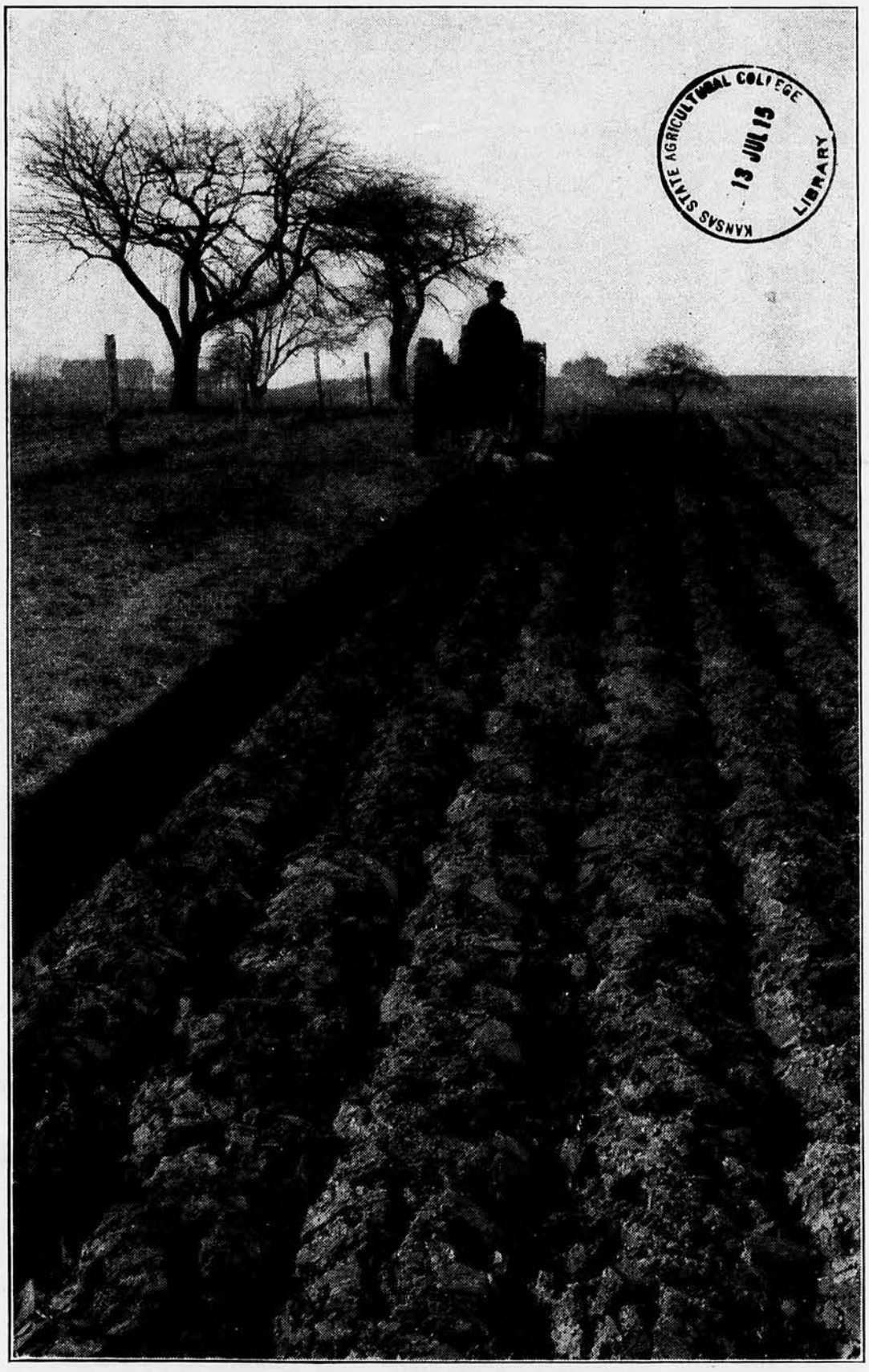
Thirty-Six Pages

The FARMERS MAIL AND BREEZE

Price Five Cents

Vol. 45. July 10, 1915 No. 28.

Agricultural Reading Rm Comp



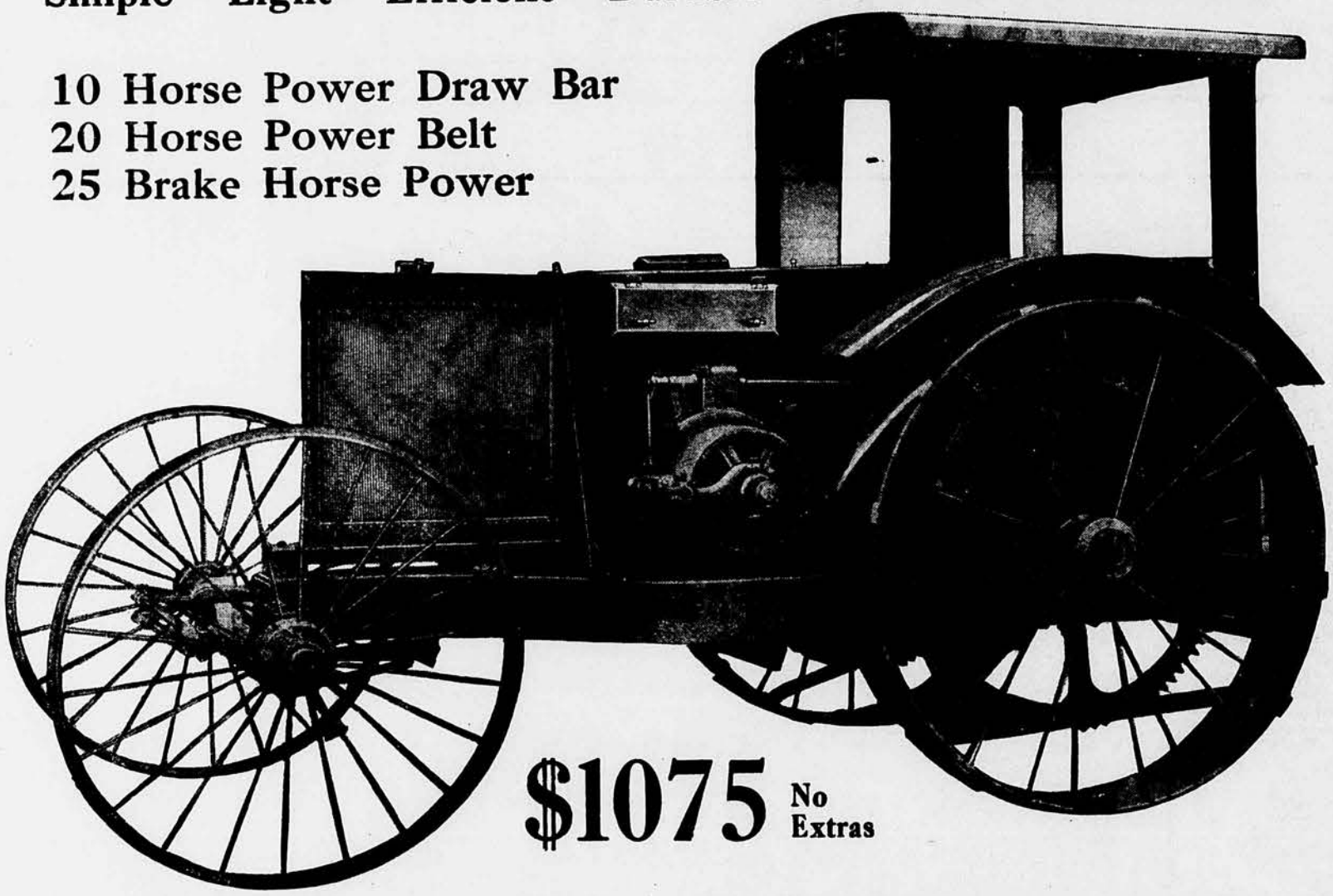
KANSAS STATE AGRICULTURAL COLLEGE 13 JUL 15 LIBRARY

The Unwearying Plowman

The Parrett Tractor

Simple—Light—Efficient—Durable—Powerful—Economical

10 Horse Power Draw Bar
20 Horse Power Belt
25 Brake Horse Power



$1075 No Extras

The Parrett Tractor will pull three 14-inch bottom plows—disc 50 to 80 acres per day—pull two binders anywhere—run your threshing machine, ensilage cutter, baling press and do all your work better in less time.

This All Purpose Tractor

Is scientifically designed for all power work. It has stood every conceivable test. Its superior construction and simplicity make it an ideal power unit for every farm. It is manufactured by men of wide experience and guaranteed by a substantial and reliable company.

Special Parrett Features

Short turning space.
Accessibility of all parts.
Self steering when plowing.
Two speeds forward—one reverse.
Direct drive—both high and low gear.
Four cylinder—Vertical—Four Cycle Motor.

We want to show you what you can do on your farm with the Parrett Tractor—show you how it will economically help you to better, bigger farming results. We have a splendid tractor booklet that will tell you all about this general purpose tractor. Send for your copy today. We want to meet you at Hutchinson, Kansas, July 19 to 24, or Enid, Oklahoma, July 27th to 31st.

Parrett Tractor Company

105-409 Fisher Building CHICAGO, ILLINOIS

We desire to hear from live dealers in territory still open.

THE FARMERS MAIL AND BREEZE

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

Volume 45 Number 28 — TOPEKA, KANSAS, JULY 10, 1915 — Subscription $1.00 a Year

For Low Plowing Costs

KANSAS STATE AGRICULTURAL COLLEGE 13 JUL 15 LIBRARY

You are Invited to the Exhibit of Modern Farm Tractors to Be Held July 19 to 24 at Hutchinson

BY F. B. NICHOLS, Field Editor

A BIG attendance of Kansas farmers is assured for the Kansas Traction Plowing exhibit, July 19 to 24, at Hutchinson. This is indicated by the hundreds of letters the management has received in the last few days from farmers, not only in Kansas but also from all the surrounding states. There are many communities in the wheat belt from which almost every man will attend; this is especially true in the territory tributary to Hutchinson.

The main reason for all of this interest is that there is a very general belief in power farming in Kansas, and a wish to see whether its field may profitably be extended. It will help a farmer greatly in forming an accurate judgment in regard to whether an engine would be a paying addition to his equipment if he has a chance to see all of the leading makes in operation. It was with this idea in view that the Kansas Traction Plowing exhibit was organized last winter by the Kansas State Agricultural college, the Hutchinson Commercial club, the Kansas Farmer and the Farmers Mail and Breeze. The officers include W. Y. Morgan of Hutchinson, Lieutenant-Governor of Kansas and editor of the Hutchinson News, president; H. J. Waters of Manhattan, president of the Kansas State Agricultural college, chairman of the board of directors; A. A. Potter of Manhattan, dean of engineering in the Kansas State Agricultural college, secretary; H. M. Bainer of Amarillo, Texas, agricultural demonstrator for the Atchinson, Topeka & Santa Fe railroad, field manager, and W. M. Jardine of Manhattan, dean of agriculture in the Kansas State Agricultural college, member of the board of directors.

All of the leading tractor and plow firms of the country have entered. Most of the firms are bringing several outfits; the Avery company for example will exhibit five tractors, one of which will be equipped with an electric self-starter, which is a help in efficient tractor farming that is attracting much attention. Every effort is to be made to make the show of just as high educational value as possible. The officials and the tractor operators expect to make every step and every move plain to the visitors, and to co-operate in setting forth the principles of power farming that affect Kansas conditions.

One thousand acres and more if it is needed, will be plowed. This ground is just south of Hutchinson, and it is very easy to get to it. The soil is uniform, and free from "sand-pits", so it will be a fair test for the tractors. The engines will work on lands side by side, which will give every visitor an opportunity to compare their relative efficiency. Public plowing exhibitions will be held in the afternoon, while in the morning the time will be used for private demonstrations by the operators. Admission will be free to everything, including the lectures and the entertainments in Convention Hall. The entertainments will include band concerts, a fine exhibit of tractor accessories, a smoker and a motor car ride. The Hutchinson Commercial club has planned an elaborate entertainment, all free, for the visitors, which will keep all of the time fully occupied.

This plowing exhibit is being held to meet the logical demand for more information about tractors which has come in the last three years. Perhaps the main reason for this is the remarkable increase in the efficiency of farm tractors, and especially with the smaller types, which has made it possible to introduce them on many places where they would not have been profitable in past years. The tractors made by the leading companies are remarkably efficient, as has been well shown on hundreds of places in this state, many of them not far from Hutchinson.

Another influence which has entered into the tractor situation is the increase in the cost of horses and grain in Kansas, which has greatly raised the cost of power production with draft animals. This increase in the cost of good horses has been steady; in 1905 the average price for all the draft animals sold on the Chicago market was $186, in 1910 it was exactly $200, while last year, before the shipments of war animals began, it was $213. The war demand has produced an amazing increase in the price of horses, and it seems to be quite probable that there will be a still greater advance in the next few years. That is why there is more than 150 million dollars' worth of horses on Kansas farms today, which makes a fearful tax for little items like depreciation and interest that must be charged up to the power department.

The feed bill is the largest of all these charges, however, and unfortunately it is getting higher every year. According to Dr. C. W. McCampbell of Manhattan, secretary of the Kansas livestock registry board, it cost 40 million dollars last year to feed the draft animals in this state. It seems probable that this amount will be increased this year. One of the unfortunate things about a horse is that he must eat no matter whether his time is used for productive work or not. The feed bill of a tractor, however, stops when it stops.

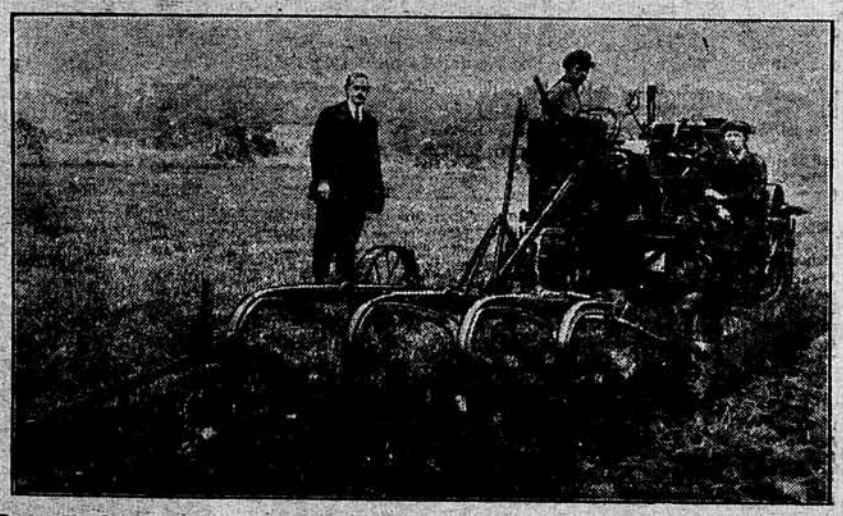
Perhaps the greatest boost that the tractor business has received is the increasing appreciation of the larger yields that can be obtained by the proper use of an engine. This is especially true in wheat growing. As L. E. Call, professor of agronomy in the Kansas State Agricultural college, has well shown, the best wheat yields are produced by deep plowing or listing just after harvest. This is because there is an abundant chance for the forming of soluble nitrates, or available plant food, for the early, deep breaking increases chemical and bacterial activity in the soil. In addition this early breaking in connection with proper after treatment conserves moisture.

The best yields on the college farm for a series of years have been obtained on the soil plowed 7 inches deep July 15. This is, of course, much deeper and much earlier than the average wheat land is plowed, and it is much sooner than it can be broken, too, when horses are used. September plowing for wheat has always been common, although it almost always produces low yields, and it probably always will be the rule unless a very extensive use is made of tractors. When a man has a tractor he can go ahead steadily no matter if the weather is hot, and there is plenty of power available for breaking the soil at a proper depth. A farmer may start into wheat plowing with the very best intentions about going deep, but when the faithful team starts to blow and sweat that plow is raised, nine times in ten, and the old skimming process is repeated. Indeed this is about all that one can do if he has a big acreage, for horses cannot pull a plow 7 inches deep in July and August and make much speed. One does well if he can keep them in motion 6 or 7 hours a day.

A tractor, however, may be kept in motion 20 or 22 hours a day if it is run at night, which allows an immense capacity for the outfit. In other words, when an engine is available for the plowing the work may be done at the first of the season, even if the acreage is large, at the best depth to produce the maximum yields. This ideal plowing usually will allow an increase in the yields of several bushels an acre over the late plowing, and in addition it frequently is cheaper than plowing with horses. The lower operating cost and the higher yield usually produces a margin that will pay for an engine in two or three seasons.

It is not to be expected that a tractor will take the place of all the horses on a farm; even the most enthusiastic tractor men hardly believe this. In some cases it will not reduce the number of horses required to any considerable extent. Draft animals always must be kept for the lighter work, but as the heavy tasks are done by tractors mares can be used much more—a mare is just about as efficient as a gelding for the lighter work, even if she is raising a

(Continued on Page 30.)



Deep, Early Plowing for Wheat Soon After Harvest Will Help in Forming Available Plant Food and in Conserving Moisture—

—and in Producing Big, Profitable Yields the Following Year, Which Will Aid Materially in Paying For a Tractor.

DEPARTMENT EDITORS
Livestock Editor.....Turner Wright
Field Editor.....F. B. Nichols
Farm Doings.....Harley Hatch
Markets.....C. W. Metsker

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

SPECIAL TO ADVERTISERS.

Changes in advertisements or orders to discontinue advertisements must reach us not later than Saturday morning, one week in advance of the date of publication. We begin to make up the paper on Saturday. An ad cannot be stopped or changed after it is inserted in a page and the page has been electrotyped. New advertisements can be accepted any time Monday. The earlier orders and advertising copy are in our hands the better service we can give the advertiser.

The Farmers Mail and Breeze

Member of Audit Bureau of Circulations.

Published Weekly at Eighth and Jackson Streets, Topeka, Kansas

ARTHUR CAPPER, Publisher. T. A. McNEAL, Editor.
CHARLES DILLON, Managing Editor. A. L. NICHOLS, Associate Editor.

E. W. RANKIN, Advertising Manager.

SUBSCRIPTION RATES, - - - - - - - - One Year, One Dollar

ADVERTISING RATES.

50 cents an agate line. 110,000 circulation guaranteed.

DEPARTMENT EDITORS
Women's Pages.....Mabel Graves
Dairying.....A. G. Kittell
Poultry.....G. D. McClaskey
Mgr. Livestock Advertising.....Frank Howard

No liquor nor medical advertising accepted. By medical advertising is understood the offer of medicine for internal human use.

ADVERTISEMENTS GUARANTEED

WE GUARANTEE that every advertiser in this issue is reliable. Should any advertiser herein deal dishonestly with any subscriber, we will make good the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us promptly, and that we find the facts to be as stated. It is a condition of this contract that in writing to advertisers you state: "I saw your advertisement in the Farmers Mail and Breeze."

Passing Comment--By T. A. McNeal

Microbes, et al

A scientific fellow made a speech the other night that sent the cold chills o'er us and gave us such a fright about microbes and trichinae, bacilli and the germs, and he handled them, as best he could, in scientific terms.

He said the microbes sat around honing for a fuss, and when we victims came along, they jumped right on to us, and gnawed upon our vitals and consumed us for their prey, and multiplied by millions every single day.

There are worms found in the cabbage, trichinae in the meat, and bacilli in every dod-gasted thing we eat; and he threw upon the canvas some scenes that made us squirm—pictures of bacillus, of microbe, and of worm—until it made us shiver and all our flesh to creep, so we worried all the day and at night we could not sleep.

I often sit and wonder how the people long ago were so healthy and contented, when they did not even know about microbes and trichinae, bacilli and the germs, or how to handle subjects in scientific terms. Jonas Cook.

Chickasha, Okla.

A Question of National Armament

I have here a letter from H. Shulz of Leavenworth, Kan. Mr. Shulz is an educated German and naturally a sympathizer with Germany. A considerable part of his letter is a defense of Germany's conduct. I have no objection to that because he has the same right to his opinions that I have to mine, but as this has been gone over in these columns a great many times I do not care to discuss that phase of the question any more. However, Mr. Shulz presents an argument in favor of militarism and navalism that is worthy of consideration. He says:

Editor The Farmers Mail and Breeze—Referring to your honest conviction that militarism is impracticable and menacing the welfare of nations, I have a few questions to ask you: Do you believe in law and order? Do you believe that law and order should be observed and maintained? Is not the "man of the law" in our localities the very infancy of militarism, a system extending to state and national boundaries?

Militarism and navalism when in the hands of a government whose principle is justice and right is the only possible means of self preservation and by which we may maintain our rights, dignity, honor and freedom. Through the greed for possession and personal power of men at the head of governments these systems have been misused and the results probably have led you to the conclusion that the system should be condemned.

We are dealing with cause and effect. The cause lies with the few, the effect with the multitude. If we destroy the cause there can be no effect. Militarism and navalism are but the servants of international law and so long as mankind violates these laws punishment is inevitable.

Last of all, should not we as Americans shoulder arms and stand by our government when we are forced into such a situation by another government or if there is an uprising which threatens the welfare of our nation and freedom for which our fathers paid so great a price? If this be true then we must come to the conclusion that the more completely we are organized the better.

H. SHULZ.

Leavenworth, Kan.

I am inclined to think that is as strong an argument as can be presented in favor of militarism and navalism. Mr. Shulz however, must abide by the logical conclusion of his own argument, which is that the only safety for a nation lies in being constantly prepared to defend itself against possible enemies by force of arms. If that is true then only the most powerful nations have any assurance whatever that their liberties will be preserved.

It is obviously impossible, for example, for such nations as Holland, Belgium, Denmark, Sweden or Switzerland to muster sufficient force of arms to defend themselves against such nations as Germany, France, Russia or Great Britain. These smaller nations must inevitably be destroyed, according to the logic of Mr. Shulz, or lose their independence and become dependencies of some more powerful nation, for the assumption of his argument is that as military strength is the only protection then other nations will recognize military force only as a deterrent.

That is the logical result of militarism as proved all too often by the history of military nations. Russia without shadow of justice destroyed the independence of Finland, Great Britain destroyed the Boer republics because they interfered with the selfish ambitions of the financial interests of England. Germany overran Belgium because it was in its way. Japan took possession of Korea for the reason that the ruling powers of Japan decided they needed Korea in their business.

And these results are logical if militarism is right, because if liberty can be preserved only by military force, then the small nations have no right to exist, because they cannot preserve the rights and liberties of their people, consequently the great nations should take possession of the territory of these small powers in order that they may guarantee to the people their rights and liberties by force of arms.

Mr. Shulz talks about international law, but if his first assumption is correct international law is a myth, for government by law is based on the supposition that the individual yields voluntary obedience to the law of the land, while militarism is based on the theory that obedience is to be obtained only by force.

Mr. Shulz is, I take it, a law abiding citizen, not because he is afraid of a policeman, but because he cheerfully and voluntarily yields some of his individual rights for the common good. If no citizen in the United States obeyed the law except by force—in other words, if he yielded only such obedience as he was compelled to yield, our government would have gone to smash long ago.

But how can there be such a thing in fact as international law if the only way in which the liberty and rights of the citizens of any country can be preserved is by force of arms? For if that is true then eventually the most powerful nation must lay down the law for all the weaker nations, or possibly a combination of a few powerful nations will be effected which will dictate to all the other and weaker nations.

A Significant Admission

Here is a very significant admission from Mr. Shulz. I want the reader to note it carefully: "Militarism and navalism, when in the hands of a government whose principle is justice and right is the only possible means of self preservation and by which we may maintain our rights, dignity, honor and freedom. Through the greed for possession and personal power of men at the heads of these governments these systems have been misused." Exactly. And when have they not been misused? Always the few control the military power and that power always has been misused. The many have nothing to do with the disposition of this military power. The many do not and never have shaped the policies of great nations ruled by autocratic power. Always the more autocratic the government the greater its relative military power.

Mr. Shulz labors under the delusion that militarism and navalism are the servants of international law. Bosh! Militarism and navalism determine the thing called international law and necessarily must do so if Mr. Shulz is correct in his first proposition, that military power is the "only possible means of self preservation." For that means, according to his own statement, that militarism and navalism are above international law.

Let us stop this hypocritical or at least senseless talk about international law. There is no such thing as international law at present. Nor will there ever be such a thing so long as the great nations subscribe to the doctrine laid down by Mr. Shulz. Militarism and navalism are in their very nature a denial of international law. They are based on international anarchy. If there is no better way than militarism, then liberty is an irredescent dream. Might makes right and the weak can hope for such privileges only as the strong may see fit to accord them.

Just at present it looks as if the great war in Europe, which is the legitimate fruit of militarism, will end in a draw, when all the nations engaged have reached that condition of physical and financial exhaustion where they are willing to quit. And when that time comes what will have been gained? Already more than 4 million young men have been killed or wounded. Perhaps by the end of the awful conflict twice that number will either be laid in untimely graves or placed in a condition where they will have to pass the rest of their lives maimed, unfitted for earning a fair living and perhaps suffering continuously from pain caused by their wounds.

A large amount of property will have been destroyed. A multitude of women will be widows and a still greater multitude of children will be orphans. An almost incalculable burden of debt will be added to that already piled on the backs of the toiling millions. Worst of all there will be left in the breasts of the people of all the nations an heritage of hate for their brother men of other nations. And out of this welter of blood will come the militarist preaching still the doctrine of force and the doctrine of hate.

I would to God that every gun factory and every ammunition factory might be closed, that every battleship and every submarine might be put out of commission.

The logic of militarism is not the preservation, but the ultimate destruction of human liberty. It means first the destruction of the independence of the weaker nations. After that another struggle between the few powerful nations still existing, until the most powerful among these few will conquer the others and the world will be one military dynasty. Finally this same militarism will destroy the liberties of the people in this remaining government, for necessarily the right of the individual citizen will be subservient to the military power. Military power is necessarily autocratic and the better the army the more autocratic its organization. The individual unit must subordinate his will to that of those in command.

Theirs not to reason why,
Theirs but to do and die.

The more democratic a nation the weaker it is from a military standpoint, because individual independence and military discipline are incompatible. That is what frets the militarists in this country. The people are not willing to submit to military rule. They are not willing to surrender their individual liberty and do the "goose step" at the command of a military despot.

That Farm Adviser Matter

Editor The Farmers Mail and Breeze—I'm just beginning a wet harvest and would like to keep cool but how can I when the mentor for thousands of busy farmers, the clearest and most honest reasoner in the state, permits himself to espouse this system of farm advisers?

Now come, T. A., put yourself in our shoes. Don't take away from us what little respect there is left us. The very inception of this system, coming from above and not from within us and the sponsors and payers, namely, the bankers and Sears, Roebuck, should condemn it. Now I say investigate it and you will condemn it as you rightly condemn the banking system.

There are better ways of giving us farmers what we most need, method and encouragement. In one of the northwestern states the Agricultural college rents a farm, or several farms throughout the state and demonstrates through a practical agent the best methods. But it seems to me the best system for us would be in connection with the consolidated country school, the hope of the future, managed in this way: Buy or rent 80 or 160 acres. Hire a man and his family to farm according to plans devised by the best thought of home talent, men and women alike.

Where we have not the consolidated school we may have a county poor farm and no paupers. Let us sell this fertile soil, invest in a proper acreage of poor land and establish a model and demonstration farm, guided by the best home thought in connection with whatever of good there may be in the Agricultural college.

Independence, Kan. H. K. BAKER.

I have no objection whatever to the suggestions made by Mr. Baker. I have advocated just such an arrangement as he suggests in connection with consolidated schools. I would have the consolidated district own a tract of land on which the consolidated school building would be located and here would be employed regularly a well qualified instructor in agriculture, horticulture, floriculture and arboriculture. I would make this a branch of the Agricultural college so that each district might have the benefit of the help of that institution. On each of these tracts of land would be carried on experiments in all the lines heretofore mentioned. In other words, I would spread the Agricultural college all over the state. I would if possible make every farmer and every farmer's wife and children students in this great practical school. That is one of my dreams that I hope sometime may be realized.

But after all, this is only a modification and enlargement of the farm adviser idea. The consolidated schools are established in only a few localities

and those which are established have not the land for demonstration purposes. Indeed, many farmers, I find, are strongly opposed to the whole plan of consolidated schools. They wish to continue the old plan of separate district schools. Now the question is this: Is there nothing to be done in the way of general farm demonstration while we wait for the consolidated school idea to be worked out?

I note that one of the objections urged by Mr. Baker is that Sears Roebuck and the banks are offering to help finance the farm adviser plan. This he considers a reflection on the intelligence of the farmers.

Very well. Just tell Sears Roebuck and the banks to attend to their own business and the farmers will attend to theirs; that they are able to pick their own advisers and also to pay for them without any outside benevolence or charity. I rather like that spirit myself and am not surprised that the farmers are sensitive about gratuitous advice offered by a lot of men who know very little about practical farming, just as I presume the bankers would resent an intimation from a lot of farmers who never had any banking experience, that they knew better how to conduct the banks than the bankers themselves.

That natural feeling, however, should not prevent the farmers from employing any reasonable means to increase their knowledge about their own business. It is not uncommon at all in these days for successful business firms to employ efficiency experts to come into their factories or other places of business, carefully study the methods and then make suggestions of ways in which the experts believe that the business can be run more economically and profitably.

No man who is really wise thinks that he knows all that is possible to be learned about his business. When he reaches that state he ceases to progress, and when a man ceases to progress he begins to go backward. Nature seems to abhor inaction. Everything in the world is constantly changing. That is true even of the seemingly unchangeable rocks.

No business requires greater intelligence than the business of farming, if conducted as it should be conducted. The up-to-date farmer constantly is looking for new methods by which he can increase his profits and make his farm a better farm. It would be foolish to say that nobody can teach him anything.

Now the valuable farm adviser is not a man who labors under the delusion that he knows it all. He should be a man who is learning all the time. He will gain knowledge from the very farmers he is trying to advise. He has, however, presumably gone through a careful training. He has been educated in the science of agriculture. He has studied the nature of different soils. He is familiar with, or should be familiar with, the different plants and the soils to which they are best adapted and also the most successful methods of cultivation as proved by experience.

Now I say that if the farm adviser is the right sort of a man he can be of great benefit just as the good farmer is always of great benefit to his neighbors. Whether he is of benefit or not depends on the man.

Got the Wrong Hubbard

Editor The Farmers Mail and Breeze—I call your attention to the fact that you have located me at Rome, Kan., which was formerly the location of Hon. Thomas A. Hubbard and not Thomas D. Hubbard. Brother Thomas Hubbard of Rome is a jolly good fellow but as you say, you probably have not heard such a complaint from him as I have set forth in your issue of the 19th. However, in justice to Hon. Thomas A. Hubbard I should like to have you make the correction as to initials and location of home.

Since writing this letter there has been a number of very heavy rains and some terrific wind storms here. The near cyclone which visited us last night about midnight snatched trees off as if they might have been corn stalks and scattered the branches of other trees all about the landscape. The rainfall was heavy and the condition of the fields is such now that no one will be able to get into them before June 21 or 22.

Meanwhile the weeds are growing with great rapidity and corn is bringing 72 cents at the warehouses while farmers who are so lucky as to have a small store of corn on hand utterly refuse to sell it, stating that the outlook for a corn crop this year is not good and that they wish to hold their last year's corn to feed their teams until they can make another crop after this year.

You can call this a complaint or whatever you wish but it is not worth while to hold up something bright when there is nothing bright to be seen and it is absolutely wrong to mislead inexperienced people. THOMAS D. HUBBARD.
Kimball, Kan.

An Irishman Does Not Agree

I should judge from his name that Thomas O'Shannon is of Irish extraction and the following letter will, I think, bear out that supposition:

Editor The Farmers Mail and Breeze—I have read your Passing Comment for quite a long time and as a rule I agree with you. But I never was quite able to bring myself to your way of thinking in regard to the military policy of this country.

The events of the last year have made it very plain to me that this country should have military and naval strength to protect us from foreign aggression, while you seem to think the time is here when the lion and the lamb shall lie down together and the sword shall be beaten into plow shares.

Now that time is not here and if it is on the way it is coming so slowly it will never do this generation any good. We have yet to meet the facts as they are and not as they will be. Commercialism and greed are the dominant powers of this earth and when a man or a nation of men determine to rob some one as Germany has Belgium, moral suasion doesn't go very far toward preventing them from doing so. You must be prepared to kill such robbers as they were prepared in Bible times.

There is no use crying "Peace" when there is no peace. The German government has bull-dozed this country because she knew we had no efficient army and navy. They also knew we had a milk and water blatherskite cold footed statesman for secretary of state who would desert the President at the opportune moment in order to aggrandize his own reputation. Germany knew this, that is what German espionage is for, to get facts.

It is not necessary for this country to bankrupt itself in order to maintain a respectable army and navy. If you will investigate facts you will learn that the kingdom of Italy and also the French Republic have maintained their military and naval forces on slightly more than it has cost Uncle Sam to support his makeshift army and navy. The trouble in this country is the money appropriated for the military has gone into the pockets of grafters.

Advocates of peace at any price might point to China as an example of an unprepared nation but I hope the time never will come when this country shall take China as an example. China is in no sense an independent nation and never has been. It always has taken its orders from Europe. You have only to read history to learn that fact.

Now all Europe is involved in war. Japan virtually has assumed control of China and intends to continue her overbearing policy. Unless this country arouses from this lethargy and looks to its own defense it eventually will sink to the level of China. You cannot depend on grape juice and international honor for protection for nations are like individuals—a great many of them have no honor.

I thought for a time Socialism was having a great influence for peace but the year 1915 sees Socialism standing before the world indicted, convicted and sentenced for its insincere teachings. Mr. Editor, to avoid humiliation this country must arm itself. THOMAS O'SHANNON.

Commissioners Won't Act

Editor The Farmers Mail and Breeze—I live in a school district and have one girl to send to school but she has a creek to cross with no bridge over it, so I can't send her. Two years ago the commissioners promised to put in a bridge over this stream but failed to do so. The road across the creek is on the section line. Tell us what to do to get the bridge. J. F.
Parkerville, Kan.

I know of nothing you can do but just keep hammering at the commissioners until you get your bridge. It is possible that the commissioners might be mandamused and compelled to build the bridge, but that would cause you a good deal of expense and I am very doubtful about it doing any good. A court would be very slow about ordering a board of county commissioners to do anything of the kind. The policy of the law is to give county commissioners a good deal of latitude in such cases.

Why They Become Socialists

Writing from Baxter Springs a subscriber has this to say in a defense of Socialism:

Editor The Farmers Mail and Breeze—Why do men become Socialists? The Socialists are working men principally. The struggle they have to make in order to obtain a decent living is a hard one. In their distress they seek relief. The two old parties promise but do not fulfill.

Most of the Socialists are well read and well posted in politics and they realize that our law makers are not interested in the welfare of the working men as is plainly shown in the Mulhall investigation when he represented manufacturing associations and they furnished him with all the money he needed to bribe legislators. These bribes were to prevent the passage of laws that would benefit the working people.

Congress investigated the Lawrence strike. Conditions were awful. Little children working in the mills at wages that would hardly be dignified by calling them starvation wages. What did Congress do? Nothing.

Congress investigated the strike in Colorado where women and children were murdered by hired gun men. Who did the hiring? The Colorado Fuel Company, Rockefeller's company. Did that company have to pay any penalty? No, but it got 80 miners in jail and is working hard to have them hung.

The slogan is, "The labor unions must be crushed."

The Socialists are the ones who worked for women suffrage. The Socialists are working to put an end to bloody wars; to abolish one brand of law makers and prevent the supreme judges from pronouncing our laws unconstitutional. Is it any wonder that humane men become Socialists? I am a Socialist and a Catholic.
Baxter Springs, Kan. WILLIAM BRUGGER.

Commends the Editor

Editor The Farmers Mail and Breeze—My regard for my country and my fellowmen prompts me to commend you for the courageous stand you take against unnecessary war. I refer to your expressions in the last issue of the Farmers Mail and Breeze entitled, "Friends if Permitted to Be."

I for one am with you in the stand you take. I believe in, and hope I may live up to, a patriotism that is much higher than the counterfeit sort which would hazard the lives and well being of millions of innocent human beings in order merely to establish doubtful technical rights abroad. These rights, if they exist at all, are not really necessary to the well being of those Americans who want this nation to back them up in their use. This small class of Americans care not at what tremendous cost to their country they may be permitted to enjoy these doubtful rights—that is, to travel in safety in the war zone. In short, they have no patriotism.

It has been said that the American people are as unintelligently generous in their patriotism as they are in work intended for the general uplift of humanity. As to a great majority this probably is true, and the jingoes, taking advantage of this over-generous spirit, are trying now to make it appear that to be patriotic one must "stand by the President" at any cost to the nation; that one must sit supinely mum while the President is hastening his drastic action that may engulf us in an unnecessary and useless war. Then they tell the President the people are a unit for war!

Patriotism, as I understand it, is devotion to the welfare of one's country. Yet the jingoes pretend to be the real and only patriots. They seem to assume that they are the whole United States, and that because they alone are ready and eager to throw sanity and humanity to the winds and rush the nation headlong into unknown depths, the people as a whole are for war!

Will the intelligent citizens of this country be stupid enough to be dogged eternally by such devilish tactics?

Again I assure you that I am earnestly with you for honorable peace, and unalterably opposed, as you are, to unnecessary and barbarous militarism.
Kimball, Kan. J. H. MORSE.

Another Commends the Editor

Editor The Farmers Mail and Breeze—Your article in last week's issue under the title, "Must Be One Thing or the Other," is one of the best things that has been written on the war. Germany has been preparing for war for years and years. It has wanted war. The kaiser has longed for and been disappointed that the time did not come sooner when the German army could have a chance to kill, to wreck and ruin.

There was no occasion for the present war and had it not been for the fact that the war lords of Germany wanted to show the world what the German army could do, it never would have occurred. Eliminate the militarism from Germany and England and Europe would never have another war. The common people there do not want war. This war is really only a fight between the king of Great Britain and the kaiser of Germany. It is a fight to see which will remain the ruler of Europe. The smaller countries which allied themselves with England did so in order to maintain their governments because they know that if Germany wins in this fight it will be impossible to them to exist there under the domination of a man like the kaiser and his war lords.

There is no question that the ruler of Germany believes his army and navy can whip the world and while this war is the most destructive in the annals of history it should continue until Germany has had enough. When it is over the people of these countries should put an end to pin-headed royalty, form a constitutional government and elect men to office who have a higher idea of government than bloodshed and murder.

A government which is not founded for the betterment of humanity must fall. Militarism is not necessary in any part of the world. When we boast of our great civilization and education; of our Christianity and love of mankind, and then read of the daily slaughter going on in Europe, it is enough to make every intelligent person wish that there was not an army or navy anywhere on the face of the globe. May the time come when every battleship shall be turned into a vessel of some other kind and peace shall reign over the entire world. LEM A. WOODS.
Chanute, Kan.

What Should We Do?

Editor The Farmers Mail and Breeze—It looks as if this nation might be dragged into war by the loss of a few lives of persons who took chances of getting across the water when they knew when they started that they were likely to be attacked by a German submarine. I think anyone wanting to take a trip on the sea now should take his own chances. I also think that the warring countries, especially Germany should be dealt with as you would deal with a drunken man and make her come to time in some other way than by going to war.

In the case of Mexico it would seem foolish to fight with a class of people like them. They wouldn't know when they were whipped anyway and would be just as bad after they were whipped as before—maybe worse.

If Americans want to stay down there after they have had a chance to get out and have had warning let them take the consequences. War should be the last resort. Is there not some way in which we could inflict punishment on Germany or any other nation when we have a just cause of complaint? E. L. ALBUS.
Minneola, Kan.

Yes, there are other ways in which we could punish an offending nation besides going to war. We could refuse to do any business with that nation and there is no nation that for a long time can afford to be cut off entirely from the business of the United States.

Regarding Interest

Editor The Farmers Mail and Breeze—A merchant charges $67.50 cash for a cream separator but if he sells it on time wants $75 and 10 per cent interest, a difference of 20 per cent between cash and credit. Is that charging unlawful interest, or usury? F. M.
Fountain, Okla.

I assume that the merchant referred to is in Oklahoma where the legal rate of interest on contract is 10 per cent. He would not be charging illegal interest, according to the facts as stated. He has a right to ask what he pleases for his goods, but having agreed on the selling price he would not be permitted to charge the purchaser more than 10 per cent interest on the purchase price.

Trees and the Public Road

Editor The Farmers Mail and Breeze—A man owns a farm. Another man rents it. Will renter, owner or road boss have to keep trees cut along public road? READER.
Winkler, Kan.

Speaking generally, the law does not require the land owner to keep his trees trimmed along the public highway, although it may do so in special cases as where the people of a township have voted the law compelling the trimming of hedges. As to whether in any case the land owner or renter would be compelled to trim the hedges or trees, that would depend entirely on the terms of the lease.

A Question of Tenancy

Editor The Farmers Mail and Breeze—In March, 1914, I rented a piece of land for two years. The lease expires March 1, 1916. Can I hold the ground and put same in wheat this fall? E. J.
Palco, Kan.

Not without the consent of the land owner.

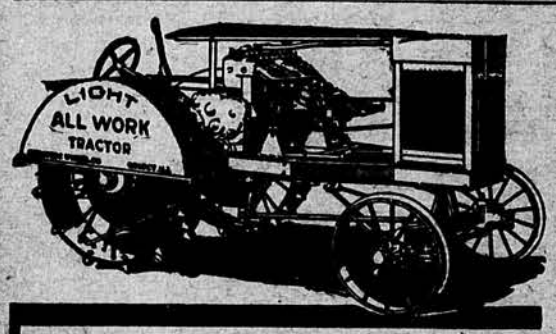
The "Kinnard" Tractor

The Latest Addition to the Flour City Line

The "KINNARD" is not a two-plow affair, but is a strictly four-plow tractor, guaranteed to pull four 14-inch plows at the rate of two and one-half miles per hour. It has weight enough to stick to the ground, power enough to pull the load, and is substantial enough to stand continuous work. It is equipped with a four cylinder, vertical motor; 60-inch drive wheels with 16-inch face; Hyatt Roller bearings throughout, (except motor); Automobile Steering device, and the best standard accessories. A cheap price is not its dominating feature, but its size, power, and capacity is destined to solve the Small Tractor problem. If interested send for descriptive circular.

Will Be At the Hutchinson, Kansas, and Fremont, Nebraska, Demonstrations

KINNARD-HAINES CO., 854 44th Ave. No., Minneapolis, Minn.



The Light "Allwork" Tractor

Pulls 3 Plows Easily

A Four-Wheel Tractor Dependable as a Horse

A simple, durable, powerful machine selling at a price you can easily afford.

Equipped with four-cylinder vertical engine, 5x6, developing 22 h.p. at the belt, 12 h.p. at the drawbar. Two-speed transmission working in oil, automobile type front axle, roller-bearing rear axle, steel gears thoroughly protected from dust and self-oiling, radiator and fan that *cool* absolutely, 16-inch-face rear wheels, weight 4500 lbs., price $850. Also furnished with two-cylinder opposed engine, 20 h.p. at the belt, 10 h.p. at drawbar, weight 4200 lbs., price $750.

Our ten years' actual experience in building gas tractors gives to the farm owner of the country the assurance that in buying the above machine he is getting a tractor that is not a freak, nor one that is in the experimental stage, but a machine built along practical, sensible lines, giving guaranteed results, assured by the numerous machines at work in the fields today. *Our catalog gives full details, write for it today.*

ELECTRIC WHEEL COMPANY, Box 30A, QUINCY, ILLINOIS

Now Only **$995**

Here It Is

Just The Tractor You Need

Exactly what you have been looking for. A good, substantial, powerful, practical, light weight, one-man tractor for general farm work. Field or belt. High quality at a low price.

Heider Tractor "Model C"

The product of our expert engineers who know the requirements of power farming as proven by years of successful manufacturing of light weight tractors.

Not a freak, not an experiment, but a strictly high-grade, four-cylinder, four-wheel tractor which is the recognized standard of tractor construction. Has seven speeds. Horse Power, ten-fifteen. Burns gasoline, kerosene or motor spirits. Absolutely guaranteed. Write today. Get facts and proof of our claims. Address

HEIDER MFG. CO.
455 Main St.
Carroll,
Iowa

1c IS WORTH DOLLARS

when you invest that 1c in a postal card to us. Here are a few of the good things in it for YOU.

1½ H-P. $24.75	5 H-P. $67.50
2 H-P. 28.75	6 H-P. 90.75
3 H-P. 33.50	8 H-P. 135.50
4 H-P. 55.00	10 H-P. 175.00
12½ H-P. $214.50	

WE GUARANTEE AGAINST REPAIRS FOREVER.
OTTAWA MFG. CO., 2012 King St., Ottawa, Kans.

