idle day getting new land ready to produce crops. Every day spent in this kind of work this year will pay big dividends for many years to come.

Make a Good Exhibit

The Kansas Panama-Pacific exposition commission has requested the animal husbandry department of the agricultural college to assist in getting an exhibit of livestock which will be a credit to the state.

1. The state will pay the expenses on all Kansas livestock shipped to the

will not be finally passed upon and accepted for shipment until within one month of date of shipment.

It is essential that the preparation of animals intended for the exposition begin immediately in order that they may be presented in the best possible condition. Kindly let us know immediately how many animals you intend to show so that space can be reserved for them and facilities provided for assembling the exhibit with the least possible expense and delay.

A New Name

A new name for an old firm always is interesting. Such a change would be considered a travesty in England or any other of the old countries, but in America it is an evidence of the untiring energy characteristic of business, an energy which makes necessary the most commanding advertisement.

From a small enterprise near the Bluffs where a general trade in iron was carried on, the company's plant has grown into a great and very important business in which engines of several kinds have become the chief product.

It is always a pleasure to report a man's progress. In the case of the Witte

Have You Silo Troubles?

THE Farmers Mail and Breeze would like to get a letter telling how the silo was filled and the condition of the silage when fed, from every person who used a silo last year.

- What kind of silo do you have?
What is the height and diameter of the silo?
What crop did you use for silage and what condition was it in when cut?
How fine did you cut the material when it was put in the silo?
What method did you use in distributing the material in the silo?

- How many men did you use in the silo?
Did you tramp the material more around the edges than in the center?
How many days did it take to fill the silo?
How much water did you use in packing the material?
Was the material allowed to settle at intervals while the silo was being filled?

exposition if it is previously accepted as worthy of representing the state by a committee including one breeder of purebred livestock for every breed represented and one member of the animal husbandry department of the agricultural college.

2. Freight to the exposition and return with expenses enroute for attendant will be paid upon livestock accepted and shipped for exhibition purposes and returned to the state.

3. Similar expenses will be paid for all livestock exhibited and sold at the exposition, provided every individual so disposed of shall have been awarded sixth place or better in open competition.

4. When exhibitors wish to ship a full carload, including both individuals accepted by the committee and sale animals, freight and expenses will be paid only upon the exhibition animals and not for attendant. The amount allowed will be based upon a full load of eighteen cattle or horses, or forty hogs.

5. For exhibitors who do not have a full carload of animals suitable for exhibition purposes, special arrangements will be made to have such lots assembled at some central point for shipment with similar lots in full carloads in charge of a competent attendant. If an exhibitor wishes to accompany such shipments he may do so by paying his transportation expenses.

6. Breeders who may have individual animals of exceptional merit and who are unable to fit them, may make arrangements with the animal husbandry department of the agricultural college to fit them for exhibition at actual cost of feed and attendance. Such exhibits

Engine Works it is a particularly agreeable task because we have watched that progress for nearly 20 years, a little more than one-half the life of the plant. We have seen it grow steadily and solidly. We have known the time when the mention of a catalog for the house, and an advertising manager to tell about its products would have stirred up some lively laughter in the little front office with its one grimy desk and its dusty windows. This is referred to because the firm's new catalog, just from the press, shows its commercial rating to be more than 1/2 million dollars, almost doubled in two years.

We have another purpose in pointing, cheerfully, to the progress of this old firm in Kansas City, and that is to emphasize the fact that its prosperity has been due not alone to good goods and fair treatment. It has been a consistent advertiser. This talk about the world making a path to your door, even if your house is far back in the trackless woods, provided you have made a good rat trap is largely twaddle. You might make rat traps or gas engines or straw hats until the end of time and never be known away from your own township - if you don't tell the world what you're doing.

You must beat the drum, in these days of big competition if you expect to keep going and keep the eyes of the crowd. That's what the Witte family has been doing.

Trojan Gates Insure Your Stock

Stronger than your fence is. Made of steel galvanized by our famous Galvotrol Galyzing Process. Galvanizing can't peel, chip or crack. It's permanent. Automatic latch absolutely insures gate being locked whenever closed. Opens at a touch of your hand but cannot be opened by stock at all. Mesh is No. 3, full gauge galvanized wire with stays every six inches. Every size wire fitted with an individual lighter. Trojan Gates never sag. Frame is made of high carbon steel tubing with braced seams and tough, unbreakable, malleable iron couplings. A strong, durable, good-looking gate.

Poor Crop Yield
No farm can afford to take chances on the year's work and crop being spoiled by water-soaked soil. Wet land should be tiled. Tile is crop insurance. It is just as reasonable as hail or fire insurance. Write for booklet (not an advertisement) on "Proper Methods and Results of Draining Land," "Hints on Farm Drainage," mailed free, postpaid, by HUMBOLDT BRICK MFG. CO., HUMBOLDT, KANS.

Save Your Incubator Chicks
We have a guaranteed remedy for White Diarrhoea or bowel trouble, and if you will send us the names of 5 or 10 of your friends who use incubators we will send you free enough of our remedy to raise 50 to 75 chicks. Also our book, "History of White Diarrhoea and How It Can Be Cured in 24 Hours." Will save you \$100.00 a season. BABY CHICK REMEDY CO. Box 80, Marshall, Mo.

BUY IT NOW
We farmers can bring back prosperity at once by buying our Spring needs now, instead of waiting.

THIS BIG, 3 1/2 FOOT TELESCOPE FREE
This is a real telescope and not a worthless toy. It is made by one of the largest manufacturers in Europe. When closed, as shown in picture, the telescope is 12 inches long and has a circumference of 5 1/2 inches. When all 2 sections are pulled out the full length is over 3 1/2 feet. It is built of the best materials, brass bound throughout. We furnish with each telescope a solar eye piece for use in studying the sun and the solar eclipse. Eye piece can also be used as a magnifying glass to detect insects or germs in plants or vegetables. Powerful Lenses 5 to 10 Mile Range. Our Offer! We will send one of these big telescopes free and prepaid to all who send \$1.00 to pay for one year's new or renewal subscription to Mail and Breeze and 25 cents extra for postage (\$1.25 in all). The Telescope is guaranteed to please you in every way or your money will be promptly refunded. Order at once. Address all letters to Mail and Breeze Eighth and Jackson, TOPEKA, KANSAS.

Potatoes Do Well at Tribune

Potatoes may be made a money crop even in the extreme western part of Kansas if they are given proper attention. It is to be regretted that few persons in western Kansas attempt to grow potatoes in their gardens, believes Charles E. Cassel, superintendent of the Tribune substitution.

When potatoes are planted at Tribune on wheat land or on fallow, good yields usually are secured. Nine varieties of potatoes tested at Tribune in 1912 yielded from 52 to 91 bushels an acre. In 1913 the potato crop averaged 33 bushels, while in 1914 an average of 50 bushels an acre was secured. The Irish Cobbler has proved to be the best potato for western Kansas, averaging 61 1/2 bushels for the last three years at the station. None of these potatoes were irrigated.

"Fairly deep planting is necessary in the west," says Mr. Cassel, "because of the drouth encountered. It pays to cut a large seed piece so as to give the young plant a good reserve food supply."