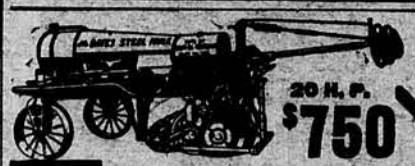
Get out from the Plow Handles

Be the master,—not the slave,—of your farm. Do your plowing, harvesting, threshing and hauling and operate your farm machinery with a

HUBER FARMERS' TRACTOR

Enables one man to do the work of six men and twelve horses. Cuts costs, saves time and increases profits. Gasoline or kerosene for fuel. Three sizes. Our price and terms enable you to pay for it out of what it saves for you.

Write today for FREE CATALOG
THE HUBER MFG. CO.
762 Center St. Marion, Ohio



20 H. P. **$750**

BUYS 30 H. P. $850

The Bates Steel Mule

One man drives both tractor and implement. Works on any soil all the year round. 4 Cylinder Motor. Hardened Gears, Hyatt Roller Bearings.

CULTIVATES CORN

and other crops. Takes the hoeing place for every farm operation. Uses your present implements. Hundreds in use.

JOLIET OIL TRACTOR CO., 245 Benton St., Joliet, Ill.

JUST ABOUT FARMING

THERE is a sound, substantial basis behind the movement for more power farming. This basis is the increased profits which it will bring. That is why there is such a great interest in the Kansas Traction Plowing exhibit, July 19 to 24, at Hutchinson. The thousands of Kansas farmers who are coming to this show wish to see the different makes in operation side by side, and to learn of their relative efficiency.

Efficiency

The relative efficiency of tractors and horses has always been a subject for dispute among farmers. Here is what F. L. Peterson, a specialist in farm mechanics, said about this recently:

"There are different methods of comparing the efficiency of the horse and the inanimate engine. The student of animal physiology first determines the number of digestible elements contained in the given food and considers this the fuel value of the feed. It is said that 30 per cent of the fuel value of food is lost in the energy expended by the animal in chewing and digesting it. The amount of external work that can be obtained when the animal is given a certain definite amount of food is termed the production value. Even when the horse is working a certain proportion of energy is being consumed in moving its body, and as it is able to deliver work only when in motion, the thermal efficiency of the horse is low, being given by authorities as not more than 6 to 10 per cent. While this may be true of scientifically fed animals, the horses that work under actual farm conditions have a much lower efficiency. This efficiency is exceeded by most internal combustion engines. Experts of the United States Department of Agriculture have obtained an efficiency of 20 per cent under laboratory conditions."

Plowing

"Every farmer knows there is a right time and a wrong time to plow. It is possible that a difference of a week or 10 days in the time of doing a job of plowing may mean a difference of 5 or more bushels of grain an acre in yield when harvest comes," says a letter received recently from L. L. Davison, of Deuel county, Nebraska. "By plowing with engine power the ground may be turned a great deal faster, and this is of special value where farming is done on a large scale. It means that the ground can be put in proper shape at the right time.

"The cost of preparing ground with an engine varies greatly as it depends largely on the kind and condition of soil, and the depth you want to plow. But where farming is done on an extensive scale an engine for plowing is far in the lead of horses and, besides, there are a great many other uses to which an engine may be put about such a farm. The fear that the large drive-wheels will pack the ground is without foundation. The tractor wheels are much higher and also wider than those of the common engine and their larger wheel base in proportion to weight makes it possible for them to travel over softer ground than the other engines. In selecting an engine for plowing, one should see that the shafting and gearing is heavy and that there are as few bearings as possible over which to transmit the power."

Small Tractors

The development of the small tractors has greatly increased the field for power farming in Kansas. It has made it possible to use these machines on many places where they would not have been practicable a few years ago. In presenting this viewpoint, a tractor manufacturer said recently:

Because there are tractors now plowing and seeding a fair-sized farm between sunrise and sunset we sometimes forget its importance on the small farm. Indeed, even today many people think that a tractor can only be employed on a large farm. The small tractor for the 150 to 200-acre farm is plowing, fitting and seeding 15 acres a day; an output to cover the entire farm it is intended for within the usual best seeding season.

For permanent culture deeper plowing is needed—and the farm world is power-short now. In the past 10 years horses have increased nearly 50 per cent in numbers and the price has increased 100 per cent. Deep plowing of any considerable area is extremely hard work on the horses, with resultant collar sores, galls, and fagged-out animals. The traction engine, however, will drag a gang of two to twelve 14-inch plows 2 to 2½ miles an hour and keep it up all day without stopping to rest at the end of the furrow.

The life of a horse is figured at about 10,000 working hours, but his maintenance is several times that. The horse force must be kept 9,000 hours for every 1,000 hours of full service. One acre out of five under cultivation is required to produce the food for horses that supply the power to work the rest, a food product valued at 1,250 million dollars a year, or the total income of 3 million families. The traction engine consumes nothing that could be made into food for the human family in any more direct way than through the tractor. The traction engine can be worked to its full capacity every day in the year if there is work for it to do, without regard to excessive heat, flies or continuous hours.

A gas tractor not only effects a striking economy, but it multiplies the efficiency of every piece of machinery or implement on the farm not operated by human power.

Feed

Statistics show that if you farm with horses or mules they eat a great deal of what you raise. Statistics also show that they only work on the average about 100 full days a year. But they eat all the time, whether they are idle or working. You can't turn a switch and stop a horse eating, like you can with a tractor. You have to feed them the other 265 days all for nothing, just to get 100 days' work out of them. It's entirely different with an engine. When it isn't working, it doesn't cost you anything for fuel.

The Wife Helps

Modern tractors are easy to run, and they cause but little trouble if the few simple instructions are followed. There are many women in Kansas who run tractors, and they do it easily, too. Here is an example in a letter from James Needham of Ashland, Kan.

The tractor does better plowing than I could do with teams. In my best day's work I plowed 15 acres in 15 hours of steady plowing, my wife running the tractor while I ate my meals. I am not in the habit of having my wife work in the field but plowing with a tractor is fun for her, and at the same time it helps to get the ground plowed in the time that it should be broken. We have so little rain in this part of the country that we have to plow all we can while we can. I believe the tractor is going to solve the farming proposition in this section. It will do so much better work than can be done with teams and much more of it. It does not cost as much an acre to plow with the engine as it does with teams. It cost me $28 for the fuel and oil to plow 100 acres. I plowed the 100 acres in nine days.

Work

A tractor is adapted to a great variety of work on a farm. Almost every tractor operator discovers new purposes to which it may be put. Here is a letter from W. G. Harsha of Kremmling, Colo., which tells how his tractor is used for the different farm tasks:

I have often said to my neighbors that we do everything on the ranch but milk the cows and that the only reason we didn't do that was that we hadn't the necessary machines to hitch the tractor to.

To be specific, last spring we cleared up a good many acres of sagebrush land, and absolutely everything including harrowing and seeding the land was done with the tractor with the exception of raking and burning the brush. The raking was light work so my father did that with the team while I grubbed, plowed, harrowed and seeded with the tractor.

In the first place I pulled a grubber cutting a 9-foot swath through the brush, then after my father burned the loose brush behind me, I hitched the little tractor to our heavy disk plow and plowed four furrows up and down hill, thus cutting the remaining brush and doing a good job of plowing at the same time. Then I hitched to a home-made spike harrow 9 feet wide with teeth 10 inches long and pulling this on second speed, I soon had the buried brush pulled out on the surface of the ground. After my father raked and burned this brush, I finished the operation by hauling disk harrow, spike-tooth harrow and a grain drill all on second speed at 3 miles an hour. This made a perfect seedbed and deposited the grain in the soil with very little loss of moisture, so we raised some of the best grain we have ever had. When the grain was ripe we pulled a binder and disk harrow on high speed at 5 miles an hour, thus disking the ground and conserving the moisture that would otherwise have been evaporated.

In addition to the above work, I have pulled up posts, torn down old log buildings, graded roads, made ditches and even pulled down trees in the timber.

We also string our woven wire fences with it, moving a foot at a time if we wish and making the fence "singing tight" and holding it in place for nailing.

MORE POWER ON FARMS

THERE is a constantly increasing use of tractors in Kansas. They are paying on the farms where they have been introduced, if they are used in a proper way. Of course, one must have work to which an engine is adapted, and enough of this work so it will be a profitable investment.

Like every other business or profession, farming is constantly becoming more and more of a science. The successful and progressive farmer of today uses more machinery and labor-saving tools than was thought possible a few years ago. In striving for higher efficiency he seeks to replace manual labor and physical energy with that of mechanical power, thereby not only solving in a measure the labor question, but making it possible to perform various farming operations at a time when energy expended along a certain line will accomplish the best results. For facilitating work of this kind, the tractor is being constantly introduced in new fields.

In the spring, the first job in the field is plowing, disking, preparing the land and sowing the seed. This is being done with the use of tractors fully as well, in less time and with far less expense, than with horses.

Considerable power will be absorbed in a plow if it is not properly adjusted. Too much suction will add to the load carried on the wheels and if the hitch is not arranged in line with the plows, they will tend to swing around and draw at an angle, which greatly adds to the draw bar pull. Plows should be adjusted with just enough suction to keep them in the ground and hitched so that the beams travel in perfect line with the tractor frame.

There is a great difference in the amount of power required to pull a plow in different soils and under different conditions. In order to determine what this variation is, dynamometer tests have been made in different kinds of land and in different parts of the country, and the variation was found to be very great.

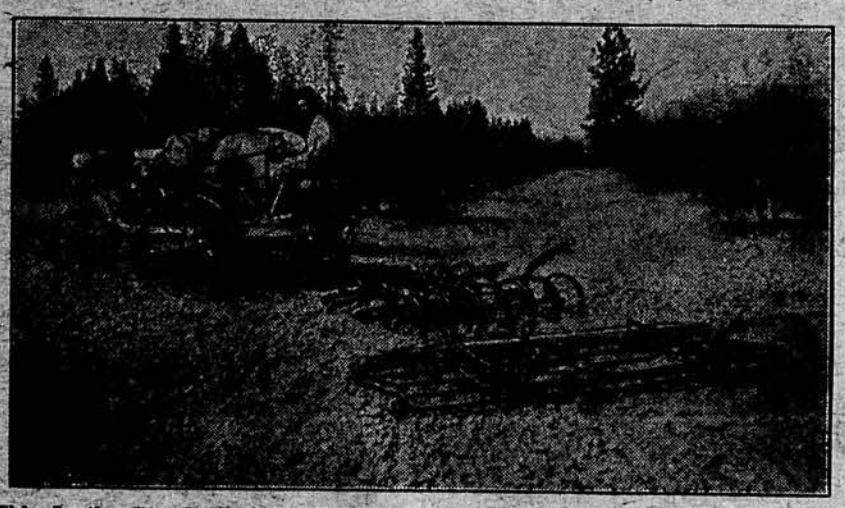
In ordinary stubble plowing, a six-bottom gang, cutting 4 inches deep, requires a draw bar pull of 2,600 pounds. In a different locality a four-bottom gang of the same make and type used in breaking 3½ inches deep, required a draw bar pull of 4,000 pounds. The soil and conditions sometimes vary enough in the same field to make a variation in draft amounting to 500 pounds a plow. This will indicate, of course, that the condition of the soil has a great deal to do with the number of plows that a tractor can handle.

Tractors are being used very extensively for harvesting, for in this way two, three or even more harvesters can be operated with the use of one tractor, and on the larger tracts can be run almost continuously by having the men change shifts. During harvesting time, because of the extreme heat at that season of the year, the work is very hard on horses and frequently results in their being overcome by heat and ruined.

The following system may be used in calculating the size tractor necessary for hauling a given load under certain conditions. Over hard level road it requires a 100-pound draw bar pull for each ton. On sod it requires about a 160-pound draw bar pull, and on newly plowed land or muddy clay roads about a 260-pound draw bar pull a ton. A load of 15 tons over a hard level road would require a 1,500-pound pull on the draw bar and over a prairie or in the fields would require a 2,400-pound, and the same load over muddy clay roads would require a 3,900-pound pull.

Tractor manufacturers will be pleased to supply information setting forth the number of pounds draw bar pull of the different size machines. Of course, in estimating the size of load a certain tractor will haul under certain conditions, it is necessary to take into consideration the effect of the road conditions on the tractor itself, since the tractor will not exert as much tension on the draw bar in deep mud as it will on a hard road.

Allowance also must be made when pulling loads up grade, since each 1 per cent of rise in grade adds 1 per cent of the combined weight of the tractor and load, whether it be plows, wagons, or other appliances, to the draft.



This Is the Big Bull, a Small Tractor Especially Adapted to General Farm Work and Exceedingly Efficient in Cultivating.

If You'd Escape Typhoid

Only one kind of germ can cause typhoid fever—the typhoid germ. Before the germ can induce the disease it must be swallowed into the stomach and pass the intestines. This is how we know that every person who contracts typhoid fever has previously swallowed food or water which has in some way been contaminated by human excrement. For this reason the excrement of a typhoid patient should be burned or buried in a hole in the ground well lined with quick lime, then be well covered with quick lime and earth.

Flies which gather wherever there is filth, carry the typhoid germs on their feet and plant them in food.

Often the disease is spread by contaminated milk.

No person who is attending a typhoid patient should be permitted to have anything to do with the milking or care of the milk, nor with the preparation of meals.

Screen all houses, outhouses and stables.

Do not let sewage mix with surface soil nor seep into wells, springs, creeks or rivers.

This is some trouble but so is a long illness and a funeral.

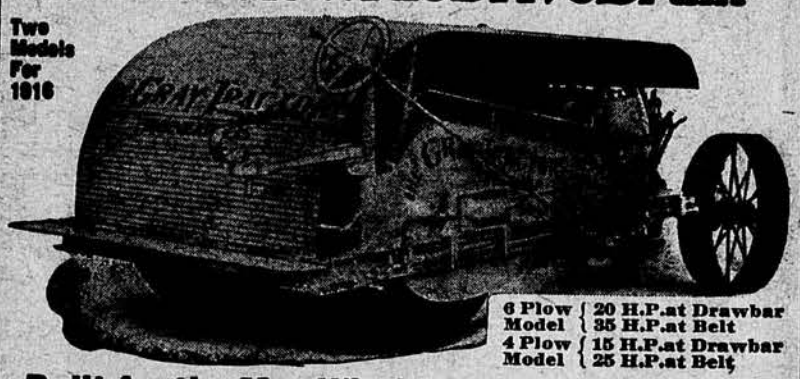
There is another way to protect yourself from typhoid fever—be vaccinated for it by the family physician. The practice is safe, simple and sensible. Many persons take this precaution before they go on journeys where they will have to drink water from strange wells.

To make good butter it is necessary to have clean milk and healthy cows. Milk from unhealthy cows is not a safe article of food, even though there is no visible dirt in it.

To produce good milk, cows must be comfortable. The dairy barn should be roomy, clean, dry, light and well ventilated.

The GRAY TRACTOR
With The Wide Drive Drum

Two Models For 1916



6 Plow Model { 20 H.P. at Drawbar / 35 H.P. at Belt
4 Plow Model { 15 H.P. at Drawbar / 25 H.P. at Belt

Built for the Man Who Wants Good Machinery

See the 1916 Models at the
Kansas Traction Plowing Exhibit
Hutchinson, July 19-24
Also at the National Power Farming Demonstration
Fremont, Neb., August 9-14.

The Gray is unlike any other tractor, its Wide Drive Drum, light weight and individual construction make it an all-season, all-purpose farm power. Sold on Approval, Catalog on request.

Gray Tractor Mfg. Co., Power Farming Engineers
1042 Marshall St., Minneapolis, Minn.

THE HUME TRACTOR
Pays a Profit the Year Around

Plowing 15 acres per day

Discing 80 acres per day

Running Ensilage Cutter

A One Man Outfit

The Square Turn Tractor

The **Hume**, light-weight, high powered and economical, is the ideal general purpose tractor for the medium-sized as well as the largest farms. No dead expense attached for, being adapted to all kinds of belt or hauling purposes, it can be used at a profit at all seasons of the year for

Plowing
Discing
Binding
Threshing
Road-Work
Ensilage-Cutting

It has no unnecessary parts—is made of the best material—is easy to handle and does not require the attention of an expert.

The Hume Tractor
has the most draw bar pull for its weight of any tractor on the market, is the most substantially constructed and has fewer mechanical parts to wear.

Turns Square Corners
Won't pack the ground. Its simple, power-steering device enables you to turn absolutely square corners in soft ground as well as on the road. Our catalogue gives some information that will be of great interest to you. Write for it today.

Meet us at Hutchinson, Kan., July 19-24.

HUME MANUFACTURING CO., 540 Fourth St., Hume, Ills.

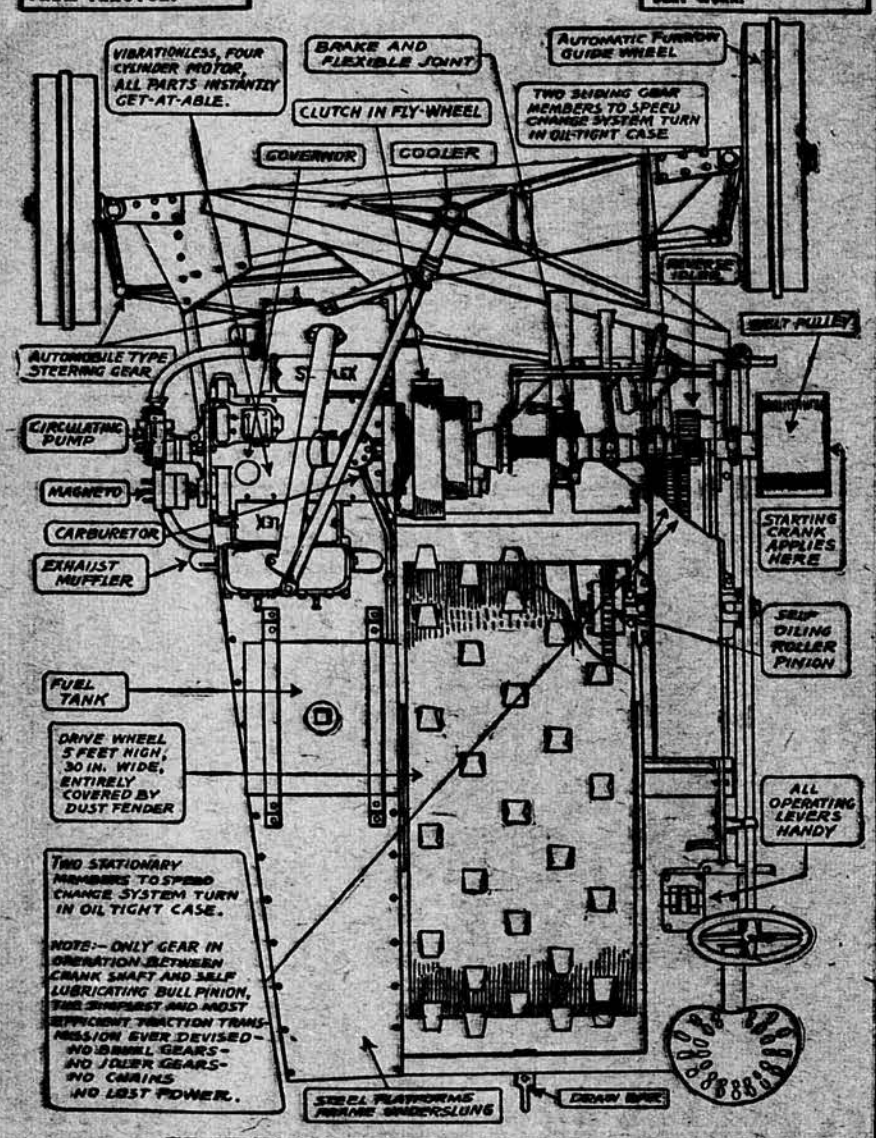
Will exhibit at the Kansas Traction Plowing Exhibit
Hutchinson, Kansas, July 19th to 24th, 1915
Also at National Power Farming Demonstration, Fremont, Nebraska, August 9th to 14th, 1915. Prompt deliveries guaranteed.

INVESTIGATE THE SIMPLEX

A BIG, FOUR PLOW, LIGHT WEIGHT, HEAVY DUTY, FOUR CYLINDER FARM TRACTOR.

$765.00

A UNIT POWER PLANT FOR ALL FARM AND ROAD HAULAGE AND STATIONARY BELT WORK.

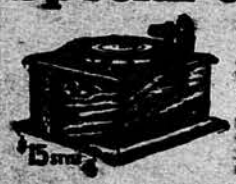


SIMPLEX TRACTOR COMPANY
WRITE TODAY Agents Terms on Request Address Dept. 14. 214 SOUTH THIRD STREET MINNEAPOLIS, MINN.

THE Music House. THE Music Maker.

JENKINS'-Victrola

Special Outfit Suggestions With Our Prices and Terms


$15 STYLE 4

WE offer these Special Outfit suggestions on Victrolas. The records included in these outfits are 10-inch double-faced records of your own selection, or if you prefer other records you may select them to the same value from the Victor Catalog of over 5,000 selections. We give you the benefit of our experience, our superior service and our musical knowledge, which gives you exceptional advantages in selection and advice. Particular people will appreciate this.

$50 STYLE 9

Jenkins Outfit 4-A $5 CASH $5 a Week No Interest **$19.50** Includes latest Victrola Style 4 with 12 selections on 6 double-faced 10-inch records.

Jenkins Outfit 5-A $5 CASH $1 a Week No Interest **$29.50** Newest Victrola Style 5 with 12 selections on 6 double-faced 10-inch records.

Jenkins Outfit 11-A $7 CASH $5 a Month No Interest **$107.50** Newest Victrola Style 11 Cabinet Model with 20 selections on 10 double-faced 10-inch records.

Jenkins Outfit 9-A $5 CASH $2 a Month No Interest **$57.50** Newest Victrola Style 9 with 20 selections on 10 double-faced 10-inch records.

$100 STYLE 11

Jenkins Outfit 8-A $5 CASH $4 a Month No Interest **$47.50** Latest Victrola Style 8 with 20 selections on 10 double-faced 10-inch records.

Jenkins Outfit 14-A $15 CASH $7 a Month No Interest **$157.50** Latest Cabinet Style 14 Victrola with 20 selections on 10 double-faced 10-inch records.

Jenkins Outfit 10-A $5 CASH $5 a Month No Interest **$82.50** Latest Cabinet Style 10 Victrola with 20 selections on 10 double-faced 10-inch records.

Jenkins Outfit 15-A $25 CASH $10 Monthly No Interest **$207.50** Largest and latest Cabinet Victrola Style 16 with 20 selections on 10 double-faced 10-in. records.

$200 STYLE 16

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.

DISTRIBUTORS WANTED! GOOD PAY; Steady Work; giving away packages Perfumed Borax Soap Powder with our soaps, etc. No capital or experience needed. H. B. WARD & CO., 215 Institute Pl., Chicago.

BEE SUPPLIES Five per cent discount allowed on orders sent in this month. Write for catalogue. Clemons Bee Supply Co., [illegible] Street, Kansas City, Mo.

For Better Silage Yields

The Best Returns Have Been Obtained From the Sweet Sorghums; the Kansas Orange Variety Averaged 17 Tons

CORN has been grown so generally for silage that many believe this crop the only one adapted for the purpose. This is not the case in Kansas. It has been proved conclusively by feeding tests at the Kansas Experiment station, which extended over three years, that both kafir and sweet sorghum make practically as good silage as corn. These three crops, therefore, should be considered when choosing a crop for silage, and the one which will produce the largest tonnage of feed to the acre should be grown.

A test has been conducted by the agronomy department in the last three years to determine the relative yields of corn, kafir, and sweet sorghum for the production of silage. Kansas Sunflower corn, Standard Blakhulled White kafir, and Kansas Orange sorghum were the varieties planted. The crops were grown on fertile, second bottom creek land. This soil is recognized as being very favorable for corn. The corn produced 12 tons, the kafir 10½ tons, and the sweet sorghum 17 tons of silage to the acre as an average for the years 1912, 1913, and 1914. More silage was produced from an acre of sweet sorghum than from an acre of either corn or kafir in every one of the three years. There seems, therefore, no reason to doubt the superiority of sweet sorghum to both corn and kafir for silage when the comparison is made on the acre basis because the yield of sweet sorghum is so much greater than the yield of either of the other crops.

The results slightly favor corn when corn and kafir are compared although the kafir produced several tons more silage to the acre in 1912. Kafir would have made a comparatively higher yield on upland soil where conditions were less favorable for corn. The yield of kafir on the upland was almost equal to the yield obtained on the bottom, while the yield of corn was almost one-half less on the upland.

The animal husbandry department conducted a feeding test during the winter of 1912-13 to determine the relative feeding values of corn, kafir, and sweet sorghum silage when fed to calves with equal amounts of cottonseed meal. The calves fed corn silage ate 13½ tons and made a gain of 1,528 pounds; the calves fed kafir silage ate 15 tons and made a gain of 1,584 pounds, and the calves fed sweet sorghum silage ate about the same amount and made a gain of 1,627 pounds. This test shows that about the same gain was obtained from a ton of the different kinds of silage. If the comparison is made on the acre basis rather than on the ton basis, and the average yields of the crops are used in making the computation, it will be found that an acre of sweet sorghum yielding 17 tons of silage would have produced 1,745 pounds of gain, an acre of corn yielding 12 tons of silage would have produced 1,353 pounds of gain, and an acre of kafir yielding 10½ tons of silage would have produced 1,128 pounds of gain. Thus an acre of sorghum fed as silage produced 23 per cent more gain than an acre of corn fed as silage, and 35 per cent more gain than an acre of kafir fed as silage. This was not because of a greater feeding value of the sweet sorghum silage but because of the greater yield.

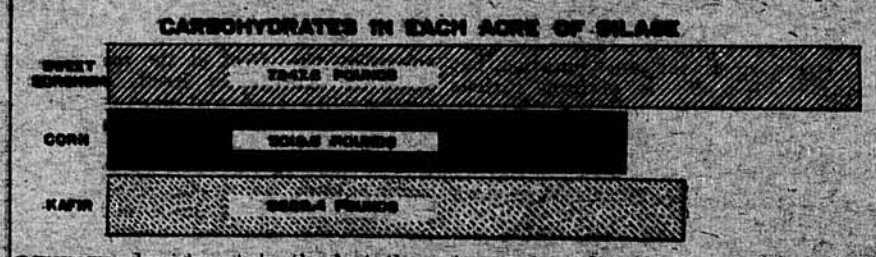
A good variety of sweet sorghum is the best silage crop in most parts of Kansas. Corn may be equal or superior to sweet sorghum in five or six counties in the extreme northeastern part of the state and in the most fertile valleys farther west, but sweet silage is decidedly the best crop in all other sections. A large growing, leafy variety of sweet sorghum should be planted in order to obtain the best results. The small varieties, such as Black Amber, produce too small a yield. The Kansas Orange is the best variety to plant in the eastern part of the state. The Western Orange or Red Amber, slightly earlier varieties, should be grown farther west, especially in northwestern Kansas. The Sumac gives good results on the better types of soil in the southern part of eastern Kansas.

Sorghum often makes such a rapid growth on rich soils that the stalks are weak and spindling, and it lodges badly after hard storms. This makes the crop difficult to harvest. The Red Amber and Sumac varieties are worse in this respect than the Orange. The Orange varieties will not lodge badly ordinarily, but the crop may make such a rank growth in wet seasons that it will be hard to cut with a corn binder.

The sorghum crop should be planted on a well prepared seedbed, and the seed should not be planted until the ground is warm. It usually is safe to plant sorghum about two weeks after the regular corn planting time. It should be planted in rows at the rate of about 10 to 15 pounds of seed to the acre on the more fertile soils in the eastern part of the state, and at the rate of 6 to 12 pounds of seed to the acre on the soils of western Kansas and on the poorer soils of eastern Kansas. Sorghum grown for seed should be planted much thinner than when grown for silage.

Sorghum should be practically mature before it is harvested for silage. It is ready to harvest when the seeds are just firm enough to be cut readily when pressed between the thumb nail and the finger. The quality of the silage will be poor if it is cut too green. It is better to allow the crop to be frosted before cutting rather than to cut it too green. If the crop is frosted it should be cut and run in the silo as soon after the frost as possible in order to pre-

(Continued on Page 30.)



Getting in the Alfalfa

I always am interested in reading articles in your paper by H. C. Hatch. In your last issue I noticed what he said about cutting alfalfa. I followed the plan last year which he follows this year, of letting the alfalfa stand till the weather looked favorable before cutting. My first crop was put up in fine condition by doing so, but I got very little hay after that. I cut early this year even though the weather was not promising; shocked the hay, and it stood out two weeks with rain most of the time. When weather permitted it was stacked and I found, to my surprise that there was very little spoiled hay, most of it being a good color and not musty.

Now the second crop is about ready to cut. The first crop will make good hay for cattle if it keeps good in the stack, which it will do if wet weather does not spoil it from now on.

Usually I put alfalfa in the barn, for it scarcely ever comes out of the stack in good sound condition if the season is wet, at least this is my experience with it. I intend to cut when the hay is ready in the future for think I can make cattle hay anyway, and give the next crop a chance.

In a recent issue Mr. Hatch spoke of the price of land in Coffey county and said he thought Kansas has not such good soil as Iowa and Illinois. This is true in a general way, but much of Kansas land is as good as the high priced land in some of those states with reputation for big crops. In the Hoosier state from which I came land has sold recently at $200 and $400 an acre that did not raise any better crops when I was there than I raise in Kansas. Illinois did not raise any better oats and corn last year than were produced in this vicinity. We had 30 to 50 bushels of oats to the acre, and 30 to 60 bushels of corn. Oats look now as if they will make a better crop than last year. J. E. White.

Abilene, Kan.

To transplant seedlings dig them up and put them at once into a shallow pan or dish half filled with water. Then the air does not reach the tender roots. Thoroughly wet the soil after setting them again into the ground, and if you shade the little plants for a day or two they will never know they have been moved, except that they will put out many more feeding roots for having been transplanted.

A bureau of employment could find useful work in every town of size.

Here's Another Silo Year

THE FARMER who owns a silo ought to be happy, for this is a silo year. The Farmers Mail and Breeze seldom gives advice to its readers. It believes in reporting results rather than printing long and dreary things filled with theories, but in this case the paper believes it a duty to urge its friends toward silo building.

You remember, perhaps, how we pleaded with you in August, 1913, when things were rather dry and dusty out here, to plant late maturing crops and get ready to make silage? Remember how many of you followed that reminder, and how you wrote us about it—hundreds of you—in the spring of 1914? Remember how we helped to get feed and feeder together?

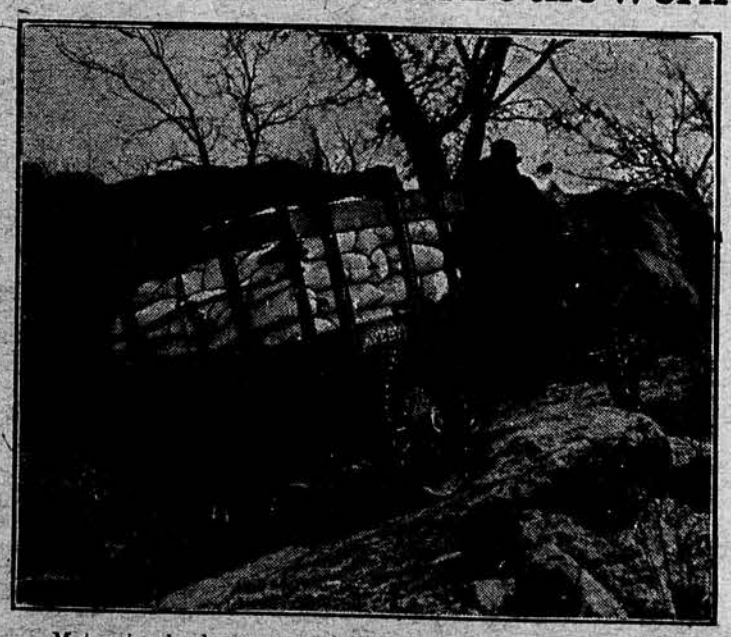
Well, it isn't dry weather this year. You've had rain enough. What you ought to do now—right away—is to follow the methods of others who have succeeded. The Farmers Mail and Breeze doesn't present any other plans. Its sole hope is to say a word now and then that may save its friends from loss.

Therefore we now urge the building of silos. Ordinarily we would advise any kind of a silo, but this is a wet year. With present conditions we do not believe in pit silos for Kansas. We doubt whether there is a spot in the state dry enough now to serve as a proper site for a pit silo. The earth is soaked a long way down. A pit silo would almost certainly be disappointing.

Put up a good silo, stave, metal, concrete or metal lath and have it ready for the late stuff you are planting. You will need this feed before the fields are green again.

Save the commonsense articles on Page 3 of the issue of June 26 and on Page 8 in the issue of July 3. Read these pieces over again. Then figure on a silo. You'll not regret it. It's simply a matter of business protection.

Let the Motor Truck Do the Work



Motor trucks have not put horses out of business entirely. They have merely relieved them of the heavy, back-breaking work. They—the motors—have leveled the roads, in a way, by using power that no horse could exert. Big loads like that shown in this picture try the hearts of horses. They are no strain for the motor truck.

For Sale $125

For Sale $500

Same Make—Same Model Both Used Three Years

Which Is Yours?

You stand to *lose hundreds of dollars* when you come to *re-sell* your car if you have not used the right lubricating oil.

Polarine, if it cost *twice* as much instead of the *same* as common oils, would thus *actually pay*. It maintains the correct lubricating body at every motor speed and temperature.

Polarine FRICTION REDUCING MOTOR OIL

Unlimited facilities and *means* enable the Standard Oil Company's experts to produce the *utmost* in quality at the *lowest cost*. An increase of more than *6,000,000 gallons in seven years in the Middle West alone* testifies to the satisfaction resulting from the use of Polarine.

STANDARD OIL COMPANY (Indiana), CHICAGO, U. S. A.

Use RED CROWN Gasoline—Car and Money Go Farther

Guaranteed to do more and better work with less power

than any other silo filler operating under equal conditions. That guarantee is based on what repeated tests have *proved* that the Appleton Silo Filler will *do*. By its efficiency and economy in use, its positive safeguards against breakdowns and its extra long life, the Appleton proves that *service-cost* is the only sensible basis on which to choose a silo filler.

Solid oak frame, braced, bolted and mortised; impossible to pull out of line. Special high-grade tool steel knives, spiraled to give clean shearing cut. 10 lengths of cut, 5-16 to 2½ inches. Tremendous capacity. Positive frictionless self feed table runs on chilled iron rollers. One lever controls feed rolls and table. Independent belt driven blower, on

APPLETON Silo Filler

has speed adjustable to minimum use of power for any height silo. Lowdown, cut-under frame; easy to handle. Send for catalog of details showing 4 sizes.

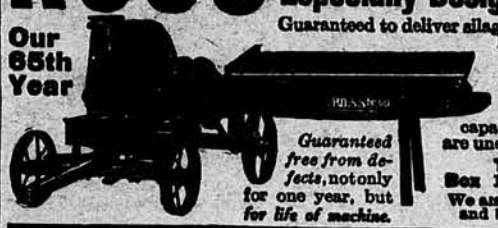
Appleton Manufacturing Co., 497 Fargo St., Batavia, Ill.

FREE book on Silage. Explains how siloing doubles feed values of crops; describes all types of silos, how built, etc.; full of silage and silo facts of real value. Sent free—write!

ROSS SILO FILLING MACHINERY

Especially Designed for Gas Engine Power

Our 65th Year



Guaranteed to deliver silage into the silo at 50% less speed and 30% less power than ordinarily required.

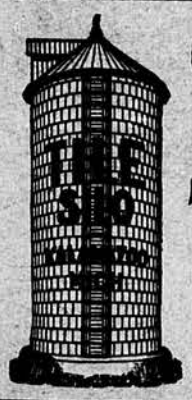
Cuts the silage in uniform lengths, which insures the Best of Feed. Silage packs closer, which permits of more tonnage into the silo. For strength, durability, capacity and easy-to-feed—Ross Machines are unexcelled. Write for catalog.

Guaranteed free from defects, not only for one year, but *for life of machine.*

THE E. W. ROSS CO. Box 170 Springfield, Ohio

We also manufacture the Ross Wood and IN-DE-STR-UCT-O Metal Silo.

ROSS



Capacity
Economy
Safety
New
Different

SILO FILLERS AND

Glazed Tile Silos PRICED TO YOUR **Home Town**

SILOS to earn cost first—then pay. HOW? Ask, giving size.

Kalamazoo TANK & SILO Co., Kalamazoo, Michigan

NO. FORT WORTH, TEXAS. MINNEAPOLIS, MINN. KANSAS CITY, MO.

FREEMAN Dollar-Saving, Powerful Ensilage Cutters

embody more labor-saving and money-making features than any others made. There is no clogging or wasting with the Freeman positive, steel, enclosed carriers (Patented). We have made this machinery for 47 years and we have improved it every year. Simplicity and strength personified, 100% efficiency.

FREE BOOK—We will send you a free book that explains and pictures the complete Freeman line of cutters for every purpose from hand-power up. A postal will bring your copy of this book.

THE S. FREEMAN & SONS CO.

215 Michigan Street Racine, Wis.

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., 826-F Washington, D. C.

Kodak Work Free

Write for coupon and sample print. J. C. WOLCOTT, TOPEKA, KANSAS. Over 10 years in Kodak finishing

Motor Cars For Farmers

BY F. H. SWEET.

The American farmer has the reputation of being conservative to an extreme degree, and this opinion of him was not altered by his attitude toward automobiles when they began to disturb the dust of his highways and to stampede his stock.

But though conservative he may be, his willingness to adopt labor-saving methods and machinery shows that this trait does not extend to matters that affect his productiveness. Therefore it is no great surprise to learn that not only has he become tolerant in his attitude toward automobiles, but that he is making extensive use of them in his work.

Within the last few years automobiles have made a place for themselves as adjuncts to the equipment of a farm, and these are not specially designed machines, but the standard types that are built for pleasure purposes. The complicated reapers, threshers and other implements of the farmer's trade make him a mechanic, and he has little difficulty in mastering the mechanism of a car or in making it do things that certainly were not taken into consideration by the makers.

Having bought a car with the intention of using it for holiday trips, the farmer has been struck with its speed and convenience, and it has not taken him long to get into the habit of using it to take light loads to market or to carry fodder for the stock.

Throughout the farming districts of the Central West one meets motor-carried loads of hay or milk cans, crates of chickens or a calf, and if of sufficient power, the car will be towing a loaded spring wagon. The makes and types are as divers as the uses to which the cars are put. The farmer is not the only resident of the country who benefits by the use of the automobile, for the doctor finds in it a means of extending his field of activity to points 50 miles from his office, as against the radius of 20 miles possible with horses.

And that the accessories to the car may also be useful is shown by the well-authenticated case of a doctor who found a patient in such distress that an immediate operation was necessary. The fact that it was night, and that the oil-lamps were insufficient, did not deter him, for he detached the acetylene lamps from his car, and, piecing out the tubing that connected them with the generator, performed the operation.

One striking result of the use of automobiles in the South and West is the rapidity with which new sections of the country are being opened up. Town and camps distant from the railroad have been put into close touch with civilization by establishing automobile 'bus and wagon lines, and time saved by the ability to strike across country rather than follow a road laid out with regard to springs and water holes. Grain and cattle buyers go everywhere in automobiles.

Ignition for Gas Engines

BY H. L. THOMSON.

The "sparker" of the gas engine in times past has caused a large amount of trouble and was usually the first place to be looked into if the engine would not run. Batteries or a small generator were the source of the current. These often gave out and failed to work well. The spark points would "soot" easily and had to be taken out and cleaned.

All this has been changed by the ingenuity and inventive genius of electrical designers until today the ignition apparatus on a first class engine can be forgotten except for an occasional oiling. The majority of the good grade of engines are not equipped with batteries at all, but depend for current upon a "built-in" magneto.

These magnetos for the "make and break" engine are of two kinds, the geared-in rotary magneto and the oscillating. The geared-in type is geared to the half-time gears of the engine. It is connected to the stationary binding post of the spark plug by one wire, which is not disturbed. No switch is used as the engine is stopped by shutting off the gas. These magnetos will start the engine just as easily as batteries. It does not need to be cranked fast at all.

The oscillating type is fitted right onto the spark plug. The ignitor push rod "cocks" the armatures through an angle of about 30 degrees, when it trips and flies back rapidly, due to a pair of springs.

This sudden flick generates the current. These magnetos start the engine very easily, as the spark is very strong even at first starting. The spark points usually are made of a special nickel alloy, and as they are always together, except when the spark is made, there is small chance for sooting or other spark point trouble. Either of these magnetos is a good investment for the man who has an engine already, as it will relieve him of further ignition troubles. It is a great mistake to buy a new engine without these up to date features.

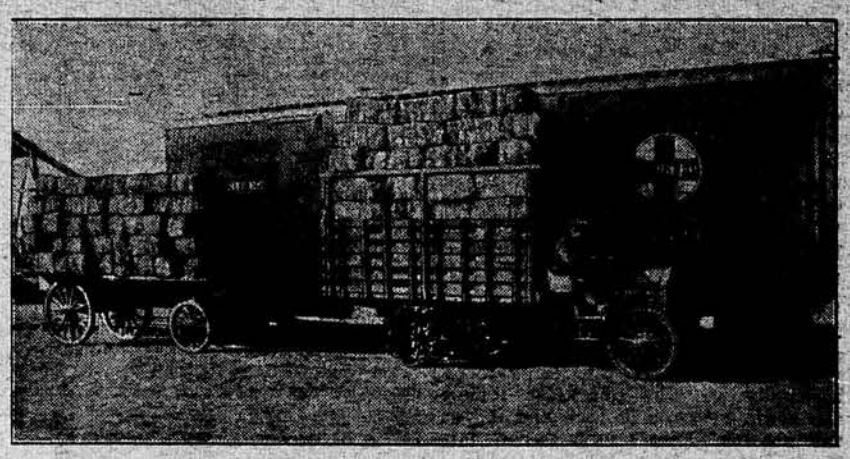
As a matter of fact, most of the high grade manufacturers supply these magnetos with their engines without additional cost. An engine can be started with either of these types without cranking by simply rocking it against compression. Look into this magneto proposition. They are a necessity for satisfactory service.

Motor Delivery for Farms

BY GEORGE F. WHITSETT

When we consider the advantages of farm marketing by motor as compared to the advantages of city gasoline delivery, it is hard to see why the city man beat his country brother to the method. The man in town has better streets and shorter hauls, yet he was first to adopt motor truck delivery.

But the difference is fast disappearing. Rural competition is increasing and ways and means for increasing the speed and decreasing the cost of delivery are becoming as popular among the orchards, lettuce fields and poultry farms of the countryside as they are among the manufacturers, wholesalers and retailers who make their deliveries over brick pavements and asphalt.



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

The man who raises berries and fruit soon comes to wonder how he managed to stay in business with his old-fashioned methods of delivery. His motor truck enables him to rise later in the morning and get to market at the customary time. It enables him to gather his tender fruit, such as berries and peaches, in the cool of the day, and get it to market or the shipping point the same afternoon. It not only moves him up closer to his customary market but also puts him within easy striking distance of other markets.

These conditions apply with equal force to the producer of truck and garden vegetables. The motor truck makes the raiser of radishes, green peas and roasting ears master of his early morning marketing. It lets him get as much sleep as every man deserves, and yet enables him to get into market before it already is glutted. It makes him independent of local buyers, and enables him to go where he can get the best prices and conditions. Furthermore, it enables him to get there more easily, quickly and economically.

Every man who produces milk, cream, butter, or cheese to any extent is, or soon will be, the owner of a motor truck. It gives him the power and speed necessary to make quick deliveries in the cool of the day and cover, if necessary, long distances. The motor truck as now built will travel over all kinds of roads in all kinds of weather, and will encounter any hill. The motor truck has become an all year proposition, and one which will relieve the dairyman of the tortures of slow and tiresome delivery.

The poultry farmer is a natural member of the motor truck club and finds that his business can be handled with alacrity and economy by the aid of gasoline. It enables him to market daily, when desired, and to answer and to fill special orders on short notice. It makes a full fledged business man out of the otherwise handicapped poultry farmer.

A farmer need not be an all-fruit, all-vegetable, all-dairy or all-poultry farmer to come in under the classification of those who need specialized delivery. Being engaged in several lines of farming does not keep a man from being a candidate for specialized delivery.

No one need be surprised to observe an increase in the number of motor trucks purchased for farm use. As the kinds of materials marketed change, the means of marketing will differ. The more farmers who become engaged in specialized farming of any sort, the more farmer owners of motor trucks will there become. What is more, motor truck delivery holds as it grows. More than 90 per cent of all who take up motor truck delivery keep it up and never go back to the ways of their forefathers.

For Better Tire Returns

BY R. S. WILSON
The Goodyear Tire Company

An automobile tire is pretty nearly human in one respect. It requires care to perform its functions up to the standard of its creation. This is often entirely overlooked by the owner of the car, and this negligence is certain to hasten the tire breakdown.

Any tire is subject to more or less abuse, owing to the fact that it must encounter all kinds of roads and receive little or no consideration from the driver. Cuts, stone bruises and mud blisters result, and if these are neglected they eventually spell out the destruction of the tire, as dissipation does the man.