When potatoes are grown under irrigated conditions, the water should be applied judiciously if the best results are to be obtained. One irrigation before seeding is a good plan. The crop should not be irrigated again until the potatoes begin to form. Further irrigation need be applied only as the crop demands. Once or twice will generally be sufficient.

"I believe that from 60 to 100 bushels of potatoes an acre may be grown in the extreme western part of Kansas," said Mr. Cassel. "The potatoes we have grown are of fine eating quality and are readily sold on the market. There is a good field for the selling of seed potatoes to the irrigated sections. Irrigated seed is not desired by farmers raising irrigated potatoes. It is well to secure potato seed from the drier parts of the state.

"The varieties tested and their yields last year were: Irish Cobbler, 50 bushels an acre; early Ohio, 31 bushels an acre; Triumph, 29 bushels an acre; Rural New Yorker, 18 bushels an acre."

Protect Wounds From Flies

It is important, when an animal is wounded, to treat the wound so it will heal and yet prevent screw-worm and house flies from attacking the open surfaces. The house fly alights on the wound to suck up the exudate and is the source of considerable annoyance to the animal. It may introduce germs of infection in addition to preventing the wound from healing. Other flies, the screw-worm flies, particularly, deposit their eggs in the wound. The larvae or maggots hatching from these eggs infest the wound and burrow more or less extensively into the surrounding tissue. Serious losses may result from these attacks of flies. The U. S. Department of Agriculture gives these formulas for mixtures to apply to wounds to prevent fly troubles:

- Mixture No. 1— Oil of tar..... 8 ounces Cottonseed oil to make.....32 ounces Mixture No. 2— Powdered naphthalin..... 2 ounces Hydrous wool fat.....14 ounces Mix into an ointment. Mixture No. 3— Coal tar.....12 ounces Carbon disulphide..... 4 ounces Mix and keep in a well stoppered bottle. Apply with a brush. Mixture No. 4— Oil of turpentine..... 1 dram Phenol..... 1 dram Cottonseed oil to make..... 4 ounces Mix and apply freely to wounds.

Mixtures 1 and 2 will adhere to moist surfaces. Mixture No. 3 forms a coating over raw surfaces that gives a protection from the screw-worm fly. The fourth mixture is a very effective one that is used extensively in the South.

To Control Kafir Smut

How can smut be controlled in kafir? LE ROY SALSBERRY. Carbondale, Kan. The sorghum smut which is causing the most damage in Kansas is the kernel smut. This smut can be distinguished because of the fact that each individual kernel retains its shape. Usually the grains are a little elongated and have a dirty white color. When the grains are crushed between the fingers, each grain is found to be a mass of smut. Usually, though not always, every grain in an affected head is found to be smutty. The formaldehyde or formalin treatment is as follows: Place 1 pound of

standard strength formalin in 30 gallons of water, then soak the seed for one hour and dry thoroughly.

As soon as the seed is dry enough to run through the planter box, it may be planted, providing there is sufficient moisture in the ground to bring the seed up at once. If you are planting in dry ground, the seed should be thoroughly dry before it is planted. A great deal of care is necessary in drying out the seed to prevent heating. It should be spread out in a wagon box or on the granary floor and shoveled over occasionally. If it is sacked or placed in a bin when partially dry, it is certain to heat and weaken the vitality. After treating, the seed should not be placed in unclean sacks or run through an infected drill. If the seed is well dried out, it can be kept after treatment just as well as before treatment.

G. E. Thompson. Kansas State Agricultural College.

A Mother's Appreciation

I am enclosing slips for my boy to enter the Capper Boys' Corn Contest and for the two girls to enter the Tomato Contest. They are all enthusiasm since their papa rented some ground where they can have a share for their crops.

It makes a mother's heart glad to have her children want to do things worth while and I want to thank Mr. Capper for furnishing the stimulus for their ambitions.

The girls are also making the sewing models and can hardly wait until the next lesson comes.

I am glad that I live in Kansas where my babies can have the best, and I hope Arthur Capper will be elected governor. There will be two votes for him here in this home.

Emporia, Kan. Mrs. W. W. Scofield.

Lawrence Business College, Summer Term. Enroll now. For catalog ad. Box K.—Advertisement.

Red Seal DRY BATTERY The Electrical Silo. A convenient storehouse from which electric current can be drawn at will, furnishing fat, hot sparks that spur your engine into action and keep it running at par. Recommended as the most efficient, satisfactory and economical medium of ignition for Gas Engines — Automobiles — Tractors. Your dealer will be glad to supply your wants and advise you of the superior qualities of Red Seal Dry Batteries for all purposes requiring the use of Dry Cells. Our guarantee insures you the utmost in service. "Red Seals" Spark Strongest — Last Longest. "How to Run the Gas Engine—Simplified" is the title of a booklet which we will be glad to send all users of farm power. Also we will send a complimentary copy of our catalog containing pictures and descriptions of everything electrical for home and on the farm. When writing for books, mention dealer's name. Manhattan Electrical Supply Company 124 So. Fifth Ave., Chicago. New York, St. Louis, San Francisco, Factories: Jersey City, Cincinnati, Ravenna, Ohio. Send for This Book. Ask Your Dealer.

This Book Is Yours Free. We want every reader interested in better farm methods to send for this free book, containing a world of valuable information regarding crops, cultivation, irrigation, fertilizers, implements, plant diseases, farm management, etc. This book is written by men of best authority and is a great aid in the betterment of farming conditions. We will also include free illustrated literature showing our line of Grand Detour Power-Lift Plows. Made by world's oldest plow builders. Operate automatically by pulling a cord from engine cab, saving time, labor and effort. Made correct in every detail: best materials and workmanship. Do perfect work in every soil. No matter what your need may be we have the plow to fit your requirements in size, style and price. Be sure to write for our new free booklet and illustrated literature. Grand Detour Plow Co. 20 Depot Avenue, Dixon, Ill.

BIG PROFITS to RIDER AGENTS of the Howard new style Bicycle. Men, Women, boys, girls, send at once for our free proposition. Learn all about this wonderful bicycle, entirely different from the ordinary sort. Howard Bicycle Co., Dept. F.M., Trenton, N.J. Man, not God, fixes the death rate.

Embroidery Set FREE. This beautiful 5-piece Table Set, Wild Rose design—1 large Center-piece with 4 doilies to match. Stamped on fine quality art linen 1/2 yd. long. This free to all who send only 10c. for trial 3-months sub. to our big fancy work and family magazine. Address Household E. S. Co., Dept. 29, Topeka, Kan.

This Valuable Hog Book FREE To Every Hog Raiser FREE. Every Breed of Hogs Illustrated in Natural Colors. This is the handsomest Hog Book you ever saw. 96 pages, giving a full description of every breed of hogs, with illustrations of Prize Winners in their natural colors. You'll be proud to have this elegant book for your library. I will gladly send you a copy free, provided you are a hog raiser and over 21 years of age. Those are my only requirements. This book will not cost you a single cent. I can afford to make you this valuable present because it also tells all about the Hog-Joy System of Successful Hog Raising. It will surely make you a friend and a customer of mine, as it has made thousands of other hog raisers. Mail the coupon today for your copy and I will forward it to you promptly. The supply is limited, so don't wait. A Food—Not a Medicine "GRO-FAST" Contains No Salt or Other Filler. The New Mineral Food. The newest addition to the Hog-Joy Line. A remarkable natural mineral food that makes hogs grow faster and on less food per pound of gain. Not a medicine, but a real food that furnishes Potash, Phosphorus, Iron, Lime, Magnesia, Sulphur, etc., in a form that does the hog most good. More Profit on Every Hog. The pigs come big and strong. And they get to market on less corn and often a month quicker. Every pound of Hog-Joy "GRO-FAST" will save at least 30 pounds of corn. Contains not a single ounce of salt or worthless filler. Keep it before the hogs. Let them eat what they will. A little goes a long way, but they pay you well for giving them that little. Try It 30 Days Free—Send No Money. I'll send you enough Hog-Joy "GRO-FAST" to feed your hogs 30 days on trial. Send no money. See for yourself how they like it. See how the Iron in "GRO-FAST" expels every single worm. Note how quickly their appetites improve. Try out Hog-Joy "GRO-FAST" on your herd. It is a FOOD, not a MEDICINE. Mail the coupon and get the Hog Book and my free introductory offer. HARRY IDE, President, Hog-Joy System, 604 N. Fifth St., Springfield, Ill. MY GUARANTEE. I guarantee Hog-Joy "GRO-FAST" to be a natural mineral food derived from vegetable sources exclusively. Not a single ounce of salt or other worthless filler has been added to this original product. It is guaranteed to expel worms and to furnish in a safe and palatable form all of the minerals required by growing, fattening and breeding hogs, with the exception of salt. Authorities agree that salt should be fed separately for best results. Hog-Joy "GRO-FAST" is guaranteed to contain potash, phosphorus, lime, iron, sulphur, soda, magnesia, carbon, aluminum and silica in unadulterated form. Hog-Joy "GRO-FAST" is guaranteed to make hogs grow faster and heavier with less feed per hundred pounds gain than they will on a ration lacking its mineral constituents. HARRY IDE, President. HOG-JOY SYSTEM OF SUCCESSFUL HOG RAISING. Hog Book Coupon. HARRY IDE, President, Hog-Joy System, 604 N. Fifth St., Springfield, Ill. Please send me a free copy of your Hog Book and tell me about your Hog-Joy "GRO-FAST," the New Mineral Food for Hogs. This does not obligate me. I raise about.....hogs each year. My implement dealer's name is..... Name..... Address..... "HOG-JOY HOGS GROW FAST"

The Growing of Blackberries

In selecting a site for a blackberry plantation, the most important considerations are the moisture of the soil and the accessibility of a market. The blackberry is a tender fruit, the keeping qualities of which are seriously affected by jarring over rough roads. It is, moreover, essential that the berries should be placed on the market as quickly as possible after they are picked if they are to command a good price. The best land is a deep, fine, sandy loam with a large supply of humus and abundant moisture at the ripening season. On the other hand, the plants are often killed if water stands on the plantation during the winter.

The year before establishing the blackberry plantation the land should be planted with a cultivated crop. This insures the thorough rotting of the sod and will help to destroy the cutworms and other insects injurious to the young plants. The soil should be plowed to a depth of about 9 inches in the spring and a thorough harrowing should be given

to facilitate cultivation as well as to prevent them from being damaged by winter snows. A wire trellis may then become a profitable investment. The simplest form of such trellis consists of a single wire attached to posts set at intervals of from 15 to 30 feet in each row of plants. The canes are tied to this wire about 2 1/2 feet above the ground. Another method is to nail cross pieces to the posts and stretch two wires from the ends of these cross pieces which form a support for the blackberry canes on each side. Varieties that grow somewhat like a grape vine require a much higher trellis with two wires; one about 5, and one about 3 feet from the ground.

Let the Paint Brush Help

Put the paint brushes to work on Clean Up day. There is nothing that looks cleaner than a bright, fresh coat of paint. It is a good disinfectant, too, and lengthens the life of buildings, fences, and machinery as nothing else can. Many a wagon, mower or plow has gone into the junk heap several years too soon because some farmer could not see that it was worth while to paint it occasionally, and keep it out of the weather. Many a barn is leaky because this same type of farmer would not spend a few hours and a few dollars on the simple task of giving it a few coats of paint from year to year. Many wives and sons and daughters have grown discouraged and disgusted with farm life because the home place was



This Plant Was Cultivated.

the whole field before the plants are set. This is usually done as early in the spring as the land can be properly prepared. The earlier the plants are set the larger the proportion that live and the better their growth. The roots should be set deeply for the canes break easily if the crowns project above the surface of the ground. The tops should be cut back to 6 inches or less in length. Cultivation is necessary and the plants should, therefore, be set sufficiently far apart to permit it.

During the first summer some intercrop may be grown between the rows, which will greatly reduce the cost of the berry field that year. This should be one that requires constant cultivation and at the same time one whose growth will not be large enough to shade the blackberry plants. Such truck crops as cabbage and potatoes are excellent for the purpose, while corn and small grains should be avoided. By the second summer the plants will be large enough to occupy all the space and an intercrop will not be possible.

In both summers, cultivation should begin early in the spring and be continued at intervals of from one to two weeks throughout the season in order to provide a dust mulch for the retention of moisture and to keep down suckers and weeds. Suckers are apt to spring up from the roots at various distances from the parent plant, especially when the roots are cut. Digging up these suckers is a favorite way of securing new plants, but this practice interferes, of course, with the yield of the berries.

Blackberry roots live for many years, but the canes—excepting two varieties—bear only in their second year. After the fruiting season, therefore, they should be cut out and burned. The 1-year old canes may usually be left to themselves throughout the winter. Not more than three or four new canes should be left to each plant, however, and the others should be thinned out at the same time that the canes which have fruited are thinned. In some cases, it will also be desirable to train the plants in order

Our present system of legislating was born in the days of the stage coach and the blunderbuss. It is utterly incapable of keeping step with the quick march of modern progress and modern thought. Every year it is falling farther and farther behind. It is so uncertain in its movements and so unmanageable in its methods, that by its own inadvertence and inefficiency it frequently defeats its own good purposes, and invariably it brings keen disappointment and humiliation to the people. It has thwarted the will, discouraged the genius and hindered the progress of the American people for generations and never more so than today.

shabby, run-down and ugly, when the simple magic of the paint brush would have brightened and beautified everything.

Nothing builds up a community, brings it new residents and business, and gives it a new reputation so well as does a bright, prosperous appearance. Well painted barns, sheds, fences and dwelling house, good walks, and a neatly kept yard with a few trees and flowers, and no weeds, are the best evidences of prosperity a farm can show. Cleanliness and fresh paint pay, not only in the better health and increased enjoyment they give the owners of the place, but in the increased money value they give the farm as well.

The Cost Of a Roof

BY G. C. SEVEY,
Central Roofing & Supply Co.

I have used ready roofing material on all sorts of buildings, including hog pens, henhouses, ice houses, dairy stables, maple sugar houses and woodsheds, and always with satisfaction. Every man to his own notion, but I consider the use of shingles a step backward, just as it is for a man to work up a wood pile with an ax instead of a bucksaw or a gasoline engine. This conclusion follows years of experience and observation and is based on cost and durability, or serviceability, if I may coin the word. It seems to me that roofing manufacturers have kept pace with the progress of the times.