Tire neglect runs bills up rapidly. There are many more things for the drivers to consider than the mere driving of the car. Road conditions play an important part in the life of tires. Inflation, distribution of the weight of the machine and alignment of the wheels are also influential. No two tires in a set may give the same service, although their quality, workmanship and construction may be identical. One may give out far before its time. There is a reason for this. Do not blame the tire; always look at the real cause and place the blame where it belongs.

The service and mileage of a tire depend as much on the conditions under which it is used as upon the quality of the tire itself. Possibly three-fourths of the tires returned to the manufacturers for repairs have been ridden insufficiently inflated. Insufficient inflation is responsible to a greater extent than perhaps anything else for blowouts and quick disintegration.

When a tire is imperfectly inflated the walls are continually bending back and forth as the car moves, with the same result as when a wire or piece of metal is bent back and forth in the hands. Heat is engendered in the threads and because of this heat, and the continued bending, the walls soon weaken and give away. In a short time they are not strong enough to support the air pressure multiplied by the weight of the car, and blow-outs result. Not only that, but when a tire becomes loose, a lump or fold of rubber and fabric is formed just in front of the part in contact with the ground. This is what tire-makers call "kinking." This tends to separate the plies of the fabric, or in aggravated cases to chew up the walls of the tire, as well as that portion of the tube that happens to get caught.

Don't inflate your tires by guess. A big, thickwalled tire will show little depression under a heavy load, even though the air pressure is too low for safety. One cannot tell from appearances whether the tires are perfectly inflated. A good gauge should be used and the tires tested every day.

Here's the Side Car

Speed and Comfort.

To the fact that the rural free delivery mail carrier is adopting the motorcycle generally as one of the best methods of transportation for him in his work is conceded one of the greatest influences in the widespreading sentiment for better roads.

Since using the motorcycle the R. F. D. man has been able to cover his route in half a day with the result that the farmer has read his mail at the dinner table instead of waiting until evening as in the days when the R. F. D. man traveled with a horse. Thus the farmer unconsciously is taking increased pride in the upkeep of his roads if for nothing more than the expediting of his mail service.

The sidecar has been the means of popularizing the motorcycle to a large extent in rural communities. It offers motorcycle pleasure to the entire family. The newer sidecars are constructed so that they can be attached or detached in a few minutes, ball and socket joints allowing for plenty of flexibility for rough riding yet holding the combination rigid at all times.

Motorcycle manufacturers, recognizing the growth of sidecar travel have put three-speed gears and increased power into their product, this year, so that the sidecar owner can travel long distances and over rough roads and steep hills with ease.

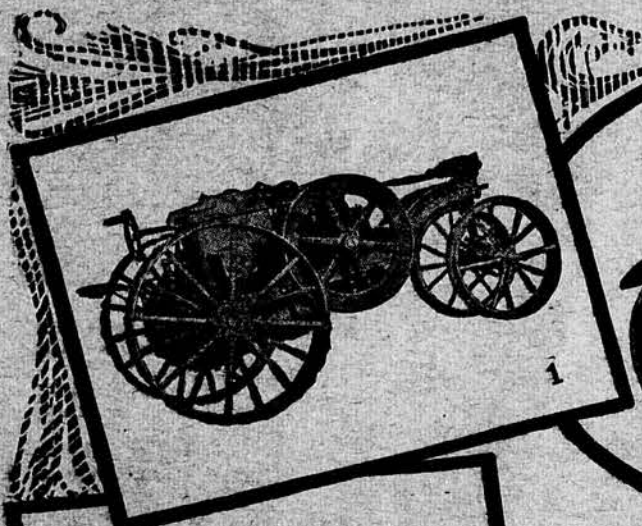
Broom Corn

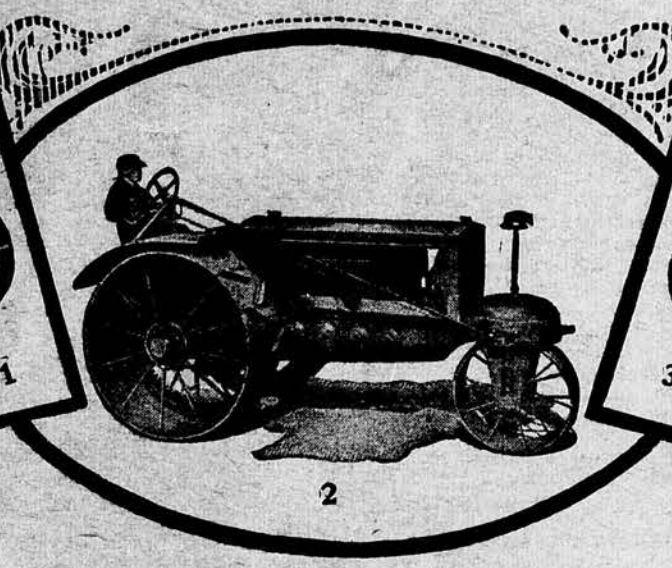
Business in the broomcorn line has been quiet at Wichita, Kan., during the past month. Very little broomcorn has been received and comparatively little sold. One firm purchased from western Kansas dealers sixteen carloads of brush of fair quality according to Brooms, Brushes and Handles.

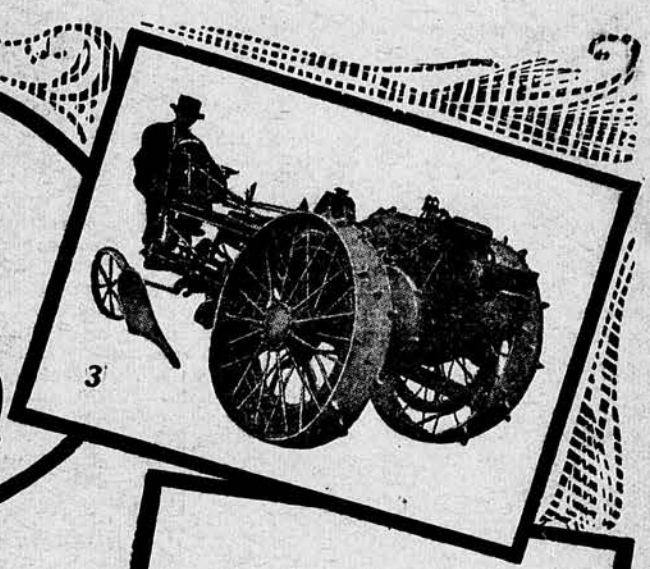
There has been no change in prices. Dealers are holding their brush at $70 to $100, with the bulk of sales ranging from $75 to $90. Considerable broomcorn, that has been in storage there, has been shipped to eastern factories the past few weeks.

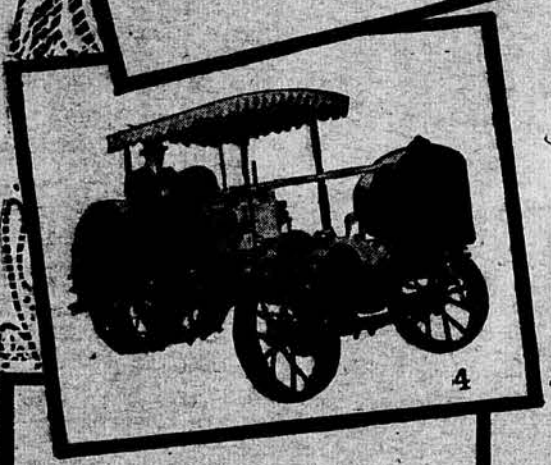
Not Too Late

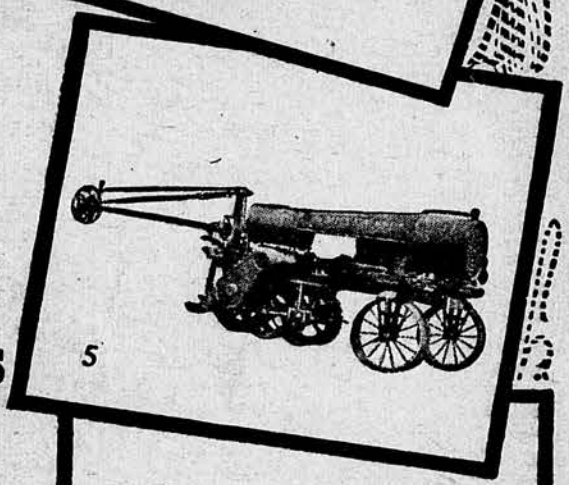
Kafir and milo sowed July 29, 1911, yielded the dairy department at the Kansas State Agricultural college, October 15, 4 tons of silage to the acre. If conditions are as suitable this year as then, silage crops might be obtained from sowings made now. And if growth should be cut short by frost the crop should make forage anyway.—From the Farmers Mail and Breeze, August 9, 1913.


1


2


3


4


5

HYATT ROLLER BEARINGS

Are Used in All These Tractors

Shown at the

Kansas Traction Plowing Exhibit

At Hutchinson, July 19-24

1. International Harvester Co., "8-16 Mogul."
2. Wallis Tractor Co., "Wallis Cub."
3. Universal Tractor Mfg. Co., "Culti-Plow."
4. Kinnard-Haines Co., "Kinnard 4-Plow."
5. Bates Machine Co., "Bates Steel Mule."
6. Mayer Bros. Co., "Little Giant."
7. Gray Tractor Mfg. Co., "Wide Drum Drive."
8. Holt Mfg. Co., "45 H. P. Caterpillar."
9. Sweeney Tractor Co., "Sweeney's Iron Horse."
10. J. I. Case T. M. Co., "Model 12-25."
11. J. I. Case T. M. Co., "Model 10-20."
12. Emerson - Brantingham Co., "Model D-20 H. P."
13. Emerson-Brantingham Co., "Model L-12 H. P."
14. Emerson - Brantingham Co., "Big Four 30 H. P."

The above companies and over forty others have equipped their tractors with Hyatt Roller Bearings because they insure:

Reliability:

Hyatt Roller Bearings eliminate all bearing trouble—They cannot run hot or burn out—No Shut-Downs.

Efficiency:

Power of the motor transmitted with least frictional loss—Saves fuel.

Durability:

Hyatt Roller Bearings will last for the entire life of the tractor—Saves Repairs.

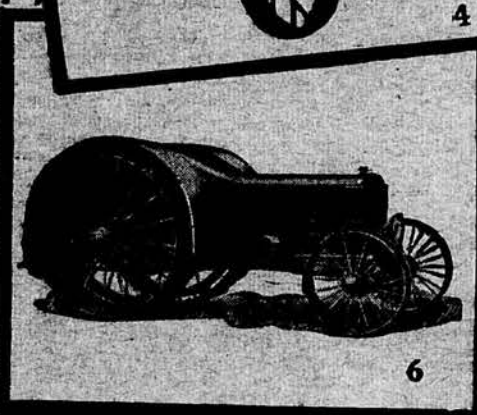
Serviceability:

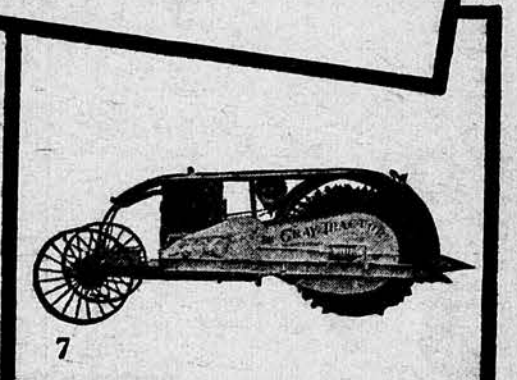
Oil Hyatt Roller Bearings once a month instead of oiling plain bearings twice a day—Saves time.

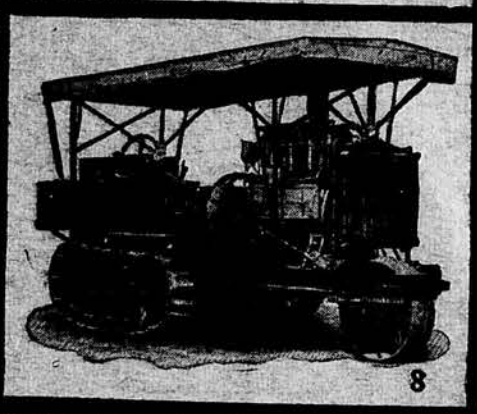
There are many other reasons why Hyatt Roller Bearings are superior to any other type of bearing for tractor service.

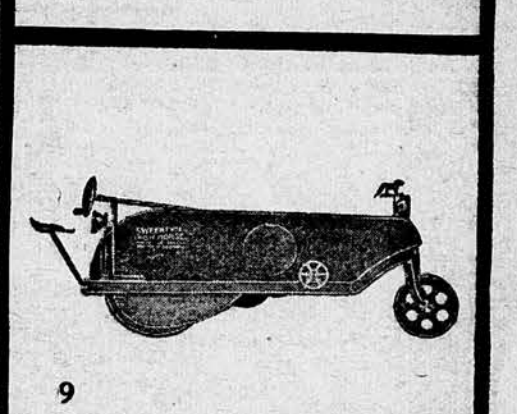
Detailed information cheerfully furnished upon request.

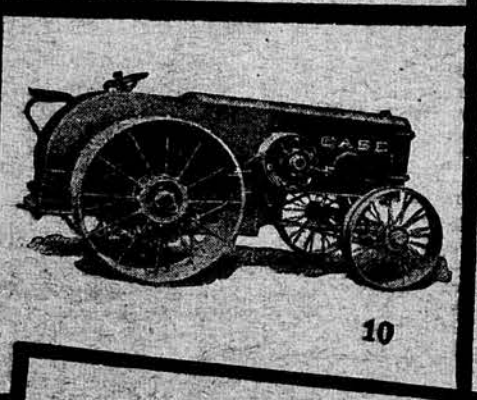
HYATT ROLLER BEARING CO.
TRACTOR BEARINGS DEPARTMENT
NEWARK N.J. CHICAGO ILL. DETROIT MICH.

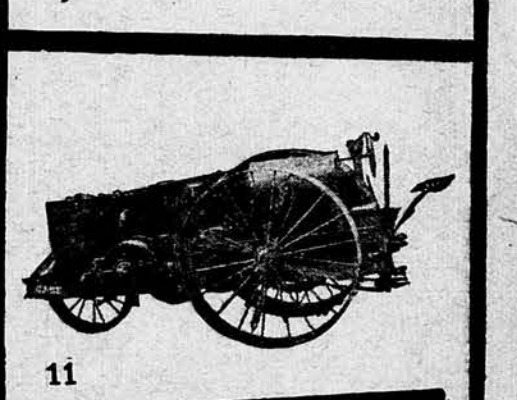

6

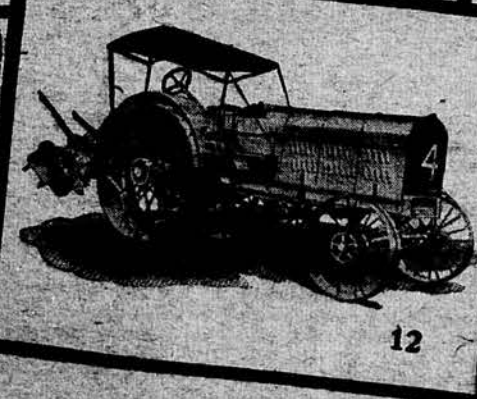

7

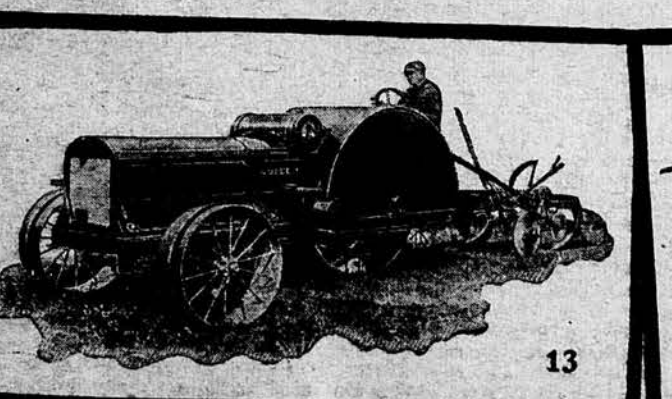

8

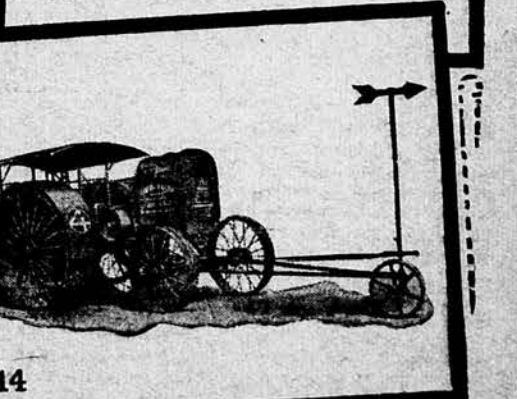

9


10


11


12


13


14

Cushman Light Weight Engines For All Farm Work

8 H. P. 2-Cylinder With Friction Clutch Pulley

For Silo Filling, shelling, grinding and all light portable work, 8 H. P. weighs **only 320 lbs.** Double cylinders mean steadier power. Equipped with Schebler Carburetor and Friction Clutch Pulley. Run at any speed.

20 H.P. for Heavier Work

Built as heavy as necessary, yet weighs **only 1200 lbs.**, because of advanced Cushman design. Equipped with gear-driven high tension Magneto and Clutch Pulley. A remarkably high grade and reliable worker. May be mounted on 2-horse truck. Delivers any power economically up to full 20 H. P.

Cushman Engines are the lightest weight farm engines built, yet are steady and reliable because of Throttle Governor and perfect balance. They are not cheap engines, but are cheap in the long run. Ask for free Engine Book.

Outfit Weighs 375 lbs.

4 H. P. TRUCK

CUSHMAN MOTOR WORKS
214 N. 16th St. Lincoln, Neb.

For Grinding, Sawing, Shelling, Elevating, Electric Lighting, Household Jobs and all other Farm Work. Same Engine Used on Binder.

Your Silo Will Pay

you more profit if you spend less for *cutting* and *filling*.

Save the day wages and board of at least one hired man by getting a *Smalley*—the only *real* self-feeder—the only machine with Grip Hook and Paddle Roller outfit.

Save costly *breakdowns, repairs* and *delays*. Smalley machines are built to stand the smashing work of silo filling. They are one-fourth heavier than others and have *steel* in their castings. Sixty years of honesty and capability behind each Smalley Filler.

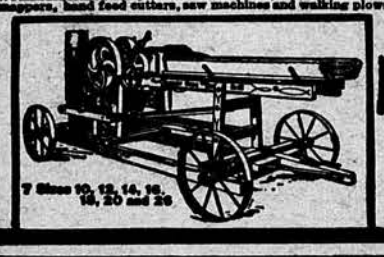
Even on Gas and Kerosene we make you a saving. That's because of our low speed chain-drive blower.

Smalley Grip Hook Silo Filler

Send for Free Book that tells all about the remarkable construction of Smalley machines; and names of well-known users. Sample of Alfalfa Meal, ground by our new roasting Device can also be had *free* for the asking. Write

SMALLEY MFG. CO., Dept. 3, MANITOWOC, WIS.

We manufacture a complete line of silo fillers, alfalfa cutters, corn choppers, hand feed cutters, saw machines and walking plows.



7 Sizes 10, 12, 14, 16, 18, 20 and 26

New Silver's "Ohio" Beater Self-Feed

Another big work-saving feature for "Ohio"—farther in lead than ever. This with famous "Bull-Dog" Grip feed rollers doubles feeding efficiency. Remember "Ohio" has *direct drive*—one lever control—friction reverse—non-explosive blower—20 year durability and many other big work and money-saving features. 40 to 300 tons a day—4 to 15 h. p.

Write today for Catalog 8

The Silver Mfg. Co.
336 Broadway
Salem, Ohio

"Modern Silage Methods"—96½ pages—Mailed for 10c

Write, Phone or Wire!

WE have the stock and can make immediate shipment, enabling you to preserve 100 per cent of your corn crop in the

INDIANA SILO

Easy to erect. No special tools or skilled labor needed. Every stave guaranteed. You pay for the Indiana Silo out of what it saves on feed bill. Address nearest office.

THE INDIANA SILO CO.
Anderson, Ind. Des Moines, Iowa
Kansas City, Mo. Ft. Worth, Texas

What Happens to Bluegrass

An Old Story About Its Turning to Cheat

BY HARLEY HATCH

COMING from the field a day or two ago we noticed that the English bluegrass was ready to cut, so this afternoon we will make our weekly trip to town instead of waiting until Saturday. We will get the twine we need and take in the eggs and cream. We like to go to town, Saturday, for then we can see all the neighbors but if we can cut the bluegrass, Saturday, we will be willing to miss our regular "town day." The bluegrass is a very good crop, not equal to last year but still better than an average.

We were told by our bluegrass seed buyer this week that there is a chance for a pretty good seed market this year, after all. All the seed from last year's crop has been worked off by the seedsmen and so they start with empty bins. In addition, a very large acreage of bluegrass has been plowed up since last summer and in Johnson county, the great bluegrass center of the country, much of the crop has been spoiled by cheat.

We still find a man occasionally who believes that wheat and bluegrass will turn to cheat but that idea, like faith in weather prophets, has about died out. If a man is not familiar with bluegrass seed he will not notice the presence of cheat and in that way can sow enough of it to stock the field and not know it. Cheat is very hardy and comes up whether or not the bluegrass fails. Hence it is that often we hear of a man sowing bluegrass and finding, when it comes up, that it has turned to cheat. One such instance was recorded near here a few years ago.

A man not familiar with bluegrass seed bought enough from a farmer living in the township to sow 30 acres. The fall was favorable and a fine stand

Cutting the Roadside Weeds.

was obtained. The next spring that 30 acres was for a time the beauty spot of the farm, and so proud was the owner of it that when it was out in full head he sent for an old bluegrass grower to come and see his fine crop. This man knew bluegrass but did not know cheat. So when he saw the field he said to the owner, "I don't know what you have growing there but it's not bluegrass." Other men who saw it pronounced it one of the finest fields of cheat they ever had seen. Investigation of some of the seed that was not sown disclosed that fully 30 per cent of it was cheat. The cheat grew and crowded out the bluegrass. This is how one field of grass turned to cheat. If cheat appears in a field it is because the seed has been sown there.

We went to Emporia this week while waiting for the fields to dry. The 10 miles to the railroad station at Hartford was traveled by team and the remainder of the distance by train. We had thought of trying to go to Hartford with the motor car, but when we came to a car in a mud hole that occupied the whole road we were glad we were depending on horsepower. This car was mired to the body and the wheels could secure no traction. A rope was tied to the rear of the car and six men, with what the engine could do, brought it out. A heavy rain had fallen the day previously and the country roads between Hartford and Emporia, as seen from the train, were covered with mud.

This is Friday morning, June 25. We have just come in from the field with two listers. We gave the creek bottom field, which was listed May 14, another trial and found it much too wet. On the way in we prospected another field which we intend to plow, and found it too wet. This means no planting of crops on this farm before Monday, June 28.

We had intended to plant northern grown Silver Mine corn today but it will now have to go until next week. What we will get from such planting can better be told next September. The soil is good, and with a start in fresh clean ground this early corn may make a little grain. Since May 14 there has been planted on this farm just 9 acres of corn. That was planted almost three weeks ago and it has had rain after rain on it. Despite that it is a good stand except in a few low places.

We have complied partly with the Coffey county law requiring the hedges to be kept cut down to a certain height and the weeds to be cut in the roads. We have trimmed the hedge which was cut to a 4-foot height last winter and have mowed a part of the road. The hedge brush we cut last winter is still in big piles waiting to be burned. This will be done as soon as it gets dry enough. We could have done this work last spring but had we burned it then it would have set the old grass on fire and burned up a fine woven fence for a neighbor so we waited until the grass became green. As a result, the brush is still in the pile.

We are wondering how all the hedge that was cut down last winter is going to look this fall or by this time another year. The heavy supply of moisture has caused hedges to make an immense growth, and on the one we cut there were sprouts 5 feet long which had grown this spring. If all this newly cut hedge is not kept trimmed it will not be long before the last state of the hedge will be worse than the first. Hedge trimming is a mighty mean, hot job and the trimmer usually gathers a plentiful supply of chiggers. For this reason the average hedge is not going to be kept trimmed. Nearly everybody in this county cut down the hedges last winter to comply with the law, but if they keep on complying with it they will find they have a big job on their hands.

It is the general opinion of farmers here that chinch bugs are about all dead. We find none on examining our oats. Two weeks ago the bugs were more numerous in this field than we ever had them on this farm. Now we cannot find one. Other farmers tell the same tale. Should conditions be the same over the rest of Kansas we may expect at least a year of respite from them and perhaps much longer if the wet weather has killed them in Oklahoma also. The farmers here who are planning on sowing their idle land to wheat this fall are interested in this matter and would be glad to hear from Oklahoma farmers as to the bug situation there. If the bugs are killed in Oklahoma it may be years before they trouble us again.

A Farm Upside Down

An interesting little book new this year is "Upside-Down Farm" by Astolf Levin. The title refers not to topsy turvy methods of farming as might be inferred, but to deep plowing, and the advantages of this method of cultivation are set forth in story form in a way more convincing than argument. "When you think of it, the farm below the top six inches belongs to me, and I might as well try to farm it and make it feed my crops," says the owner of the farm after he has tried deep plowing, and this decision not only lifts the mortgage but brings many comforts to his family and home. "Upside-Down Farm" is published by the Farmers' Text Book Publishing Company, Albion, Mich. Price 50 cents.

When You Must Have Reliability

You need your motor's last ounce of power to carry you over the crest of that steep hill.

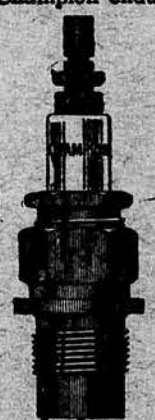
Your Spark Plugs must stand the terrific force of those "hill-crest" explosions in your cylinders.

Even the porcelain insulation must take that punishment without "cracking."

It will—*if they're Champions.*

Champion

Champion endurance — reliability — dependability is developed by repeated testing under just such strains in the motors they are built to serve.



Champion Conical
⅞ - 18 Long
$1.00
Specially designed for Buick Motors

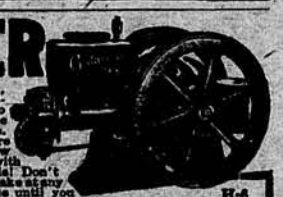
75% of all American made gasoline motors for every purpose are equipped when new with Champion Spark Plugs.

Insist on Champions when you replace your plugs.

The Champion Guarantee—complete satisfaction to the user, free repair, replacement or money back.

Champion Spark Plug Co.
507 Upton Ave., Toledo, O.

POWER



Economical, reliable, steady, satisfactory engine service built into every Galloway gasoline and kerosene engine. Heavy weight, large bore and long stroke low speeded. Compare it with any engine! Then decide! Don't buy an engine of any make at any price until you know all about Galloway engines. H-6

17.95 1½ H.P.

ENGINE PRICES LOWER

Great volume, perfected design and simplicity make Galloway prices possible. Built from best material on modern automatic machinery, all parts standardized. Sold to you at one small profit. No unnecessary parts. Built-in quality steadily increases our volume. All styles and sizes from 1½ h. p. to 16 h. p. at proportionate prices. A postal gets big Galloway engine book free. Engines shipped from Minneapolis, Council Bluffs, Kansas City, Waterloo or Chicago.

WM. GALLOWAY CO., Box 445, WATERLOO, IOWA

Stack Your Hay The Easiest Way *the Jayhawk*

STACKER AND HAY TOOLS

Save time, men and money. Lightest in weight — easiest to operate — delivers hay anywhere — no ropes or pulleys — cannot tip — fully guaranteed — wood or galvanized steel. Sold direct at manufacturer's prices. Write today for free catalog and Big Jayhawk "Bargain Book" of farm implements sold direct at money saving prices.

F. WYATT MFG. CO., 902 N. 5th St., SALINA, KANS.

100 Ton SILO $210. F.O.B. -K.C-

THE K. C. SAFETY SILO

is the most perfectly constructed and easiest erected silo, has the most convenient Door-Ladder-Chute and Anchoring arrangement. Continuous hinged doors, independent ladders, circle faced chute. Water-proofed frame, made in sections ready to set up. Self-locked, Self-plumbed, Self-Scaffold.

Requires no expert to build. Costs less, and takes less time to build than other silos.

Furnished single wall or double wall, any size from a wash tub to a Sky-Scraper. Sub-sill furnished. Prices the lowest. Write for complete information.

Kansas City Silo Co., 508 Ridge Bldg., Kansas City, Mo.

The First Corn Planters

Modern Cultivation Is Based on Improved Machinery in Keeping With Improved Methods in Agriculture

CORN planters have been developed to the point where they are exceptionally efficient. A great deal of the credit for the progress of corn growing in Kansas must be given to the men who have perfected this implement. The great corn belt of the Middle West never could have made its fine records in the production of the world's greatest cereal without the modern, efficient machinery for planting the grain. And yet good corn planters are a comparatively recent invention.

I find in looking over the old records of the patent office that the first efficient corn planter was designed by G. W. Brown of Tylersville, Ill. His first patent was dated August 2, 1853. He designed a planter that would check the corn in hills, which was the great need then. There had been planters before this that were planned to drop the corn so it could be cultivated both ways, but they seem to have been inefficient affairs that usually broke down about the time one got them started.

Progress Was Slow.

Inventors worked on corn planters for many years before they achieved much success. I find that the first patent on a corn planter was granted to Eliakim Spooner in 1799. About 30 patents were granted on alleged corn planters between that year and 1836, when most of the records of the patent office were destroyed, so no one knows much about what they were, but the designers never got very far with them. D. S. Rockwell got a patent, March 12, 1839, on a corn planter that was fearfully and wonderfully made. It had four wheels, all of the same size, and the dropping machinery seems to have been very elaborate, judging from his description. His machine never was a success.

Many men were working on corn planters at this time. The records of the patent office contain frequent reference to such implements. After Mr. Brown's planter had been placed on the market there was a great deal of interest in planters, and a considerable increase in the number of patents. Mr. Brown took the lead in perfecting his first effort, and on the second patent of his planter which was issued November 10, 1857, he covered some important improvements many of which have been placed on modern planters. These included: Placing the seats of the driver and the dropper so they balanced each other; making the driver's seat adjustable so he could put more or less of his weight on the seeding apparatus and thus adjust the depth, and about a half dozen other points that made his planter fairly efficient in the field.

A Marker Was Added.

These first planters were made without a marker, the first patent for a device of this kind being granted to E. McCormick in 1855. This marker extended 4 feet from the end of the axle. The marker in common use on the planters today was invented by Jarvis Case of La Fayette, Ind., whose patent, dated December 1, 1857, showed a marker having a double-edged shoe, and hinged so it could be turned over to mark on either side of the planter and be raised clear of the ground in turning.

All of these patents and about 10,000 others were purchased by manufacturing companies and these companies took a leading part in the planter development beginning about 1860. Gault and Tracy of Sterling, Ill., were large manufacturers of planters in the early days, and they contributed many improvements. The Deere and Mansur Company of Moline, Ill., did most of the pioneer work in adopting a rotary drop to a corn planter. This rotary drop really was designed by G. W. Brown in the early days when he was doing his other work on planters, but he never did very much with it.

While it is only in the last few years that the check row planters have been developed to the point where they are really efficient, work was begun on them quite early. The first patent was granted to M. Robbins of Cincinnati, O., in 1857. It covered a reversible hopper, an arm with a vibrating claw connected with the seeding machinery, in combination with a jointed rod which was provided with buttons. Thus it will be seen that Mr. Robbins had some of the ideas on which the successful check row planter is made today.

Few Sales Were Made.

The planter designed by Mr. Robbins planted only one row, so it was rather slow. It would work under field conditions, and he sold a few of the machines, but the farmers in those days did not take kindly to the contraption. Robbins died a poor man. The next patent on a check row machine was granted to John Thompson and John Ramsey of Aledo, Ill., in 1864, and it covered "the employment or use of a wire or cord, provided with knots at a suitable distance apart." This machine worked better than the Robbins patent, but it was not especially successful. G. D. Haworth took out a patent on a check row machine in 1870, which was the first of a long line of inventions designed by the Haworths. There were four of these men, and they took a leading part after 1870 in the inventions on which modern planters have been developed.

Thousands of patents on corn planters have been issued since the time of the Haworths, but they have gone largely to companies which were paying trained men to investigate the designing of these implements. All of the leading farm machinery companies today employ well trained men who give most of their time to investigations that will tend, it is hoped, in making the machinery more efficient, and they find out most of the really important new things about modern machinery.

Care for the Tools

Entirely too many people take no care of farm tools and farm implements. The waste from this source amounts to thousands of dollars every year. The selfbinder or header remains in the harvest field where it was last used, the cultivator is put in the corner of the corn or kafir field, the drill, the hay rake, and the harrow with many other pieces of farm machinery are drawn up against the barnyard fence at the close of the season and left there exposed to the weather all winter and spring until needed for the next crop.

The annual depreciation of farm machinery should not exceed 10 per cent, but on many farms it often amounts to 50 per cent or more. Every farmer can save hundreds of dollars by having a good machinery shed in which all tools and implements can be stored.

Wagons and buggies when not in use always should be placed under shelter. At the close of the season the machinery should be well oiled and put into thorough repair for the next year's crop, and then placed in the machinery shed. The life of the wood work of the machinery will be prolonged greatly if given at least one good coat of paint every year. Plow shares, mold boards, cultivator shovels, sickles and sickle bars and the like should be given a good coating of axle grease.

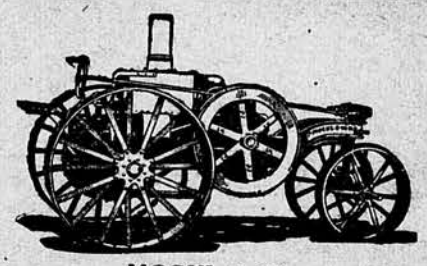
A good piano often lasts a life time because of the excellent care we take of such an instrument. If we were to leave it out in the rain and weather in the back yard it would be ruined in a short time and the neighbors would think that the owner was a fit subject for the insane asylum. Yet that is exactly what many farmers do with some of their most expensive machinery. Give the farm tools and farm implements the same care that is given the piano and they will last much longer.

A complete outfit for the tool shed includes a measuring stick, a garden line, spade, digging and manure forks, a hoe, iron and wooden rakes, a cultivating tool or Dutch hoe, a trowel, an asparagus knife, raffia for tying a water can, a spray pump and a wheelbarrow. All these can be bought for about $14. Homemade labels will do quite well. Every row of vegetables should have its label.

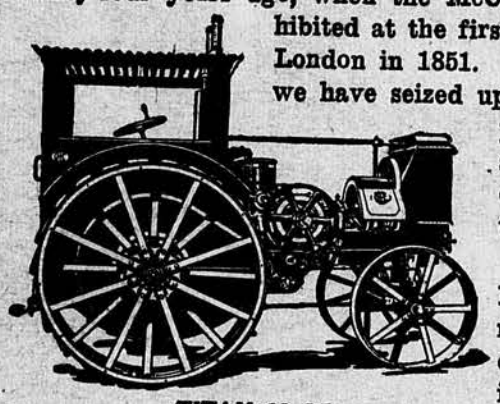
Plantings can now be safely made of practically all summer vegetables except the most tender sorts, such as egg plant, pepper and lima beans.

Let the People Judge

In line with this Company's long established policy to enter its machines in field demonstrations and exhibits and let the people judge, we are again showing our line of oil burning tractors at the tractor demonstration to be held at Hutchinson, Kansas, July 19-24, 1915. This policy was initiated sixty-four years ago, when the McCormick reaper was exhibited at the first World's Fair, held in London in 1851. From that day to this we have seized upon every available opportunity to demonstrate the quality of our machines and let the people judge.



MOGUL 8-16



TITAN 12-25

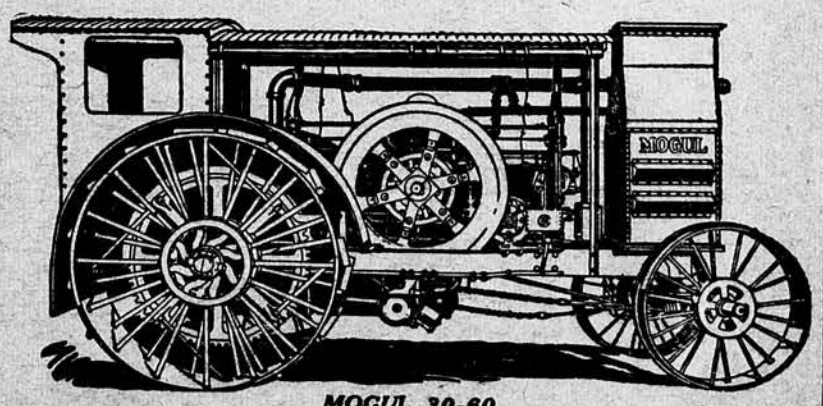
The World's Fair at London gave McCormick machines the highest award. The standing given our products there has since been sustained at every exhibit. Now comes the announcement of the awards at San Francisco, where again the jury says that

International Harvester Oil Tractors Win Highest Honors

International Harvester oil tractors entered in this demonstration, duplicates of the grand prize winners at San Francisco, include the following machines — Mogul: 8-16, 12-25, 30-60; Titan: 12-25 and 18-35.

TITAN 18-35

Your interest lies in the demonstration of what these tractors will do to save work or money for you. We shall be pleased to see you at our headquarters or on the field during the demonstration.



MOGUL 30-60

International Harvester Company of America
(Incorporated)
Chicago, Hutchinson, Concordia, Salina, Wichita, Denver, Oklahoma City, Topeka, Parsons

Chiggers Can Be Controlled

The microscopic harvest mites, commonly known as "chiggers" and red bugs, attack the skin of the human being, entering the large sweat tubes or pores where they die, and cause much suffering from intense itching. Chiggers are most troublesome to people with tender skins, and especially to children. The inflammation usually starts in a few hours after the mites have crawled into the pores.

Chiggers are most abundant and troublesome in the tropics. They are, however, also generally distributed up the Mississippi River. They are most bothersome from June to September, according to new Farmers' Bulletin 671 by the United States Department of Agriculture, "Harvest Mites, or Chiggers." Some residents of the infested regions and particularly farm laborers seem to be proof against the toxic effects of harvest mites, and often go with impunity in places overrun with them. This is due primarily to two causes: The skin has become toughened through exposure to the sun and weather, or is no longer irritated, due to becoming accustomed to the toxin secreted by the harvest mites.

In some localities where the harvest mite is found in great numbers, to walk among blackberry or other shrubbery or come in contact with grasses or similar herbage along streams or pools on edges of marshes, or under trees near such places, is to invite an attack. It is obvious, therefore, that the best preventive is to avoid exposure. However, if a bath is taken in hot water or water containing salt or strong soap within a short time after exposure, no ill effects will be experienced. After a longer exposure a bath is practically of no effect.

Sulphur is the best remedy for mites and is also the best preventive of attack. Since the harvest mites usually become attached to the person in walking through vegetation, it has been found, according to the bulletin, that sifting flowers of sulphur into the underclothes from a little above the knee, downward and into the shoes and stockings is effective. Naphthalene has been successfully used in the same manner, and is also considered a safeguard against several forms of man-infesting tropical insect pests.

If a person has been exposed to an attack of harvest mites, an application to the affected parts of a moderately strong solution of ammonia is possibly the best counter-irritant. Bicarbonate of soda, or common cooking soda, or saleratus may be substituted in saturated solution. Similar alkaline solutions probably would also serve in counteracting the insect poison, which is acid. In case the suffering is severe, dilute tincture of iodine or collodion should be lightly applied.

Cultivate the Garden

BY M. F. AHERN,
Kansas State Agricultural College.

First, last, and all the time, let the slogan be "Cultivation." In small gardens cultivation must necessarily be by hand. The hoe, rake and fingers will prove efficient tools for cultivation of a square rod garden. Cultivation conserves moisture, kills the weeds, aerates the soil and increases the supply of plant food.

Thinning is a necessity for many garden vegetables, particularly lettuce, onions, beets, parsnips, carrots and radishes. Experience teaches that it is often better to thin two or three different times. This gives an opportunity for the selection of more uniform products.

Watering should be done carefully, for too much is nearly as bad as too little. It is better to irrigate or sprinkle vegetables in the evening so that there will be less evaporation. A good way to apply water to a small garden is to make a shallow furrow with the hoe and then permit the water to run into these shallow ditches. As soon as the soil will permit after watering, the garden should be cultivated in order to conserve the moisture.

Insects are prevalent this season. The flea beetle has been eating the radish. Spray with powdered arsenate of lead and lime, or with arsenate of lead dissolved in water. For the green aphis—these insects feed upon the under side of the leaves, sucking the juice—spray with soap and water, 1 pound of soap to 6 gallons of water. Cut worms are likely to be troublesome. Bran mash is a good remedy. Use 2 or 3 ounces of sugar or similar quantity of molasses to a gallon of water and sufficient bran to make a mixture that will readily run through the fingers. Add ½ ounce of Paris green. Poisoned bait may be used against this pest. Spray a patch of clover or useless succulent plants with Paris green, 1 pound to 100 gallons of water. Mow the clover close to the ground and place in small heaps while fresh around the infested plants at a distance of about 2 feet.

When Growing Mulched Potatoes

BY R. F. HOWARD.

Any coarse material, such as straw, hay, or bedding from the stable, will serve as a mulch for potatoes. The material should be free from grain or weed seeds. It must be deep enough to prevent weed growth, to conserve the soil moisture, and to keep the ground cool when the tubers are forming. A mulch about 4 inches deep after settling will accomplish these results. A thicker mulch will cost more and it may prevent a good stand of plants.

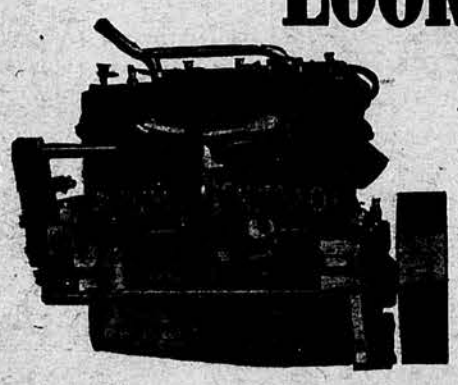
The mulch may be applied immediately after planting or any time before the young tubers begin to form. If the mulch is not applied before the plants are up, it is better to wait until the plants are several inches high. In applying a mulch upon potato plants that are several inches high, it is necessary to exercise considerable precaution to get the litter close about the plants without burying them. A potato sprout will force its way up through a comparatively thick mulch, while a thin mulch will smother the plant, if applied after the leaves are spread. Thus, the extra care necessary in mulching plants that are several inches high makes the process a more expensive one than mulching immediately after planting. Another reason for mulching before the sprouts begin to appear above ground is that no cultivations are necessary. There is little danger in early mulching provided the seed pieces are large and are not planted too deeply. While seed pieces weighing 2 ounces are considered large enough when cultivation is given, it is better to have them 4 to 6 ounces when a mulch is to be applied. Plant about 4 inches deep and later add a mulch that will be about 4 inches thick after settling.

A few rows of mulched plants will yield enough seed tubers for the next year's crop when only a small acreage is grown. It will be found more convenient to have the mulched rows along the side of the field. The mulch can then be applied without driving over the unmulched rows.

The cost of producing mulched seed potatoes is about 10 or 12 cents a bushel more than the cost of producing them by cultivation. If mulched seed will increase the yield 20 to 25 per cent, the slight increased cost of producing them can be disregarded. If one has waste straw, hay, or bedding litter at hand, he can produce, at an additional cost of a few cents a bushel, seed tubers at home that are equal to the best northern grown stock. He can produce this high yielding seed stock at less expense than he can buy it from the North.

An easy going man in business seldom proves successful. Success in business requires the most constant and close attention to detail and faithful, earnest and interested industry. The man must be on the job all the time. And this is the very reason our political management of the public business is such a complete and colossal failure that it is costing the people enormous sums every year out of all proportion to the benefits they receive. The public servant must learn that his job depends solely on the way he does his work and not on his political pull, before one in a thousand will be worth his salt. Not until we insist on divorcing the public business from partisan politics, political intrigue and the spoils idea, will the public get its dollar's worth of service for its hundred cents of tax money.

When You Go to the Hutchinson Show Look for Waukesha Motors



All over the exhibition grounds you'll see tractors equipped with the famous Waukesha long-stroke nickel chrome steel motor—the motor that is built especially for tractor service. Watch the Waukesha motored tractors in action. See how well the Waukesha does its work. Then—when you buy a tractor insist on having one equipped with a Waukesha motor. Most tractor troubles are motor troubles. Getting the right kind of a motor means the elimination of a large percentage of motor troubles. You'll make no mistake if you pick a Waukesha motored tractor. Look for the proof at the big show.

These Tractor Builders Use Waukesha Motors

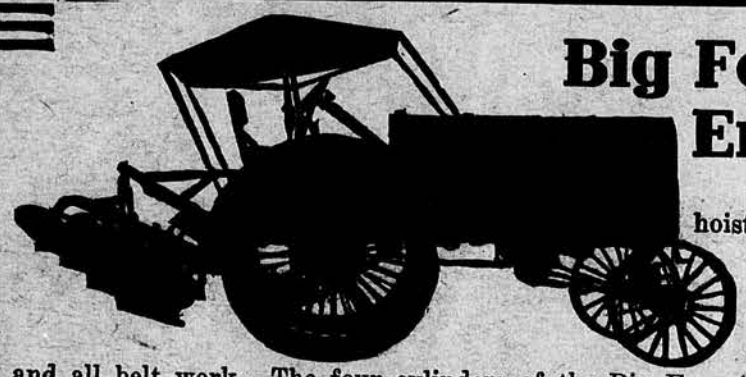
ALLIS-CHALMERS CO., MILWAUKEE, WIS.
AMERICAN GAS ENGINE CO., KANSAS CITY, MO.
AMERICAN THREE WAY PRISM CO., LA PORTE, IND.
BARRY TRACTOR CO., MUSCATINE, IOWA.
CHASE TRACTOR CO., SYRACUSE, NEW YORK.
DENNING MOTOR IMPLEMENT CO., CEDAR RAPIDS, IOWA.
ELLIOTT & CO., DE SMET, SOUTH DAKOTA.
4-M TRACTOR CO., CHICAGO, ILL.
WM. GALLOWAY CO., WATERLOO, IOWA.
GRAY TRACTOR CO., MINNEAPOLIS, MINN.
HEIDER MFG. CO., CARROLL, IOWA.
HOKE TRACTOR CO., SOUTH BEND, IND.
HUME MFG. CO., HUME, ILL.
JOLIET OIL TRACTOR CO., JOLIET, ILL.
KINKEAD TRACTOR CO., MINNEAPOLIS, MINN.
KILLEN-STRAIT MFG. CO., APPLETON, WIS.
LAWTER TRACTOR CO., ST. MARYS, OHIO.
McKINNEY TRACTION CULTIVATOR CO., ST. LOUIS, MO.
MORTON TRUCK AND TRACTOR CO., HARRISBURG, PA.
NEVADA TRUCK AND TRACTOR CO., NEVADA, IOWA.
NILSON FARM MACHINE CO., MINNEAPOLIS, MINN.
PARRETT TRACTOR CO., OTTAWA, ILL.
M. RUMELY CO., LA PORTE, IND.
STRITE TRACTOR CO., MINNEAPOLIS, MINN.
SWANEY TRACTOR CO., CARROLL, IOWA.
WOLF & CO., LA PORTE, IND.

This Free Bulletin "B" Gives You Valuable Tractor Facts

Whether you do or do not go to the Hutchinson Tractor Show you ought to read the Waukesha Bulletin "B." It gives you valuable motor facts that every tractor owner and every prospective tractor buyer ought to have. Write today for your free copy.

WAUKESHA MOTOR CO., Dept. 207, Waukesha, Wis., U.S.A.

Emerson Tractor and Plow Demonstration
At Hutchinson, Kansas, July 19th to 24th



Big Four "20" Tractor and the Emerson Power-Lifted Plow

Here we have the Big Four "20" with Emerson plow and power hoist. The Big Four motor raises or lowers the plow by simply pushing a foot lever—whether tractor is running or standing still. Plows, when raised, are out of way of everything. When lowered, are adjustable to any depth you wish to plow. Don't waste room and time turning; back up and plow out corners. Plows may be quickly detached and tractor used for harrows, discs, drills, mowers, etc.—and all belt work. The four cylinders of the Big Four "20" insure steady, dependable power. The Big Four "20" has two speeds forward—both direct—and reverse. Burns gasoline or kerosene. Is adapted to practically all soil conditions.

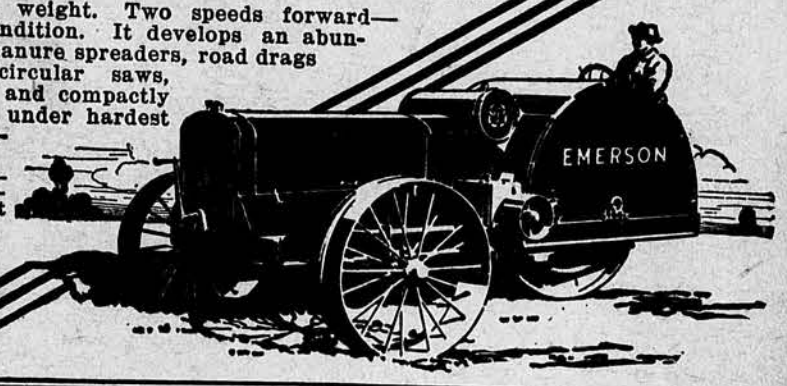
See This Great Tractor Demonstration At Hutchinson

Emerson Small Farm Tractor

A Four-Cylinder, Light-Weight Tractor That Solves the Labor Problem

This Emerson Model L Farm Tractor is a four-cylinder tractor. Light weight. Two speeds forward—both on direct—and reverse. Built for work in practically every soil condition. It develops an abundance of power. Power for pulling plows, drills, harrows, mowers, binders, manure spreaders, road drags and graders. Operates small separators, ensilage cutters, feed grinders, circular saws, water pumps, hay balers, and all kinds of other farm belt machinery. Neat and compactly built. Economical in fuel. Easy for anyone to operate. Built to stand up under hardest use. The transmission runs in enclosed dust-proof oil-filled case, which prevents wear and tear on mechanism.

Simple, accessible. Only one drive wheel, one master gear and one master pinion, eliminating differential—resulting in simplicity and easy operation. All working parts easily accessible. Call at the **Big Tent** for Souvenir. Make our Exhibit your headquarters. Write for hanger—illustrated in colors.



The Emerson-Brantingham Implement Co., (Inc.)
Good Farm Machinery—Established 1852
391 S. W. Iron Street, Rockford, Illinois 4550

Dusting the Sweet Corn

BY JAMES W. McCOLLOCH,
Kansas State Agricultural College.

The corn ear-worm has long been recognized as one of the most serious enemies of sweet corn. Within recent years it has become almost impossible to obtain roasting ears on the market that were free from ear-worm injury and field counts have shown from 85 to 100 per cent of the ears injured.

The corn ear-worm is one of the most difficult insects to control. The best that can be hoped for is a material reduction in the amount of injury. Numerous measures for the control of this pest have been advocated but probably the most generally recommended remedial measure is that of poisoning with liquid and dry sprays. This method seems to be growing in favor. It has been learned by the department of entomology at the Kansas State Agricultural college that a large percentage of eggs deposited during the summer were placed on the fresh corn silks and that the worms causing the injury to the ear originated from these eggs. The young larvae on hatching from the eggs begin feeding on the silks and eating their way down into the ear. From the data thus accumulated it seemed possible to control a larger percentage of the injury by keeping the silks sprayed during the silking period. In the preliminary experiments it was found that powdered arsenate of lead was the most efficient poison. Three strengths of dust sprays have been used by the department—pure arsenate of lead, 75 per cent arsenate of lead, and 50 per cent arsenate of lead. A fourth plot was kept for a check. The dust, which was put on by shaking from an ordinary cheese cloth bag, was applied every three days while the silks were fresh. No attempt was made to get the poison on any other part of the plant. Owing to the dry weather the applications were made more frequently than would ordinarily be necessary. The corn dusted with the pure arsenate of lead and with the 75 per cent arsenate of lead had about 65 per cent of the ears injured, while that dusted with 50 per cent arsenate of lead had 88 per cent injured and the check plot had 100 per cent damaged. In the first two cases there was considerably less than 1 per cent of the grains injured and no mould or fungous injury. In the last two plots from 5 to 25 per cent of the grains were injured and there was a large amount of mould injury. It cost $15 an acre to dust with pure arsenate of lead and $10 an acre to dust with 75 per cent arsenate of lead.

The results of the last summer show that the 75 per cent mixture controlled the corn ear-worm almost as well as did the pure arsenate of lead. The difference in the cost, however, was about $5 less an acre in favor of the 75 per cent arsenate of lead. From these and previous experiments dusting can be recommended as being practicable.

The dusting of sweet corn can be carried on easily in the ordinary sweet corn field at a very small expense. The dust can best be applied by shaking from an ordinary cheesecloth bag or flour sack and the only cost is that of materials and labor. Under ordinary weather conditions which shorten the silking period the number of applications can be reduced to four or five put on at intervals of from three to four days. In the experiment described sulphur was used as a carrier for the lead, but there is no reason why some cheaper carrier such as air slaked lime or land plaster cannot be used. With a cheaper carrier and fewer applications the cost of protection of sweet corn can be reduced to about $5 or $6 an acre. That it pays to dust sweet corn is evidenced by the fact that sweet corn known to be free from ear-worm injury, can be sold on the market at from 5 to 10 cents more a dozen ears. An acre of sweet corn should produce at least 375 dozen ears. If 5 cents more can be realized on each dozen ears, there would be a total increase of $18.75 an acre or a net increase of $12.75.

Warts Can Be Cured

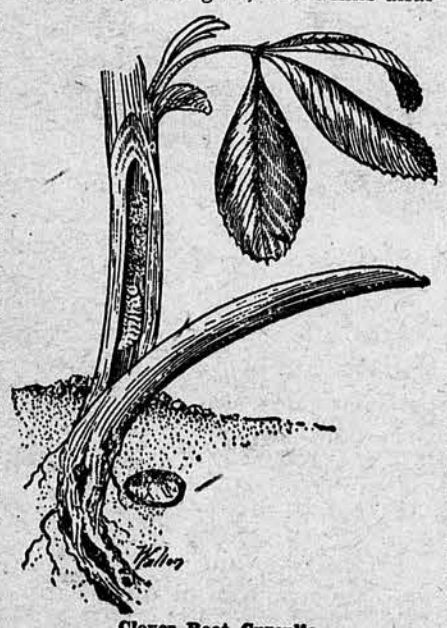
I notice an inquiry from S. F. L., DeKalb, Mo., for a remedy for warts on a heifer. If these are common white warts it is not in the least necessary to cut them out. We cured six this spring that were badly affected, some having as high as 30 warts, by an application of common steam cylinder oil. Most any heavy machine or castor oil will do the work if applied once a week until the warts disappear. Ours took only two applications this time and we have often cured them with one. We use the steam cylinder oil because the heat from the sun or from the animal does not run it off as it does softer oils.

Olathe, Kan. R. E. Bartlett.

An Enemy of Legumes

Serious injuries have been caused recently in alfalfa and clover fields, by a small beetle, called the clover root curculio, says M. L. Seder in the Iowa Agriculturist.

This pest in its most dangerous form is a small, white grub, which kills alfalfa and clover plants by boring into the roots, often working its way upward into the stem of the plants. Since the grubs confine their attacks to the roots, their work is not noticed until the plant dies. The grub itself is so small that it is not easily seen.



Clover Root Curculio.

The adult insect, a tiny beetle, feeds on the leaves of the clover and alfalfa plants, usually making its attacks in September or October. Its work is more noticeable, but less serious than that of the grub, because it does not eat enough of the leaves to injure the plant seriously.

A thorough disking or harrowing of the hay field as soon as the first crop is removed is the only practicable method of fighting the insect. This operation destroys hundreds of the grubs, which lie within an inch of the surface. Although disking and harrowing will not prevent injury to that season's hay crop, it will reduce the losses from the pest the following year.

As the insect breeds along the roadside and on other waste land, short alfalfa rotations will not limit its presence in the field. Applications of poison to the plants are useless, because the adults eat but a small amount of the leaves and the grubs feed below the surface.

At present this insect is found in most of the northern states, east of the Mississippi, also in Washington, Oregon, Idaho, Utah and Colorado in the West, and Virginia, North Carolina, Tennessee, Kentucky and Louisiana in the South.

Thumps

What is the cause and is there a cure for thumps in pigs? H. M. H.
Hatton, Kan.

Thumps in young pigs is due to a spasmodic contraction of the diaphragm corresponding to hiccough in man. In many cases it may be relieved by the internal administration of fluid extract of belladonna, administering it at the rate of a drop for every pound weight up to one hundred pounds. This should be given once daily in the feed until the symptoms disappear or until the drug induces temporary blindness, the latter being an indication that the system is saturated. Blindness wil disappear in a few days after the discontinuance of the drug. R. R. Dykstra.
Kansas State Agricultural College.

Try Summer Pruning

BY E. P. SANDSTEN

Summer pruning should be as regularly performed as winter pruning. After the shape of the tree has been obtained through winter pruning, the filling out of the branches and the trunk should be accomplished by summer pruning. This is especially true during the fourth and fifth years after planting. As a rule, most fruit growers prune their young trees too heavily during these years. Growth becomes excessive, especially in length, and the branches do not become properly braced at the crotches of the tree. If summer pruning is done between the middle and the latter part of June, when the growth in length has reached from 12 to 15 inches, by cutting off the terminal buds, it will invariably check the growth in length and increase the thickness of the trunk and branches. Further, it tends to produce fruit spurs by checking the flow of the sap.

Summer pruning may also be practiced on older or bearing trees in connection with the thinning of the fruit. In this case, there is very little occasion for cutting and pinching off the terminal shoots, as older trees make little or no wood growth. Cutting out a number of fruit spurs will give a larger food supply for the remaining ones and the size of the fruit borne is greatly increased.

Trees are troubled with over-bearing, that is, most of our trees have too many fruit spurs, and set too many fruits, making it difficult to obtain the proper size. While thinning the apples by removing them after the fruit is set is a remedy against over-bearing, yet this is less efficient than the actual removal of fruit spurs. The fruit spurs should be cut off close to the branches, to leave the remaining spurs well distributed.

The time for this kind of thinning, or summer pruning, is after the apples are well formed and the June drop is past. The operator then can gauge the number to be removed or left, without any difficulty.

Light pruning-shears is the best tool for this purpose.

More Wheat Can Be Saved

There is a vital need for more care at threshing time. A great deal of grain is wasted by carelessness at this time that could otherwise be saved. Unless due attention is given by the farmer much of the profit on the year's work may be lost. He also should require that the threshing crew should do its part in saving the grain.

As a general rule the separator man with the better outfits is careful to keep his machine in good order. Most of the loss is not due to him. Perhaps the most important thing for the farmer to consider is to be sure of the men who are doing the pitching into the self-feeder. No machine can do its best work unless the pitching is handled properly. The feeding should be done at a steady, uniform rate, for every time a separator is "slugged" there is considerable wasted grain that is never knocked out of the head. If bundle grain is being pitched the heads on one side should be even with the band of the bundle on the opposite side of the feeder.

Good feeding will make a difference of many dollars a day in the amount of grain that comes from the machine. Therefore a good pitcher, who can be depended on to put the grain into the feeder in a proper manner, is worth much more than an ordinary hand, and it is right that he should be paid more. A strong man is required for this work, who has an appreciation of the importance of proper feeding in getting the most grain out of the straw. There is a community in eastern Oklahoma, where the outfits do not carry their own pitchers and where the farmers change help, that two men have done almost all the pitching into the feeder for many years. They are especially good at this work, and the rule is to pay them a dollar a day more than the ordinary hands get. They are worth it, too.

It pays well to have a canvas spread under the feeder, to save the heads and grain that otherwise would drop on the ground. Many outfits are now carrying a canvas of this kind, and they are saving considerable grain on every "set" that would be wasted. Farmers should insist that the owner of the machine must carry a canvas, and if he doesn't do it one should be provided by the farmer.

A vast amount of grain is wasted every year by leaky wagons. It takes a good wagon box to hold wheat, and unless considerable care is used some of it will escape. A liberal use of cloth between the bottom and the sideboards and around the endgates usually is well worth the trouble. A canvas or cloth should always be tacked from the bin to the box, so that when the grain is shoveled into the storage space there will be no chance for loss. It is true that some fortunate men have "dumps" on their own farm for the grain, but most of the wheat in this state still goes into the bin by the scoop-shovel route. There is a loss of many carloads of wheat every year in the 2 or 3 feet between the wagon and the bin when a canvas is not used.

To Make Stacks Rain Proof

From an experience of 50 years I can give the man who wishes to learn the art of stacking sheaves a plan for a stack that will turn rain. Begin by making a shock in the center and enlarge it continually, giving the sheaves more slope. A medium bottom will be 12 feet across and a large one 14 feet. The outside course should be about flat on the ground. Take a three-tined sheaf fork and build your outside course up until the stack is about flat. Start a round stack with two courses of sheaves, having the outer course even with the outside of the stack and the inner course lapping on the outer course about to the bands of the outer course. Always walk on the inner course and never get down on your knees nor tramp the outside course. When the stack is 2 feet high begin to lay out 6 inches all around for the bulge. When the stack is 5 feet high it should be bulged 2 feet all around. At 5 to 6 feet high you should begin to draw in for a top so your stack will be shaped about like a sharp pointed hen egg. The inside of the stack should be well tramped solid with the outside left loose so it will settle down over the bulge. This will give slope to your sheaves and will turn rain. If for any reason the stack should appear too flat, get on it above the bulge and run round and round until you get to the top. This will give the outside sheaves the proper slope, especially after a little rain. Finish the top from a ladder. Put a sharp pole 7 feet long in the center and turn the sheaves down on the pole with the heads down to make a neat top.

J. B. Whittaker.

Nickerson, Kan.

More About the Corn

BY P. G. HOLDEN.

From a standpoint of acreage and valuation, corn is king of all crops. More than 20 per cent of all the improved lands of the United States is devoted to the growing of corn every year. For nearly 50 years the acreage used for this crop has been equal to, if not greater than, the acreage devoted to all other cereal crops combined. The valuation of the annual crop is more than double that of cotton, nearly three times that of wheat, and almost four times more than oats. The 1914 corn crop if sold at 70 cents a bushel would bring the farmers of the United States 1,900 million dollars, or enough money to build six Panama Canals. Yet, the average yield was less than 26 bushels an acre—about half a normal crop. There are thousands of farmers who produce 60 and 70, and even 80 and 90 bushels an acre. Too often we see two fields just across the road from each other, and perhaps adjoining, but on different farms, one yielding 70 bushels and the other less than 20; yet the land values are practically the same and the labor required to produce the 20 bushel crop is as great as that needed for the 70 bushel crop. If one man can produce 70 bushels an acre, the other men can do it also, and not only that, but must do it if we are to achieve our greatest agricultural possibilities.

The failure of the corn crop in the United States for two years in succession would cause a financial panic. There is a wonderful chance for improvement. The opportunity and responsibility is ours. If every ear of seed corn were harvested at the proper time, properly stored and tested before planting, millions of dollars would be added to the value of the corn crop every year.

Special Avery Tractor Announcement

3-Plow Tractor $760—Cash
Also for running silo fillers

4-Plow Tractor $1120—Cash
Also for running 22x36 inch threshers and silo fillers

5-Plow Tractor $1680—Cash
Also for running 28x46 inch threshers and silo fillers

6-Plow Tractor $2145—Cash
Also for running 32x54 inch threshers

8-10-Plow Tractor $2475—Cash
Also for running 36x60 inch, and larger, threshers

WE announce a new smaller and lighter Tractor for pulling a two gang plow, which will sell for not over $550.00 cash (depending upon costs of certain details which are now under consideration). This tractor has many new and original features which will be of much interest to the farmers looking for small tractors. Later, a still smaller and cheaper size will be announced. We also announce new cash prices on all five sizes of Avery Tractors now on the market.

Our extensive factories are running overtime turning out five sizes of famous Avery Light-Weight Tractors, which have proven so successful, and of which thousands are now in the hands of farmers doing daily duty. They are simple, durable and powerful, smooth running and reliable; have all been introduced by the "sold-on-approval" policy, backed by strong warranties that insure the buyer getting a machine that will do the work.

Now Is the Time to Start Tractor Farming

Now is the time to sell horses—the price is good. Now is the time to place your order for a tractor and get it on the ground early to do your fall work. Learn all the facts about the Avery Tractor and Power-Lift Plow, the original one-man outfit and you will have no fears or doubts about what tractor farming will *save you* in expense and hard work and what it will *gain for you* in raising bigger crops by plowing at the right depth at the right time.

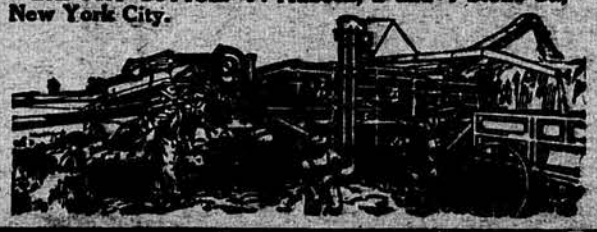
Avery "Light-Weight" Tractors and "Self-Lift" Plows will be on exhibition at all of the important Tractor Plowing Demonstrations. Come and see them at work. Write any of our branch houses, jobbers or the factory for full information.

Avery Company, 1010 Iowa St., Peoria, Ill.

BRANCH HOUSES: Omaha, Neb.; Des Moines, Ia.; Kansas City, Mo.; Minneapolis, Minn.; Indianapolis, Ind.; Grand Forks, N. D.; Fargo, N. D.; Billings, Mont.; Aberdeen, S. D.; Lincoln, Neb.; Madison, Wis.; Wichita, Kan.—JOBBERS: Avery Company of Texas, Dallas, Texas—Canadian Avery Company, Winnipeg and Regina, Can.—EXPORT OFFICE: P. Aubeck, 2 and 4 Stone St., New York City.

The Avery Thresher Is a Job Taker, a Grain Saver and a Money Earner

Avery Grain Threshers are built for use with Avery Tractors in all sizes from 22x36 to 42x70 inch. Equipped with guaranteed non-breakable razor-steel cylinder teeth. Proven by field tests threshing on canvas to be the best grain saving threshers built. Every one is given a running test at the factory before it leaves which insures satisfactory results from the start. Backed by the strongest warranties ever given on a threshing machine. Satisfaction guaranteed.



War and the Grain Tanks

Unless the great war in Europe ceases rather soon the farmers of this country will have to be satisfied with ordinary steel grain tanks—ungalvanized. The fact is zinc and spelter have increased so rapidly and so enormously in the last few months that no manufacturer can afford to buy it for tank-making; that is to say many of the manufacturers will be wholly out of spelter or galvanized metal sheets by the middle of July.

However, this need not worry the farmers if only they will adjust their opinions and prejudices. Ordinary black steel tanks will cost very much less than the galvanized variety now sold in such large numbers. Indeed the saving will be such a material gain for the farmers that they may even feel grateful finally.

C. R. Butler, president of the Butler Manufacturing company; A. A. Kramer, proprietor of the Columbian Steel Tank company, and other Kansas City manufacturers of galvanized metal products, say that the substitution of some other material is necessary if the business is to be continued along present lines.

Mr. Kramer says the plants will have to shut down in the course of a few months if they have to depend upon galvanized steel at the present condition of the market.

The purchase of great stores of spelter in this country—by the warring nations of Europe, which virtually amounts to the United States supplying the world with an output normally one-third of the world's production, is blamed for the continued high level of the spelter and brass markets. Spelter is made from zinc ore, which has reached the unprecedented price of $130 a ton in the Webb City-Joplin district in Southwest Missouri.

"We can see the finish of the galvanized sheet metal business within the next three or four months, if the present condition continues," said Mr. Kramer. "It is not so much a question of price but of actually obtaining the sheet metal. The mills cannot deliver it because they cannot get the metal to make it."

This statement was borne out by the announcement of R. A. Skinner of the Wheeling Corrugating company, of Kansas City, that the Wheeling company is practically shut down as a galvanized steel mill on account of the inability to obtain spelter. The company is out of the market and is not quoting prices or selling, except on stocks already on hand or in sight.

The Columbian company is installing an enameling and painting plant in its factory to experiment with a combination to take the place of galvanized steel used for tanks and silos.

Galvanized steel is used for farm equipment, such as tanks and silos, and the one item of grain bins alone runs into the millions annually in the Kansas City district. There are from 3 to 4 ounces of galvanized coating on each square foot of galvanized steel.

New Uses for Wood

Everybody knows that the most successful manufacturer of today is he who most effectually utilizes the waste products of his industry. The heads of the great meat packing establishments were among the first to waken to a realization of that fact. Another "big business" that is just getting thoroughly awake to the possibilities of waste materials is the lumber industry, which, contemplating a diminishing timber supply and greatly increased cost of production of building material, is expending millions of dollars in research work devoted to finding uses for the "odds-and-ends" of wood formerly discarded without a thought of their possible utility.

What has already been accomplished along that line, especially in the great Southern yellow pine forests, would amaze an "old-time" lumberman out of touch in recent years with changing conditions. Research work in field and laboratory has developed so many uses for lumber "culls" and waste materials that today the Southern yellow pine interests, like the packing interests, come pretty near utilizing "everything but the squeal."

Turpentine and rosin have long been important by-products of the Southern pine forests, but under old methods these were obtained principally by "bleeding" standing trees, much as the sugar maple is bled for its sweet sap for making maple sugar. Recent improvements have made it possible to recover turpentine and rosin from stumps and mill waste, until now it is estimated that the immediate possible returns from that source will amount to many million dollars annually. Excelsior, charcoal and pine tar also are important by-products, which are now being made in quantities from wood fragments formerly destroyed by fire. Pine oil, used in the manufacture of varnishes and paints, is a comparatively new product from waste, obtained by distillation. The yellow pine mill scraps, shredded and subjected to chemical treatment, yield a pulp that is made into the strongest wrapping paper known. Uses have been found even for the pine needles, the "leaves" of the tree, which, distilled green, yield an oil of balsamic odor; while boiling the needles in a solution of alkali produces "pine wool," a fibrous substance that is carded and woven into fabrics or used in upholstering.

Probably the most important saving in the Southern yellow pine industry, however, is that of the upper portions of the trees, formerly rejected as worthless, but now worked up into fence posts and creosoted. Improvements in the method of treating wood with creosote oil are largely responsible for the saving of the pine tree tops and their manufacture into fence posts on a large scale. Southern yellow pine is impregnated naturally with quantities of rosin and wood oils that make the wood remarkably resistant to decay, and when these preservatives are reinforced with creosote oil, the pine is rendered practically impervious to the action of moisture, mold, or other agencies that tend to destroy. The demand for creosoted yellow pine, whether in posts or structural timbers and lumber generally, is reaching enormous proportions as builders everywhere learn of the remarkable durability of the wood so treated. In England, creosoted Southern yellow pine not only is used extensively for wood block paving and heavy construction, but before the beginning of the European war it was fast superseding all other material for farm building in many foreign countries. So great has been the demand for the creosoted wood that manufacturers predict that creosoted lumber and fence posts soon will be a part of the regular stock of all retail dealers in lumber.

The queen of Sheba came from the uttermost part of the earth to hear the wisdom of Solomon. And the now fully enfranchised women of Kansas are listening to the men they believe are really trying patriotically to make government and social conditions better. The adoption of woman suffrage in Kansas has made it easier to elect men of good moral character to office and harder to foist a man of shady reputation on the people. Election day in rural Kansas with the women voting, is more like a big neighborhood picnic than a political fight.

Picnics for Institutes

Farmers' institutes and the women's auxiliaries will celebrate on July 17 with a picnic, entertainment and relaxation meeting following the harvest season. The institutes in every part of the state will meet that afternoon at the regular institute hour to enjoy the harvest program.

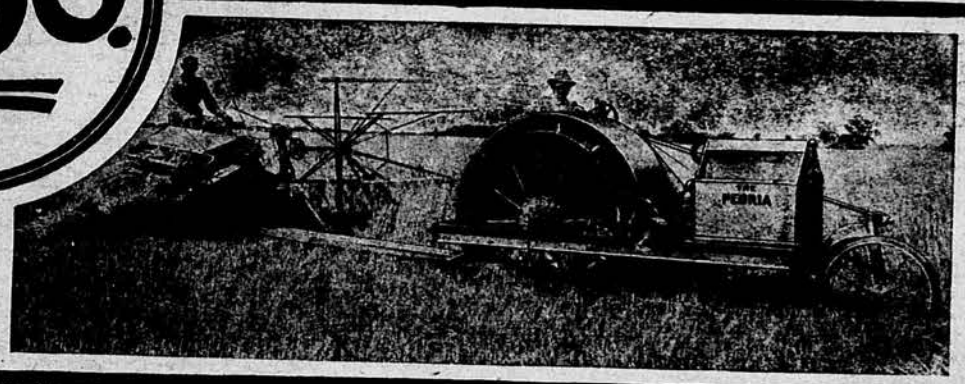
Here is an outline for a program which is suggested by the institute department of the agricultural college: Invocation, local minister or priest; song, "America"; symposium, local incidents and anecdotes by several of the best story tellers; papers by school children on "From the Grain to the Loaf"; paper, "The Farm Woman's Side of the Harvest"; informal talks on "The Harvest of Fifty Years Ago" by some of the older members; closing song, "Auld Lang Syne."

Keeping production records is only half the work. How much did it cost you to feed that cow that gave you 6,000 pounds of milk last year? Keep records and keep them right.

The TRACTOR that Meets with the APPROVAL of KANSAS FARMERS — So SUCCESSFUL in 1914 that it is in DEMAND EVERYWHERE in 1915

$650. Peoria Tractor

The 3 PLOW TRACTOR that was RIGHT from the START



PEORIA TRACTOR HAULING 8 FT. BINDER 3 MILES PER HOUR.

Be guided by the experience of others—don't take chances by buying new or untried tractors. When you buy the "PEORIA" three plow machine you have bought a tractor that has proven itself a winner.

This machine by its day after day continuous service has built up a reputation for all time to come. Its many purchasers are endorsing the principle, the workmanship and above all the economical way in which the "PEORIA" can be operated.

The very first "PEORIA" was built along correct line. Our price and model has not been changed. Peoria Tractor designers knew what they were about—they knew just the kind of a tractor that was needed and the result is this product is enjoying a wonderful trade—every purchaser is entirely satisfied.

Write us today for all facts and terms regarding the "PEORIA" and let us tell you about the wonderful work this machine is doing for your neighbors.

Prompt deliveries guaranteed for harvest and early plowing seasons on all wire and mail orders—REMEMBER the "PEORIA" 3 plow Tractor will pull one or two binders—two or three plows—two discs. Drive pumps, corn shellers, ensilage cutters, feed grinders, wood saws, etc.

The "PEORIA" furrow gauge wheel attachment steers the "PEORIA" from one end of the field to the other without a driver—ADDRESS NOW

PEORIA TRACTOR Company, Inc., PEORIA, ILLS

THE MID-WEST SALES CO., 1713-15 McGEE ST., KANSAS CITY DISTRIBUTORS.
SOUTHWEST SALES CO., 420 WICHITA ST., WICHITA, DISTRIBUTORS.

Putting Vegetables in Cans

Surplus Things From the Garden May Be Turned Into Cash

BY MABEL GRAVES

A FEW DAYS ago this letter was received at the office of the Farmers Mail and Breeze, written by a reader from the extreme western part of Kansas:

"I would like some information about home canning. Is it a success? Of course the advertising of the canning outfit manufacturers gives glowing accounts, but I would like some reliable information from other sources, including the cost of fuel—we would have to use coal or oil out here— the cost of cans and other things, with some recipes. It is not because farm women are too lazy or not enterprising enough to have 'good things' to eat the year around. To many of us the idea of having all kinds of vegetables in the winter as well as in the summer at an expense of 4 or 5 cents a can—that is as high as any of them ever get—seems like a dream 'too good to be true.' The question is, can we do it? I am sure others besides myself would like this information. I write knowing my letter will receive consideration, whether you act upon my suggestion or not. I have always read and liked the Farmers Mail and Breeze."

This letter was welcomed at the office of the Farmers Mail and Breeze, because canning is a subject in which every woman is interested. On nearly every farm enough vegetables go to waste to supply the needs of the family until they are in again. If there is any way by which the surplus things that cannot be eaten fresh from the vine or stalk can be put away for winter use and a variety of good food provided without having to be bought from the grocery store the women of Kansas ought to know about it.

A canned fruit or vegetable keeps because it is sterile. It may be cooked in a kettle until all bacteria, germs and mold have been killed, but in passing through the air on the way from the kettle to the can it is apt to pick up other bacteria; and that is one reason why the kettle method has so often been unsuccessful. A few years ago someone found that vegetables could be canned by putting them into the jars cold and cooking in the wash boiler an hour a day for three successive days. Full particulars about this method of canning were published by the United States Department of Agriculture in Bulletin 359, which is free to any woman who will write to it. However, the boiler method of canning, although successful, is slow. The long cooking is necessary because the heat cannot be raised above boiling point, 212 degrees.

Then a few years ago someone discovered that factory methods of canning could be applied at home; and that meant a revolution. There are many canning machines on the market, but they all may be divided into three distinct types: (1) The hot water commercial outfit, which operates much the same as the wash boiler, but having been made for canning it is more conveniently arranged. It is usually planned for outdoor work, and has a fire box attached. Think of being able to can your apples in the cool breezes of the orchard! (2) The water seal, a combination of hot water and steam, which cooks with a temperature considerably higher than the hot water canner, making only one cooking necessary. And (3) the steam pressure canner, in which a temperature of 220 to 260 degrees can be secured, with a consequent decrease in the time required for cooking.

The canning machine is a success, as has been demonstrated by men, women and girls in all parts of the United States. Canners are better known in the South than in the North, because the United States Department of Agriculture has been busy for several years establishing girls' canning clubs in that section of the country, in South Carolina, Georgia, Mississippi, Louisiana and other states. In Oklahoma there are 1,868 girls enrolled this year in the canning clubs, and every girl will use some kind of commercial canner. The Department of Agriculture is organizing Canning clubs in Kansas this summer for the first time.

A Farmers' Canning Club.

Up at Firth, Neb., there is a neighborhood canning club, organized by two young women who found the canner valuable in their own home. The membership of this club includes farmers and some town gardeners, with their wives and daughters. They have canned meats and vegetables for their own use for several years, some members have canned for market, and some of them have been paid to can for neighbors who did not possess a canning outfit of their own. The members of this club during the year 1914 canned 121,500 quarts of meats and vegetables. This included rhubarb, pickles, carrots, beets, tomatoes, string beans, lima beans, peas, asparagus, turnips, hominy, corn, sweet potatoes, pumpkin, chili sauce, pork, beef, salsify, spinach and other vegetables.

A valuable article on the subject of commercial canners was published in the Farmers Mail and Breeze of May 9, 1914, written by Mrs. C. F. Thompson, a Kansas woman. A most excellent bulletin on the subject of commercial canners has been issued by the United States Department of Agriculture. Those who wish it should write for bulletin No. 521, "Canning Tomatoes at Home and in Club Work." A 6-page circular giving detailed directions for canning in glass or tin with a canning machine has just been issued by the Department of Agriculture. It is No. 631 Revised. Both of these are free for the asking. A valuable bulletin on "Canning Fruits and Vegetables on the Farm," has been issued this spring by the University of Idaho. Anyone sending for this should at least enclose a stamp. The federation of women's clubs of Illinois is behind the canning movement in that state. The slogan for Kansas should be, "Let nothing go to waste."

A canning machine may be used to advantage in putting away fruits for winter as well as vegetables. This is what happens when fruit is cooked in an open kettle over the fire: Heat is wasted; time is wasted; labor is wasted; strength is wasted; patience is lost; flavor of fruit is wasted; color of fruit is injured; beauty of shape of fruit is lost. It seems strange someone did not discover the better way long ago.

Tin cans are numbered according to size as No. 1, 2, 2½, 3, 10. Sizes 2 and 2½ are seen on the grocery shelves filled with peas, beans, corn, and some fruits. Size 3 is the one usually used for tomatoes and peaches. The larger the order for cans the smaller the cost a can. Ordering in large quantities the cost would be a little more than 1¾ cents a can. The smallest order would probably not bring the cost for each can (tin) over 3 cents, including freight charges.

Either glass cans or tin may be used with a canning machine. Things that are to be sold are best canned in tin, because the cost is less and the cans do not break; but for home use the glass cans on hand will do perfectly well. The cost of a canner is $5 to $35, depending on size and equipment.

Mason jars have long been the standard, but the tops have been hard to sterilize. That is one reason so many women have said in despair, "I can't understand why my fruit doesn't keep!" Then someone invented the spring-top can which is easy to seal and as easy to keep clean as a saucer. Four or five years ago someone thought of a better top for the Mason cans. This new top is in two pieces, and the rubber ring sits on the edge of the glass neck of the can. The glass top is laid on, with the rubber flattened into a groove in the top; then the outer piece is screwed over it. This cap is easy to keep clean, and it makes a more perfect seal than the old fashioned kind of Mason tops. Mason cans are now made with wider tops than they were a few years ago, which is an advantage in putting up large fruits.

The woman who is going to can with a commercial canner will first put her fruit or vegetables in the can. If she is canning fruit she will fill the spaces with a sugar and water sirup; if vegetables, she will pour on water. Then she will seal according to the directions given with the canner, and put on to cook. This is called the cold pack method.

The Cost of Canning.

Some vegetables, such as corn, peas and beans sometimes are cooked a little in an open kettle and the water poured off before the vegetable is put in cans. This is called blanching. It removes the strong odor and flavor, improves the texture, and makes them pack better. Usually the little hole in the end of the cap is left open for a few minutes after the vegetable is started to cook in the cans, if the canning is done in tin; or the top is left loose if the canning is in glass. This is to allow the escape of steam. It is called exhausting.

The price of a canner is $5 to $35, depending on the size and equipment. A furnace may be built outdoors, or the canner may be heated on the kitchen stove. Some canners are equipped with a burner which uses oil or gasoline, and need no other fuel. After the canner is bought the expense is small, and this first cost may be quickly made up in the value of the things canned. One enthusiastic Kansas woman who has a canner wrote: "Two years ago we canned more than 1,000 quarts of peaches and sold most of them for a shilling a quart. We figure that we cleared 7 cents a quart, or more than $1.50 a bushel." The cost of tin cans and all other expenses was included in this estimate. The canner makes it possible to take care of perishable produce for which there is a poor market and sell it when the market is good.

The University of Idaho kept a record of the cost of canning during a period of three years. In computing the cost all items, such as preparing fruits and vegetables for the cans, filling, siruping, soldering, labeling, sugar, salt, solder, cans, cases, labels, fuel, and gasoline were included. All labor was paid for at the rate of 15 and 20 cents an hour. Much of this expense the farm housewife need not take into account. Where the work is done by the members of the family the first five items in the list of expenses may be omitted. Cases and labels are needed only for goods that is to be sold. Where glass cans are used, which when once bought will last for years, that expense is also reduced, and gasoline made unnecessary.

But the cost, including all expenses, as listed by the Idaho university was as follows: Apricots, No. 2½ cans, $2.21 for a case of 24 cans; sweet cherries, $1.85; peaches $1.86; strawberries, $2.33; beans, $1.96; cauliflower, $1.73; tomatoes, $1.73; sour cherries, No. 2 cans, $1.95; raspberries, $1.64; beans, $1.57; corn, $1.91; peas, $1.89. If the canning machine is kept busy to its capacity several hundred cans may be put up in a day on the smallest size. With larger sizes of canners the possible amount may run into thousands; but this size would be found profitable only to truck gardeners who were canning for the market.

This recipe for canning corn, issued by the United States Department of Agriculture, is typical of all vegetables: Use corn the same day it is picked; if possible the same hour. Remove husk and all defective places, and blanch in boiling water 5 to 10 minutes. The time depends upon the stage of ripeness, size of ears, and degree of freshness. Remove from the ears and plunge quickly into cold water. Cut the corn from the cob with a sharp knife. Pack well in glass jar or tin can; add hot water, and a level teaspoon of salt to the quart. If using glass place rubber and top in place, but not tight. If using tin solder the cap in place and fill the vent hole. Then process (cook) the corn 180 to 240 minutes if you are using a homemade or a hot water commercial bath outfit; 1½ hours if you have a water-seal outfit; 60 minutes when using 5 to 10 pounds of steam pressure and 40 minutes when using the aluminum steam pressure-cooker outfit. After processing remove the jars, tighten covers, invert to test the joints, and cool.

You who are reading this article doubtless have noticed that the United States Department of Agriculture is much interested in the subject of canning. The canning specialist for the department, O. H. Benson, probably knows more about canning than anyone else in the United States, and he is always willing to give information to those who wish it. Here is a table he has prepared showing the time of cooking required for several different fruits and vegetables by each type of canner:

	Size of cans.	Hot water.	Water seal.	Steam pressure.
	Lbs.	Min.	Min.	Min.
Apples	3	15	15	10
Asparagus, Greens	2 or 3	60	60	40
Beans, lima and string	2 or 3	90	60	60
Cherries, Peaches	2	15	12	10
Peas	2	60	60	40
Sweet potatoes	3	80	70	60
Tomatoes	2 or 3	22	20	10
Beef	3	250	240	180
Beets	3	20	20	15

HOME DRESSMAKING

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

French dress 7285 may be made with or without the skirt ruffles. Four sizes, 2, 4, 6, 8 years.

Shirtwaist 7295 is in six sizes, 34 to 44 inches bust measure. It can be made with or without the smocking.

Skirt 7281 is in six sizes, 22 to 32 inches waist measure.

Dress 7289 is cut in seven sizes, 34 to 46 inches bust measure.

Dress 6971 is for children 4, 6, and 8 years.

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.

There's nothing effeminate about taking care of one's health. A slicker, rain coat and rubber boots belong in every farmer's personal outfit.

Mother of Five

She mothered five!
Night after night she watched a little bed.
Night after night she cooled a fevered head,
Day after day she guarded little feet,
Taught little minds the dangers of the street;
Taught little lips to utter simple prayers,
Whispered of strength that some day would be theirs,
And trained them all to use it as they should
She gave her babies to the nation's good.

She mothered five!
She gave her beauty; from her cheeks let fade
The rose's blushes, to her mother trade.
She saw the wrinkles furrowing her brow,
Yet smiling said, "My boy grows stronger now."
When pleasures called she turned away and said:
"I dare not leave my babies to be fed
By strangers' hands; besides they are so small
I must be near to answer when they call."

She mothered five!
Night after night they sat about her knee
And heard her tell of what some day would be.
From her they learned that in the world outside
Are cruelty and vice and selfishness and pride.
From her they learned the wrongs they ought to shun,
What things to love, what work must still be done.
She led them through the labyrinth of youth,
And brought five men and women up to Truth.

She mothered five!
Her name may be unknown save to the few.
Of her the outside world but little knew.
But somewhere five are treading Virtue's ways,
Serving the world and brightening its days.
Somewhere are five, who, tempted, stand upright
Clinging to honor, keeping her memory bright.
Somewhere this mother toils and is alive,
No more as one, but in the breasts of five.
—Edgar A. Guest.

Value For Value Received

Can a girl rent a room in town and be a dressmaker, when she has not studied dressmaking but is an extra good sewer? And will I have to have a license? I want to send my sister to high school.—Country Girl.

No town that was ever heard of asks a license from a dressmaker. Licenses usually are for the benefit of peddlers, and others of that class. You will not, of course, advertise yourself as an experienced dressmaker when you have not had such experience. A silk dress made without "style" will injure you as well as your customer. But if you undertake to do only the things that you know you can do well, giving honest value for value received, there is no reason why you should not go to town and be pleased with the experience. Work will be a little slow in the beginning, but one pleased customer brings another and in time you should have your share.

Canned Beet Pickles

[Prize Recipe.]

Boil beets until done, and slip off the skins. Cut thick and put in a granite kettle. Cover with vinegar not too strong. For 1 gallon of the beets add ½ cup of dark brown sugar, 2 tablespoons mixed spices, and 2 level tablespoons salt. Boil until beets are boiling hot all the way through, then put in cans. Getting them boiling hot is the secret of keeping any kind of pickles.

Mrs. Edith Worley.

Barclay, Kan.

A Fresh Fruit Pie

[Prize Recipe.]

Bake the crust on an inverted pie tin, pricked full of holes as for lemon pie. At serving time fill crust with thinly sliced mellow peaches and sprinkle well with sugar, using about ½ cup. On top heap stiffly beaten cream flavored with vanilla. Patty shells can be filled the same way. It is a rare treat.

Limon, Colo. Mrs. Fred Davis.

Kansas Farmers Up To Date?

Several months ago a sanitary and social survey was made of Sumner county, Kansas, by the Kansas state board of health. Sumner is one of the richest counties in Kansas. Its people are mostly native born Americans; in its homes, schools and churches the county is typical of Kansas, and that means a high class citizenship.

"The common drinking cup and bucket is the rule in Sumner county," says Dr. J. J. Sippey, in a bulletin just issued by the state board of health. The survey was made under the direction of Dr. Sippey. "Running water and plumbing were found in a very small proportion. Convenience and labor-saving devices for the benefit of the farmer's wife are only too rare. It would seem that the farmer, who demands all the newest and up-to-date labor saving devices in the field, would feel that the housewife is entitled to her share in the home. Women demand more physical recuperation and rest than the male sex, and more especially the women who are expected to rear children. This is important, not only from a physical but from a sociological standpoint. No woman can be a good mother, and devote the time that is necessary to her children, when she is obliged to spend from 10 to 12 hours a day in the strenuous, irritating details of household labors."