I have no pet brand. I have used tarred and asphalt roofings costing from \$1.50 to \$3.25 a roll of 108 square feet; the extra 8 feet of course is for lap or waste. I have used tin roofing and it gave me fair satisfaction. I have always felt that I got my money's worth and that ready-made roofing manufacturers are giving value received. The farmer can buy a brand and grade to suit his needs and pocketbook without much danger of being robbed but poor judgment in determining the hardships to which the roofing will be subjected must not be blamed to the manufacturer.

The matter of cost must include the material and labor. Right now good red cedar shingles are worth \$4.65 a square. It is usually figured that 1,000 will cover 100 square feet, the same area as an ordinary roll of roofing will cover. This figures shingles laying five inches to the weather and 16 inches long. White cedar shingles cost 15 cents less. The cheapest possible grade is \$3.

Experienced carpenters tell me it takes a mighty good man to lay 2,000 shingles daily. This is on a new roof and straight work. Carpenters work eight hours a day, and I believe the union price is \$3.55 daily. It is usually figured that it will require four pounds of nails to lay 1,000 shingles. These will cost about five cents a pound in small lots. Hence for a shingle roof we have the following items: Shingles \$4.65 a square—100 feet; nails 25 cents; labor approximately \$2, making a total of \$6.90 to lay 100 square feet of shingles. Some roofing enthusiasts say it will cost \$8 but I think this estimate is high, although it is true that the price is creeping up gradually.

A good grade of roofing may cost you \$1.95 a square of 100 square feet including nails and cement. An expert tells me he can lay 14 squares in 10 hours. The best I can do is a roll in an hour. Figuring on my labor this would make the labor cost about 20 cents, but to be liberal, let us place it at 30 cents. This makes the total cost for roofing \$2.25 compared to \$6.90 for shingles. Of course this price is based on buying direct from the manufacturer. If I had to buy this roofing from a dealer, I probably would have to pay \$1 a square more. On a roof of any size, this difference in favor of roofing is worth consideration. Of course, the saving would be still greater if a lower priced roofing were bought. I have selected shingles for comparison, because they are cheaper than slate and because that is the roofing material which has been used for centuries.

As regards durability: I have some prepared roofing on my building, placed there ten years ago and it looks almost as good as the day it was put on. I have seen many barns roofed and have paid particular attention to them. The roofing has been on as long as mine and is in very good shape today and will last several more years. The best shingle roofs will not go beyond 15 years and the majority are likely to fall much below that.

Kansas agricultural products in 1914 amounted to 376 million dollars.

Statement of the Ownership, Management, Circulation, Etc., Required by the Act of August 24, 1912.

of Farmers Mail and Breeze, published weekly at Topeka, Kansas, for April 1st, 1915.

Name of— Postoffice address
Editor, T. A. McNeal.....Topeka, Kansas
Managing Editor, Charles Dillon.....Topeka, Kansas
Business Manager, J. E. Griest.....Topeka, Kansas
Publisher, Arthur Capper.....Topeka, Kansas

Owners: (If a corporation, give its name and the names and addresses of stockholders holding 1 per cent or more of total amount of stock. If not a corporation, give names and addresses of individual owners.)
Arthur Capper.....Topeka, Kansas
Known bondholders, mortgagees, and other security holders, holding 1 per cent or more of total amount of bonds, mortgages, or other securities: (If there are none, so state.).....None
(Signature of Business Manager.)
Sworn to and subscribed before me this first day of April, 1915.
(Seal.) FRANCES WRIGHT,
Notary Public.
(My commission expires Oct. 29, 1916.)

P & O LITTLE GENIUS Engine Gang Plow

Two Furrow, 725 lbs. or Three Furrow, 900 lbs. 12 and 14 in. bottoms, all standard types. A Power Lift one-man outfit. Simple, strong, durable, easy to operate, and Backed by an Unqualified Guarantee. Ask your dealer for P. & O. goods, and send for Catalog on P. & O. Engine Gang Plows. The most complete line of plows made.



1000 Shot Steel Air RIFLE **Hamilton 22 Gal. Hunting RIFLE**

We give choice of four Guns for \$4 Easy! Plans as you are entitled to. WARELY SUPPLY CO., Box 211, Monroeville, Pa.

Lightning Cant Strike

Illustrated Book on Lightning free. Explains cause and tells what kind of rods will protect your building. W. C. SHINN, 119 So. 7th Street, Elmhurst, Ill.

Shinn Gets There First

Free to Farmers

Every farmer is entitled to a copy of Catalog No. 400, showing all the latest and up-to-date Horse Clipping and Sheep Shearing Machines. Send today. You will want to keep posted. CHICAGO FLEXIBLE SHAFT CO., 213 Ontario St., Chicago.

\$40 a Week for Agents
The Acorn Softening Flat Iron takes women by storm—they simply can't resist. Selling almost as easy as giving away. Something entirely new. An entire week's trading for a penny. Seven miles of walking and making ironing day a pleasure. Carry it any where—fit anywhere on a porch, under the shade tree. No stove needed. Everybody interested. Every home prospect. Agents make Money—men or women, quick, easy, sure. An all year's business: two sales a day will make you \$30.00 in a week—six sales per day easy. Don't wait—think of this profit—write for selling plans and samples. ACORN BRASS MANUFACTURING CO., Dept. 2, CHICAGO, ILL.

Get A Birthday Ring

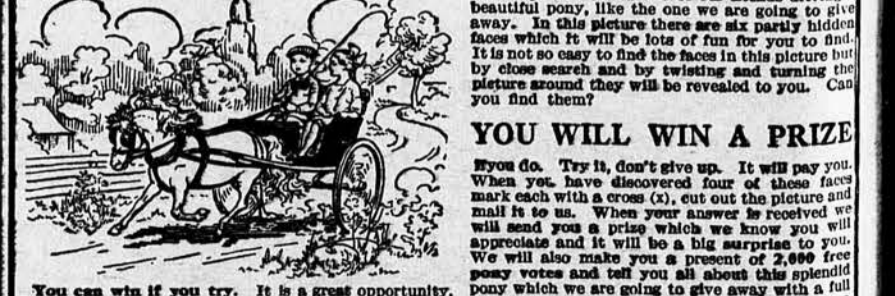
These beautiful Pfeiffer \$8 Birthday Rings are solid gold Tiffany mountings, set with your choice of birthstones. No present is more acceptable than a birthday ring. All settings are about the size of a one carat diamond and beautifully cut. Quality is guaranteed. Make expensive rings if desired. Send for descriptive folder a snap from our office. Birthstones for March is Bloodstone; for April the Diamond. Write us today.

PFEIFFER & CO., GRAND AVE. & ROBEY ST., CHICAGO.

BUY IT NOW

The suffering of thousands of families this Winter will be stopped if we farmers will buy, now, instead of waiting 'till Spring.