A Bad Mouthful For Chiggers

For chigger bites I know of nothing so good as carbolic acid. It can be added to the bath water, but a still better way is to wring a sponge or cloth from water containing a litle acid and go over the entire body with it after the bath is over. It will be found refreshing, and much better than greasy compounds.

M. C.

Wichita, Kan.

To Clean a Panama Hat

When a panama hat needs cleaning, rub it first with meal, then dissolve lump starch in water to make a thin paste and rub this all over the hat. Place hat in sun to dry. When dry take an old toothbrush and brush the starch off. The hat will look as good as new.

Mattie Gray.

Itta Bena, Miss.

The Fruit Prospects

Reports received by the state horticultural society indicate the prospects for the Kansas fruit crop to be as follows: For the state as compared with the June reports for the last two years:

	1915	1914	1913
Apple	61	53	53
Pear	50	46	40
Peach	61	39	28
Plum	60	42	41
Cherry	60	58	64
Grape	80	68	79
Strawberry	74	53	70
Raspberry	69	69	70
Blackberry	70	67	69
Apricot	66		

As reported by congressional districts: First congressional district comprising Atchison, Brown, Doniphan, Jackson, Jefferson, Leavenworth, Nemaha and Shawnee counties—blackberries 70; raspberries 73; strawberries 68; pears 43; apples 62; cherries 65; plums 49; peaches 18; grapes 78; apricots 46 per cent.

Second district having the following counties: Allen, Anderson, Bourbon, Douglas, Franklin, Johnson, Linn, Miami and Wyandotte. Blackberries 83; raspberries 81; strawberries 79; pears 37; apples 54; cherries 60; plums 66; peaches 52; grapes 88; apricots 43 per cent.

Third district composed of Chautauqua, Cherokee, Cowley, Crawford, Elk, Labette, Montgomery, Neosho and Wilson counties—blackberries 86; raspberries 79; strawberries 77; pears 40; apples 44; cherries 67; plums 66; peaches 85; grapes 86; apricots 45 per cent.

Fourth district including Chase, Coffey, Greenwood, Lyon, Marion, Morris, Osage, Pottawatomie, Wabaunsee and Woodson counties—blackberries, 68; raspberries 66; strawberries 74; pears 42; apples 57; cherries 56; plums 42; peaches 38; grapes 78; apricots 57 per cent.

Fifth district consisting of Clay, Cloud, Dickinson, Geary, Marshall, Ottawa, Republic, Riley, Saline and Washington counties—blackberries 50; raspberries 50; strawberries 75; pears 58; apples 68; cherries 49; plums 53; peaches 51; grapes 75; apricots 62 per cent.

Sixth district—all counties north and west of Ellsworth county—strawberries 72; pears 54; apples 66; cherries 62; plums 60; peaches 72; grapes 74; apricots 83.

Seventh district—all counties south and west of Rice county—blackberries 61; raspberries 72; strawberries 76; pears 64; apples 74; cherries 72; plums 71; peaches 82; grapes 78; apricots 68 per cent.

Eighth district, embracing the following counties: Butler, Harvey, McPherson, Sedgwick and Sumner—blackberries 74; raspberries 75; strawberries 74; pears 45; apples 63; cherries 69; plums 76; peaches 86; grapes 83; apricots 61 per cent.

Reports on garden vegetables indicate that despite slight damage by cut worms all classes of vegetables will be plentiful.

Peaches in the northeast part of the state were severely injured by the low temperature of December, probably due to the fact that there had been more rainfall in that section than in the central and southern part of the state.

All other classes of fruit gave a very full bloom, but the continuous rains all over the state during blooming period cut down the average considerably.

The quality of fruit probably will be above the average of the last few years as considerable interest has been shown in spraying as the result of the work of the county agents and the agricultural college.

Should the conditions remain favorable, it means that Kansas will have approximately 3½ million bushels of apples. The largest crop in the last 10 years was that of 1912 when 4,827,789 bushels were reported.

J. L. Pelham, Secretary.

Church Union Is Best

BY PETER RADFORD.

Blessed is the rural community which has but one place of worship. While competition is the life of trade, it is death to the rural church and moral starvation to the community. Petty sectarianism is a scourge that blights the life, and church prejudice saps the vitality of many church communities. An over-churched community is a crime against religion, a serious handicap to society and a useless tax upon agriculture.

While denominations are essential and church pride commendable, the high teaching of universal Christianity must prevail if the rural church is to fulfill its mission to agriculture. Religion is an every day affair so why should the house of worship be opened but one day out of each week? There is no sacrilege in using the house of God as a community meeting place if one always remembers that each day should be consecrated to His service.

The rural church can be made the strongest factor in the development of community life if farm men and women will work together for good. Let us forget sectarianism and only remember that there is but one final meeting place for God's children.

Shawnee County's Grange

The Shawnee County Pomona Grange has issued its constitution and bylaws in pamphlet form, excellently done in colors. The book contains also a roster of the national, state, Pomona and subordinate Granges' officers; a sketch showing the origin of the organization, written by G. G. Burton, and much other interesting matter certain to be valuable to every Grange member. The book shows that the national membership is 940,000, the state membership 21,088, and Shawnee county 2,116. Here is a contribution from Marco Morrow:

"I love the State of Kansas, with its fields of wheat and corn; I love the Kansas sunset and the Kansas dewy morn; and speaking metaphoric, I grow fat on Kansas crops, and never mind the absence of the yield of rye and hops. I love the Kansas porker and the Kansas top-notch steer; I love the Kansas zephyrs and the Kansas atmosphere. I love the Kansas sermons and I love the Kansas jokes, but the thing I love in Kansas most, is the Kansas kind of folks; and of all the folks in Kansas, in town or field or range, I rather think the pick are found within the Kansas Grange."

More County Agents

Cherokee and Wilson counties are planning to have county agents next year. E. C. Johnson, superintendent of institutes in the Kansas State Agricultural college, who superintends the work of the county agents, has just returned from a visit to these counties.

At meetings held in each county, reports Superintendent Johnson, a constitution and bylaws were adopted, officers elected, and plans outlined for a campaign to get the necessary funds. W. H. Shaffer is president and W. H. Taylor, secretary-treasurer of the Cherokee county organization, while F. D. Farwell is president and Clinton Baker, secretary-treasurer of the Wilson organization.

How Much Are You Earning?

In a few months you can secure a practical business training and be in a good position with a good salary. You can be in a place that will develop your ability, and be a stepping stone to prosperity. Our Big Free Catalog tells you how. It explains about courses and expenses at the

Kansas Wesleyan Business College

The largest business college west of the Mississippi, with 1008 students, yearly—supplying 66 per cent of the bookkeepers and stenographers to Central and Western Kansas banks, with splendid equipment worth $60,000, with graduates in good positions in almost every city in the Western half of the United States, with a greater demand for its graduates than it can supply—with lower tuition and board expense than any other reliable school, a school that guarantees positions—a school of strong Christian influences. Write at once to

L. L. Tucker, Pres., Salina, Kan.

Read this book before you choose

And you will select the school whose graduates never wait for a position. The demand for young men and women thoroughly prepared as stenographers or bookkeepers, for government positions, and commercial teachers, is greater than we can supply. We guarantee you a position. Our students succeed because they go to the employer trained for real work. This is the oldest and best known business college of Kansas, with high salaried teachers, and a spirit of true helpfulness and friendship. Write today for large beautifully illustrated catalog to

Lawrence Business College 647 Massachusetts St., Lawrence, Kan.

Emporia Business College

"The School That Gets Results."

Clean moral surroundings. Everything modern. Pleasant rooms. Living expenses low. May enroll for a trial month. No solicitors. Free catalog.

C. D. LONG, EMPORIA, KAN., BOX M.

CENTRAL BUSINESS COLLEGE

offers the best opportunities; 24th year. Largest. Best. Write today for our special proposition.

1222-26 Oak St., Kansas City, Mo.

LEARN TELEGRAPHY

Students earn board while learning. A practical school with railroad wires. Owned and operated by A. T. & S.F.Ry. EARN FROM $55 to $165 PER MONTH. Write for catalogue.

Santa Fe Telegraph School, Desk G, 305 Kansas Ave., Topeka, Kan.

Finlay Engineering College

Tenth and Indiana, Kansas City, Mo. One and two-year courses in engineering. Also special short courses in Electrical, Automobile and Traction Engineering. Actual shop work and class work combined. Day and night sessions. Call now and investigate, or write for Catalog H.

Big Spreader Sale

$3 CERTIFICATE FREE ON NO. 8 SPREADER

A chance of a lifetime to own a real spreader. Heavy channel steel frame, double chain drive. Flexible tube, scientific beater. Sold on 30 days trial. Prices down, quality better than ever. The Galloway is already famous from coast to coast for construction, simplicity, 11 improvements and low price. Now prices go still lower. $3 Certificate on our famous No. 8 Spreader! 30 days' sale! Wm. Galloway Co., Box 49 Waterloo, Iowa.

S-4

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.

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

F. Mayer Boot & Shoe Co., Milwaukee

$15.95 SENT ON TRIAL UPWARD

AMERICAN CREAM SEPARATOR

Thousands In Use giving splendid satisfaction justifies your investigating our wonderful offer to furnish a brand new, well made, easy running, easily cleaned, perfect skimming separator for only $15.95. Skims one quart of milk a minute, warm or cold. Makes thick or thin cream. Different from this picture, which illustrates our low priced large capacity machines. The bowl is a sanitary marvel and embodies all our latest improvements.

Our Twenty-Year Guarantee Protects You Our wonderfully low prices and high quality on all sizes and generous terms of trial will astonish you. Whether your dairy is large or small, or if you have *an old separator* of any make you wish *to exchange*, do not fail to get our great offer. Our richly illustrated catalog, *sent free of charge* on request, is the most complete, elaborate and expensive book on Cream Separators issued by any concern in the world. *Western orders filled from Western points.* Write today for our catalog and *see for yourself* what a big money saving proposition we will make you. Address,

AMERICAN SEPARATOR CO., Box 1092, Bainbridge, N.Y.

Fresh Eggs One Year Old 00

NO LIQUID GLASS, NO LIME, NO WATER MIXTURE USED.

MORNING GLORY will keep eggs fresh and sweet for an indefinite time without cold storage or refrigeration in any climate or temperature.

MORNING GLORY is a pure, harmless vegetable compound in liquid form, applied with the hands. No dipping or brushing, no submerging. A child can treat 1,000 eggs in thirty minutes.

MORNING GLORY does not enter the egg, but hermetically seals the pores, and the egg retains all of its nutritious qualities and natural appearance, and can be transported without shrinkage or deterioration in the same way you now handle eggs.

The use of MORNING GLORY enables the producer to have fresh eggs for home consumption all the year round, and the surplus eggs can be saved and sold at the price of new laid eggs when the market is at its highest. Think what this means to you! After many exhaustive tests, lasting from three months to nearly two years, and subjecting treated eggs to extremely hot and then cold temperatures, the eggs were broken and found to be fresh and sweet.

. . . After six months test . . your preservative is genuine . . Alfred W. McCann, Pure Food Expert, New York Globe, March, 30th, 1915.

MAIL US ONE DOLLAR TODAY for package of MORNING GLORY which will preserve 2,000 eggs. Or Two Dollars for a package sufficient for 5,000 eggs. Parcel Post, prepaid. MONEY REFUNDED if not entirely satisfactory.

EGG PRESERVATIVE CO — TRADE MORNING GLORY MARK — 2000 BROADWAY N.Y.

Save Money, Save Your Chickens

GERMEX—Cheapest and best roup and cholera preventive and treatment, does the trick. Save 50% of your protection cost and raise more chicks. 25 cent package makes a pint of concentrated liquid GERMEX. Order today; postpaid. The Colwell Remedy Co., Pawnee City, Nebraska

Ride a RANGER

bicycle and know you have the best. Buy a machine you can prove before accepting.

DELIVERED FREE on approval and 30 days' trial. NO EXPENSE to you if, after trial you do not wish to keep it.

LOW FACTORY COST, great improvements and values never before equalled.

WRITE TODAY for our big catalog showing our complete line of 1915 Ranger bicycles, TIRES, sundries and parts, and learn the wonderful new offers and terms we will give you. Auto and Motorcycle Supplies at factory to user prices. Do not buy until you know what we can do for you. A postal card brings everything.

Mead Cycle Co., Dept. S-177, Chicago

1915 MODEL 22 Cal. HUNTING RIFLE Free

A REAL GUN. Take-Down pattern, with latest improvements, walnut stock and grip. Shoots accurately 22 long or short cartridges. Handsome, durable. SEND NO MONEY only your name and address for my easy plan of securing this fine rifle Absolutely Free—express prepaid. Write today. D. W. BEACH, Box 52, Spencer, Ind.

World's Lowest Price

Genuine Elgin Watch known as the world's most reliable make, sent by mail postpaid for $3.89 or can examine at express office. 16 size, 7 jewel movement, stem wind, open face, silverine screw case. Regular $12 value. If in need of good watch don't fail to order at this ridiculous low price. Money refunded if not pleased.

D. A. BATEMAN, 230 E. Market St., Louisville, Ky.

Do Your Own Mending

WITH A SET OF THE "ALWAYS READY" COBBLER'S TOOLS

This handy shoe repair outfit was made especially for home use. With the aid of these tools you can easily do any kind of shoe repairing at a great saving of time and expense. The outfit comes securely packed in a box and consists of the following: Iron stand for lasts; one each 9 in., 7½ inch, 5¾ inch lasts; shoe hammer; shoe knife; peg awl; sewing awl; stabbing awl; one package of heel nails; one package of clinch nails; and full directions. A most complete and serviceable outfit which will always give satisfaction.

OUR OFFER: This cobbler's outfit may be had free all mailing charges prepaid by sending a one-year subscription to Mail and Breeze at $1.00 and 25 cents to help pay packing and mailing charges—$1.25 in all. Either new or renewal subscriptions will be accepted. Send in your subscription and remittance at once to

FARMERS MAIL AND BREEZE
Dept. C. O. 10. Topeka, Kansas.

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

Eggs That are Worth More

Annual Loss of 48 Million Dollars May Be Greatly Decreased

BY C. E. BASSETT AND W. H. KERR

THE annual production of poultry and eggs in the United States is in excess of 600 million dollars, and is equal to the value of the hay or the wheat crop. Almost 8 per cent of the eggs marketed are lost. This great loss is due largely to improper handling between the farm and market.

Most farmers consider that eggs are a by-product, and that the returns are so much clear gain. The hens forage for a living, eggs are gathered when convenient and kept almost anywhere. With such carelessness, a combination of mongrel stock, dirty nests, stolen nests of broody hens, unconfined males, late maturing pullets, and other undesirable conditions, is it any wonder that the product includes such a high percentage of small, cracked, dirty, stale, heated, and even rotten eggs?

Occasionally the accumulations of all these kinds of eggs are taken to the country merchant and exchanged for merchandise. The merchant usually buys these eggs "case count," paying the same price for all kinds and sizes, provided they are eggs with an unbroken shell.

Many of these losses can be prevented by:

Selecting pure breeds that lay more and larger eggs.
Giving better care, food, and shelter, with dry, clean, vermin-proof nests.
Confining males except in breeding season.
Collecting eggs frequently, especially in hot or muggy weather.
Storing eggs in a dry, clean, cool place.
Using small and dirty eggs at home.
Marketing frequently, with protection at all times from heat.
Selling for cash on a basis of size and quality, "loss off" instead of "case count."
Using an attractive package.
Combining shipments as a matter of economy.

By uniting several egg producers in an association more can be accomplished in these essentials. One very successful egg company has a large incubator house with a capacity of 12,000 eggs, where early chicks are hatched for the members at a low cost. This is done in order to obtain early maturing pullets, thus getting eggs in the fall, when eggs usually are scarce. The company also has a receiving room for eggs where they are candled, sorted to weight, packed in cartons and shipped on contract orders. Their eggs are guaranteed to be according to grade, they advertise the fancy grades on their cartons and cases, and market prices are paid to the members. Twice a year dividends are paid each member in proportion to the amount of eggs marketed through the company and the time of year eggs were brought in, a larger dividend being paid for eggs marketed in the fall and winter than for those brought in during the spring and summer. A regular trade is established with discriminating consumers, with city clubs, with the best class of hotels and restaurants, and with fancy grocers.

The reputation thus established enables this association to fix its price at several cents a dozen above the regular market quotations, as fancy trade is willing to pay a premium for a guaranteed article. Most egg circles co-operate in buying their chicken-feed and other poultry supplies.

All food products should be delivered in a clean, attractive package. Some of the most successful egg shippers have discarded the dirty wooden case and are using a heavy fiber-board gift case, which will hold from 15 to 30 pasteboard cartons. Each carton has compartments for 12 eggs. Upon both the cartons and the case can be printed such advertising as may be wished. This style of package is especially desirable for the fancy retail grocer who can have his firm name included in the advertising. The fiber-board case is not expensive, is an excellent protection to the eggs in shipping, and is worthy of trial.

With a firm container, parcel post can be used for small shipments to private homes within first and second zones; that is, 150 miles. Each egg should be wrapped in paper to hold it snugly on end, in its own individual compartment of the container, so that it has no play; and after the container is closed it should be wrapped securely in strong wrapping paper and tied with coarse strong cord.

While at first the number of eggs to be marketed may not warrant a central station, with a manager to inspect, grade, and market the whole product, the aim should be to develop to that state. It is the only way to make a uniform grade, which will attract the highest class of trade.

Air Cure For Broody Hens

The best and quickest method of breaking up a broody hen is to build a cage entirely of laths, without a solid floor. Hang this cage in a tree, or build it up from the ground, so the air can pass through easily. You can break hens from sitting in a very few days by this method. It is not necessary to

Lath-Bottom Coop for Broody Hens.

deprive them of food and water, or almost to drown them in the rain barrel as is too often the custom. It is better than to place the hen in a pen with a vigorous male bird and make her exercise for her feed. It is a mistake to starve these hens. They should be fed all they will eat. Heavy feeding starts them to laying at an early date. Starving delays egg production much longer.

Powdered Hellebore for Flies

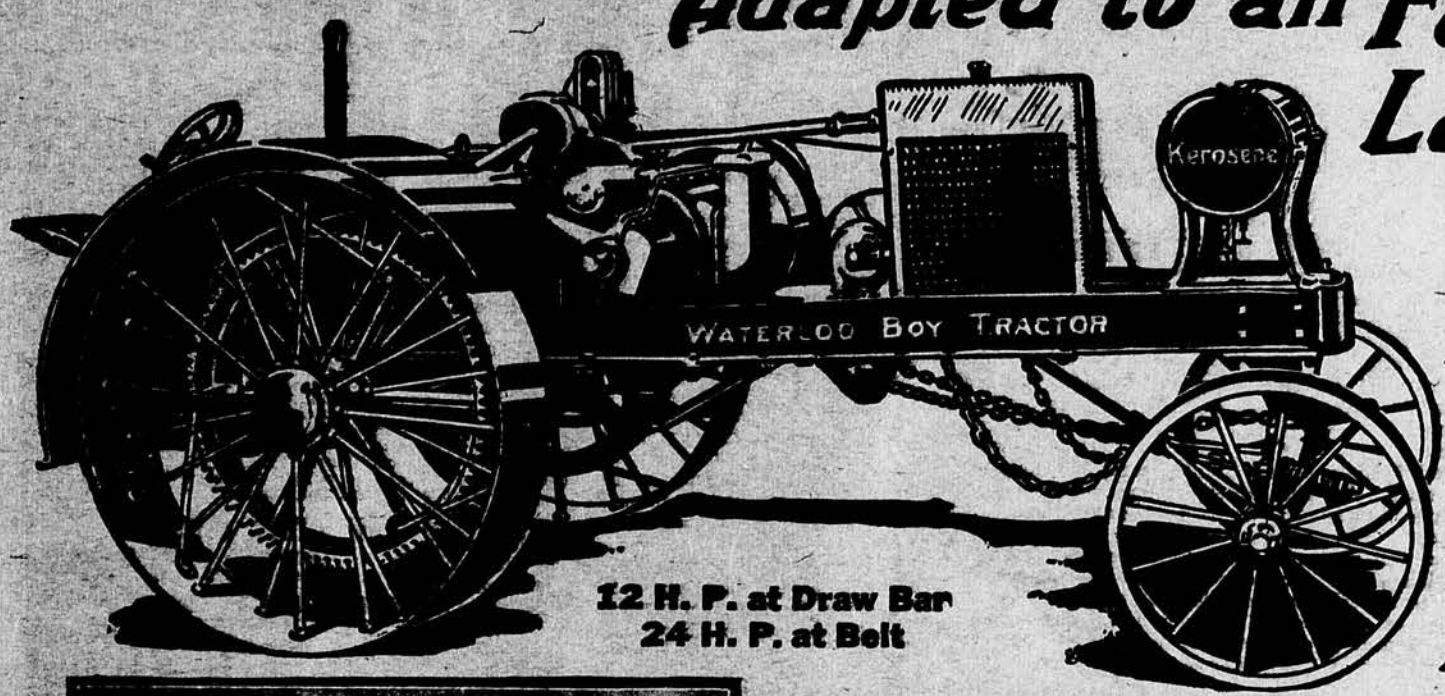
A safe and effective weapon against the typhoid or house fly has been found in powdered hellebore by scientists of the United States Department of Agriculture. Flies lay their eggs chiefly in stable manure. Powdered hellebore mixed with water and sprinkled over the manure will destroy the larvae which are hatched from the eggs. Since powdered hellebore is readily obtainable, this puts in the hands of everyone a remedy for one of the pests that has been found dangerous as well as troublesome. Powdered hellebore, however, will not kill adult flies which must be swatted or trapped.

It has long been known that flies breed in manure but previous methods of destroying the larvae there by the use of strong chemicals have been open to the objection that the treatment under some conditions lessened the fertilizing value of the manure or actually injured vegetation. This is not true of powdered hellebore. Government experiments have shown that the hellebore is entirely decomposed in the course of the fermentation of the manure and that even in excessive quantities it does no harm except to the larvae it is intended to destroy. Chickens picking in manure treated with it suffer no ill effects.

One-half pound of powdered hellebore mixed with 10 gallons of water is sufficient to kill the larvae in 8 bushels or 10 cubic feet, of manure. The mixture should be sprinkled carefully over the pile, especial attention being paid to the outer edges. In most places hellebore is obtainable in 100-pound lots at a cost of 11 cents a pound. This makes the cost of the treatment a little less than seven-tenths of a cent a bushel of manure. A liberal estimate of the output of manure is two bushels a day a horse. The money involved is, therefore, trifling in comparison with the benefits to the individual and the community from the elimination of the disease-spreading fly.

When a cow turned out to pasture does not give so much milk as you expected, do not blame the cow without investigating. Sometimes it is the fault of the pasture.

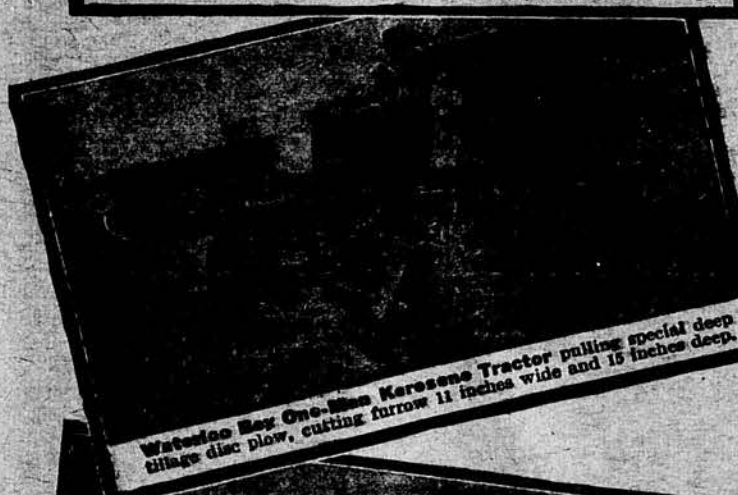
Adapted to all Farm Labor in Field or Barn Yard



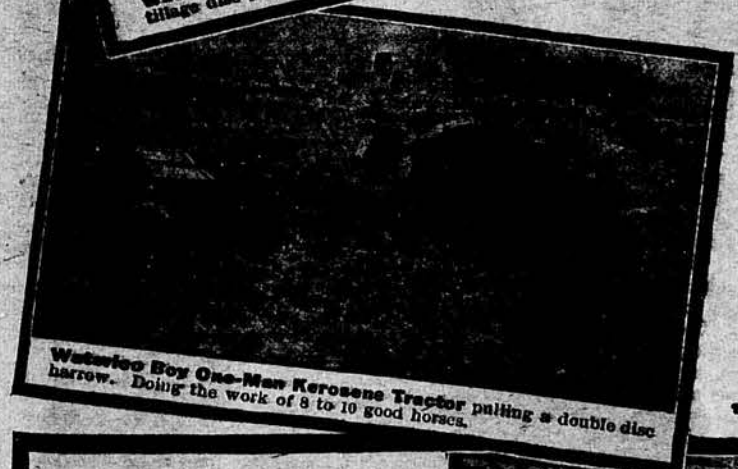
12 H. P. at Draw Bar
24 H. P. at Belt

WATERLOO BOY KEROSENE TRACTOR

Waterloo Boy One-Man Kerosene Tractor pulling a three bottom power lift engine gang plow, cutting 14-inch furrow 8 inches deep.



Waterloo Boy One-Man Kerosene Tractor pulling special deep tillage disc plow, cutting furrow 11 inches wide and 15 inches deep.



Waterloo Boy One-Man Kerosene Tractor pulling a double disc harrow. Doing the work of 8 to 10 good horses.

This tractor has stood every test in field, belt and road work, on farms in all parts of the United States, at all kinds of work and in all kinds of weather. It meets perfectly the requirements of the average sized farm. Simple, reliable, economical, powerful and easy to handle—**one man operates it.**

The Waterloo Boy Kerosene Tractor Costs Only $750

The low fuel cost of operating, the saving over the use of horses both for harvesting and plowing, the quickness and thoroughness with which the work is done, make the Waterloo Boy Kerosene Tractor one of the best profit producing machines on the farm.

Light Enough to Work Over Any Ground That Is Dry Enough to Plow

The pictures shown in this advertisement are from actual photographs taken in the field, but the Waterloo Boy Tractor is equally as serviceable at belt power in the barnyard. No other engine is needed for running the threshing machine, shredder, silo filler, separator, etc.

WATERLOO GASOLINE ENGINE CO.
175 W. 3rd Ave. Waterloo, Iowa

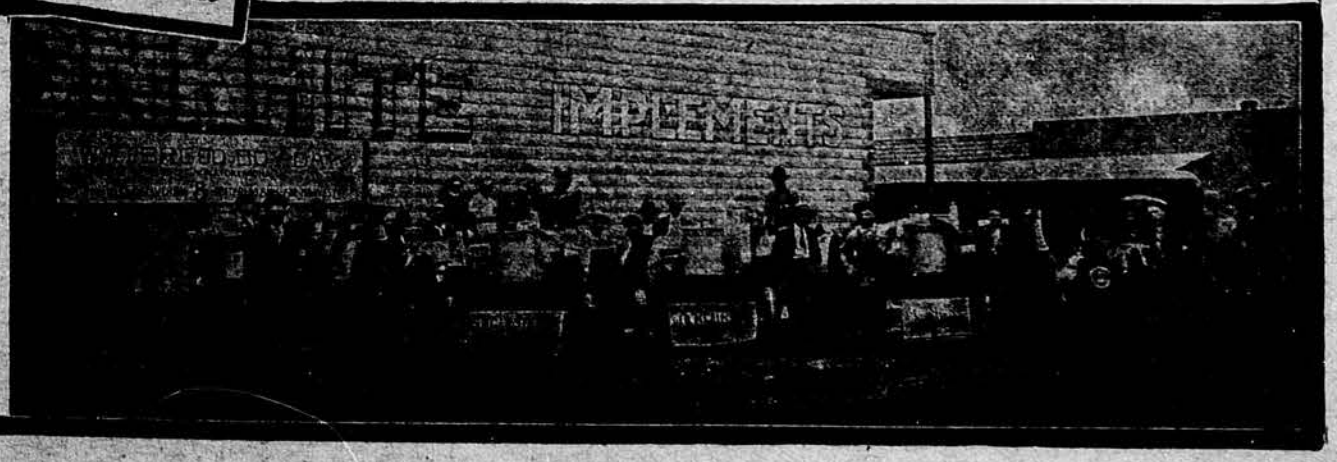
Come and See It Work

The Waterloo Boy One-Man tractor will be on exhibition at the great Tractor Demonstration at Hutchinson, Kan., July 19th to 24th, and at Enid, Oklahoma, July 27th to 30th and at all leading tractor demonstrations. You can there see it put to the fullest test and be your own judge of its many superior qualities. The man in charge of the Waterloo Boy will show you every courtesy.

Write for Free Illustrated Catalogs on:

The Waterloo Boy One-Man Kerosene Tractor
The Waterloo Boy Kerosene-Gasoline Engine
The Waterloo Boy Cream Separator
The Waterloo Boy Milking Machine

A big shipment of Waterloo Boy Tractors being delivered to the purchaser at Hitchcock, Oklahoma, Mr. Cronkhite, the Waterloo Boy agent. Many Waterloo Boy Tractors this year plowed the ground, put in, cultivated, and are now harvesting Oklahoma crops.



Canning Clubs are Good Fun

Hundreds of Little Farm Girls Are Making Money, Too

BY MARY CATHERINE WILLIAMS

ONCE upon a time there was a little country girl who wanted to earn some money. That starts out like a fairy tale, doesn't it? But it really isn't a fairy tale at all. It would have been much easier for this girl if she had been a story book girl, for then when she wanted money there would have been a magic purse for her to open or a fairy godmother to wave a wand and fill her apron with gold pieces. She didn't have a fairy godmother for she was a real little girl just as all the rest of you are, but she had something very nearly as good. There was a county agent in her county and he came around one day and persuaded the little girl to join a garden and canning club. She worked hard all summer and the rain and the sunshine played good fairies and helped her, and when autumn came she had nearly $100 all her very own. Wasn't that fine? And the best part of it is that this little girl wasn't the only little farm girl who made money. There were 33,173 of them last year in all parts of the country, and this year there will be nearly 50,000 of them. Maybe you are one yourself.

Wonderful Things To Do.

Wonderful things come from this money the canning club girls earn. Sometimes the dollars go for pretty clothes or for new comforts in the house, and often, oh, very often indeed, this canning money takes the girls to school and college. It really is the same as fairy gold, after all, you see, for it makes dreams come true, and all the charms and spells in fairyland can do no more than that. The canning is hard work, of course, but sometimes work is more fun than play. You will say so yourself, I'm sure, if you ever have been to a canning party. There will be lots and lots of these canning parties this summer. Some of them will be here in our own Kansas, and there will be others in North Carolina and in Mississippi and Texas and Oklahoma and Ohio and so many other states I haven't time to name them all. They will be canning all sorts of things, too. First year girls in most places will not try anything but tomatoes and string beans, but girls who have been in the clubs longer will put up other vegetables, besides canned fruit and preserves and jellies. Some girls will even be preserving figs. Maybe you didn't know that figs grow in our country, but in California and Mississippi and Louisiana they are almost as common as peaches are here.

Girls Like a Canning Party.

On canning club day the girls take their tomatoes and cans to some school house or to the home of one of the club members. The leader sets up the canner in some cool place out under the trees and assigns the work for the girls. There will be two girls to do peeling, two to do packing, two to do capping and so on, and the girls are changed around often enough so that every one learns to do all the processes. A canning party would be more fun than a picnic, to my notion, for sometimes at picnics the time drags and you sit around and don't know what to do, and you come home at night with nothing but empty baskets and chiggers to show for your day, while at a canning party you can visit with your dearest chums just the same, and you are so busy the day slips away before you know it, and when you go home you have a dozen or so cans of tomatoes ready to sell or to set away on the pantry shelf. Some clubs use a homemade canner fitted up from a wash boiler, while others have regular commercial canners, which make the work easier and quicker and surer. A good canner costs only $10 or $15 and many club girls have bought their own to use at home.

Canning club girls have a high standard for their work. Maybe you know their motto, "To make the best better." So they wear clean dresses and aprons when they have a canning party and keep their cans and dishcloths and everything else they use just as fresh and clean and spotless as can be. They use only the best fruit and vegetables, too, and work very very carefully for they know the club standard depends on their cleanly methods of work and the quality and taste of their canned goods and on giving full, honest weight. If every girl in every club lives up to her motto this way then the pretty club labels on their cans will always stand for quality in canned fruits and vegetables and people who buy once will keep on buying. That is the best way in the world to build a business, you know.

There are nearly 1,500 girls in tomato clubs here in Kansas. Isn't that a good many? A large number of them have their canning clubs, too, though canning clubs are newer here than in some of the other states. One girl in Montgomery county canned part of her tomato crop last summer and made $67.12 after she had paid her father rent for her one-tenth acre and 10 cents an hour for the use of a horse, and counted in her own time and all the other expenses. If you are a tomato club girl and have no canning club in your neighborhood, maybe you would like to organize one now. If you write to Otis E. Hall, state agent in charge of club work, Manhattan, Kan., he will tell you how to go about it. It is a mighty good thing to learn how to can so you may have vegetables to use at home in the winter, even if you do not sell any the first year and it is more fun to do the canning work with the other girls than to do it all by yourself at home. Just ask the girls who have tried it and see if they don't say so too.

Jamie Oriole's Lesson

Mrs. Oriole's nest was high up in a tree in a big yard and there were three of the dearest baby orioles in it that ever lived. Mrs. Oriole thought so and I guess she was right. But one day Mrs. Oriole had a very bad fright and Jamie Oriole learned a good lesson. Mrs. Oriole had told the babies to stay in the nest while she went to get worms for them to eat, but when she came back Jamie was gone. Billy and Yellowtop, the other little Orioles, said he had gone out of the nest and that was the last they had seen of him.

"Oh, dear!" thought Mrs. Oriole, "if Father Oriole had been here I could have stayed at home and there wouldn't have been any trouble." But Mr. Oriole had been shot by a cruel hunter a month ago. Mrs. Oriole had to cry every time she thought about it. She flew down to the ground in search of Jamie. She searched and she searched but could not find him. She was beginning to think that the black cat Tom must have caught him when suddenly the door of the big house opened and a man came out followed by several children and one of them had Jamie.

Mary wanted to sell him, Jane wanted to put him back, and the others wanted to keep him and put him in the bird cage, so they had a general quarrel. Meantime the man had gone away and now he came back with a ladder and said, "We will put the little bird back." He placed the ladder up against the tree and taking Jamie in his hand, started to climb to the nest, while Mrs. Oriole fluttered around and told the bird babies to be quiet and show their best manners.

The man put Jamie back and got down. Mrs. Oriole sang her sweetest song to thank them. After they had gone away Mrs. Oriole scolded Jamie and told him the next time he might not get off so easy because the cat might get him. After this Jamie did not have to be told to stay at home because he had learned a lesson for himself. Genevieve E. Stack, age 11.
R. 9, Elmont, Kan.

How Foolscap Was Named

Did you ever stop to wonder how things got their names? Some of the commonest articles in every day use have a most interesting story if you can find it. For instance, there is scarcely a boy or a girl who does not use letter paper and who doesn't know that this paper is called stationery, but how many of you know the reason for this name? It began ever and ever so many years ago, when there were two classes of merchants who sold writing materials and books. There were those who kept their wares in small carts and went about the streets selling them, and those who had permanent shops. Of course those merchants who carried their wares from place to place could not keep such large stocks as the others, and paper and ink were found more often in the shops than in the carts. Because these shops were stationary, the men who kept them were called stationers, and it was very natural that the materials they handled should become known as stationery.

Perhaps you may have wondered why a certain size of writing paper is called foolscap. The name goes back to the time in English history when Oliver Cromwell was protector, after the execution of Charles I. Cromwell caused the stamp of the liberty cap to be placed on the paper used by the English government. After Charles II. was restored to the throne he wished to send some dispatches one day and some of the government paper was brought him. The stamp on it attracted his attention at once, and he inquired the meaning. The answer angered the king and he cried, "Take it away; I have nothing to do with a fool's cap!"

Animals in Motion Pictures

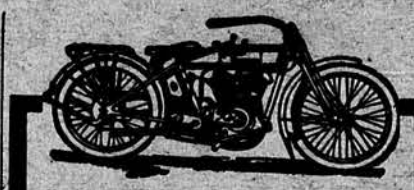
Most boys and girls enjoy motion pictures of wild animals, and often wonder how they are taken. At first the beasts were hired from some menagerie or circus, says a writer in Our Dumb Animals, but as time went on the motion picture companies found there was great difficulty in accustoming these menagerie animals to the smallness of the silent stage. Then several of the principal companies established menageries of their own where the animals could be especially trained for picture purposes.

The largest of these "zoos" is owned by the Selig company. It is a wild animal farm covering 40 acres near Los Angeles, and the various inhabitants are allowed to roam at will in surroundings made as nearly as possible like their native jungles. Mr. Selig himself and an expert animal trainer ransacked Europe for suitable additions to his "zoo." His animals include 45 lions, 10 elephants, a drove of camels, six tigers, six leopards and a pair of giraffes, besides many other kinds.

While special training is necessary for the animals before they can take part in photoplays, there is no cruelty or brutality on the part of the trainers, but the beasts are treated with every consideration. The trainers are directed to use the greatest patience in tutoring the beasts. Often a piece of raw meat placed just outside the range of the camera is all that is needed to produce the desired effect in the picture. The forest scenes are usually taken in a closed-in portion of wooded country in California, and the animals are not injured in any way for traps are only mesh nets and the hunters fire blank cartridges. The hard work is done by the human players, who, as a rule, do not relish parts to be played with wild animals. Instances have occurred where the photoplayers have been disfigured for life, and sometimes permanently disabled by the beasts taking part in the picture.

If we married wives with as much care as we trade horses, Solomon in all his glory would be eclipsed by our wisdom.

"Old men for counsel, young men for war," may be true, but lawsuits are popular with all ages.



$25 For A Good Motorcycle

places these time-saving, pleasure-giving machines within the reach of everyone.

We have 50 used machines, representing every well known make and ranging in price from $25.00 up to $150.00. These are not rebuilt machines—they are motorcycles that have been slightly used and they are all in good condition. Wonderful bargains at the prices asked. Write to-day for full particulars.

OLIVE CYCLE & MOTOR CO.,
1035-1037 N. Grand Av.
ST. LOUIS, MO.

Costs No More Than Wood; Outlasts It 3 to 1

Saves fire risk, insurance, storage and hauling expense, and loss from rats and mice. Makes it possible to sell when the price is high instead of when it is lowest.

The Security Corrugated Metal GRANARY

is the only granary that really ventilates the grain. Perforated tube ventilators keep steady circulation of air through the grain. Roof with separate rafter frame. Corrugated sides, 8 to the 24-inch sheet, 20 times as strong as plain. Dormer manhole, double doors. Strongest granary built. Write for Free Booklet and name of dealer nearest you.

METAL PRODUCTS CO.
401 North Ninth Street, Salina, Kansas

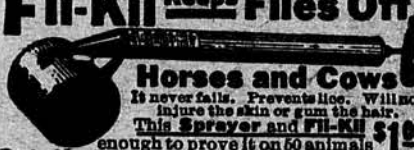
Butler Metal GRAIN BIN

CORRUGATED RAT-PROOF FIRE-PROOF

Safe, profitable place to store grain until favorable time to sell. Keeps grain perfectly. Large door, removable shoveling board, 8-foot sliding door for easy scooping. Ask for booklet showing letters from satisfied users.

BUTLER MANUFACTURING CO.
1304 Grand Ave., Kansas City, Mo.

Fli-Kil Keeps Flies Off



Horses and Cows

It never fails. Prevents lice. Will not injure the skin or gum the hair.

This Sprayer and Fli-Kil enough to prove it on 50 animals $1.00 Postpaid. Dr. C. L. Barnes, of the Veterinary dept. of the Kansas State Agricultural College, says: "Fli-Kil is certainly the best preparation I ever used. The flies would simply swarm around the wound until they came into the presence of the Fli-Kil, when they would suddenly fall over. I can highly recommend Fli-Kil from its use." Fli-Kil pays for itself more than a hundred fold. A trial will satisfy you, or your money back. Car-Sol Disinfectant beats all for killing lice, mites and disinfecting poultry houses, pig pens, stables, etc. Large trial sample and circulars FREE with your first $1.00 order for Fli-Kil. Don't delay. Now is the time.
PRESCOTT SALES CO., 304 Traders Bldg., Kansas City, Mo.

PRIZE COUPON NO. 3

If you will sign your name and address on the space provided below, and send this coupon to us at once with 25 cents (silver or stamps) to pay for a one-year new, renewal or extension subscription to The Missouri Valley Farmer we will send you as a free prize, postage prepaid, a copy of the popular new book, "The Panama Canal as Seen by a Kansan," written by Arthur Capper, publisher of the Valley Farmer.

This is the newest and most interesting story of the great Panama Canal. It is well printed and profusely illustrated. It's free on this special offer.

The Valley Farmer,
Dept. P. C.-3, Topeka, Kan.

I enclose 25 cents to pay for a one-year (new), (renewal), (extension), subscription to The Valley Farmer. You are to send me free, a copy of Arthur Capper's new Panama Canal Book.

My Name.....

Address.....

Hired Men Then and Now

My father had hired men while I was growing up and they were always treated well and allowed some privileges. They kept a horse, cow and chickens, and had time to plow and help make a garden. When the man had to go to town for provision, fuel, or on special business his time was not counted out. Of course if he made a visit or went for pleasure he was "docked," and rightly so. He was also given every Saturday afternoon, except during seeding and especially busy times.

We always tried to get hired help who were equal, socially, as our men and boys had to associate with them continually.

I have held to these rules since I have had a home of my own and have had the same "hands" for years. You can readily see how I have failed to grasp the real situation of the tenant's life as I have seen it discussed in the papers. I know there are some farm hands and tenants who try the "patience of Job," are no-good and don't want to be. But why not appreciate a good man when you get him? I have found that some men make no distinction between the good and the bad. They are all "hired men" and must fare alike. If you take an interest in your work and do it right too often you get the hardest, most difficult work to do because you are honest and don't have to be watched. Just for example, I was husking corn for a man. He came out, complimented me for my good work and said that I was the only man out of the number who were in the field, that did the work properly without his watching. Did he pay me more? No; instead he asked me to work in a silo where the work was harder and more disagreeable, because I could be trusted.

I have worked overtime to amount to more than a day in a week and when I had to take a half day to make a hasty trip to town for provisions I was "docked" the half day. But the time I overworked was not mentioned. I sent my son who also was working to town for coal. My employer sent a team the same time for freight. My son helped load the freight—the man had to have help—and hauled some home on top of his coal. Yet he was "docked." Lost half day's work. We should be thankful I presume that we did not have to pay hire for the team. My wife was expected to prepare the ground and make the garden; consequently we haven't any as she has never had experience in that kind of work. I could not have time to make coops for chickens consequently haven't any.

Wages are good? Yes; but everyone knows a cow, garden and chickens are the greatest and best part of a living and without these things you have to spend the most of your wages. If you have anything left you are not allowed to buy a colt, calf or pig. Then, where's your chance? I get out early; attend to my teams; eat; go to work until sundown; come in; eat, and if I read at all it is aften 10 before I can get to bed. But are hired men supposed to read? There is always plenty of work for rainy days. So you need not lose time. If it's raining the barn is big and has a good roof or some other place in which to work. So there is not one minute from beginning to end of year for yourself and only part of Sundays. If visitors should chance to come to my home I cannot lose time to entertain them only on Sunday. A hired man is expected to vote, yet has no time to get information. He is expected to be honest and do the work right, but no distinction is made between him and the man who shirks and loafs.

Now this is my actual experience. I am not a hired man through necessity. I am not prejudiced. I am studying this life, and it's mighty hard for a good man to stay good under such a labor system. Mechanics, shop men, in fact most of the working men in the cities work 8 or 10 hours a day—few get less than $2 a day; they go home, have no chores but a long evening to spend with their families and pleasure. Many times they spend more money for pleasure than for their living, I know, but their's is a better life than a farm hand's as I see it. I don't wonder so much now how the Socialist party sprung up. But I do wonder that there are so many good farm hands and tenants. And there will be fewer if the farmers don't study the problem more and treat men better. I wish farmers all over the country would write telling their ideas of how hired help and tenants should be treated.

The Yeoman.

Dishonest, disreputable, always the willing and eager partner of every wickedness, of every crime, of every evil, Whisky is now found to have perpetrated a gigantic fraud against the government, to have betrayed its best friend by cheating it out of millions of dollars of revenue, the friend which licenses the sale of whisky in prohibition states as well as wet ones and which stands between Whisky and national prohibition, between the welfare of the American people and the evil existence of their greatest enemy. Isn't that just like Whisky?

Have Your Name Registered

The American Society of Agriculture is now preparing to publish its annual Directory of Livestock Breeders. The purpose of the directory is to guide members in making purchases of purebred breeding stock. The society will print the names of all responsible breeders of purebred horses, cattle, sheep, swine, and poultry without charge. These names will appear in the directory under the proper breed, county and state, so that members of the society can readily learn the location of breeders nearest to them. The society's officers are eager to publish the names of the smaller breeders, men who are just getting started and who are not yet in position to exhibit their stock or advertise extensively. There is no advertising space for sale in the directory as it is not published for profit.

Breeders of purebred livestock, poultry or seeds who desire to have their names and addresses listed in the next directory should write at once for an information blank, to A. M. Barrett, treasurer, the American Society of Agriculture, 732 Federal St., Chicago.

W. M. Jardine, dean of agriculture at Manhattan, is president of the society.

Cultivate Broomcorn With Care

Broomcorn grows very slowly during the first three weeks of its existence, but later in the season the plants develop very rapidly. For this reason the heaviest cultivation should be given the crop before the plants are knee high. For the first cultivation a sharp-tooth harrow is used sometimes just as the plants are coming up. If the ground becomes dry after the seed has been planted the harrowing breaks up the crust and the plants which may be curled up beneath the crust will then straighten out and work their way through the loosened soil.

Broomcorn plants produce many feeding roots near the surface of the ground and on this account all cultivations of this crop should be very shallow and when possible the soil should be packed or firmed behind the cultivator. In listed sandy lands, this packing is not possible, but is not so necessary as on the heavier soils.

The sled cultivator so often used in the western portion of the state does very satisfactory work when fitted with either knives or disks. Care, however, should be taken that the disks are not set too deep. Broomcorn plants are exceptionally tender during the early part of their growth and care should be taken not to cover up the small plants as they will not force themselves out of the ground, as do many other plants.

In dry weather constant cultivation will be required to establish and maintain a dirt mulch that will conserve the soil moisture and insure the best development of the broomcorn plants. Clean cultivation also is required to keep down the weed growth, because a good quality of brush cannot be produced from a weedy soil. Careful attention given to the cultivation of broomcorn will increase the yield greatly.

THE CREDIT SYSTEM THE FARMERS OF KANSAS HAVE BEEN WAITING FOR

LOANS ON KANSAS FARMS AT 5% OR LESS

THE KANSAS RURAL CREDIT ASSOCIATION

A Co-operative Organization of Kansas Farmers For Mutual Financial Benefit

The Kansas Rural Credit Association, Chartered by the State of Kansas and under the supervision of the State Bank Commissioner, is organized to provide the farmers of the state with a credit system that meets their needs.

The Kansas Rural Credit Association is based directly on the recommendations of the National Commission, which studied rural credits as established in the European countries, to determine the best means of providing the farmers of this country with the form of credit enjoyed by the farmers abroad.

The National Commission, in its report to congress, urged that Rural Credit Associations be formed in each state. By organizing The Kansas Rural Credit Association, Kansas takes the lead and is the first state—as usual—in a great national movement.

MANAGEMENT AND ADMINISTRATION.—The Association will be governed by a Board of Directors of not less than Fifteen, chosen from among its membership. This Board will meet in Emporia, which will be the Association's home, and elect officers to carry on the business of the Association.

A LIMITED MEMBERSHIP.—One canvas of the state will be made for members. The books will be closed. As only a limited number of farmers in each county can join, you should act quickly.

MONEY LOANED AT 5 PER CENT.—Loans will be made only to the members of the Association for periods of from 5 to 35 years, at 5 per cent interest, and only for the purpose of buying or improving farm lands or farm homes, or to pay off existing loans.

COLLECTIVE SECURITY.—The principle behind all Rural Credit Systems of Europe is the issuing of bonds on the collective security of many mortgages. Farmers form an association and borrow money collectively at a lower rate of interest and for longer periods of time, than they can borrow it individually. It is on this principle that the Kansas Rural Credit Association is founded.

LOANS REPAID BY AMORTIZATION.—Amortization means the payment of a part of the principal at each paying period, by which plan a small annual payment pays both interest and principal in a given number of years.

INDIVIDUAL LIABILITY.—No shareholder will be liable beyond the amount of his loan. **Each farm will be liable only for the individual loan it secures.** Shareholders are not subject to double liability. The shares of the Association are fully paid and non-assessable.

THE ASSOCIATION IS CO-OPERATIVE.—No one member will be sold more than one per cent of the capital. Each member has but ONE VOTE, no matter how many shares he may hold.

THE SHARES AS AN INVESTMENT.—The Association Collects one per cent on its loans for expenses. As it is permitted to make loans equal to 15 times its capital and surplus, the earning power from that source is 15 per cent. Added to this is the interest earned from the invested capital. After all charges are paid a good dividend should be returned on the shares each year.

These Members Have Already Been Elected to the Board of Directors

W. M. PRICE, Emporia.
State Senator and Pres. Lyon Co. State Bank.
CHARLES F. SCOTT, Iola.
Editor and Owner Iola Daily Register; Former Member of Congress.
T. A. McNEAL, Topeka.
Editor The Farmers Mail and Breeze.
H. S. MORGAN, Topeka.
M. McAULIFFE, Salina.
Farmer; Pres. Kan. Div. Farmers' Educational & Co-op. Union of America; Editor Farmers' Union.
L. W. MOODY, Emporia.
J. M. DAVIS, Blue Mound.
Farmer; State Senator; President Farmers' State Bank of Blue Mound.
W. A. AYERS, Wichita.
Lawyer; Member of Congress from Eighth District.
W. C. LANSDON, Salina.
Editor Salina Daily Union; Secretary Farmers' Union Jobbing Association.

MAIL THE COUPON TODAY

The Kansas Rural Credit Association

A Representative Wanted in Every County in Kansas.

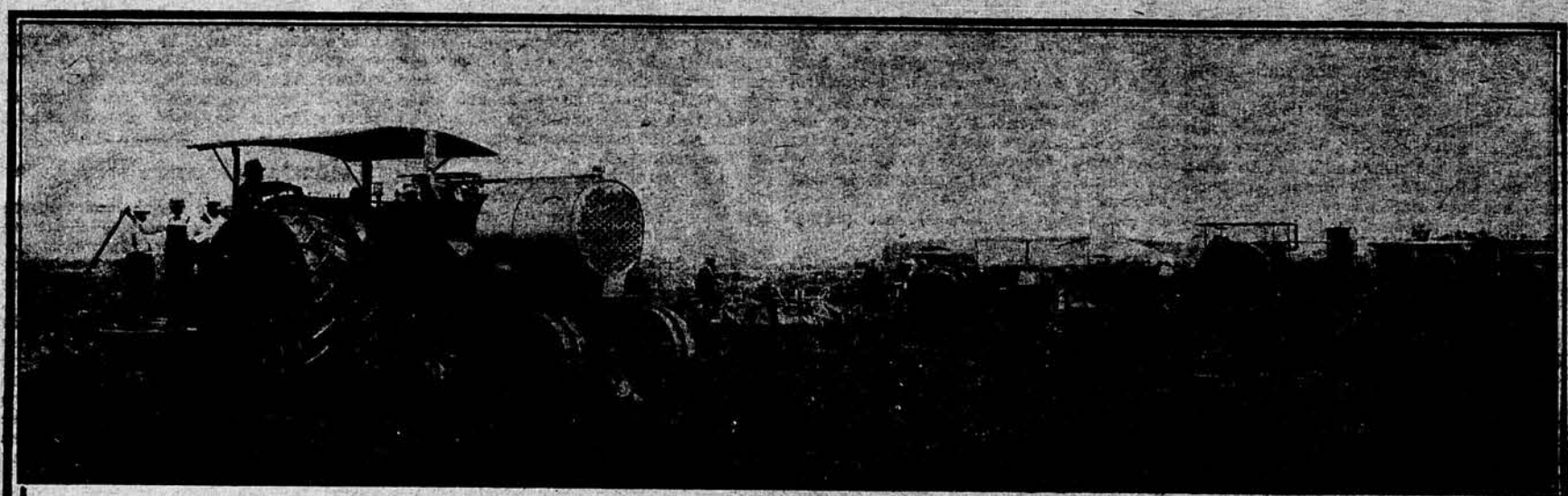
Dept. F. Emporia, Kansas

THE KANSAS RURAL CREDIT ASSOCIATION,
Department F, Emporia, Kansas.

Without obligating me in any way please send me your sixteen-page booklet which explains, in detail, the plan of The Kansas Rural Credit Association and tells how I can become a member and enjoy the benefits of this Co-operative organization of Kansas farmers.

Name .....

Address .....



Come and Combine Fun With Profit

See the most stupendous aggregation of farm tractors ever gathered together—plowing side by side in a monster 1000-acre field.

Learn how to farm easier, and better and cheaper.

This is a big free event for the farmers of Kansas and Oklahoma—that no man can afford to miss who wants to know what this latest big step ahead in farming means to him.

More than eighty tractors of every size and sort will be shown doing everything a tractor can do—as well as plowing.

There will be snappy, interesting lectures by Dean Potter of the Agricultural College and other tractor authorities.

Free Band Concerts every evening. A Free Smoker, with free cigars, for everybody, by the Hutchinson Business Men, and other entertainment. **Admission to everything is free.**

The Kansas Traction Plowing Exhibit At Hutchinson, Kansas

These few days of rest and fun and study will fill you chockful of ginger for the rest of the year. It will pay you big wages for the time it takes.

You've earned this rest. It will pay you to take it. Men write us from hundreds of miles away they are coming to see this mammoth spectacle at Hutchinson.

A New York Moving Picture concern, the greatest in the world, will have men there to take views of this great demonstration to be shown in all parts of the country. Be there and get in the pictures. You'll be entertained royally. Hutchinson is making big preparations. Rates for board are reasonable. **Admission to everything is free.** Ample facilities for reaching demonstration grounds from Hutchinson.

Come along—you'll enjoy it, and go home full of vim and dollars-in-the pocket ideas. Make up your mind now to be with us.

These Tractor and Plow Concerns Are Entered

The Avery Company—5 Tractors.
Peoria Tractor Company.
Mayer Bros. Company—"Little Giant."
Hart-Parr Company—"Little Devil."
Bullock Tractor Company—"Creeping Grip."
Hall Bros. & Reeves—"Bull" Tractor.
Hume Mfg. Company.
Parrett Tractor Company.
Grand Detour Plow Company.
Oliver Chilled Plow Company.
International Harvester Company—"8-16 Mogul" and four others.
Nilson Farm Machine Company.
Waterloo Gas Engine Co.—"Waterloo Boy."
Universal Tractor Mfg. Company.
J. I. Case Plow Works.
Simplex Tractor Company.
John Deere Plow Company.
Ward Tractor Company.
Hackney Mfg. Company.
Kinnard-Haines Company.
ElectricWheel Co.—"Light-All-Work"Tractor
J. I. Case Threshing Machine Co.—Case Tractor and Sattley Plows.
Heider Mfg. Co.
Aultman-Taylor Company.
La Crosse Plow Works.
Rock Island Imp. Co.—"Sanders" Disc Plows.
Sweeney Tractor Co—"Sweeney's Iron Horse"
Holt Mfg. Company—"Caterpillar" Tractor.
Dayton-Dick Company.
Chief Tractor Company.
Light Draft Harrow Co.—"Forkner" Light Draft Tilling Machine.
Joliet Oil Tractor Co.—"Bates Steel Mule."
Emerson-Brantingham Implement Company.
Wallis Tractor Co.—"Wallis Cub."
Dauch Mfg. Company—"Sandusky" Tractor.
Allis-Chalmers Company.
Lawter Tractor Company.

Under Management of the Kansas Agricultural College, the Hutchinson Commercial Club, the Kansas Farmer, and the Farmers Mail and Breeze

W. Y. MORGAN, Pres.,
Hutchinson, Kansas

DEAN A. A. POTTER, Sec.,
K. S. A. C., Manhattan, Kansas

Dairy Advice for the Novice

Keeping of Records Is a Factor for Success

BY A. W. AICHER
Manhattan, Kan.

MAN IS one of the most important influences in developing a successful dairy herd. He must be interested in the work, understand farm management, animal breeding and feeding, have a knowledge of the equipment necessary for success, and possess fair business ability. He should be interested in testing associations, in keeping records, and have a determination to accomplish something worth while. He must be wide awake, eager to grasp new ideas, and be able to recognize the benefits to be derived from co-operation.

If the man who is starting in the business does not have a farm he should have money to buy a suitable one. It is not a good plan to start in the dairy business without some capital. The farm should be bought in a community where most of the farmers are interested in dairying. The beginner should select a community where the breed he likes best is handled, if possible. This cannot always be done but it is the best policy where it can be accomplished.

There are other factors to bear in mind when selecting the farm. It should be near a good market. The land should be fertile, for the dairy farmer who makes a success should produce most of his feed. The size of the farm should be determined by the number of animals to be kept. It should be large enough to produce all the feed, besides a few acres for pasture.

Locate Buildings Conveniently.

The buildings should be located in a suitable place. The house probably will be near the road. The barn should be a reasonable distance from the house. It should be located on ground that will drain well. If money is available build a large, roomy, well constructed, sanitary barn. If funds are lacking a temporary barn can be constructed and a larger one built later. The first building can be converted into a calf barn when the herd increases. The barn should be sanitary and large enough to house the stock comfortably. There should be at least 4 square feet of window glass for every cow. The interior arrangement should be made so that time and labor will be saved in doing the work. This should be decided by the individual as every man has his own idea as to arrangement.

A sanitary milk house is needed on every dairy farm. It should not be built far from the barn. It should be well screened so that a sanitary product can be produced.

A silo also is a profitable improvement on every dairy farm. It is essential for the complete harvesting of the corn or kafir crop, and it provides a palatable, succulent food.

Choose the Breed Carefully.

The man who intends to buy dairy cattle should decide first which breed he wants to handle. Preference should be given to the breed which prevails in his community. The kind of product one desires to sell, however, should have something to do with the selection of the breed. If a man wishes to produce fancy market milk which will command the highest price he should select a breed which gives rich milk. If he intends to sell butterfat and feed the skimmilk on the farm the richness of the milk does not amount to so much, as the thing desired is quantity instead of quality.

Buying the kind of cows which prevail in the community gives a chance for co-operation. This is a very important factor in successful dairying. The aim should be to buy purebred stock. If the money available is not sufficient to buy purebred animals a few purebred cows may be bought and the remainder of the herd can consist of good grades. This is the best plan for the man who has a limited amount of capital. The head of the herd should be a good individual of pure breeding that has high producing ancestors. This makes it possible to build up an excellent herd while purebred animals are being raised. The grade animals may be replaced with purebred ones in a few years.

There are two ways of selecting dairy cows. One is by individual type and the other is by records. The method of selecting a cow by type is not entirely dependable. A cow may have good dairy type and still be an inferior producer. Selection by conformation should be used only within certain limits and then only by experienced persons. It is not possible always to buy cows which have been tested, and when they have not been tested selection by type is the only way to pick them.

Don't Overvalue Rich Milk.

A point to keep in mind when selecting tested cows is not to overrate the importance of rich milk. Cows which are high testers, too often are low producers. It is better to consider the total production rather than just the per cent of butterfat, for if a cow produces a large amount of milk she is better, even though she tests low, than one which has a high test and produces only a small amount of milk. It is a good plan to consider both before buying.

It is better to buy mature stock than to buy calves. A calf may be a promising looking individual but one never can tell how it will develop. This is true particularly of the bull. It is better to buy a mature sire than it is to buy a bull calf, but one should be careful not to buy a mature bull from a herd which has contagious abortion.

There are two diseases which should be avoided when buying dairy cattle. One of these is tuberculosis and the other is contagious abortion. Never buy breeding stock which is not guaranteed free from tuberculosis. Contagious abortion is harder to detect. Practically the only way to guard against abortion is to go into the owner's calf barn and see if he has enough calves to indicate that his cows have produced calves. If he has, he may not have abortion in his herd. It is best when possible to buy stock in the immediate vicinity rather than to go into another state, but this cannot always be done. If one must buy in another state he should not be too hasty in making his transactions. If you do not know much about the man you are dealing with ask some of the folks in his neighborhood about him.

The next thing to consider is the care which should be given the herd. The feeder must have a knowledge of feeding; he must know how to balance rations; and in order to do justice to his herd, he must know the needs of every individual. The feeder should be governed by the amount of milk and butterfat produced. As much of the feed as possible should be produced on the farm. If alfalfa can be grown it should be used as part of the roughage. Silage and alfalfa with corn chop, wheat bran, and linseed meal will make a good ration.

Keeping records is another factor which should not be overlooked. This is the only way to determine the amount of feed a cow should receive. The milk should be weighed at every milking and it should be tested two days in every month. Every cow's milk should be weighed separately. This is the only way to detect the unprofitable cows in the herd.

The cows should not be abused or handled roughly at any time. They should have warm quarters in winter and be protected from flies in summer. It is a good plan to heat the water with a tank heater in cold weather. A marked difference in the production will be noticed if the cows are housed properly and given warm water. None but good, pure water should be used.

One cannot take too many precautions to keep the milk clean. Always aim to put out a product with high quality. The milk should be cooled immediately after it is milked if it is to be sold to consumers in the city. It should be separated while warm, if the cream is sold, and the cream should be cooled immediately after it is separated. Such a product will command the highest market price.

More Windows for the Barn

BY R. M. DOLVE.

Sunlight is Nature's greatest germicide. It makes for health and efficiency among animals as well as people, and yet the semi-darkness of the medieval dungeon prevails in a great many barns. There is no good reason for this deficiency, except that it is customary. Windows of sufficient size do not add greatly to the cost of the barn, and if properly put in do not materially reduce the temperature in winter.

Four square feet of window surface for each animal is the least that should be provided, and for dairy barns 6 or even 8 square feet will be found beneficial. Windows that are long up and down admit much more light than windows of the same dimensions with their long axes horizontal. Windows near the ceiling admit more light and distribute it better than windows placed low on the wall. Then, too, they are less likely to be broken. A south exposure is desirable, especially for swine and poultry. South windows admit direct sunshine in winter when the sun is low, but on account of the height of the sun are not as hot in summer as is generally supposed.

Butter From Better Cream

Cream must have the proper care if good butter is desired. The most important point in handling cream is cleanliness. The separator and milk utensils should receive painstaking care, and the cans in which the cream is kept should be sweet and clean. They always should be washed in soap suds, then scalded with boiling water to kill any germs which they may contain.

Warm cream never should be mixed with the other cream, and when it is put with the other cream it should be stirred. All the cream should be stirred at least once a day. Cream never should be kept covered air-tight. Keep a cloth over it so it can get plenty of air. If the cream is to be churned at home it should be kept in a warm place in winter, and in a cool place in summer. Cream that is to be marketed should be kept in a cool place.

Miss L. Hensley.

La Cygne, Kan.

Separate Milk While Warm

Milk, when drawn from the cow, has a temperature of about 90 to 95 degrees Fahrenheit the best temperature at which to separate it. If the milk is allowed to cool much lower than 85 to 90 degrees, as is likely to be the case in the winter, it should be warmed before separating, thereby avoiding considerable loss of fat in the skimmilk and variation in the richness of the cream.

Changes in temperature of milk separated cause a variation ordinarily from 3 to 4 per cent of fat in the cream.

Cow Has Garget

One of my cows gives chunky milk at times. Part of udder gets hard occasionally. This is a second calf; heavy milker.

R. 3, Inman, Kan. W. H. S.

Your cow is affected with garget or inflammation of the udder, the treatment of which consists in massaging the udder several times daily for 15 minute period with warm, unsalted lard. In addition, bathing the part several times a day with water as warm as it can be borne by the hand is of value. As soon as the first symptom of the disease is noticed the animal should receive a pound or a pound and a half of Epsom salts as a drench.

R. R. Dykstra.

K. S. A. C., Manhattan, Kan.

ENGINE POWER COSTS LESS NOW

Read My New Free Book

Before you buy any kind of an engine. Note my lower prices: 2 H-P $34.95; 3 H-P $52.50; 4 H-P $69.75; 6 H-P $97.75; 8 H-P $139.65; 12 H-P $197.00; 16 H-P $308.00; 22 H-P $389.65. *Portable engines proportionally low. 5-Year Guarantee.*

WITTE Engines

Gasoline, Kerosene, Distillate, Gas.

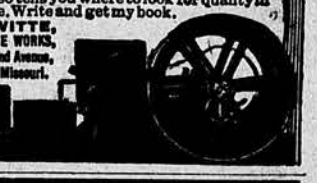
Besides lower prices, WITTE engines use less fuel per horse-power hour, by one-fourth to one-third—enough saving to pay entire cost of engine in a year. Easy starting; no cranking; steady running. My 28 years at one thing, making WITTE engines, makes my higher quality.

Buy Direct, Cash or Easy Terms

Why pay more for reliable power, than for what the WITTE will furnish it? You pay engine price only once, but fuel costs money every day you run. My engines cut down the fuel cost.

My Free Book Tells how it is done and shows in figures how the saving is made. Also tells you where to look for quality in any engine. Write and get my book.

ED. H. WITTE,
WITTE ENGINE WORKS,
1541 Oakland Avenue,
Kansas City, Missouri.



MAKE YOUR BIKE A MOTORCYCLE

at a small cost, by using our attachable outfit. Fits any Bicycle. Easily attached. No Special Tools Required.

"300 Miles for 40 Cents"

W. M. Harmison, of Iowa, writes: "Certainly cheapest and best running machine I ever saw. Have ridden 300 miles at about 40c expense."

FREE BOOK Write today for bargain list and free booklet, describing the SHAW Bicycle Motor Attachment. Motorcycles all makes, new and second hand, $35.00 up.

SHAW MANUFACTURING CO.
Dept. P, Galesburg, Kansas.

Only $2 Down
One Year to Pay!

$24 Buys the New Butterfly Jr. No. 2. Light running, easy cleaning, close skimming, durable. Guaranteed a lifetime. Skims 95 quarts per hour. Made also in four larger sizes up to 51-2 shown here.

30 Days' Free Trial Earns its own cost and more by what it saves in cream. Postal brings Free catalog, folder and "direct-from-factory" offer. Buy from the manufacturer and save half.

ALBAUGH-DOVER CO. (12)
2183 Marshall Blvd. CHICAGO

No. 5½

SAVE $100. ON THIS WEYERHAEUSER SILO

Wood makes the best silo. Fir makes the best wood silo. The WEYERHAEUSER SILO is recognized as the best fir wood silo.

No Weyerhaeuser Silo under present construction has ever gone down or collapsed from any reason. Made of Douglas Fir staves it comes direct

FROM TREE TO FARM

through your home dealer.

FREE Simply send name for certificate entitling you to our special discount and other savings; also big silo book. Save $100 by writing today.

WEYERHAEUSER LUMBER CO.
442 R. A. Long Bldg. Kansas City, Mo.

Handy Wagons
Save High Lifts

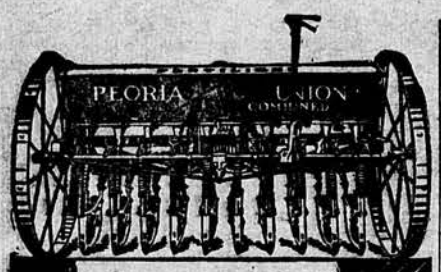
Built low—wide tires prevent rutting—light draft—save work and repairs. Write for free catalog of steel wheels and wagons.
Electric Wheel Co., 30 Elm St., Quincy, Ills

Horse Book FREE

Here is a book that should be in the hands of every horse owner! Admittedly the greatest book on the subject ever written and practically *worth its weight in gold* to horse owners and livestock breeders. 520 large pages profusely illustrated. Part 1 deals in plain language with the theory and practice of Veterinary Science—Diseases of Horses, Cattle, Sheep, Poultry, Swine and Dogs—with tested and proved remedies. Part 2 contains Prof. Gleason's famous System of Horse Breaking, Taming and Training. Gleason's marvelous skill in training and treating horses is known throughout the entire world and he is considered the world's greatest authority in this field.

Our Great Offer! By a special arrangement direct with the publishers we are able for a limited time to offer "Gleason's Horse Book" *absolutely Free*—postage prepaid—to all who send $1.00 to pay for a one-year—new or renewal—subscription to our big farm weekly. Send your name and $1.00 at once.

Mail and Breeze, Dept. H B-10, Topeka, Kansas



Better Crops With Least Fertilizing Cost

This drill opens the furrow, lays the seed at the very bottom and then covers it. At the same time it deposits the fertilizer that brings the big profit making crop.

The Peoria Union Drill

Covers All Seed and Fertilizer

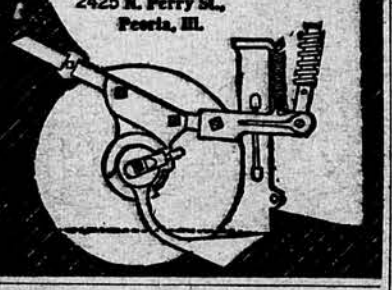
It combines the single disc shoe drill with an accurate fertilizer feed. Disc cuts trash and hard ground and opens the furrow—seed and fertilizer are dropped in a packed seed bed and then covered.

No matter what drill you are now using, it will pay you in increased crop profits to get a Peoria Union.

Think of the increased yield it can bring you—the assurance of a heavy harvest. Let us tell you more about it.

Write today for catalog.

Peoria Drill & Seeder Co.
2425 N. Perry St.,
Peoria, Ill.



START AT $900 A YR.

That is what Uncle Sam offers his Railway Mail clerks. Life position and sure promotion. No high school work necessary. Attend on credit. Pay us from your salary. Send for catalog.

SCHOOL OF CIVIL SERVICE
44 McNaill Sta. Bldg. St. Louis, Mo.

Boston Garter

The Standard for men

PAD, CORD AND NEVERBIND

Of your Dealer or by Mail on receipt of price.

George Frost Co., Boston.

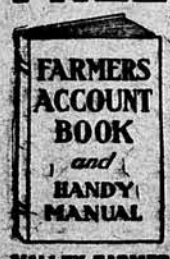
SILK 50c. LISLE 25c.

We Make Good Cuts!

The Mail and Breeze has the most complete plant in Kansas for the making of first class half-tone engravings and zinc etchings. Particular attention given to livestock and poultry illustrations for letterheads, newspaper advertisements and catalogues. Our cuts cannot be excelled and are guaranteed satisfactory. Lowest prices consistent with good work. Write for information.

THE MAIL AND BREEZE, Topeka, Kan.

FREE To Every Farmer!



Here is a book that every farmer needs—a book that every farmer must have if he desires to know how to stop the losses and increase the profits of the modern business of farming.

This book contains 60 pages, printed and ruled especially for keeping accurate account of everything you raise, sell and buy. Covers every phase of farm accounting, shows expenses, losses and profits at end of each year, also 62 tables and rules for farmers. No bookkeeping knowledge required. Bound in strong covers.

Our Offer We want every farmer to have one of these useful books and will send it free to all who send 25c to pay for 1 year's subscription to our popular home and farm journal. Address,

VALLEY FARMER, Dept. AB-10, Topeka, Kansas

"Ropp's Commercial Calculator"

A Book of Great Value to Every Farmer **FREE**

This book is the greatest time and labor saver ever offered the American farmer. It is also a great money-saver and money-maker. It shows you how to accurately and instantly figure out any problem that may come up—how to figure estimates, wages, taxes and interest on any sum of money, any number of days, at any rate—tells bushels and pounds in loads of grain; correct amount at any price; weight and prices of livestock; contents of cribs, wagons, bins, etc. It is a "lightning calculator" always ready when you want it. Bound in red cloth covers, 128 pages, pocket size. One copy of this famous book free to all who send 25c for a year's subscription to our well-known home and farm monthly

VALLEY FARMER Dept. AC-11 TOPEKA, KAN.

Try Some Printer's Ink

BY JOHN F. CASE.

Sam Jordan, of Missouri, prints a tearful wail about the cattle feeder paying five or six profits when he buys cattle at the stock yards, and it has much of truth in it. Perhaps the cattle bought were grown in his own community and shipped to the Kansas City, St. Joseph, or St. Louis markets. A carload of feeders grown in Oklahoma last year were shipped back to within 10 miles of where they were born and reared. The man who bought the steers had to pay all the expense of freightage both ways, and the commission of the men who handled them. If this man could feed at a profit surely the breeder who matured and fed his own stock, and the feeder who bought cattle in his own territory, made money.

Organization will correct abuses of buying and selling to a great extent, but even where farmers are well organized and meet frequently to talk over farm affairs the question of stock or produce for sale will sometimes be overlooked. In a community in Andrew county, Missouri, two progressive farmers were active workers in the local farmers' association. They lived on adjoining farms and were together almost daily. One of them went to a newspaper office and ordered a two-line advertisement inserted stating that he had 500 bushels of corn for sale. His neighbor read the notice next morning, hastily stepped to the 'phone and bought the corn. He wanted to buy that amount of corn but knew of no one in the neighborhood who had it to sell so he was making arrangements to ship in the corn from Iowa. The farmer who sold the corn had decided not to feed cattle that year but had neglected to mention it in any of the association meetings or in conversation with his neighbor. The advertisement cost the seller a dime, sold his corn and saved the buyer the labor and expense of a 2-mile haul from the railroad.

Farmers should get in the habit of patronizing the local newspapers when they have anything to sell or wish to buy. If you intend to buy cattle to feed don't spend days riding around over the county. Call the editor of your home paper and the newspapers at the county seat. Tell them to run a notice something like this: "Feeders Wanted. I wish to buy steers weighing about 800 pounds each. Will pay highest market price and call for the stock. Phone 103 Mutual, James Jones, Clayville." The advertisement will cost you less than 50 cents and it will put you in touch with stockmen all over the county. There are few farmers but could add largely to their profits by judicious advertising.

Successful Co-operative Creamery

The Riverton, Neb., Co-operative Creamery was started 15 years ago, to get a larger profit for the dairy farmers near that place. T. N. Moore was elected secretary, and he has held that place ever since. The creamery didn't do much business the first year, as the records show that it produced only $9,000 worth of butter, but 10 cents a pound butter was no longer in evidence about the town.

Every month after the returns were in on the month's run, the patrons were sent a check for the full amount of the business they gave, less the actual cost of producing the butter and 10 per cent interest on the stock, says Cecil E. Matthews in the Independent Farmer. That was giving every patron his dues. The creamery continued to grow and the more business it did, the greater the net price the patrons received. More cows were bought. Silos became a necessity and waste feed was no longer in evidence. Farmers were coming into their own and they were happy. Merchants were paid their accounts 12 times a year, where previously they were paid but once, and in many cases not at all. The spirit of progress was everywhere in evidence. Church spires raised their heads in the more populous sections of the country, and social, educational and spiritual uplift followed.

The creamery kept on making flattering strides. Its 13th year held out these figures: Cream received, 513,796 pounds. Tested out in butterfat, 170,855 pounds. Churned into butter, 200,524 pounds. Overrun, 29,669 pounds. Paid out to patrons, $45,800. Received from butter sold, $48,358.

This isn't all, for hand in hand with the progress of the creamery have come later day appliances for the producing of high grade butter. Improved agitators, cold storage and sweet cream producers have been installed, and now the Riverton creamery product is selling on the Chicago market at top price, and the home producer is receiving from 2 to 4 cents a pound more for his butterfat than centralized plants offer.

Why shouldn't such success as has attended the Riverton creamery be the success of every other such institution? Why shouldn't there be found in every rural community of the land just such a full and free development of the natural resouces as has occurred out here in southwest Nebraska? Why should the God-given opportunities of the farm be allowed to remain undeveloped just because it takes perseverence and pluck such as T. N. Moore had to put them in operation? Why hold back the development of a community by those who are too drone-like to initiate it? Are there not men in every community who will shoulder the duty they owe to society and make of themselves promoters of such agencies as will help uplift the community in which they live? The men who 15 years ago shouldered such an undertaking as this of which I write, did this.

Profits From Co-operation

Every farmer must take complete control of his business. It is not enough to grow the raw product as a low-priced muscular laborer. Farmers should be both laborers and business men, saving for themselves the profits of handling and selling their products. This is the underlying idea of Clarence Poe's new book, "How Farmers Co-operate and Double Profits." Mr. Poe is editor of The Progressive Farmer and a member of the organization committee of the National Conference on Marketing and Farm Credits. He has spent years in studying methods of co-operation used by farmers in all parts of the world, and his book tells in a practical and interesting manner of the successful operations of all sorts of such organizations from the co-operative "bacon factories" of Denmark, the Irish rural credits associations and the California and Florida citrus fruit organizations to the co-operative laundries, creameries and livestock shipping associations of Minnesota and Wisconsin.

Five lines of co-operation are advocated in Mr. Poe's new book: Co-operation in buying supplies, in crop production, in crop finishing, in crop marketing, and in rural credits. Farmers' clubs and unions are discussed and plans given for their organization. It is a book every wide awake farmer should read, for it is not made up of theories but of facts which have long ago proved their value in increased profits on farm products and greater prosperity and comfort for the farmers themselves. "How Farmers Co-operate and Double Profits" is published by the Orange Judd Company, New York. The price is $1.50.

The Telephone

Please tell me, through the Farmers Mail and Breeze, when the telephone was invented. R. O. M.

Zenda, Kan.

The first telephone through which articulate speech was heard was invented by Alexander Graham Bell in March, 1876. As early as 1854, however, the possibility of transmitting speech by wire, electrically, was conceived by Charles Bourseul, in Paris.

Always the Same.

Father—What an unearthly hour that young fellow stops every night, Doris! What does your mother say about it?

Daughter—She says men haven't changed a bit since she was young, Daddie.—Illustrated Bits.

Pull your face into a sneer and notice what an unlovely world this is; smile, and observe how cheerful life may be.

Farmers

The man who tills the soil is performing a noble work. Let him study it, let him love it; let him take pride in it; let him do better today than he did yesterday, better this year than last year.—P. G. Holden.

SPECIAL ONLY $12.75 EASY TERMS

30 Days FREE TRIAL!

Standard of the World. Endorsed by Government and Railway Officials. Harris-Coar's enlarged every equipped plant enables you to secure one of these superb Elgin Watches now.

17-Jewel Elgin!

Now, during this Special Sale, is the time to buy this elegant 17-Jewel Elgin. Thoroughly factory tested, fitted in a beautiful Gold Strata case, factory stamped and guaranteed 25 years, hand engraved, plain polished or with your own monogram, and our startling offer is to send you this celebrated 1915 Model free of charge for your inspection and approval.

No Money Down

Because we want to prove to you that the great volume of our business actually allows us to be better by you than any other watch or diamond house in the world, we ship that on this particular watch, we save you nearly half, for it sells regularly at $20 to $22, while our

Special Price is only $12.75

We don't want you to send one cent. Not a penny. Merely give us your full name and address that we may send you this superb 17-Jewel Elgin on approval, and if after you receive it and want to keep it, then we ask you to pay the small sum of

Only $2 a Month But, if after you have worn it 30 days you and don't want to keep it, send it back at our expense. You assume no risk whatever. You do not buy or pay one cent until we have placed the watch right in your own hands for your own decision. We want no security, no interest, no red tape—just common honesty among men.

2 Fine Books FREE!

Mr. Harris wants to send you this three issues BOOKS FREE—one the story of "The Diamond," its discovery, where and how mined, cut and marketed, the other "If Jones Knew Brown" all about the watch business, both are handsomely illustrated. Write today—Do it now!

HARRIS-COAR CO. Department 1733 Kansas City, Mo.

HAY BALING IS EASY

With the famous Admiral Motor and Horse Presses. Leverage does the work. Big Tonnage. Big Profits.

Admiral Hay Press Co.

Box 79 Kansas City, Missouri

THIS BIG, 3½ 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 13 inches long and has a circumference of 5¼ inches. When all 5 sections are pulled out the full length is over 3½ 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 eclipses. 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

The lenses in this telescope are carefully ground and correctly adjusted by experts. See objects miles away. Farmer said he could count the windows and tell the colors of a house 7 miles away and could study objects 10 miles away which were invisible to the naked eye. Absolute necessity for farmers and ranch men. They can keep their eyes on the cattle, horses or men when far distant.

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.

A Farmer and His Books

One of the reasons why farmers do not do more bookkeeping is that the average man does not feel that he has sufficient knowledge of keeping accounts to handle it satisfactorily. Another reason is that a man is too tired after a hard day's work to enter an elaborate set of accounts. One trouble with many of the systems of farm records now being exploited is that they are too complicated and go too much into detail.

However, there are a great many farmers who would keep a simple system of accounts. This can be done at an expense of 25 cents for a journal or record book, and less than 5 minutes of time daily, except at the end of the month, when it is time to figure up the month's business.

One of these journals or record books may be purchased at the drug store or book store. The next step is to rule the two pages necessary for the first month's business. A pen and ink, and a common ruler will do this. Open the book to two pages facing each other, and rule the left hand page for receipts and the right hand page for expenses.

An accurate account for all receipts and expenses for the month can be kept on these two pages. These should be entered each evening, and a total taken at the end of the month. After figuring the totals for the month, turn to the next two pages and rule them in the same manner for the next month. The ruling and totaling is the only part that will require much time, and it need be done but once a month.

Under receipts should be put the returns from all farm sales such as hay, hogs, butter, wheat and corn. If butter and eggs are sold at the store and the proceeds taken out in trade, the amount will be entered under receipts for those items, and the items purchased with that amount at the store, will be entered under expenses under the proper headings. If groceries were purchased with butter and egg money they should be entered under the column of house expense.

If crop rent is being paid, and the owner's share is sold, the amount should be first entered under receipts, and the amount of the money received for the owner's share entered under expenses under a heading of rent. Such expenses as clothing will come under personal expense, as well as all other expenses that are personal in their nature.

It should be borne in mind that this is simply an account of the receipts and operating expenses of the farm. Sales of any stock or anything that may be considered as part of the investment should not be entered under receipts. For instance, the horses and machinery are part of the investment. If one sells a horse that is a part of his invested capital, he should not enter the proceeds under receipts. Nor, if he buys some machinery, should the cost be entered under expenses, as the machinery is part of his investment, and its cost is not an operating cost. However, some amount should be entered under expenses once a year for depreciation on the total investment. Depreciation is an operating expense, the same as taxes and interest. Any additions to or subtractions from the investment may be shown by a yearly inventory.

This simple system of accounts should be kept throughout the year, at the end of which time the totals for each month should be added together. This will show the receipts for the year for each crop or kind of stock grown for sale on the farm, and the amount of expense for each different branch of the total expense. The difference between the two will show whether the farm is being operated at a profit or a loss. A farmer may not have a cent at the end of the year, and yet his business may have been conducted on a profitable basis. The profit may have gone into investment, and his true net worth will be shown from an inventory. If carried out, the system shown should prove both interesting and useful to the average man.

Harold Robinson.

Sumner, Okla.

Dean Potter's Book

"Farm Motors" by A. A. Potter, dean of the engineering division in the Kansas State Agricultural college, gives practical information on construction, working and management of engines and motors suitable for farm use. It covers steam engines, gas and oil engines, traction engines, automobiles, water motors, windmills and electric motors. It considers the important questions of economy and efficiency of motors of all kinds in the light of modern engineering practice. In a word it enables the student, without digging into the abstruse physics and complicated mathematics of modern engineering, to apply the results of these, intelligently, to his problems. It is a practical, useful book. It contains 278 illustrations, in line and halftone, that show the principles, construction and applications of motors. The McGraw-Hill Book Company, New York; price, $1.50.

Turnips Worth While

We have found turnips to be a most profitable crop, as they may be sown any time up to July 25, and still make a heavy yield; so that they often can be made to occupy ground which otherwise might lie idle till the following season.

While turnips will return a good profit from the land as market products, their highest value can be realized by the farmer who has the stock to consume all the turnips he may produce. They are especially adapted to the needs of poultry and part of the stock during the winter months, when the essential greenness is not obtainable as in summer.

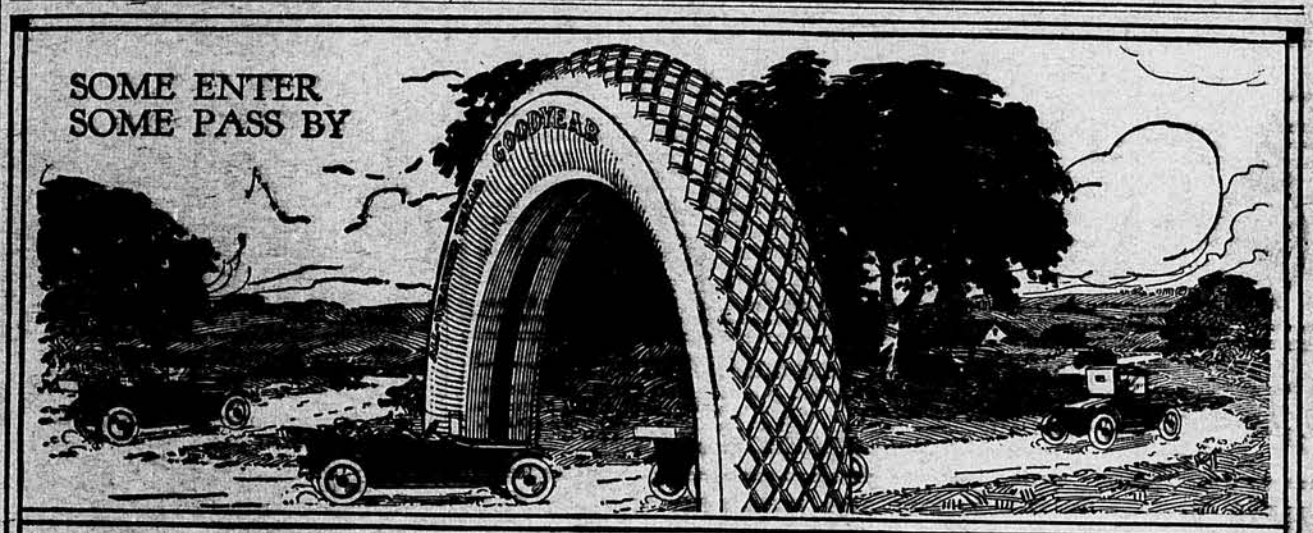
Any ordinary land will produce a satisfactory crop of turnips; although they will not do well on thin, poor soil. Neither should the ground for turnips be very rich, as they would develop too rapidly, causing the products to be pithy and possess a very strong, undesirable flavor. In early days we used to sow turnips on fresh sod-land, says the Farmers Guide, and here they do exceptionally well. All that is required is to break the land, sow the seed thick, and follow the seeding with a good harrowing or two. Sometimes, when this could be done just as a heavy shower of rain was coming up, no harrowing was needed, as the rain-drops beat the seeds into the soil and gave ideal covering.

We have tried both broadcast and drill seeding of turnips, and one's method must be decided by conditions—the amount of time he can spare, soil, area to be sown, and the like. Drill seeding does not require so many seed as broadcasting, but will take more time. It is also a little safer method, as all the seed are placed at a depth that will insure germination and be conducive to vigorous growth. Drilled turnips also can be cultivated, and therefore will yield heavier than broadcast sowing, since one not only keeps down the weeds, but the stirring of the soil increases the productiveness of the crop. Drilling is especially recommended where the space for turnips is limited.

Where turnips are drilled in, they should be drilled thick; then, when the plants come up and start to growing, they should be thinned out to about one plant to every 4 or 5 inches. If left thicker, the turnips may be too crowded for good growth; if thinner, the yield will be diminished.

In broadcast seeding, many waste a great deal of seed by putting them on the ground too thick. To avoid this, we take a shallow vessel, something like a wash basin, put it almost full of fine dirt, and mix in a few turnip seed, say a handful. This is then thoroughly mixed, and with each handful, one will scatter only a small number of seed at sowing time. The same scheme can be put into practice where the drill-plate holes are too large, corn-chop or dry dirt being put in with the seed till only a few of them will enter the holes at a time.

One good job-holder protects another.



A $500,000 Gift
To Users of Fortified Tires

This is an actual gift, as these facts show:

Nobody asked for better tires than Goodyear built last year. Nobody thought them possible. They were so extra-good that for years they've outsold any other tire.

And this year—on February 1st—we gave you another big price reduction. It will save Goodyear users about $5,000,000 this year. It was our third reduction in two years, totaling 45 per cent.

This Year's Extras

Yet, despite this reduction, we have added new improvements which will cost us $500,000 this year. Part are in extra rubber—all in extra wear.

We have added these extras to the best tires built. To tires that dominate because of super-service. And we've done it at a time when price reductions have led to considerable skimping.

Total, $1,635,000

All the extras we give you in Goodyear tires will cost us $1,635,000 this year, judged by current output. These include five features which no other maker uses. It includes other uncommon features.

We could omit all these, yet build a tire which looks about like Goodyears. It would serve as well as many rival tires. Thus we could add to this year's profits $1,635,000.

Tires Not Alike

It's a vast mistake to think that tires are pretty near alike. Five of the greatest features known are found in Fortified Tires alone. And many a tire lacks all the extras that we cite.

These extras combat rim-cutting, blowouts, loose treads. They combat punctures and skidding. They mean a secure tire. They mean more rubber, more fabric than some. They mean more mileage, less trouble, less expense.