PONY PRIZE PUZZLE



You can win if you try. It is a great opportunity. Write us today, sending your answer with the faces marked with two two-cent stamps to help pay the postage and mailing expenses of the present which you have won. It will be mailed direct to you with your Certificate of Entry and 2000 Free Votes in our pony contest. We will also send you a copy of three popular publications worth 15c. Write your name and address plainly so there will be no mistake. Address: Pony Puzzle Dept. 261, W. D. Boyce Co., 500 N. Dearborn St., Chicago, Ill.

SHORTHORNS.
SHORTHORNS
Serviceable bulls, bull calves, and a few females. Prices reasonable.
KELLEY BROS., GARDNER, KANS.

Scotch Shorthorn Bulls
Two Shorthorn bulls, 11 months old, one white and one roan, sired by Golden Cruickshank, pure Scotch. From the same family as Lavender Lord, by Avondale. **C. E. HILL, TORONTO, KAN.**

17 SCOTCH TOPPED BULLS
9 yearlings past and 8 yearlings. Big, strong, rugged bulls, mostly by Victor Archer. Reds and roans. Write today for descriptions and prices **WILL GRANER, Lancaster, Kan.**

Pure Bred Dairy Double Marys (Flatcreek strain) and Rose of Sharon families.
Shorthorns Two young bulls of serviceable age for sale. Registered Poland Chinas. Big type.
R. M. ANDERSON, BELOIT, KANSAS

SCOTCH and SCOTCH TOPPED HEIFERS
Five yearling heifers, 3 pure Scotch and 2 Scotch topped. Extra quality. Also one bull nine months old. Write for prices and descriptions.
S. B. Amcoats, Clay Center, Kan.

Pearl Herd Shorthorns
Valiant 346182 and Marengo's Pearl 391962 in service on herd. Choice early spring bulls by Valiant for sale. Thrifty and good prospects. Scotch and Scotch Topped. Correspondence and inspection invited.
C. W. Taylor Abilene, Kansas

DAIRY CATTLE.
HOLSTEINS FOR SALE high bred registered bulls from 4 to 18 months old. **N. S. AMSPACKER, JAMES TOWN, KANS.**

HOLSTEINS—CHOICE BULL CALVES
H. B. COWLES, TOPEKA, KANSAS.

HOLSTEIN CATTLE All females able bulls sold. Have nothing to offer now but bull calves from a few weeks to four months old. The calves are from good producing dams, some giving as much as 70 pounds a day.
T. M. EWING, Independence, Kan.

Bonnie Brae Holsteins
15 head of high grade heifers and young cows; two registered bulls two years old; registered bull calves from a few weeks old to six months of age. One extra fine bull 7 months of age, full blood but cannot be registered. **IRA ROMIG, Station B, Topeka, Kansas.**

Maplehurst Guernseys
Choice grade cows and heifers for sale. A registered herd bull for sale or trade.
A. P. BURDICK, NORTONVILLE, KANSAS

SUNFLOWER HERD HOLSTEIN-FRIESIANS
Young service bulls and bull calves from A. R. O. dams at prices never before offered. **F. J. Searle, Oskaloosa, Kan.**

Linscott JERSEYS
Premier Register of Merit Herd Est. 1878. Bulls of Reg. of Merit. Imported. Prize Winning stock. Most fashionable breeding, best individuality. Also cows and heifers. Prices moderate.
R. J. LINSCHOTT, HOLTON, KANSAS

For Sale Seven choice Jersey cows, fresh or springing. Six 2 and 3 yr. old Jersey heifers, fresh. Five 2 and 3 yr. old springers. Two yearling Jersey bulls. All of above are fawn colors.
R. F. Hodgins, Topeka or Silver Lake, Kas.

Higginbotham's Holsteins
Extra fine registered bull calves at bargain counter prices. Foot and mouth scare has not stopped our sales. We are selling to parties that are in states quarantined against Kansas at present. We hold bulls at our risk until we can ship them, in this way giving you a chance to get a good one and you are taking absolutely no risk. Also a few registered females for sale.
HIGGINBOTHAM BROS., ROSSVILLE, KS.

PURE BRED HOLSTEINS
Herd headed by Sir Juliana Grace DeKor. Dam, semi-official record one year, milk 22,087 pounds, butter 924 pounds. Sire's dam, semi-official record, one year as three year old, butter 1,026 pounds; three years consecutive 3,000 pounds. Bull calves for sale.
SHULTHIS, ROBINSON & SHULTZ, Independence, Kan.

GUERNSEYS
I have one very choice Guernsey bull of serviceable age, out of imported sire and dam; also one six-months old bull—very choice.
OVERLAND GUERNSEY FARM, OVERLAND PARK, KANSAS

ADVERTISEMENTS.
& Sons' herd at Clay Center, Neb. One was bred to the great Illustrator and has a fine litter of eight pigs. The other was bred to Grand Model 1st and will farrow soon. "Hillcrest farm" is a handy little farm of 80 acres about one mile out. It is being improved every year and is a model hog farm. Around 100 pigs have been farrowed to date and there are several sows to farrow yet. Look up the advertisement in this issue and write him about fall boars and gilts of choice breeding and individual merit.

Poland Boar and Gilt Sale.
J. J. Hartman, Elmo, Kan., will sell 40 Poland China boars and gilts of last October farrow, at his farm near Elmo, on Tuesday, May 4. They are a well grown, thrifty lot and with the exception of three that are of September farrow and sired by Hartman's Hadley, they are by Orange Valley, by Blue Valley Orange. They are out of a choice lot of big sows. Hartman's Hadley will be sold in this sale and he should go to some good breeder. He is 5 years old and sold with a positive guarantee. Autos or teams will take you to the farm from either Elmo, on the Missouri Pacific or Abilene on the Union Pacific. Write today for the catalog.

N. Missouri, Iowa and Illinois
BY ED. R. DORSEY.

Spurling's Western Trip.
Harry Spurling, the well known animal artist of Taylorville, Ill., is planning on making a trip through Missouri, Kansas and Oklahoma, soon. Any of our readers who would like to have photographs or sketches made of their livestock should correspond with Mr. Spurling at once so that he could arrange his trip to the best advantage. Harry Spurling is probably the best known livestock artist in the country and there are probably more advertisements carrying cuts made from Spurling's photographs and drawings than those of any other artist. His work is high class and his prices are reasonable. Write him at once if you would like to have some work done this fall. Please mention Farmers Mail and Breeze when you write him.

Jersey Cattle and Poland Sows.
C. S. Hart & Sons, Milan, Mo., breeder of Island Jersey cattle and big type Poland China hogs will hold a dispersion sale April 20. They will sell their entire herd of richly bred cattle consisting of 38 cows and two bulls, one 2-year-old, a grandson of Viola Golden Jolly and the other one is 2 years past, out of imported Rosa's Golden Beauty by Daisy's Farnshire. Both are strictly good animals. The cows range from 2 to 10 years old, imported and American bred. The American bred ones are all out of the Kenlock herd and the Robinson herd. No better breeding known to the breed. Those old enough to breed have been bred to Oxford Golden Jolly. The stock is a little thin but they will not disappoint in any other way. This firm is quitting the business and closing out everything. Twenty Poland China sows will be sold. The catalog is ready.