We pay the price to give you these extras, and save it by mammoth output. You should insist on them. Any dealer, if you ask him, will supply you Goodyear tires.

GOODYEAR
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 CO., AKRON, OHIO
Makers of Goodyear "Tire Saver" Accessories; also Goodyear "Wing" Carriage Tires and other Types
(2424)

Livestock Profits

Keep a can of **Zenoleum** always handy—it's the best live stock **Profit-Insurance** on earth. Its use as a disinfectant and germicide insures the destruction of all germs and insects that prey on cattle, hogs and sheep. This powerful safe germicide kills lice, mites, sheep ticks; cures mange, scab, skin troubles, sores, wounds and prevents abortion in cattle.

COAL-TAR ZENOLEUM DISINFECTANT-DIP

Used and Endorsed by 50 Agricultural Colleges

No other live stock remedy is so highly regarded by breeders and live stock authorities. For twenty years it has stood every test. Cheaper than home-made mixtures and absolutely reliable. Send a dollar bill for a can of Zenoleum postpaid, sufficient to make 50 gallons of positive disinfectant. Full gallon can to make 100 gallons, $1.50 parcel post paid. If it is not all you think it ought to be you get your money back; no argument—just money back. Write for ZENNER'S VETERINARY ADVISER, FREE.

ZENNER DISINFECTANT COMPANY, 180 Lafayette Av., Detroit, Mich.

SAVE HARNESS MONEY

Hundreds of amazing bargains! Write now for free copy of our new catalog, with life-like pictures of harness, saddles, bridles, blankets, bits, etc.

Special Offer

Here's a dandy extra heavy copper riveted halter, 1½ inch wide, sells for $1.50 everywhere; our special offer **$1**

—Prepaid—

We Prepay the Freight

Save you from 30 to 50 per cent, guarantee our goods for two years, refund on the minute if goods don't suit you. Send goods with privilege of examination. Get catalog TODAY—it's free for the asking—and see our wonderful direct-from-maker bargains.

H. & M. Harness Shop, Dept. K, St Joseph, Mo.

CHASUM

THE only preparation on the market that will, with one application keep the flies away from horses and cattle, two to three days. CHASUM applied to screen doors will keep flies out of your homes, candy and fruit stores, restaurants, meat markets, etc. Apply to hands and face when annoyed by Mosquitoes. No other fly preparation can be used for as many purposes as CHASUM. Order a can and be convinced. Full instructions on cans.

Prices: Pt. 50c, Qt. 90c, Gal. $3.00

CHASUM MFG. CO., INC., 3520 Colfax Ave. South, Minneapolis, Minn.

Strickler's Topeka Business College

Needs Young Men and Women

For good positions. A good position for every graduate. We furnish employment for students to pay expenses while attending school. Send for New Catalog, today.

125 EAST 8TH, TOPEKA, KANSAS

FREE

This Famous Sewing Awl

The Awl For All

PATD MARCH 23 1915

6¼ inches LONG.

You can sew old or new harness, saddles, canvas, tents, rugs, carpets, quilts, shoes, grain bags and many other things. You can use any kind of thread in the Myers Awl, and it makes a lock stitch same as a sewing machine. It is very simple; a woman can use it as well as a man. It is one of the most practical devices ever invented. They are put up with two needles; one is straight and one curved, with a small screw driver and wrench combined. Also a reel of waxed thread with each awl ready for use. *The cut does not show full size. With needle the awl is 6¼ in. long.* It is the **Myers Famous Lock Stich Sewing Awl.** It is the only Sewing Awl made with a groove running the full length of the needle, so as not to cut the thread when sewing, and has what is known as a diamond point. Every teamster and farmer should own a Myers Lock Stitch Sewing Awl, as there is use for one in almost every household. The Myers Awl is nicely finished, the metal parts are nickel plated, the needles and wrench are kept in the hollow handle which has a screw top.

Anyone who will send $1.25 to pay for a one-year's subscription to our big farm paper can select one of Myers' Lock Stitch Sewing Awls, which we will send by mail, postage paid, as a free premium. Use Coupon below.

MAIL AND BREEZE

is the biggest and best farm journal in the West with over 100,000 readers. Established in 1873. Price, 1 yr., $1.00. The best edited farm journal in America.

Pub. Mail and Breeze, Topeka, Kan.

Dear Sirs:—Enclosed please find $1.25. Send me your paper regularly for 1 year, and one of the famous Lock Stitch Sewing Awls free and prepaid.

Name .....

P. O. .....

County..... State..... R.R.No....

NO POSITION, NO PAY

ATTEND ON CREDIT

and pay us when in position. 25 years' prestige. Students employed on 52 Railroads. Earn from $60.00 to $150.00 per month. Station work taught. Wabash R. R. wire. Car fare paid. Write for catalog.

CHILLICOTHE TELEGRAPHY COLLEGE
621 Irving Ave., Chillicothe, Mo.

LUMBER

At Wholesale Prices, Direct to You. If you, or you and your neighbor together can use a car-load of lumber, why not buy it at wholesale prices? Send us your itemized bill for figures. Good grades—prompt service—and a big saving in cost. Lowest prices on Bois d' Arc posts. Write today.

McKEE LUMBER COMPANY
Box 5001, Shawnee, Oklahoma

McKEE at SHAWNEE

CASH For BAGS

Don't throw them away. Save them and ship **to us.** We'll pay you HIGHEST MARKET PRICE. Get your neighbor to ship his bags with yours. ESTABLISHED 1870.

FULTON BAG & COTTON MILLS 600 S. 7th ST. ST. LOUIS, MO.

Roofing!!

Send for our Free Samples and Factory Prices. We can sell you the best roofing made at Money Saving Prices.

58c a Roll.

Cement and nails furnished Free. Every roll fully guaranteed. Write us today for samples and catalog. Address

OTTAWA MANUFACTURING CO.
2012 King St. Ottawa, Kans.

Lightning Can't Strike if Shinn Gets There First

Illustrated Book on Lightning Free. Explains kind of rods that protect. W. C. SHINN, 110 N. 16th St. Lincoln, Neb.

$12.00 Steel Feed Grinder. | $14.00 Galvanized Steel Wind Mill.

We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO.,
Seventh St., Topeka, Kansas

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

Farming—Indoors and Out

Whatever Edwin Taylor of Edwardsville, Kan., says about farming is worth hearing or reading. He is a farmer with a keen intelligence and broadness of experience that makes his contributions to current thought worthy of notice. Mr. Taylor delivered the commencement address, not long ago, to the first class graduated from the school of agriculture at Manhattan. Among the many good and sensible things Mr. Taylor said there appear these paragraphs:

"There have been many bonanza farmers in Kansas. It is no reflection on them as individuals to say that the influence of their methods has been bad. For they have turned attention away from the dependable side of farming, satisfied with moderate returns, and have featured, instead, a reckless, gambling side of farming that is demoralizing as an example to other men and destructive of soil fertility. Some day society will scourge her temple clean of bonanza farms and plural farms and will install a system of land division in which property considerations will be secondary to considerations of the public good.

"There is a class of farmer money-makers among us, however, whose example is wholesome. This class is more numerous and in the aggregate more wealthy than the bonanza group. I refer to those plain, everyday farmers found in almost every community, who are not especially gifted, and yet are noticeable among their fellows for thrift. The question is, why should there be these exceptions? It might be suggested that they are particularly hard workers, but they are not; or that they have an unusually high batting average with the test tube and the microscope; but the fact is, they don't, as a rule, do much with those implements. But this distinguishing mark is on them all: Whatever they do they do well; they don't overtax their powers of mastication; they don't wobble; they persist; and they eliminate the unfit."

* * * * * * *

"There are many farms in Kansas suited to fruit, and also to grain and livestock. And there are farmers in Kansas capable of handling all of them on one farm as well as, in the nature of things, it can be done. But there are no farmers in Kansas or elsewhere capable of making unrelated things pay out like things that are related. And whether it is in Stafford county or Riley, there is no kinship between fruit growing and livestock or grain. Grain and livestock together, on the contrary, in very many instances, fit into each other like the fingers on the two hands."

* * * * * * *

"I have no recipe for success on the farm or elsewhere. I merely submit this question: Does not 'scatteration' spell mediocrity on a farm or in a shop or in a school? Who would ever have heard of Bates, the Shorthorn breeder, if he had divided his attention between Shorthorn cattle and Leghorn hens? One of the most talked-about agriculturists in America last winter was an Englishman, Tom Barron, the White Wyandotte fancier. Well, it is just impossible to think of a man like Tom Barron ever getting anywhere, if he had lived a double life between white chickens and red hogs."

* * * * * * *

"Any impartial observer must be struck with the small percentage of first-rate stuff that farmers offer. Out of all the cattle bought by the Kansas City packers, less than 25 per cent are good enough for the top prices. There is the same variation in sheep. The percentage of first-rate fruit and vegetables in attractive packages offered by farmers is still less. If farmers would only bunch their hits and have a lot of what they do have and have it good, their market troubles would be automatically relieved."

* * * * * * *

"The business feature of farming is not confined to its outdoor department. Indoor farming is also an economic proposition. Country life is most unsatisfactory when it is patterned after city life as city life appears on parade. There is no good place to parade in the country and the revenues of the average farm are not able to keep the pace.

"Farmers have one advantage financially that I have never seen mentioned in print. It is this: The very conditions of their business compel them to economize at times. In broadcast farming, the money comes in irregularly. After the hogs are sold in the fall, there is a long dry spell till the next summers' wheat money comes in. During all those months between, the great American appetite to buy something useless, if not deleterious, has to be suspended in their case because it has nothing to feed on. When the wheat is sold and there is a tidy sum resulting in the bank, the momentum gained on the economy road carries the farmers past many a catch-penny and lands them at last in some substantial purchase, we will say an automobile, paid for. Paid for, not on! How sharper than a serpent's tooth are those words of thraldom, 'A little down on a big bill.'"

In factories where pins are made, a long brass wire is drawn in at one end of a machine, and at the other end out come the pins. Most of them are fine and straight, but a few come out crooked. The machine drops them all in a great heap, the crooked and the straight together. But the crooked ones must be picked out from the others and set aside, while the straight ones are placed in shining rows in paper rolls. Separating the crooked pins from the straight is the great difficulty which now oppresses the people of the United States in choosing their public servants and the great difficulty which confronts every administrating public official earnestly trying to do his duty. It is being made more difficult by crooked elections, undoubtedly more common than the people have supposed, by all the intrigue, waste and mischief of corrupt and spoilsmen politics. But the people are learning fast how the sorting may be better done.

Garden Ants Do Little Harm

An unusual number of complaints have been received this year by the United States Department of Agriculture from persons who say that ants are injuring their lawns and gardens. As a matter of fact, these ants do little harm and the injury that is attributed to them usually is caused by something else. In large numbers, however, the small conical nests which they build on lawns are somewhat unsightly and on this account it may be desirable in some cases to destroy them.

When there is only a small area to be covered the simplest method is to drench the nests with boiling water. Another simple remedy is to spray the lawn with kerosene emulsion or with a very strong soap wash prepared by dissolving any common laundry soap in water at the rate of 1 pound to a gallon of water. Such methods are particularly well adapted to small lawns and for the ordinary little lawn ant.

For larger ant colonies of other species, bisulphide of carbon, a chemical which can be purchased at any drug store, will be found effective. This substance can be placed in the nest by means of an oil can or small syringe, the quantity required varying from ½ ounce for a small nest to 2 or 3 ounces or more for a large one. An oil can with a long spout is a convenient instrument as it can be inserted into the nests and the liquid injected without its being brought close to the operator's nose, for the fumes of bisulphide of carbon, although not poisonous, are nauseating. To facilitate the entrance into the nest of the chemical, the ant hole can be enlarged with a sharp stick or iron rod. After the bisulphide of carbon has been injected, the opening should be closed by pressure of the foot in order to retain the bisulphide. This will penetrate slowly throughout the underground channels of the nest and kill all the inmates. It is important to remember that while bisulphide is perfectly harmless if kept away from all fire, it is very inflammable and may, under certain circumstances, explode when ignited.

Milk begins to sour within a few minutes after it is taken from the cow if it is not cooled. The bacteria that cause souring do not thrive in cold milk. Therefore to keep your milk or cream sweet, cool it without delay.

Kansas Awards at the Fair

BY MERLE THORPE.

The lower jury of awards at the Panama-Pacific International Exposition has recommended to the superior jury 79 awards for the Kansas agricultural exhibit, consisting of one grand prize, three medals of honor, 15 gold medals, 36 silver and 24 bronze. Although the official announcement has not been finally made, it is probable that the Kansas awards for agriculture will not be exceeded by any other state or nation, although there are 22 states competing and numerous foreign nations. The lower jury made its recommendation this week, and the superior jury is now in session. Protests may be filed, and alterations made, but John Ferriter, of Wichita, director of the Kansas exhibits, thinks the changes will be unimportant.

The Kansas pavilion is in the middle of the agricultural palace under the dome. Persons going through the building from any one of the four entrances must pass it. The space occupied is 60 by 70 feet. The display consists of cereals and forage crops, and some fruit. Artistic color effects are obtained by different colored kafirs, grains and grasses.

The grand prize is the highest award made by the exposition, and but 450 are granted. Kansas' was recommended for the best collective exhibit of sorghums and kafir. The medal of honor, the next highest recognition, was recommended for the best collective exhibit of corn; sorghum, grains and kafir and for the Kansas Experiment Station's exhibit of wheat, kafir and corn.

The large number of prizes won by farmers in the more arid regions of the state is notable. Had not a large share of the Kansas exhibit been left at the San Diego exposition, Mr. Ferriter thinks the list would be considerably longer, especially in wheat awards. The prizes:

GOLD MEDALS.

L. Chappea, Elkhart, kafir.
W. H. Gould, Willroads, sheaf wheat.
T. E. Lewis, Elkhart, kafir.
H. H. Newman, Hanover, corn.
Page House, Wichita, corn.
Edward Palmer, Emporia, corn.
Ross Bros., Wichita, broomcorn.
J. E. Simpson, Wellington, feterita.
G. J. Stauth, Dodge City, feterita.
E. B. Stillman, Elkhart, kafir.
Charles Williams, Cimarron, winter wheat.
Lon Wilkenson, Dodge City, milo.

SILVER MEDALS.

O. E. Barton, Cimarron, corn.
F. M. Crittenden, South Haven, winter wheat.
I. L. Diesem, Dodge City, alfalfa in bale.
John Ellis, Liberty, two prizes, corn.
J. B. Fergus, Mildred, corn.
J. B. Gronniger, Bendena, corn.
J. C. Hastings, Grantville, collection of grasses.
F. C. Hazle, Duras, milo and kafir.
Frank Higginbotham, Eldorado, kafir.
Charles Jacobs, Emporia, corn.
Jonas Jantz, Copeland, corn.
Verne Johnson, Emporia, corn.
W. Joy, Cave, millet.
Carl Deming, Dodge City, feterita.
E. J. Lewis, Elkhart, kafir.
E. J. Macy, representing Montgomery county, winter wheat, Sudan grass, sheaf alfalfa, soybeans, collection of grains.
Adeline Measer, Hutchinson, collection of wild grasses.
F. L. Milliken, Wichita, collection grains.
John Ott, Wichita, corn.
H. L. Popenhoe, Emporia, collection grains and seeds, alfalfa.
J. R. Russell, Wichita, two prizes, corn.
C. H. Scott, two prizes, corn, alfalfa in sheaves.
Frank Scott, Wichita, native grasses.
E. W. Thomas, Cimarron, milo.
A. R. Towles, Garden City, Dwarf milo.
D. W. Travis, Pratt, kafir seed.
W. E. Watkins, Iola, collection corn, clover seed.
C. E. Williams, Cimarron, wheat.
Ruth DeWitt, Wichita, corn.

BRONZE MEDALS.

William Barber, Anthony, alfalfa seed.
T. J. Boyer, Yates Center, corn.
Charles Borgner, Pratt, alfalfa seed.
W. O. Blake, Cimarron, kafir.
J. S. Brown, Mulvane, corn.
L. Chappin, Wichita, corn.
P. A. Clark, Maize, corn.
H. M. Coe, Yates Center, corn.
N. Ewart, Colwich, wheat.
C. F. Frank, Wichita, corn.
H. F. Gronniger, Idana, corn.
Ton Havercroft, Dodge City, kafir.
F. A. Holt, Wichita, kafir.
William Keller, wheat.
E. C. Lembach, Erie, oats.
Harry Mountz, Wichita, collection corn.
Harry Naylor, Red kafir.
John Ott & Son, Wichita, forage for ensilage.
D. L. Pickard, amber cane seed.
John Rutt, Elkhart, Red kafir.
F. Schall, Dodge City, wheat.
F. M. Sumpter, Mulvane, corn.
A. H. Youngmeyer, Wichita, alfalfa seed.
Harry Wright, Hutchinson, collection grains, alfalfa seed.

HONORABLE MENTION.

J. E. Crabb, rye.

Schoolhouse Fires

For the last two years there have been an unusual number of fires in schools and colleges over the country. Kansas seems to be having its share of this number. Since January 1, 1915, there have been reported to the fire marshal department 15 schoolhouse fires, with a loss of $46,947. A great part of this loss surely would be unnecessary if proper care were taken to see that flues and heating apparatus are in good condition and that piles of rubbish and other inflammable material are not allowed to accumulate. Fire escapes and stairways should be made safe and kept clear, for it is not only property but the lives of children which are at risk.

About the Holstein Association

The recent report of F. L. Houghton, secretary of the Holstein-Friesian association, showed that 135,280 certificates have been issued from his office during the year, a gain of 29,981 over the number issued in 1914. The cash receipts of his office were $177,392.88, with disbursements of $111,208.98. A total of 1,208 new members were admitted during the fiscal year, exceeding by 97 the number admitted in 1914; making the grand total of membership 7,724. Notification of the death of 48 members has been received during the year. During the fiscal year, 11,470 cows have been under test, 566 completing yearly records, adding nine names to the list of 1,000-pound butter cows, now numbering 31. The average of the 10,743 ordinary records was 406.9 pounds milk, 14.474 pounds fat, or 16.89 pounds butter a week. Average per cent fat, 3.56.

In the different divisions 13 butterfat records have been broken as against 17 the year before, and milk records have been several times exceeded. In the prize lists 953 animals are listed, some being debarred under the limitations. Verification tests have been made in the cases of 121 cows. Prize money to the amount of $15,496.50 has been divided among 269 breeders.

Special mention was made of the remarkable yearly records of Finderne Holingen Fayne and Tilly Alcartra, champions for butter and milk production, respectively. The average of the 566 yearly records was 14,407.7 pounds milk, 488.97 pounds fat, or 570.46 pounds butter. Average per cent fat, 3.39.

The total entries of animals in the Advanced Register for the year just closed will exceed 12,000, 7,680 cows having been admitted as original entries.

To Get Better Cows

1. Treat cows gently and avoid excitement.
2. Be regular in time of milking.
3. Keep stables clean, well-lighted and ventilated.
4. Weigh the milk of each cow at milking time.
5. Get your neighbor to share with you in owning a Babcock Milk Tester, and test the product of each cow.
6. Discard the animals which have failed at the end of the year to pay for their keep.
7. Breed your cows to a purebred, registered dairy bull from a family having large and profitable production of butterfat.
8. Raise well the heifer calves from cows, which for one or more generations, have made large and profitable productions of milk and butterfat.
9. Breed heifers to drop their first calves at 24 to 30 months of age. Give cows 6 to 8 weeks' rest between lactation periods.
10. Join a dairy cattle breeders association. It will help you keep posted and in touch with the best and most modern ways of managing your dairy herd.

For the Silo

Short, immature corn should be allowed to stand until nearly dry before putting into the silo. That is, the leaves should be nearly dry; the stalk should be pretty well filled with sap. If this corn is put in while too green it may make sour silage.

He Would Conquer.

Client—Didn't you make a mistake in going into the law instead of into the army?

Lawyer—Why?

Client—By the way you charge there would be little left of the enemy.—Sacred Heart Review.

THE GOOD JUDGE AND THE FLORIST KNOW WHAT'S WHAT

ONE 10c. pouch of *the Real Tobacco Chew* lasts longer than twice the money will buy in the old kind.

A new blend of mellow, sappy tobacco. That's what makes it taste so good and why it gives you such satisfaction and comfort.

A little chew of pure, rich, mellow tobacco—seasoned and sweetened just enough—cuts out so much of the grinding and spitting.

THE REAL TOBACCO CHEW IS NOW CUT TWO WAYS!! W-B CUT IS LONG SHRED. RIGHT-CUT IS SHORT SHRED.

Take less than one-quarter the old size chew. It will be more satisfying than a mouthful of ordinary tobacco. Just take a nibble of it until you find the strength chew that suits you, then see how easily and evenly the real tobacco taste comes, how it satisfies, how much less you have to spit, how few chews you take to be tobacco satisfied. That's why it is *The Real Tobacco Chew*. That's why it costs less in the end. The taste of pure, rich tobacco does not need to be covered up. An excess of licorice and sweetening makes you spit too much.

One small chew takes the place of two big chews of the old kind.

"Notice how the salt brings out the rich tobacco taste."

WEYMAN-BRUTON COMPANY, 50 Union Square, New York City

BUY FROM DEALER OR SEND 10¢ STAMPS TO US

This Big Leather-Bound Webster's 825-Page Dictionary

Sent Prepaid to Mail and Breeze Readers FREE

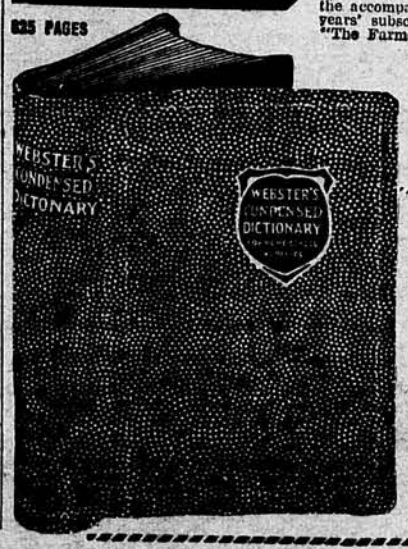
Unequaled Bargain Offer

Here is a book that is constantly needed by every man, woman and child. No other one book contains so much of practical educational value.

The book illustrated here is a book such as would ordinarily retail for a high price. It is handsomely and substantially bound in soft leather covers and printed in large, clear, easily-read type. It is just the right size for home, office or school use. Contains "Business and Law Terms," "Famous Names and Familiar Phrases," "Punctuation Rules," "Forms of Address," "Patent and Copyright Laws," "1910 Census of Principal Cities," "Declaration of Independence," "Constitution of United States," "Simplified Spelling Rules," "Weights and Measures," "Foreign Words and Phrases," "Abbreviations," Etc., in addition to complete definition and pronunciation of nearly 50,000 words. No home library, no reading table, no student's outfit is complete without a good dictionary—and there is none other more authoritative or more complete than the famous Webster.

Beautifully bound in de luxe, full flexible leather, Bible style. Contains 825 large double-column pages, printed in clear, new type. Contains nearly 50,000 words. Thousands of new terms, abbreviations, etc. Fifteen hundred illustrations. Red edges, with title stamped in gold.

825 PAGES



I have just made one of the largest dictionary purchases ever shipped into the West. I got them for a price away below the usual wholesale rate—a price so low, in fact, that I can give these books free—as long as my supply lasts—to the readers of this paper. I will send one of these big value dictionaries free and prepaid to all who fill in the accompanying coupon remitting just $2.00 to pay in advance for a 3 years' subscription (156 big numbers) to my well known farm weekly, "The Farmers Mail and Breeze."

My supply, while large will not last long on such an offer as this! So if you want to get in on this great bargain, sign and return the coupon with $2.00 today.

The coupon must be used, or the wording copied on a piece of letter or note paper in order to secure this special price. Renewal or extension subscriptions accepted on same terms as outlined above.

Cut Out and Mail This Coupon Today!

Arthur Capper, Publisher,
Mail and Breeze, Topeka, Kansas.

Dear Sir: I desire to accept your special offer and enclose herewith $2.00, to pay for 3 years' subscription to Farmers Mail and Breeze, and you are to send me, prepaid, one leather-bound "Webster's 825-Page Dictionary" as per your offer.

Name .....

Postoffice .....

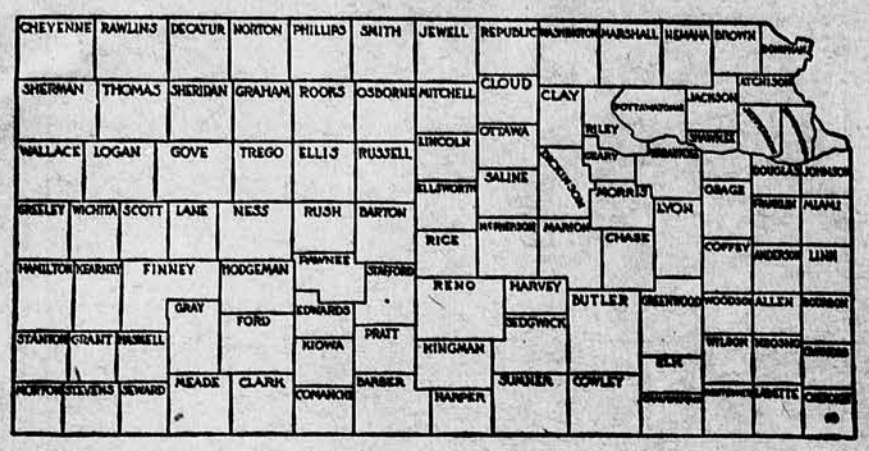
R. F. D. .....

State .....

Don't Give Away Your Wheat

Bins Will Make Money For You in Next Few Months

BY OUR COUNTY CORRESPONDENTS



THE INDICATIONS now are that the corn crop will be short in other states as well as Kansas. Much corn has been washed out, and it has been too wet to replant. The wheat crop will be large. It will not be at all strange if the harvest price is less than $1. You can get more than that, however, if you are able to hold your crop for a short time.

KANSAS.

Cheyenne County—Plenty of rain. Some damage by hail. Harvest will begin in about two weeks. Eggs 13c. Butter 25c. Corn 65c.—E. D. Kyle, July 3.

Lane County—Lots of rain. Weeds are starting as it is too wet to cultivate between showers. Wheat ripening very slowly. Not much harvesting to be done before July 10.—F. W. Perrigo, July 3.

Franklin County—Still getting rains. Too wet for harvesting. Great deal of loss from hail and storms. Most of corn weedy and grassy. Plenty of ground yet to plow and plant. Oats look very well in most places. —C. E. Kelsey, July 3.

Stafford County—Lots of wet weather. Harvest just beginning. Wheat badly down, much of it too bad to get. Corn, feed and hay look well. Have had a good crop of cherries. Peaches and apples will be fair. —S. H. Newell, July 3.

Geary County—Weather is cooler. Wheat harvest has started. Crop not nearly so good as last year and badly hurt by fly and rust. Hundreds of acres of corn and wheat lost along Republican River valley. Crops on hills look well.—O. R. Strauss, July 3.

Ford County—Wet weather delaying grain harvest. Hail has damaged wheat crop in some parts of county. Corn and feed crops are growing nicely. Second crop of alfalfa about ready for the mower. Pastures fine and stock doing well.—John Zurbuchen, July 3.

Wabaunsee County—Our rainy spell is still with us. The second crop of alfalfa and wheat that was not damaged are ready to cut, but the farmers are unable to get in the fields. Corn is very small for this time of year. Eggs 14c. Hogs 7c lb.—Henry Lesline, July 3.

Cowley County—Rain is the order of the day. Wheat cutting well along. Oats harvest just begun. The oats are well filled, but in bad condition to harvest. Corn suffering from lack of sunshine and cultivation. Kafir mostly late, the early planted very weedy.—L. Thurber, July 3.

Gove County—We have had quite a bit of relisting to do on account of the heavy rains. Crops are not looking as well as they should. Wheat harvest will begin in a week. Wheat will be extra good this year. Grasshoppers are numerous and are causing considerable damage.—H. W. Schaible, June 30.

Jewell County—Having lots of rain. Farmers not getting along very fast tending their corn. Harvest will be here next week. Some severe hail storms in northern part of county. Corn growing fast now. Oats and wheat are fine where hail hasn't destroyed them.—L. S. Belyhmer, July 3.

Nemaha County—The ripe wheat is lodging and in some cases going down. Fields so wet binders can't cut. Wheat that has been cut is rotting in the shock. Second crop alfalfa needing cutting but ground too soft for work. Corn very weedy and needs work.—C. W. Ridgeway, July 3.

Grant County—Good rain on June 23 and 29. Ground too wet to work. Got one day's farming in two weeks. Lots of grasshoppers doing some damage to late crops. Some cattle being shipped in. Stock of all kinds doing fine. Alfalfa all in the stack in good shape. Second crop doing well.—J. M. Kinsman, July 2.

Stevens County—Plowing is hindered by wet weather. Some rye and wheat have been cut, but harvest will not be in full swing until July 4. Fruit crop, especially peaches, is excellent. We had a severe hail storm which did considerable damage to crops. Livestock doing fine.—Monroe Traver, June 30.

Scott County—Too much rain is delaying cultivation of corn. Prospects for crops good. Some grasshoppers. Wheat is late. Harvest will not begin before the 15th. Cattle shipped in from Kansas City doing well. Buyers picking up horses for the war. Many young horses 2 and 3 years old in the county.—J. J. Helfrick, July 3.

Bourbon County—This county has just experienced the wettest June in many years. Some corn has not been cultivated the first time. Crops weedy and in bad condition. No good hay weather yet this season. Wheat a fair crop, mostly in shocks. Oats now ripening and promising a fair yield. Crop now affected with rust.—Jay Judah, July 2.

Wilson County—Crop prospects are very poor. Ground is too wet to harvest wheat, and to cultivate other grain crops. Second crop of alfalfa cut, part of it is in the swath. Prairie hay cutting has been delayed two weeks on account of the rain. Pastures are looking fine. Gardens look well. Stock in good condition.—S. Canty, July 1.

Pottawatomie County—Very rainy for cutting wheat but the wide awake men are making efforts in that direction with fair success. Yield is poor in most fields, ranging from 5 to 15 bushels. Corn plowing delayed because of sodden, wet land. Potato crop inferior and will be light. Apple crop light but fruit is of good size.—S. L. Knapp, July 2.

Woodson County—We have had a few fair days. A 3-inch rain in 20 minutes washed out culverts, and damaged crops. We were visited by a hail storm which damaged the crops and gardens, and caused a great deal of fruit to fall. Some crops will be good, others are being replanted. We are having fair weather today.—E. F. Opperman, July 2.

Sedgwick County—Recent rains have damaged the crops considerably, especially the wheat crop. Wheat harvest has not begun. Thousands of acres are going to waste on account of high water. Corn is looking fine, but needs cultivation. Wheat $1; corn 85c; cattle $5 to $7.50; hogs $7.40; eggs 16c; butter 25c to 30c; broilers 18c to 20c.—Ed Coleman, June 29.

Jefferson County—After a week of fair weather, we had another rain storm. A heavy wind and hail storm did a great deal of damage to the wheat and oat crop. Wheat harvest is under way. Second crop of alfalfa is being cut. Corn plowing has been delayed by wet weather. Many corn fields were washed out. Those who replanted are just finishing.—Z. G. Jones, June 30.

Neosho County—Too much rain since last September. We had had only a few days in which we could cultivate corn. Corn prospects are poor. Wheat is being cut with the mowing machine for chicken feed. Early oats are good, late oats are rusty. Not much alfalfa and feterita planted. The second crop of alfalfa has been spoiled by the high water. Water grass choked out what was sown last spring.—A. Anderson, July 2.

Cloud County—Wheat harvest has begun in some places. The ground is too soft to do anything with the machines. High water has caused much wheat to fall. Oat straw is very heavy. It may not fill out well. Potatoes are looking well, and will make an average crop. Hay will make a good crop. Pastures looking well. Second crop of alfalfa is being cut. Milk cows are in good demand, prices high.—W. H. Plumly, July 1.

Marion County—Weather has been very nice for a week. Some of the second cutting has been harvested. It is nearly as good as the first. Harvest has begun but some fields are too wet to cut. Wheat probably will make from 5 to 25 bushels to the acre. Oats are good, especially the early sowing. Cane looks very well. Corn looks better and is starting to grow a little faster.—Twine 9½ cents a pound.—James H. Dyck, July 3.

Phillips County—A heavy rain is falling today, spoiling the celebration at Phillipsburg. All corn that was replanted is doing nicely. Much corn is laid by. Farmers are cutting the second crop of alfalfa. Binding will begin Monday and heading about the middle of the week. Some rust and chinch bugs in the wheat. Farmers are preparing to hold their wheat. Some blackleg in the western part of the county. Forage crops looking well.—Roy Stanley, July 3.

Lyon County—Not as much rain as we have had and the farmers are making use of every day dry enough to work in the fields. All corn that will be planted for this season is planted. Kafir, cane, millet and feterita have been planted this week, and feterita and cane will be planted with corn planters and wheat drills for few weeks yet. Several fields of good oats and wheat. Big crop of bottom and prairie hay. Cattle doing well on pastures.—E. R. Griffith, July 4.

Sherman County—Spring wheat and barley heads are so full and heavy much is flat on the ground after each rain, but so far has partly raised for safe harvesting. Such crops are about 100 per cent better than normal. Grass and wild hay are 50 above normal, but corn and other cultivated row crops are 50 per cent below normal. All crops will finish well yet. Heading will begin about July 15. A general rain and very bad local hail storm visited this county at midnight last night.—James B. Moore, July 2.

Gray County—Harvest has begun here. We have 60 acres of wheat in stack. Many fields are quite green yet. Wheat is not quite as tall as last year, average about 3 feet. Yield will be about the same. Stacks build up fast. Cannot carry much more than 80 rods on a barge. Plenty of help for harvest. Gray county will be in the million bushel class again this year. Eggs 12½c; butterfat 21c. Stock doing well, crops are clean; have had rain every night for seven nights but not enough to stop work.—A. E. Alexander, July 2.

OKLAHOMA.

Dewey County—Plenty of rain. Wheat and oats are all harvested, and will make about 14 bushels. Corn almost all laid by. Kafir and other crops had to be replanted on account of heavy rains.—William Liston, July 1.

Pawnee County—Some wheat lost on account of wet weather. Wheat will make a medium yield. Threshing will start July 5. Oats not all cut, they will run from 30 to 50 bushels. Alfalfa ready to cut, but weather too wet.—V. Funkhouser, July 3.

Tillman County—Harvest over and threshing has begun. Wheat will make 15 to 30 bushels. Some oats making 70 bushels an acre. Corn in silk and tassel. Have had heavy rains the last 10 days that have stopped all field work. Wheat 85c.—E. T. Austin, July 3.

McIntosh County—Still very wet. Wheat and oats all cut but being damaged by wet weather. Corn in silk and plenty of moisture. Cotton fields are grassy and too wet to cultivate. Kafir and sorghum looking well. Sudan heading. Much late feed crops will be put in.—H. S. Waters, July 3.

Garfield County—Weather continues rainy. Rainfall in June was 14.42 inches here. Hail, wind, lightning and floods did a great deal of damage last spring. Wheat and oats harvest not half over yet. Weeds are getting the best of much spring planted stuff. Wheat $1 a bushel.—J. A. Voth, July 3.

Pushmataha County—Too much rain. Oats badly damaged, some entirely spoiled, and no prospect of any dry weather. Corn looks nice, except some blown down by driving rains. Fruit plentiful and cheap. Gardens best in years. Cotton in bad shape on account of rains. Eggs 10c; butter 25c.—E. D. Olin, July 2.

Kingfisher County—About one-fourth of wheat yet to cut. Rain and floods nearly every day. Too wet to get into fields. Late crops that have been planted are washed out or covered up. Wheat and oats badly damaged. Potatoes rotting in the ground. Pastures best in years. Stock doing well.—H. A. Reynolds, July 2.

Pottawatomie County—Very wet. Wheat and oats in bad shape. Alfalfa second cutting all rotted. No sale for potatoes, price 35 cents. Fat stock scarce, but lots of buyers. Threshing will begin about July 5 or 6, if dry enough. Horses and mules getting scarce. Corn in tassel and silking and good crop assured.—L. J. Devore, July 1.

Kingfisher County—Rain nearly every day. Very little late crops planted and those that have been are washed out or covered. Wheat about three-fourths cut and is damaging in shock, also some destroyed on the bottoms. Potatoes rotting in ground. Some corn never has been cultivated. Pastures fine. Stock doing well.—H. A. Reynolds, July 2.

Ellis County—Wheat harvest is in full sway when it is not too wet to use the machines. Wheat and oats crops will be good. Spring crops will be poor as they were planted two or three times. Pasture looks fine for this time of year. Ground will be in fine shape for fall plowing. Hogs $6.75; eggs 10c; cream 22c; kafir 55 cents. —W. E. Sells, June 30.

Harmon County—We had a light shower today but it was needed. Wheat harvest is in full progress. Second crop of alfalfa is being cut. Crops are late but they are looking fine. Lots of fruit, peaches $1.50 a bushel. Some mules selling for $150, the most paid for some time. Wheat 90 cents and up; oats 2½ cents in bundle; eggs 8½c; butter 17c.—R. R. Grant, June 29.

Sequoyah County—Crops grassy. Some cotton lost. Some too wet. Corn on well drained soil good. Oats damaged. Many crops not cut lost. Wheat damaged. Potatoes damaged, yield short. Digging and shipment slow on account of bad roads and wet weather. Pastures good. Cattle in excellent condition. Alfalfa short. Fruit crop extra heavy.—H. M. Wolverton, July 3.

Kay County—Wind, rain and hail have damaged the wheat and oats crop 50 per cent. The ground is too wet to use the machines for harvesting. The second crop of alfalfa is ready to cut, but will be delayed on account of harvest. Corn fields are damaged for the want of cultivation. Grass is plentiful, and pastures are looking fine. Livestock doing well.—Sherman Jacobs, July 1.

Garvin County—Twelve inches of rain in June. Wheat not all cut. Machines bogged down. Oats and wheat that are cut are rotting. Some crops abandoned on creeks and valleys. Weeds and grass have the blue ribbon. Stock is not doing well, owing to flies and too much water in grass. Peaches are water soaked and hard. Alfalfa hay injured. Corn, cane, millet in head.—H. H. Roller, July 1.

A Famous Fir Silo.

The Weyerhaeuser Lumber Co., whose name and product are known to everyone, is making a most interesting announcement regarding their Famous Fir Silo. For a short time they are issuing coupon certificates that are redeemable at a cash value of 10 per cent of the cost of their silo. The Weyerhaeuser Lumber Co. will accept these on direct orders from the Silo at any Lumber Dealer who sells the Weyerhaeuser Silo. Everybody who is interested in silos or who figures on buying one this season should by all means write the Weyerhaeuser Lumber Co., 442 Long Bldg., Kansas City, Mo., today, asking them for a copy of their illustrated free book which is an encyclopedia of silo information, and also for one of the coupon certificates, which entails no obligation, but which will save an average of about $30 on each silo. Other remarkable savings are offered in a special proposition by these people so that the farmer can buy the Weyerhaeuser Silo under this new plan, for approximately $100 less than any other silo of similar capacity and quality on the market.—Advertisement.

Hyatt Roller Bearings.

On page 11 is an illustrated page announcement of the well known Hyatt Roller Bearing Company, of Newark, Chicago and Detroit. The illustrations are of 14 tractors entered at the Hutchinson Tractor Show which are equipped with Hyatt Roller Bearings. Many other tractors are similarly equipped, about 40 others in all. And, as everyone knows, many of the best automobiles have the Hyatt bearings. The name Hyatt is a symbol for quality. It is a natural presumption that a tractor or a car equipped with Hyatt Roller Bearings is a good one. In buying a tractor one surely wants to know that its various parts are made as they should be made. If you get bearings made by Hyatt you are sure of having the best in that particular at least. —Advertisement.

About the Soils Exposition

There will be 20 states in the interstate building at the International Soil-Products Exposition held with the tenth annual International Dry-Farming congress, Denver, September 26 to October 10. The dates of the congress are October 4 to 7.

States which have made legislative appropriation direct for this purpose are: Kansas, Oklahoma, Nebraska and Wyoming. States which have made indirect appropriation are: Arizona, Texas, South Dakota and Louisiana. Other states are preparing for their exhibits through some state agency like boards of agriculture, bureaus of immigration and publicity.

The interstate building will be 38 by 266 feet. It will immediately adjoin the great Denver Auditorium, the centerpiece of the exposition group of eight buildings. Each state will have a space 12 by 20 feet.

For Low Plowing Costs

(Continued from Page 3.)

colt. Thus an extension in the use of tractors in Kansas in connection with a proper handling of the horse situation will result in an increase in the colt crop. In other words, a tractor will help the horse department on many places.

Another thing that must be avoided in considering the tractor situation in Kansas is the belief that they will pay on all farms. There are places in Kansas on which an engine will never give a return on the investment. The buying of a tractor in this state is merely a question in farm management, and it is a problem that every farmer must work out for himself. The personality of the farmer enters into this to a considerable extent. A man who loves machinery has a much better chance for success with a tractor than a farmer who does not care for its operation. However, the modern small tractors are so simple and so easy to operate that it is not a great deal of trouble for a reasonably intelligent man to learn to handle one, if he will pay attention to the book of instructions, and to the suggestions of the tractor expert who delivers the machine to him.

There is a big interest all over Kansas in farm tractors. That is why this has been such good tractor territory, with remarkably large sales. The number of tractors in use will be greatly increased in the next year or two, and they will do much to raise the yields and profits in farming. However, it is important that there should be no mistakes made in the purchase of a tractor—they should be placed only on the farms where they will return a profit.

The most important thing for a man who is thinking of buying a tractor is to find out all about the advantages and disadvantages of power farming that he can, and especially about the relative adaptations of the different makes. If a man has this information he is in a position to form an accurate judgment, founded on sound business reasons, as to whether he should buy an engine. This is where the high value of the Kansas Traction Plowing exhibit comes in. If you go to Hutchinson and see all of the leading makes of plows and tractors in operation side by side you will have every chance to get this information.

A most cordial invitation has been extended by the management to every Kansas farmer to attend this show, and to study the plowing outfits that will be in operation. The immense flood of letters which has been received in the last few days from the visitors indicates that this invitation will be generally accepted, and that there will be an immense attendance.

For Better Silage Yields

(Continued from Page 8.)

vent too great a loss of leaves. Sorghum land, from which the crop has been removed for silage, should be fall plowed, when possible, and planted to some crop like cowpeas the next season. The injurious effect of the sorghum on the soil will not be so apparent if this practice is followed.

Don't "take" advice—seek for it, search it out, prove it, select it with care and good judgment, and having made it your own, act!

FARMERS CLASSIFIED ADVERTISEMENTS

Farmers Mail and Breeze is the greatest classified advertising medium in the farm paper field. It carries the most classified advertising because it gives the best results. The rate is low: 5 cents a word; four or more insertions 4½ cents a word. Here is a splendid opportunity for selling poultry, livestock, land, seeds and nursery stock, for renting a farm, or securing help or a situation. Write us for proof that it pays. Everybody reads these little ads. Try a classified advertisement now.

POULTRY

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

PLYMOUTH ROCKS.

BUFF ROCKS—WILLIAM A. HESS, HUMboldt, Kan.

DUFF'S MAMMOTH BARRED ROCKS. Young and old stock ready to ship now. Half price. A. H. Duff, Larned, Kansas.

LEGHORNS.

R. C. BROWN LEGHORN. NOW HALF price. $2.50 hundred. W. Girout, Concordia, Kan.

SINGLE COMB WHITE LEGHORNS. Chix hatched now lay this winter. Eggs special price $3.00 per hundred. Harry Givens, Madison, Kan.

WYANDOTTES.

WHITE WYANDOTTE EGGS AND COCKerels from prize winning stock. Eggs, 15 for $1.00, 50 for $3.00, 100 for $5.50. We guarantee nine chicks per setting or duplicate at half price. Cockerels $2.00, 3 for $5.00. G. A. Wiebe, Beatrice, Nebraska.

LANGSHANS.

BLACK LANGSHAN EGGS, FROM MY best pens and yard, at ½ price. $1.50 and $3.00. J. A. Lovette, Poultry Judge, Mullinville, Kan.

ORPINGTONS.

BUFF ORPINGTONS. SPLENDID LAYERS and prize winners. Can please you. Catalog ready. August Petersen, R. 2, Churdan, Iowa.

FOR SALE—THOROUGHBRED BUFF ORpington cockerels and pullets, no relation, $1.00 each. Minnie Fultz, 1525 State St., Emporia, Kan.

DUCKS.

YEAR OLD INDIAN RUNNER DUCKS; White and Fawn and White; five ducks and one drake for $5.00; laying now. Hal Reid, Liberal, Kan.

LIVE STOCK

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

POLLED ANGUS BULLS FOR SALE. M. H. Arnold, Toronto, Kansas.

FOR SALE—FOUR YOUNG FRESH JERsey cows. U. F. Denlinger, Baldwin, Kan.