Roan's April Jack Sale.
G. C. Roan, the big jack breeder and dealer of La Plata, Mo., will hold a jack sale at the Clover Leaf farm, April 19. This is Mr. Roan's second sale of the season. His first sale was a success in every way and the demand seemed to be such that Mr. Roan felt justified in making the second offering. In this sale he will sell 20 registered jacks, the product of his and other great Missouri jack farms. Every one of these jacks is of the class and quality that will command the highest service fee in most any community. Mr. Roan has sold jacks to some of the best farmers and breeders in Kansas, Nebraska, Iowa, Illinois, Oklahoma, Minnesota, North and South Dakota and California. The Missouri mule is known nationally. The Roan offering of April 19 includes the class of jacks that has made the Missouri mule so popular. If interested in this offering write Mr. Roan today for his catalog. Col. P. M. Gross will conduct the sale.

S. E. Kan., S. Mo. and E. Okla.
BY C. H. HAY.

F. E. Moore & Sons Buy Good Poland.
Possibly one of the most important purchases of Poland in this section of Kansas this year has been made by this firm. They have added to their already good herd some very fine and well bred individuals from the herds of John Belcher, Pfander & Son and J. B. Lawson.

Harbour's Mule Foot Hogs.
Dr. E. G. L. Harbour of Baldwin, Kan., is offering some very good mule foot hogs of all ages. He is making special prices on a few serviceable boars. They are all solid colors, good individuals and well bred. Write Dr. Harbour for complete description and prices.

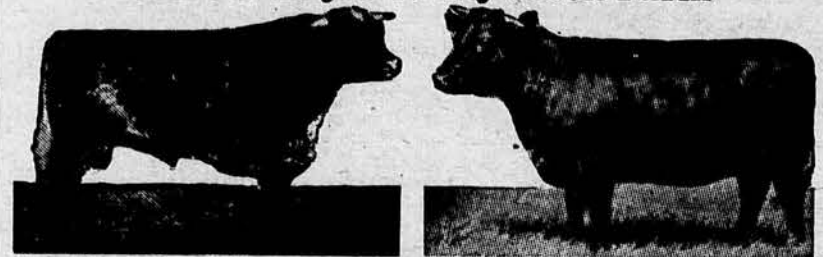
Good Shorthorn Bulls.
Kelley Brothers of Gardner, Kan., are now offering a number of Shorthorn bulls. In this lot are three real good bulls of serviceable age, and a number of good bull calves. These calves are from the large sire and dams and have every indication of developing into bulls of real merit. Kelley Brothers are pricing these bulls within reach of all. We recommend these bulls and this firm to our readers.

Shorthorn Bull Bargains.
Clarence H. White, of Burlington, Kan., is offering some outstanding Shorthorn bulls at a ridiculously low price when everything connected with the cattle is considered. In the first place in the establishing of this herd Mr. White selected the very best individuals of the most popular families available. He has constantly kept at the head of this herd an outstanding bull of pure Scotch breeding. The bulls he is offering now are the produce of this carefully selected breeding stock. His bulls, therefore, contain the very best breeding, they are of exceptional quality, well conditioned, tuberculin tested and vaccinated against blackleg. You can't beat these bulls at the prices asked. If interested write Mr. White for prices and particulars and kindly mention Farmers Mail and Breeze.



HIGH GRADE and REGISTERED HOLSTEINS
OVER 100 HEAD OF COWS, HEIFERS AND BULLS.
The silo and dairy cow are here to stay. There is big money and sure profit in the dairy farm if you use the right kind of cows. The Holstein has proven her worth in the North and East and is sure to take the lead in the southwest. Visitors welcome; call or write today.
Clyde Grod, Towanda, Kansas

Reduction Sale of Shorthorns
Come to Doyle Valley Stock Farm



175 Head of Shorthorns

50 HEAD MUST SELL IN 60 DAYS. Here is the Bargain Counter for the man who expects to start in the Shorthorn business. All kinds of Shorthorn Breeding Stock from which to select—Cows, Heifers and Bulls, cows with calf at side others due to calve soon. Included are grandsons and daughters of such sires as Avondale, Prince Oedric and other noted sires. If you want Shorthorns come now. Write, wire or phone me when to meet you at Peabody either Rock Island or Santa Fe Depot.
Yours for business.

M. S. CONVERSE, Peabody, Kansas

150 Head Shorthorns
Entire Herd

consisting of 25 bulls and 25 heifers 8 to 20 months old, 100 females of breeding age, bred to or with calf at foot by such sires as Satin Royal 377211 and Rosewood Dale 350654, by Avondale.

These Cattle Are At Frankfort, Okla.

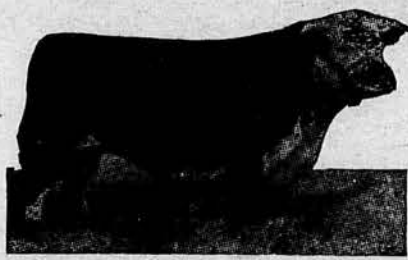
25 miles from Winfield and have not been in contact with any other cattle. They are free from Kansas and Oklahoma quarantine. We have raised these cattle and they are in perfect health and good condition and will please and make money at the prices asked.

Buy a Few Good Cows and Heifers

and a bull to mate and you will soon be in the Shorthorn business. Wire, phone or write me when to meet you at Frankfort, Okla. We can deal if you want good Shorthorns. Address

LEVI ECKHARDT, 1203 E. 10th St., Winfield, Ks.

Williams & Sons' Herefords



100-Head-100

They carry the blood of noted sires and the most fashionable families. They are the large boned, square-built kind.

We Want To Sell 30 Yearling Heifers

and a carload of yearling bulls. These heifers run very even and have unusually good bone, size and quality and the blood behind them to make the man who buys them and cares for them properly a great herd of cattle in a few years. The bulls are the kind that will make good and they can be bought even by a speculator with the chances of big profit.

You Must See These Cattle To Appreciate Their Worth.

You who have room and pasture can make plenty of money on these young Herefords. Can ship on Santa Fe or Rock Island. Write, wire or phone us when you will call and see these cattle.

PAUL E. WILLIAMS, MARION, KANSAS

FOR SALE at Normal, Ill.
Forty Head of Percheron Stallions

From yearlings to six year olds, at a very low price. Some are the best of tried sires; all blacks and grays of the big ton kind. Write your wants and come and see us.

A. J. DODSON, W. H. WELCH, Normal, Illinois

Shetland Stallions for sale and to lease: all colors. 40 Shetlands. A mixed lot for sale on one or two years time. No trades except for Jersey cows. **Mrs. Adam Stirling & Son, Des Moines, Ia.**

IMPORTED AND HOME-BRED STALLIONS

FOR SALE. Can show buyers more registered stallions and mares than any firm in America. Come and see my horses and mares and visit the best and liveliest horse country in the West. Reference: Any bank in Creston, Iowa.
A. LATIMER WILSON, Creston, Ia.

German Coach

70—Horses—70
The great general purpose horse. Satisfaction guaranteed. Write or call.
J. C. BERGNER & SONS, Pratt, Ks.

Percheron Stallion SAMMASETTE 44801, black, 9 years old, 8 sups breeding, sound, priced to sell.
T. M. WILSON, LEBANON, KANSAS.

PUREBRED HORSES.

10 Registered PERCHERON Stallions

ranging in ages from two years to six. Blacks and greys. Strong in brilliant breeding. Write for prices and descriptions. **WILL GRANER, LANCASTER, KANSAS**

Blue Ribbon Stock Farm

Registered Percheron stud colts for sale at bargain prices. Yes, we've got them from yearlings to breeding age. Write or come and see them. Will sell all for one to one mail. **P. G. HEIDBRUCH, R. F. D. No. 1, INMAN, KANSAS.**

PERCHERONS, BELGIANS AND SHIRES

2 to 5 years old; black, gray and bay, weighing 1900 to 2100 pounds, including Luby 3rd, prize winner in Paris 1913. Also Mistral, foaled 1912, weight over 2150 pounds. Owner of pure bred mares should see this colt. Our price is right, our guarantee reliable. Come and see us.

JOSEPH ROUSSELLE & SONS, SEWARD, NEBRASKA. 26 miles west of Lincoln, Neb. Farm joins town.

JACKS AND JENNETS.

LEAVENWORTH COUNTY JACK FARM

Bargains in good jacks and jennets; also one good herd jack for sale. Located between Atchison and Leavenworth on Santa Fe. Write **CORSON BROTHERS, POTTER, KANSAS**

HALEY'S STOCK FARM

For Sale: Three splendid jacks in service last season. Also one reg. Percheron stallion and a few good Percheron mares. Write **JAS. B. HALEY, HOPE, KANSAS**

Kingfisher Valley Stock Farm

Registered, big boned, black jacks and jennets. Very best breeding from colts to 16 heads. Prize winners, herd headers and great mule jacks. Prices right as they must go now. **J. H. SMITH, Kingfisher, Okla.**

Three Kentucky Mammoth Jacks

Also registered Percheron Stallion. All in service at our barns the last two seasons. Must be sold. Write us before you buy. **PRICE BROS., SALINA, KANSAS**

HOME OF THE GIANTS

100 HEAD JACKS and JENNETS

Herd headers and mule jacks. The big, black, big boned kind. Everything guaranteed as represented.

BRADLEY BROS., WARRENSBURG, MO. 65 miles east of K. C. on Mo. P. Stock in town. Come and see them.

JACKS AND PERCHERONS

40 big black Mammoth jacks, 15 to over 16 hands standard. Some extra good Percheron stallions, two, three and four years old, weigh 1900 to 2300 pounds. This is all high class stock. Attractive prices for thirty days. **A. E. Smith, Lawrence, Ks.**

20 BLACK MAMMOTH JACKS

From 14 1/2 to 16 hands high and up to 1200 pounds in weight. We won both championships on both jacks and jennets, Kansas State Fair, both 1913 and 1914. If you are disappointed we will pay your expenses. Written guarantee with every jack sold. Reference: Any bank in Dighton. **H. T. HINEMAN & SONS, Dighton, Kansas.**

GRANDVIEW JACK FARM

At private sale: 18 mammoth jacks ranging in ages from serviceable jacks down to weanlings. All are black with white points and have bone, size and substance. Also 35 jennets in foal. Write for descriptions and prices, and visit my barn at Stockton. Visitors called for at Plainville. If you are looking for the best at reasonable prices write me. **Cornelius McNulty, Stockton, Kan.**

Jacks and Jennets

A good lot of Jacks from which to select, 2 to 6 yrs. old; well broke and quick servers. **PHIL WALKER, Moline, Kan.**

BUY YOUR JACKS OF PRAIRIE VIEW JACK FARM

We have shipped jacks for 35 years. The same reliable guarantee goes with each sale. We have forty jacks and jennets to sell from 2 to 5 year olds, 15 to 16 1/2 hands high. We sell more jacks at private sale than any other firm. 40 miles north of Kan. City and 40 mi. east of St. Joe. **ED. ROEN, LAWSON, MISSOURI**

Adair County Jack Farm

Big Jacks, all ages. Starlight, Jumbo and Taxpayer breeding. Each sale is accompanied with a liberal guarantee. Get our prices. "Jacks, prices and business" is our motto. **OTTO BROTHERS, R. R. Box 88, GREEN TOP, MO.**

When writing to advertisers please mention the Farmers Mail and Breeze.

Cattlemen to Meet at Hays

The second annual "Round-up" at the Hays Branch Experiment station at Hays, Kan., will be held April 23. The results obtained in the maintenance of 200 range breeding cattle and 250 stockers on the feeds usually produced in the short grass country will be presented. A complete statement of the kind, amount, and cost of feed used; and the cost of the labor and gains obtained will be given in a form convenient for reference in the future. Visitors will be given an opportunity to inspect every group of cattle and see the effect of feeding kafir stover, alfalfa and Sudan hay, and silage made from sorghum crops. These experiments have been conducted in the feed lot and on the open range in order to make the results apply to every condition in western Kansas.

Dr. H. J. Waters, president of the Kansas State Agricultural college will preside at the meeting. J. E. Poole of the Union Stock Yards, Chicago, market editor of the Breeders Gazette, Live Stock World, and other papers will give a talk on the market and feeder situation in the United States. This will be one of the most important meetings of the year for those who are interested in the production of beef cattle, and everyone who can arrange to do so should attend. Programs can be obtained by writing to George K. Helder, Hays Branch Experiment Station, Hays, Kan.

New Cow Wins World's Record

I am glad to be able to announce that the Holstein-Friesian heifer Finderne Hologen Fayne 144551 has broken all records for fat production, not only Holstein-Friesian but those of all other breeds, by producing in 365 consecutive days 24,612.8 pounds milk containing 1,116.05 pounds fat. She freshened at the age of 3 years, 4 months, 14 days. Her sire is King Hengerveld Aaggit Fayne 56635; her dam is Mutual Hologen Fayne 111804. She was bred by Bernhard Meyer, Finderne, N. J., and is now owned by The Somerset Holstein Breeders' Company, Somerville, N. J. The test was made under the supervision of the New Jersey Agricultural college and eight different supervisors were employed in the conduct of the test. From the amount of fat produced any competent butter-maker could make 1,302.06 pounds of the best commercial butter. During the year's test Finderne Hologen Fayne is said to have increased in weight 250 pounds, now weighing about 1,450 pounds. This wonderful production gives this young Holstein-Friesian cow place above all other cows in the world and makes her the world's dairy queen. **Malcolm H. Gardner, Superintendent Advanced Registry.**

To Clear Eye

I have a horse which has a blue eye, that is there is a blue streak about half way around the outer edge. This blue streak does not, so far as I know, injure the sight. Is putting stock dip on young horses the only or best way to get rid of lice? **Shawnee County, Kansas. A. F.**

I believe that if the opacity in your horse's eye does not in any way interfere with the vision it is best to leave it alone. If however, it blemishes the animal seriously it may be cleared by blowing about as much calomel as you can hold on the point of the blade of a pocket knife, into the eye, no oftener than twice a week.

Stock dip is one of the best remedies to apply to animals for the destruction of lice. **Dr. R. R. Dykstra, Kansas State Agricultural College.**

Mare Has Thumps

I have a 5-year-old mare that seems to have thumps when I work her. I hauled some sand with her and got her very hot. Is there a remedy for this trouble? She is in foal. **Cherokee County, Oklahoma. W. W. D.**

Thumps in animals corresponds to hiccough in man and is caused by a spasmodic contraction of the diaphragm. If you are sure this is the trouble with your mare she may be relieved by the administration of a teaspoon of fluid extract of belladonna morning and evening. It is possible that the medicine may make her blind while it is being given but it causes no permanent injury to the eye. **Dr. R. R. Dykstra, Kansas State Agricultural College.**

Horses should be unharnessed at noon and fed in a cool place if possible.

LAMER

the Percheron man, has just received a car of **Extra Good Stallions**

Wire or come to Salina, Kan., at once if you want a good horse. **C. W. LAMER, SALINA, KAN.**



North & Robinson Company
Grand Island, Neb.

have a lot of good registered stallions and mares for sale at attractive prices. Write for more information.

This "Like France" Percheron farm has

the goods, and lots of them. Registered stallions, 1 to 5 yrs. old, Jet blacks, greys. Come where the genuine good ones are. Nobody will tell you that they have Percherons as weighty, heavy-boned, rugged and useful as Fred Chandler's, owning a bunch to pick from. You, too, will recommend this herd after you have been here. Just above Kansas City. **FRED CHANDLER, Route 7, Charlton, Iowa.**



APRIL JACK SALE

From the Clover Leaf Valley Jack Farm

La Plata, Mo., Monday, April 19th

I will sell twenty registered jacks, every one the product of Missouri. Every jack offered in this sale is good enough to go to any country and demand the top service fee.



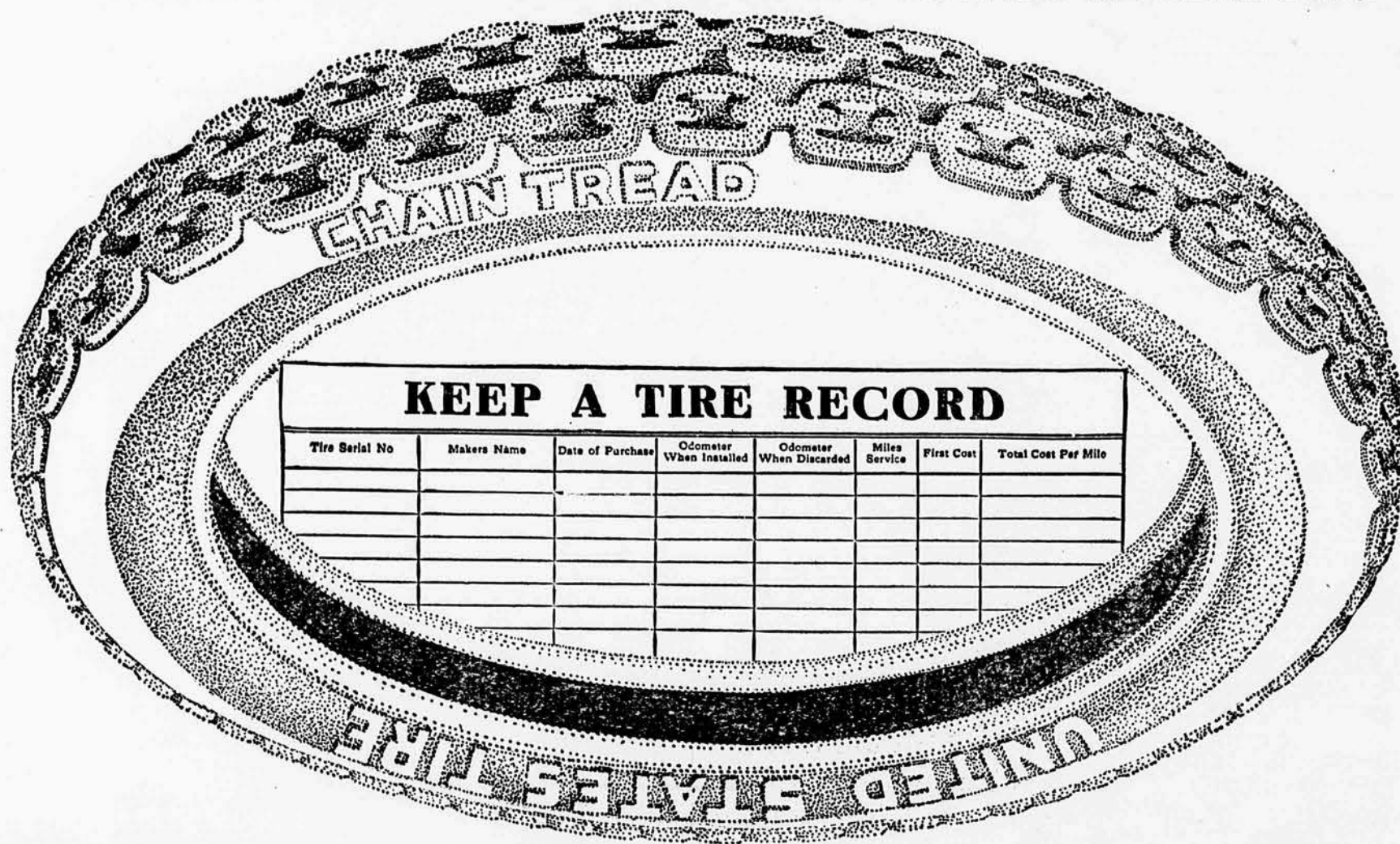
The Clover Leaf Jack Farm

For a number of years I have been producing the big, rugged, big boned Mammoth jacks. My jacks have found good homes in Kansas, Nebraska, Iowa, Illinois, Oklahoma, Minnesota, North and South Dakotas and California. Missouri is known the world over for its splendid mules. High class mules must have great sires. We are selling no others. LaPlata is on the A. T. & S. F. and Wabash Railroads. We crate every jack shipped by freight or express. The jack sale begins at 1 p. m. The Shorthorn cattle sell in the morning.

Sale conducted by Col. P. M. Gross. My catalogs are ready; send for one now. Come to sale the day before, if possible. Address all letters to

G. C. ROAN, La Plata, Missouri
E. R. DORSEY, Fieldman.

"A Rubber Chain Tread built on a Powerful Modern Tire"



We challenge the world with our Famous Popular-Priced "Chain Tread" Tires. Keep a tire record and prove it for yourself

Our total factory capacity has been doubled. Now we are ready to supply our famous "Chain Tread" Tires in unlimited quantities at the lowest price in their history.

Now we challenge any competitor's tire to show you the same combination of real anti-skid protection and low cost per mile. Get our Tire Record Card and prove it for yourself.

"Chain Tread" Tires

Safety experts acknowledge our rubber chain tread, built on this powerful modern tire, to be an absolutely marvelous anti-skid device.

"Chain Treads" are not simply a fancy design stamped on a tire—they are real anti-skid tires. Send your name and address, for a set of Free Tire Record Blanks, to United States Tire Company, Broadway at 58th St., N. Y. City

"Chain Tread" Tires are sold by Leading Reliable Dealers. Do not accept substitutes



United States Tires

Made by the Largest Rubber Company in the World
(Operating 46 Factories)