ABERDEEN ANGUS BULLS. TRAIN COLlies. Jno. Marriage, Mullinville, Kansas.

SHETLAND PONIES, MARES, YOUNG, gentle, broken to ride. John B. Greer, Marion, Kan.

HIGH GRADE HOLSTEIN CALVES, either sex, 3-4 weeks old. $17 each, crated. Burr Oak Farm, Whitewater, Wis.

FOR SALE—PRINCE RUPERT, NO. 887, full brother to Chester Dare, No. 10, most noted saddle horse sire in the world. We have used him five years and must change. Pay for himself in one season. Kentucky Saddle Horse Co., Sedalia, Mo.

SEEDS AND NURSERIES

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

FOR SALE. 500 BU. FETERITA. THE O'Brien Farm, Rush Center, Kan.

WHIPPOORWILL PEAS, FREE FROM weavil, $1.80 per bushel; 10 bushel lots, $1.70 per bushel, F. O. B. cars Ft. Smith. Fort Smith Seed Company, Ft. Smith, Ark.

WINTER EMMER—HARDIEST OF ALL cereals. Stands drouth best. Provides more winter pasturage than rye or wheat. Yields 50 to 125 bushels. Resists Hessian fly and chinch bugs. Write for samples, prices and booklet about successful "101" Ranch winter grain crops, also forage crops—Sudan grass, Seeded Ribbon cane, kafir, feterita, etc. Miller Brothers, "101" Ranch, Box J, Bliss, Okla.

FOR SALE

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

PURE BRED SCOTCH COLLIE FEMALE puppies two fifty each. M. L. Dickson, Englewood, Kan.

NEW BEETS JUST RIGHT FOR CANNING $1.00 per hundred pounds. D. Debacker, North Topeka, Kan.

NARKA, KAN.—AVERY 20 H. P. TRACTOR engine with 5 14 in. plows, automatic lift, nearly new. Cheap if sold soon. Going to quit farming. O. W. Blakesley.

ENGINE PLOW FOR SALE—JOHN Deere 10-14 in. bottom; one 12-14 in. bottom; one 14-14 in. bottom; good condition; will sell cheap. L. A. Jordan, Winona, Kan.

ONE SIZE 18 REEVES ALFALFA HULLer. Good condition. Cash price $250.00. Jasper Singley, Meade, Kan.

FOR SALE—ONE DEMPSTER LARGE NO. 14 well machine; nearly new; price reasonable. E. S. Rhodes, Tampa, Kan.

$450 HALLET & DAVIS; $450 BALDWIN for $125 each. Also absolutely new Starr Player. Mrs. Kendrick, 2003 Penn, Kansas City, Mo.

PRAIRIE HAY. WE HANDLE HAY IN large quantities and can make shipment any day. Ask for delivered prices. The Osage City Grain & Elevator Co., 416 Main street, Osage City, Kansas.

FOR SALE OR TRADE

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

TRADE IMPROVED FARM FOR KAN., Colo., Okla. farm. Box 36, Armstrong Springs, Ark.

HART-PARR LITTLE DEVIL TRACTOR, used 20 days, for sale or trade. Joe Young, Long Island, Kan.

IF YOU WANT TO BUY, SELL OR LEASE hotels, write me. E. Coltrane, Hotel Broker, Hutchinson, Kansas.

GROCERIES AND CHINAWARE; NO FIXtures; to exchange clear for clear land or town property; goods are new; in stocks from $1,000 to $25,000. Ernest Key, 302 Poyntz Ave., Manhattan, Kan.

GOOD STOCK GEN'L MDSE. IN BEST town in Western Kansas, doing fine business; invoice twelve thousand. Will take land in Eastern Kansas. Bear closest investigation owners. Write J. W. Riley Mer. Co., Garden City, Kan.

BLACK PERCHERON STALLION AND two good young Mo. jacks, just closing successful season, for equity in small improved or unimproved land, N. E. Kan. preferred, or good city property. Address B., Mail and Breeze.

BUSINESS CHANCES

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

CREAMERY WANTED: INDUCEMENTS in free location and half cost of machinery. 800 cows tributary. Rock Island and Frisco. High, healthy Ozark Valley—Good farms cheap. Write J. P. Hodge, Mansfield, Arkansas.

FARMS WANTED

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

I HAVE SOME CASH BUYERS FOR SALable farms and ranches, owners only. Write C. C. Buckingham, Houston, Texas.

WANTED—TO HEAR FROM OWNER OF good farm or unimproved land for sale. H. L. Downing, 111 Palace Bldg., Minneapolis, Minn.

I HAVE SOME CASH BUYERS FOR SALEable farms. Will deal with owners only. Give full description, location, and cash price. James P. White, New Franklin, Mo.

FARMS WANTED. WE HAVE DIRECT buyers. Don't pay commissions. Write describing property, naming lowest price. We help buyers locate desirable property free. American Investment Association, 28 Palace Bldg., Minneapolis, Minn.

LANDS

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

GRAY CO. LAND FOR SALE. $12.50 TO $30.00. J. H. Kimes, Montezuma, Kan.

PASTURE, FENCED 320 A. GREENWOOD county, Kansas. Mrs. Florence Hartshorn, Carterville, Mo.

FORCED TO SELL—LITTLE MONEY will handle improved quarter close to town. Lock Box 242, La Harpe, Kan.

230 ACRES ST. CLAIR COUNTY, MO. ½ bottom. 90 cultivation. More tillable. $35.00 acre. Terms. Owner, Will Altman, Olathe, Kan.

SELL YOUR PROPERTY QUICKLY FOR cash. No matter where located. Particulars free. Real Estate Salesman Co., Dept. 5, Lincoln, Neb.

FOR SALE—80 OR 160 ACRES OF SOLOmon bottom land of best quality. Improvements on each 80. Terms. E. Gray, R. No. 2, Minneapolis, Kan.

FOR SALE—ONE QUARTER SECTION, well improved, 5½ miles of county seat of Grant Co., Okla. B. E. Dick, owner, Raymondville, Texas.

IMPROVED FARM 320 ACRES; PART BOTtom; 4 mi. Winfield. Owner non-resident; must sell. For improved acreage tracts, city homes, write Progressive Realty Co., Winfield, Kan.

120 ACRES, TWO MILES FROM TOWN. Good buildings, orchard, other timber, fenced and cross-fenced, hog-tight; running water. Only $8,000. W. T. Miller, Langdon, Kansas.

PRODUCTIVE LANDS; CROP PAYMENT or easy terms along the Northern Pac. Ry. in Minn., N. D., Mont., Idaho, Wash. and Ore. Free literature. Say what state interests you. L. J. Bricker, 46 Northern Pac. Ry., St. Paul, Minn.

320 A. STOCK FARM BARGAIN, WOODS Co., Okla. 100 a. cultivation, bal. pasture, fenced and cross fenced. $4,000.00. Incumbrance $1,000.00. No trades. Write J. M. Sears, Lambert, Okla.

1500 ACRES WESTERN KANSAS IMproved. Every acre can be irrigated. Water inexhaustible. Greatest alfalfa section in this country. $12.50 acre. Terms. Davis, 459 Victor Bldg., Kansas City, Mo.

FOR SALE—10 ACRE SUBURBAN, OTtawa, Kan. Fine soil, well improved, choice for fruit, truck, or chickens. Good 6-room house, outbuildings. Leaving city. Bargain. $1,000 cash, balance terms to suit purchaser. Call on or address J. E. Linsdale, owner, Ottawa, Kan.

FARMS NEAR DENVER. DRIVING DIStance to city markets. Free fare to buyers. We are owners, not agents; 54,000 acres to select from; any size farm you want; very easy terms; ten yearly payments; Union Stock Yards and Packing House at Denver; vegetable and fruit canners at many nearby towns; market for everything; old settled community under completed and successful irrigation system; wheat 60 bushels per acre; three cuttings alfalfa; fine dairy and hog country; wonderful crops vegetables and small fruits. Free maps and folders on request. Write today. Chicago Title & Trust Co., Trustee, 708 Ideal Bldg., Denver, Colo.

FINE TOPEKA HOME FOR SALE—I WILL sell my place in Topeka, located on the most beautiful street in the city, near limits of city, two blocks from street car, two blocks from fine school, fine old shade, park like surroundings, lot 61½ by 205 feet, eight room house, modern in every detail, hardwood finish, four fine mantels and grates, of oak, brick and tile, big sleeping and dining porch, both screened, barn, poultry houses, etc., etc. Fine place for farmer who wants to move to the capital city. Price $5,500, worth more. Cash or terms. Interest only 6 per cent instead of the usual 7 per cent. No trade. Address R. W. E., care Mail and Breeze.

PATENTS

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

SEND FOR FREE BOOKLET, "ALL ABOUT Patents and their cost. Shepherd & Campbell, Patent Attorneys, 509 C Victor Bldg., Washington, D. C.

PROTECT YOUR IDEAS. WRITE FOR free patent books. Patents advertised for sale at our expense. Advice free. Pattison and Company, 962 G street, Washington, D. C.

PATENT WHAT YOU INVENT. IT MAY be valuable. Write me. No attorney's fee until patent is allowed. Estab. 1882. "Inventor's Guide" free. Franklin H. Hough, 532 Loan & Trust Bldg., Washington, D. C.

IDEAS WANTED—MANUFACTURERS ARE writing for patents procured through me. Three books with list 200 inventions wanted sent free. Advice free. I get patent or no fee. R. B. Owen, 34 Owen Bldg., Washington, D. C.

MEN OF IDEAS AND INVENTIVE ABILity should write for new "List of Needed Inventions," Patent Buyers, and "How to Get Your Patent and Your Money." Advice free. Randolph & Co., Patent Attorneys, Dept. 25, Washington, D. C.

FARM MACHINERY

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

SMALL POWER THRESHERS FOR GRAIN, maize, peanuts, peas, etc. Hand and Pony hay presses. Particulars free. W. H. Stopple, Dallas, Texas.

MUSIC

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

GET THE LATEST SONGS SIX MONTHS before they reach your city. Send twenty-five cents for three new songs and catalogue. We furnish any music published. Song poems wanted also. Etna Sales Co., 1431 Broadway, New York City.

BEES AND HONEY

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

SPECIAL PRICE LIST PURE CALIF. honey free. Produced by one of our Calif. apiaries. Explains grades, sized packages, prepaid prices. Inspection allowed before payment. Sample for dime to pay postage. Spencer Apiaries, Dept. D, St. Louis, Mo.

PET STOCK

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

WHITE RABBITS, PURE WHITE, PINKeyed bunnies; nice pets; fine ones, only 50c each. Write for prices on matured males, bred does, or does with young. Gerald McClaskey, 228 The Drive, Topeka, Kan.

KODAKS and SUPPLIES

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

KODAK ALBUM FREE—MENTION THIS magazine. Films developed 10c any roll, prints 2c up. We give many valuable premiums with finishing. The Fox Co., San Antonio, Texas.

CREAM WANTED

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

CREAM WANTED—THE INDEPENDENT Creamery Company of Council Grove, Kansas, buys direct from the farmer. Write for particulars.

HELP WANTED

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

GOVERNMENT FARMERS WANTED. $60 to $125 monthly. Age 21 to 50. Ozment, 38F, St. Louis.

MEN-WOMEN WANTED. $75.00 MONTH. List government jobs open—free. Franklin Institute, Dep't A-51, Rochester, N. Y.

BE A DETECTIVE. EARN $150 TO $200 per month; travel over the world. Write Supt. Ludwig, 461 Westover Bldg., Kansas City, Mo.

I CONDUCTED GOVERNMENT EXAMINAtions—can help you secure railway mail or other government positions. Trial examination free. Ozment, 38R, St. Louis.

FIREMEN AND BRAKEMEN; $100 monthly, experience unnecessary; hundreds needed by the best railroads everywhere. Particulars free. 194 Railway Bureau, East St. Louis, Ill.

FARMERS WANTED—MEN AND WOMEN everywhere. Government jobs $70 month. Short hours. Vacations. Rapid advancement. Steady work. Many appointments during summer and fall. Common education sufficient. Write immediately for list of positions now obtainable. Franklin Institute, Dept. A 51, Rochester, N. Y.

AGENTS

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

AGENTS—MAKE BIG MONEY SELLING our washing machines. Experience not necessary. Complete, durable, easily operated shows for itself. Write today. Ray Mfg. Co., Sterling, Kan.

BIG SUMMER SELLER. MAKE $10 A day. Big season is on. Get busy. Sell Concentrated Soft Drinks—just add water. Delicious summer drinks for the home, picnics, parties, fairs, ball games, etc. Every popular drink—small package, makes 30 glasses—less than 1 cent a glass. Guaranteed under U. S. Pure Food Laws. Woods made $16 first day. Quinn took 115 orders two days. Others coining money, selling to soda fountains, soft drink stands, etc. 250 other hot weather sellers. Over 100% profit. Territory going fast. Complete outfit furnished—sample case free. Just a postal today—now. American Products Company, 2409 Third St., Cincinnati, Ohio.

MISCELLANEOUS

Advertisements under this heading will be inserted at 5 cents a word. Four or more insertions 4½ cents a word each insertion. No display type or illustrations admitted.

WALNUT LOGS WANTED. 14 INCHES and up diameter, in carload lots; cash paid at shipping point. Frank Purcell, 515 Dwight Bldg., Kansas City, Mo.

TELEGRAPH OPERATORS EARN GOOD salaries. We train you in four to five months for actual service, either Morse or Wireless; positions sure. Write today. Wichita Telegraph College, Wichita, Kan.

WANTED BY ENERGETIC MAN WHO HAS wife and two children, on a farm where I can make good. Have had experience and am capable of taking charge of a good sized farm or ranch the year around. L. Whinbey, 205 E St. Sou. Herington, Kan.

FREE ILLUSTRATED BOOK TELLS OF about 300,000 protected positions in U. S. service. Thousands of vacancies every year. There is a big chance here for you, sure and generous pay, lifetime employment. Just ask for booklet S-68. No obligation. Burt Hopkins, Washington, D. C.

BIG BARGAIN FOR SHORT TIME ONLY. Send only 10 cents and receive the greatest farm and home magazine in the Middle West for six months. Special departments for dairy, poultry and home. Address Valley Farmer, Arthur Capper, publisher, Dept. W. A. 10, Topeka, Kansas.

Of the native pasture grasses of the United States, the most prominent species for domestication are said by the specialists of the United States Department of Agriculture to be Colorado bluestem and its relative, known to botanists as elymus triticoides. They are perennial and tenacious.

BIG BARGAINS IN REAL ESTATE

Dealers whose advertisements appear in this paper are thoroughly reliable and the many bargains are worthy of your consideration

Special Notice *All advertising copy discontinuance orders and change of copy intended for the Real Estate Department must reach this office by 10 o'clock Saturday morning, one week in advance of publication to be effective in that issue. All forms in this department of the paper close at that time and it is impossible to make any changes in the pages after they are electrotyped.*

320 A. wheat land, $4, ½ cash, bal. 3 yrs. Owner, Box 443, Syracuse, Kan.

ARKANSAS bottom farm close to city. $100 an acre. Papes, Mulvane, Kansas.

ALFALFA land, Sedgwick Co. Write for price list. G. R. Davis, Valley Center, Kan.

82,000 A. RANCH, New Mex. $2.50 per a. Terms. H. L. Baker, La Crosse, Kan.

960 A. Hamilton Co.; all grass, plenty water. $6 a. Walter & Patton, Syracuse, Kan.

DAIRY FARMS near milk condensary. $50 and up. Write Papes, Mulvane, Kansas.

FORD CO. farms, Catholic College and community. Millikan & Turner, Dodge City, Kan.

80 A. 3 mi. out. Good imp. 25 a alfalfa. Price $5,500. Decker & Booth, Valley Falls, Kan.

EASTERN KANSAS corn, alfalfa and wheat land $40 up. A. E. Clark & Son, Pomona, Ks.

SUMNER CO. wheat and alfalfa farms. Write for list. F. J. Wolfe, Conway Springs, Kan.

190 A. IMP., 46 alfalfa, bal. wheat, corn, pasture, $12,000. Lindholm & Son, Kingman, Ks.

BARGAIN—Choice, well improved quarter. Good terms. J. E. Sullivan, Effingham, Kan.

IMP. FARMS, alfalfa, corn and wheat lands $50 up. Mott & Kohler, Herington, Kan.

FARMS and ranches, northeast Kansas, $35 to $125 acre. Geo. Loch, Marysville, Kan.

FREE! Illustrated booklet describing richest Co. in Kan. Hosey Land Co., Columbus, Ks.

480 A. ALL GRASS. Every acre can be cult. $12.50 per acre. Box 215, German Colonization Co., Plains, Kansas.

200 A. 1½ miles Minneola, 150 a. in cultivation, bal. pasture. Well imp. $42.50 per a. Terms. Nate Neal, Minneola, Kan.

MUST SELL—12 highly improved alfalfa and grain farms; will pay car fare for 30 days to see these lands. Tate, Howard, Kan.

½ SEC., 200 cult., 20 alfalfa, bal. pasture, well improved, spring and well. $18,000. Terms. Hill & Murphy, Hoisington, Kan.

160 A. IMP. 5 alfalfa, 120 cult., bal. pasture. Living water, orchard and grove. 3½ mi. town. $40 a. M. F. House, Attica, Kan.

NESS CO. 320 a. farm, 3 mi. from good R.R. town, some imp., fine soil. Price $50. Terms. Other farms. V. E. West, Ransom, Kan.

HAVE 10 GOOD RANCHES 1000 to 10,000 a., well watered, Barber Co. Wheat and alfalfa farms. Terms. Kackley, Hutchinson, Kan.

CHOICE WHEAT and alfalfa farms. $50 up. Banner wheat and alfalfa county. Write for description. Rex Nordyke, Harper Kan.

BARGAINS in imp. alfalfa, corn and wheat farms. Right prices, easy terms. Proctor & LeGrande, South Haven, Sumner Co., Kan.

WHEAT, OATS, CORN, ALFALFA lands. Famous Sumner County, Kansas. ¼ wheat with farms. H. H. Stewart, Wellington, Kan.

BARGAIN: Improved 200 acres, 120 cultivated; 40 bottom, running water, timber; price $12,000. Will consider small trade. Write Studebaker, Salina, Kan.

160 A. WELL IMP., 15 alfalfa, 40 pasture, bal. cult. Sandy loam. 2 mi. Harper. $16,000, terms. 4 other good farms for less money. J. C. Elvin, Harper, Kan.

FINE 400 acre stock farm, 240 acres cultivation. First class alfalfa, wheat and corn land. 160 acres pasture. Fine fencing, silo, barn and other improvements. $37.50 per acre. Couch Land Co., Anthony, Kan.

REAL ESTATE dealers, listen! Work with us! Best farms and ranches in the West; fine wheat and alfalfa lands. Land at $5 to $20. If you want to sell your buyers bring them here. C. A. Pinkham, Holly, Colo.

FINE BARGAINS in wheat and alfalfa land on Solomon Valley. Send for fine list of Layton Bros., Osborne, Kansas.

160 A. well impr. 1 mi. town, $15,000. 240 a. fine improvements, $24,000. J. Jenson, Hiawatha, Kansas.

480 A. level wheat land, 8 mi. elevator. Unimproved. $8,500.00 or $3,000 quarter. Geo. W. Day, Meade, Kansas.

BEAUTIFUL RICH GRAIN & GRASS FARM Butler County, 520 a. 180 cult.; bal. grass. Level, well imp., fine location, $17,000. V. A. Osburn, El Dorado, Kan.

10 QUARTERS Gray county, sell any quarter or all $15 per a. Wheat adjoining 25 bu. These are bargains, apply quick. Chas. I. Zirkle, Garden City, Kan.

160 ACRES in north Morton county; black loam soil; all in grass; every foot tillable; $6 per acre. L. J. Pettijohn, Dodge City, Kan.

WESTERN lands in Kansas, Oklahoma and Colorado. Wheat and maize lands in any quantities. Cash or terms. W. F. Craddock, Richfield, Kansas.

WHEAT AND ALFALFA LANDS. Santa Fe Railroad land. Easy payments. Ellis Thornhill, Halstead, Kansas.

NICE smooth 800 a., 5 miles Copeland, Gray Co., Kan. All tillable; best of wheat land. Part in cultivation. $20.00 a. Good terms. Chas. E. Dye, Preston, Kan.

FINE FARM, 280 acres, 2 mi. of city of 16,000, eastern Kansas. Large house and barns. All in cultivation and alfalfa. Want small farm near Lawrence or Topeka. G. W. Goldman, N. Y. Life Bldg., K. C. Mo.

SCOTT CO. WHEAT LANDS, best quality, no Hessian fly, rust, or chinch bugs. Field 1914, 25 bu. per a. 1915 double that of 1914. Abundance good water. $15 to $25 a. Scott Co. Land Co., Scott City, Kan.

MORTON COUNTY, KAN., LANDS. 320 acres, level, black loam soil, shallow to water. Price $1400 cash. Investigate. Cecil B. Long, Richfield, Morton Co., Kan.

3120 A. IDEAL RANCH—Adjacent to Ness Co., Kan. In compact body; 90% tillable; 1,000 a. bottom alfalfa land; rich soil; 600 a. in cultivation. Two sets imp. Can lease 3,000 a. joining. Abundance water. Price $20,000, terms. For particulars address C. F. Edwards, Ness City, Kansas.

FOR SALE. 40 acres, improved, three miles Valley Falls; ½ mile school. $100 per a. 120 acres, improved. 3½ mi. Valley Falls, ½ mile school. $80 per acre. Bargains in any size farms. Write or see Herman Farm Agency, Valley Falls, Kan.

REAL ESTATE MEN, ATTENTION! Work with us. We have for sale Santa Fe R. R. and other lands southwest Kansas. Easy payments, low interest. Howell, Rhinehart & Co., Dodge City, Kan.

WE OWN 13,600 ACRES IN FERTILE Pawnee valley, smooth as a floor; best alfalfa and wheat land on earth; five sets of improvements; shallow water; will sell 80 acres or more. Frizell & Ely, Larned, Kansas.

EVERYBODY SAYS they're worth it. ½ sec. no imp., extra good, all in wheat, $20,000. ½ sec., rolling, imp., good for stock farm, $15,000. 160, no imp., priced right. 80 a. $3,000. Clark & Keller, Pratt, Kansas.

MORRIS CO. 240 a., all tillable, 160 cult., 20 a. meadow, 60 pasture, 20 a. bottom, 4 mi. town, 1½ mi. school, 8 room house, in good condition, barn, shed roof on side, other bldgs., good well, fenced with wire and posts. Price $55; mortg. $6,000 due 1919. Other farms in neighborhood are held from $65 to $80 and not better than this one. Pralle Bros. Realty Co., Bremen, Kan.

80 A., 4½ mi. Ottawa, smooth land, 30 a. bluegrass meadow, remainder cultivation. 6 r. house, good barn and outbuildings, some fruit, shade, well, R. F. D., telephone, ½ mi. school. Price right, easy terms.
160 a. near Richmond, Kan., all smooth land, extra good improvements, 5 r. house, barn 40x60, well and cistern, shade.
Write for full particulars. We make exchanges.
MANSFIELD LAND COMPANY, Ottawa, Kansas.

COFFEY COUNTY, EASTERN KANSAS. Good alfalfa, corn, wheat and tame grass lands. List free. Lane & Kent, Burlington, Ks.

IN THE KANSAS WHEAT BELT. Double your money in a few years. 160 a. smooth land $20 acre. 640 a., no improvements, smooth wheat land, $17.50 per acre. G. L. Painter, Dodge City, Kan.

MARION COUNTY LAND BARGAINS. 80 a. extra nice rich level land not improved, 5¼ miles of town. If you mean business and see this land you will take it at the low price offered. Write for full particulars. Other larger tracts. Mollohan Land Co., Peabody, Kan.

15 YEARS TO PAY FOR STOCK FARM IN CHASE COUNTY, KANSAS. 320 acres 6½ miles town, 70 acres cultivated, 10 acres alfalfa, timber, 250 acres best grazing. Everlasting water. Five room house, extra good barn, orchard, telephone, 1½ miles school. Price $12,800.00. $1,500.00 cash, balance 15 years at 5 per cent. J. R. Bocock & Son, Cottonwood Falls, Kan.

2—Rare Bargains—2

Choice level 160 a. farm, $4 a. cash. Also well imp. alfalfa farm 168 a. Perfect title. Immediate possession. $50 a. Terms. Western Real Estate Exchange Co., Syracuse, Ks.

80 Acres Only $1000

Only 7 mi. Wichita. Good, smooth black loam soil. Plenty bldgs. Possession at once. Only $6,000. $1,000 cash, time on bal. R. M. Mills, Schweiter Bldg., Wichita, Kan.

BEST WHEAT LANDS

WRITE US TODAY for free lithographed maps of Ness County, Kansas, and list of land bargains. Miner Bros., Ness City, Kan. Established 1885.

FARM BARGAIN

One of the finest 80 acre improved farms in Nemaha Co., Kan., for quick sale, at a great bargain; terms, no trade. SEWELL LAND CO., GARNETT, KANSAS

KIOWA COUNTY

Land bargains. Write for descriptions. Several of my own farms; can make terms to suit. C. W. Phillips, Greensburg, Kan.

Doniphan County Farm

80 a. farm home, 2mi. S. of White Cloud. Splendid soil; all varieties of fruit; good imp'ts. For full particulars write L. W. Beeler, Owner, White Cloud, Kan.

IRRIGATED FARMS

We are offering for sale a limited number of improved irrigated farms on easy terms. Well located, near main line of Santa Fe in Kearny County, Kansas. Water for irrigation from river and pumping plants. Electric current for all power and lighting purposes. Price ranging twenty-five to one hundred dollars per acre. Address
The Garden City Sugar and Land Co.
Garden City, Kansas.

FARM SNAPS

We shall sell four farms between now and September 1st at whatever they will bring. Your own price and your own terms. Will accept as low as one-fifth down—balance over period of twenty years if desired. This may seem "fishy" but we mean just what we say. If you can use one of these farms it will pay you to write for further information and description.
640 acres—choice for all grains and grasses improved—within eighty miles of Kansas City, near Sedalia—All Tillable.
Any part of 800 acres extra choice, Linn County, Kansas, near good towns.
240 acres Labette County, Kansas—well improved—near Parsons.
The best orchard bargain in United States; 218 acres, half orchard; thoroughly equipped, and combined with hogs and poultry. Eastern Kansas. Big crop this year.
Refer any Bank in Kansas City.
If interested at all, write us today.
INLAND SECURITY CO.,
Commerce Bldg., Kansas City, Mo.

FOR SALE OR EXCHANGE

TRADES EVERYWHERE. Exchange book free. Bersie Agency, Eldorado, Kan.

200 ACRES, nicely imp., 40 a. alfalfa, to trade. Youngs Realty Co., Howard, Kan.

LAND, sale or exch. Mo. to Pacific, Dakota to Gulf. Foltz, 311½ N. Main, Hutchinson, Ks.

BIGHAM & OCHILTREE sell and trade best corn, alfalfa, wheat land in U. S. Write for list. 116 N. 8th, St. Joseph, Mo.

HEADQUARTERS for best wheat and alfalfa lands in Kansas; will exchange and assume. Jones Land Co., Sylvia, Kansas.

FARM and grazing lands. Custer, Blaine, Thomas and Hooker Cos., for sale and trade. B. C. Empfield, Broken Bow, Neb.

FOR SALE or exchange. Irrigated farms and stock ranches in the Arkansas Valley of Colorado. C. F. Cook, Box 814, Lamar, Colo.

FARMS AND RANCHES, imp. and unimp., for sale or trade throughout Western Kansas. Eugene Williams, Minneola, Kan.

FOR SALE OR TRADE, well improved 80 acre farm. Neodesha three miles. John W. Deer, Neodesha, Kansas.

6 STOCKS of general mdse., 3 stocks of hardware and implements, 10 residences, 3 farms, to exchange for income property. Hemphill Land Co., Lawrence, Kan.

STOCK RANCHES in E. Colo., 640 to 4000 a. to trade for E. Kansas farms. All close to free range. Last chance for the cattleman to get cheap land. Write for description. The Pike-Syp Realty Co., Lamar, Colo.

FOR EXCHANGE. Stock general merchandise, will invoice about $15,000. Located in good town. Want land. A. A. Murray, Westmoreland, Kan.

GOOD BLACKSMITH shop, well equipped, for 80 a. farm. 2 apartment houses in Kansas City, Mo., for land. Bader & Webster, Junction City, Kan.

TWO NICELY IMPROVED Harvey Co. farms, and $16,000.00 clothing stock, for Western Kansas land. Cook & Francis, Newton, Kan.

EXCHANGE—GRAIN and ALFALFA FARM 320 a. 1 mi. Waverly. Good land, about ½ in alfalfa, clover and blue grass, balance good farming land. Nicely located. Well improved. Price $100.00 per a. Will take good small stock ranch in Kansas. W. H. Lathrom, Waverly, Kan.

EASTERN KANSAS RANCH For Sale or Trade. 1440 acres good grass, 600 acres new land. Price $20 per acre. Will take small improved farm as part payment. Write Theodore Veeste, Olpe, Kansas, or J. H. Crites, Fredonia, Kan.

Wanted!

Western Kansas or Panhandle Ranch for Kansas City Business properties.

Theodor C. Peltzer Investment Co.
534 Scarritt Bldg., Kansas City, Mo.

THE BEST PLACE FOR A HOME The best school town in Kansas surrounded by a rich farming country. Farms and city property for sale. T. B. Godsey, Emporia, Kan.

MISSOURI

KERAN & WEGNER, real estate, Lockwood, Mo. Write for information. English or German.

160 A. well imp. Well and spring. 60 a. cult., bal. timber. R. F. D. and phone. $17.50 a. Terms. J. A. Blair, Marshfield, Mo.

160 ACRES for $1,200.00. 40 a. cult., bal. in virgin timber. 3 room house, barn, etc. Close to school and P. O. I have other bargains. R. F. Jenkins, Ava, Mo.

ROCKAWAY BEACH, the choicest spot on beautiful Lake Taneycomo in South Mo. Fine fishing, boating, bathing. Lots; Acres; Farms. Low prices. Easy terms. Literature free. A. Merriam, Ellis & Benton, Kan. City, Kan.

20 A. well imp., all level, fenced, 2 a. timber. Suitable for chicken ranch, $1,000. A. Cawthra, Fordland, Mo.

ATTENTION, FARMERS. If you want a home in a mild, healthy climate with pure water and productive soil and where land can be bought at a reasonable price write Frank M. Hammel, Marshfield, Mo.

160 ACRES POLK CO., MO. Four miles from Bolivar, the county seat. Fine public road, rural mail, telephone. Farm highly improved. Best of soil, running water, ideal for raising blooded stock. Trade established. Prices right and liberal terms. (Owner.) K. H. Brown, Bolivar, Mo.

CENTRAL MISSOURI FARMS—Write for descriptive price list of corn, wheat, clover and bluegrass farms that will prove profitable and satisfactory for homes and investments. HAMILTON & CRENSHAW, Box 7, Fulton, Mo.

Fine Southwest Missouri Farm AT A BARGAIN.

320 acres, 250 in high state cultivation, fenced and cross fenced with wire, fine 8 room house, 3 good barns and other outbuildings, fine well, 4 everlasting springs and creek, 3 miles to good town on Frisco R. R., ¾ mile to school, R. F. D. and telephone, $37.50 per acre. Terms. E. S. Phillips, Marshfield, Missouri.

AN OZARK BARGAIN

Eighty acres unimproved fruit land, splendid neighborhood, one mile and half from railroad, same distance from Merimac river in Dent County, Missouri. Seven miles from Salem, the county seat; $15.00 per acre. First check for $1200 takes it; perfect title.
I. D. GRAHAM
CAPPER BLDG., TOPEKA, KAN.

OKLAHOMA

SOUTHERN REALTY CO., McAlester, Okla., is offering cheap farms and pastures in Eastern Oklahoma, on good terms. Write them if interested.

I'M STILL SELLING LAND at $8 to $30 per acre. Over 100 farm homes sold to readers of Mail and Breeze in the past ten years. My Free List and Map will interest you. Perry DeFord, Oakwood, Okla.

F. M. TARLTON & CO., will mail you list of farms in northeast Oklahoma. Write them. Vinita, Oklahoma.

Oklahoma Land For Sale

Good land in Northeastern Oklahoma; price from $20.00 to $35.00 per acre. Write for price list and literature. W. C. Wood, Newata, Okla.

FOR SALE BY THE OWNER

One of the best valley farms in northeastern Oklahoma; 25% cash; balance long time. Extra strong land, no overflow, splendid improvements, two or three sets of good buildings; 643 acres; can be divided to make two or three good farms; 3 mi. east of Vinita, Craig County, Okla. W. M. Mercer, Aurora, Ill.

Big Advance Sure

Following this big crop, there is certain to be a sharp advance in the price of farm lands in Oklahoma this fall and winter. It is the time to buy. Buy before the rush commences and get in on the advance. Why not clean up a few hundred or a few thousand dollars profit the next few months? You could not lose and in all probability would gain some easy money. The man who wants a farm for a home can never again buy so cheap. I sell only our own lands so you will have no commissions to pay. Come and see me. Frank Meadows, Hobart, Okla.

WISCONSIN

30,000 ACRES cut-over lands; good soil; plenty rain; prices right and easy terms to settlers. Write us. Brown Brothers Lumber Co., Rhinelander, Wis.

WE WANT more settlers to locate on the rich, mellow clay loam farm land in Rusk Co. Write for free map and folder. Faust Land Co., Box 101, Conrath, Wis.

COLORADO

FOR SALE: Fruit tracts and irrigated farms in Northern Colorado. Write me what you want. **A. H. Goddard, Loveland, Colorado.**

A FEW REAL BARGAINS in land. 160 acres all farm land, 5 miles from town, ½ mile to school; good little house, 20 feet to soft water. 35 acres in corn now. $15 per acre. **Harry Maher, Deer Trail, Colo.**

FARMERS neither dry out nor drown out! Farm Colorado irrigated land. $15 to $35 including water rights, also Kansas and eastern Colorado dry lands. **Morris Land Co., Lawrence, Kansas.**

TWO FINE improved Colorado farms 320 and 640 acres near railroad—7 and 12 miles from Denver. Good water rights, fully equipped and stocked for general farming, poultry and hog raising, all under cultivation. Big grain crops and big money makers. For quick turn price and terms address **E. W. Genter, Owner, 619 Commonwealth Bldg., Denver, Colo.**

FAMOUS SHALLOW WATER DISTRICT

Northeastern Colorado. Wonderful grain and stock country, best corn, wheat and natural alfalfa country in the West. Good climate, markets, church and schools. Productive soil. Small cash payment, balance like rent. Write for booklet and excursion rates.

Platte River Valley Land Company, State Bank Building, Omaha, Nebraska.

ELBERT COUNTY

20,000 acres of land in the rain belt in **ELBERT COUNTY, COLORADO,** where corn is making from 20 to 30 bushels, oats 30 to 80 bushels and all crops in proportion. $8.00 to $25.00 per acre, your terms.

Our specialty, 160 acres seven miles of good town and railroad, 120 acres in cultivation, north slope, fair improvements, all fenced, $1,100 worth of crops were taken off of this farm in 1914. Price $12.50 per acre. Terms.

Write us for description and literature. We need you and you need the land. **THE SILLS LAND COMPANY, SIMLA, ELBERT COUNTY, COLORADO,** or **PUEBLO, COLORADO.**

ARKANSAS

WRITE Dowell Land Company for bargains in Arkansas lands. **Walnut Ridge, Ark.**

RICH VALLEY FARMS with all new buildings on most liberal terms ever offered. **Valley Park Imp'm't Ass'n, Edwardsville, Ill.**

IF INTERESTED IN N. E. ARKANSAS farm and timber lands, write for list. **F. M. Messer, Walnut Ridge, Ark.**

ARKANSAS farms and cut-over timber lands are safe and sensible investments. Right now is the time to buy. Write for list and pamphlet. **Ben H. Crowley, Paragould, Ark.**

122 A. 4 mi. of Waldron, Co. seat, 65 a. in cult.; valley land; 2 sets improvements; good fruit; good roads. Price only $25 per a. **Frank Bates, Owner, Waldron, Ark.**

STOP PAYING RENT! Own your own home. Cheaper than renting. Our new plan tells you how. Rich, sure crop land, no rocks or swamps. Free Map. **Tom Blodgett Land Company, Desk 3, Little Rock, Ark.**

80 ACRES, bench and upland, with 60 cleared. House, barn, orchard, etc. Good neighborhood, 6 miles out. Price $1,365.00. Other farm lands for sale. Write **J. L. McKamey, Imboden, Ark.**

TEXAS

FAIRBANKS GARDEN AND POULTRY FARMS.

10 and 20 acre tracts. Right at station, school, store, postoffice, shell road and railroad. 40 minutes from Houston by rail or auto. Black sandy soil. All prairie. Monthly or yearly payments. **Commercial Investment Co., 503 Commercial Bank Bldg., Houston, Texas.. Preston No. 1520.**

FOR SALE

Farms, ranches and business propositions in south and southwest Texas, or lovely homes in Beautiful Yoakum. Are you interested? Write us just what you want and we will help you to get it. Can make you low prices and long terms. We also have some fine colonization propositions. Watch our ads. **Woolsey-Lacy Realty Co., Box 246, Yoakum, Texas.**

NEBRASKA

CHEYENNE CO. wheat averages 25 bu. Corn 35. A few snaps at $15 to $30. Easy terms. **Osborn&Kratz,BondedAbstractors,Sidney,Neb**

COMB. stock, grain and dairy farms. 50% cheaper than same quality land farther east. **Howard & Richardson, Ravenna, Neb.**

MONTANA

FAMOUS JUDITH BASIN, MONTANA.

Wonderful grain and stock country, rainfall unfailing, mild winters, delightful summers, healthful climate, crop failures unknown, extra fine stock ranches, natural alfalfa and timothy land, greatest non-irrigated grain growing section in United States, holds record winter wheat and barley. No destructive insects. Write for literature. **J. W. Studebaker, State Agent, McPherson, Kansas.**

NEW YORK

WHO wants a nice home and farm? Cheap. 8 acres one mile to railroad town, 8 room house, plastered, papered. Barn, tool house, shed, hen house, hog house, fruit. Only $1000; $400 cash. **Hall's Farm Agency, Owego, Tioga Co., New York.**

Prime Cattle Are Scarce

It Is Time for Grassers to Start to Market in Large Numbers—Wheat Market Steady Last Week

LAST week's supply of cattle was larger than in the previous week, and the character of the supply has changed somewhat, though there has been no material increase of grass cattle. It is time that Oklahoma grassers were starting to market in large numbers, but grass is washy and gains have not been as satisfactory as was expected. Plenty of grass, though washy, beats no grass at all, and the cattlemen are not complaining. Prime cattle have been scarce, and have sold at the highest prices of the year. Heavy weight corn fed cattle brought $9.50, yearlings $9.50, and Clinton county, Missouri, grass and corn steers $9.40. Straggling shipments of pulp fed Colorados arrived and sold at the season's top prices, up to $9.35, highest price on record here for pulp fed steers, bulk of the native fed steers sold at $8.50 to $9.25. In the quarantine division 325 carloads arrived, largest supply of the season, and nearly all of it was from Texas. North Texas fed steers made up bulk of the quarantine supply, selling at $8.20 to $9.00, the latter a new high top here. Some medium Texas fed steers brought $7.50 to $8, good south Texas grass steers $7 to $7.50, common Texas and Oklahoma grass steers $6.25 to $7.25. Stockers and feeders are firm and there is some call for heavy feeders, some of these selling at $8.55 this week, bulk of stockers and feeders medium quality, and selling at $7.25 to 7.67. Hogs made gains last week. Order buyers paid the top price, $7.75. Packers have been good buyers all this week, paying close to the top every day. Receipts for the week were 47,000. The tendency is toward higher prices, which should continue unless checked by unfavorable crop developments in the near future. Sheep and lambs are stronger after showing repeated weakness on various days. Native spring lambs brought $9.75. Arizona spring lambs were received liberally last week, and sold at $9.75 to $10.20, native ewes $5 to $5.50, some Texas mixed sheep at $5.75. Inquiry for feeding stock is developing, and early buyers may fare better than those who wait till late in the season, because of the big demand that is sure to develop later, coupled with a volume of supply below requirements.

Some Record Prices For Steers.

Two carlots of Hereford steers marketed by the Kansas State Agricultural college on the Kansas City market June 29 brought the highest price paid for fat cattle on that market this year. The cattle brought $9.50 a hundred pounds and weighed 850 pounds. They were purchased last fall by the college at a cost of $38 a head.

The cattle were divided into three lots and were fed for six months. All were fed silage, alfalfa, and cottonseed meal. In addition one lot received kafir, another corn, and the third hominy.

Two classes of cattle—pulp fed from Colorado and quarantine from Texas—brought record prices on the local market today. The quarantine cattle equaled the highest price ever paid on any market in the United States, local stockmen said, selling for $9. There were 17 head in the shipment which arrived from Tenbrook, Texas, and they averaged 1,278 pounds. The pulp fed steers were from Fort Collins, Colo., and sold for $9.35. Twenty-two head averaging 1,303 pounds brought this price. The local market was unusually active last week and local dealers say this is caused by the growing shortage of good fed cattle.

FAT STEERS.

Prime heavy, corn fat	$9.10@9.50
Prime, medium weight	9.25@9.50
Good to choice	8.75@9.05
Fair to good	8.00@8.70
Western steers, choice	8.75@9.25
Fair to good	7.90@8.70
Common to fair killers	7.00@7.80
Prime yearlings	8.50@9.50

COWS AND HEIFERS.

Prime	7.00@7.50
Good to choice	6.50@7.00
Fair to good	5.75@6.45
Cutter cows	5.25@5.70
Canners	4.65@5.20
Prime heifers	8.75@9.50
Fair to choice	7.85@8.70
Common to fair	6.50@7.80

QUARANTINE CATTLE.

Steers, grain fed	$8.65@9.00
Steers, meal and cake fed	7.75@8.60
Steers, grass fat	5.75@7.75
Cows and heifers	4.75@7.35

FEEDERS AND STOCKERS.

Selected feeders	8.00@ 8.50
Good to choice feeders	7.75@ 8.00
Medium to good feeders	7.25@ 7.65
Common to fair feeders	6.85@ 7.20
Selected stockers	8.00@ 8.50
Medium to good stockers	7.25@ 7.90
Common to fair stockers	6.85@ 7.20
Stock cows	5.50@ 6.85
Stock heifers	6.00@ 8.00
Stock calves	7.00@ 8.60
Killing bulls	5.00@ 6.50
Veal calves	6.50@10.25

HOGS.

Choice hogs, over 200 pounds	$7.60@7.70
Choice hogs, over 250 pounds	7.50@7.65
Light hogs, 150 to 200 pounds	7.50@7.75
Rough to common	7.35@7.50
Stags	6.70@7.40
Bulk of sales	7.55@7.65

SHEEP.

Spring lambs	9.00@9.75
Clipped lambs	8.00@8.75
Clipped yearlings	6.50@7.50
Clipped wethers	5.65@6.25
Clipped ewes	5.00@5.75
Goats	4.25@4.65

War Orders For Mules.

Demand for mules for war use is more urgent, and trade in horses on that account about the same as in preceding weeks. There is practically no domestic inquiry.

Receipts in the last seven days were 1,075 head, compared with 865 in the preceding week and 443 a year ago.

Prevailing quotations are as follows:

Drafters, 1,700 pounds up	$200@250
Drafters, fair to good	165@195
Chunks	135@175
Southerners, fair to good	75@170
Mules—	
13.2 to 14.2 hands	$100@125
14.2 to 15.2 hands	115@140
15.2 to 16 hands	135@180
16 to 16.2 hands	180@240

Wheat Prices Holding Up Well.

Broomhall estimated shipments of wheat from Argentina last week at 1,600,000 bushels, compared with 1,688,000 bushels actually exported the previous week and 360,000 bushels a year ago. Estimated corn shipments are 4¼ million bushels.

The apathy among English buyers is attributed largely to the fact that it is believed the coming season will find the British Empire independent of foreign wheat. Surplus available from home territory is placed at 280 million bushels, if present conditions are maintained. European requirements will be large, as drouth and reduced acreage will militate against yields, so the United States will be called upon to supply a large quantity. The importance of taking the Dardenelles to release Russia's new crop will be a strong factor in price making.

The Oklahoma state report for July estimates condition of wheat at 80, the same as a month ago, indicating a crop of 47 million bushels, compared with 42 million bushels last year. Fifty-one per cent of the crop is harvested, with an estimated average yield of 15.3 bushels an acre. Condition of corn is 84, compared with 83 a month ago and 82 a year ago; oats 85, the same as a month ago.

All offerings of wheat in carlots, excepting yellow and ordinary, sold readily at 1 to 2 cents higher prices. Sales of hard wheat were: No. 2, nominally $1.26@1.34; No. 3, nominally $1.24@$1.33; No. 4, $1.26; live weevil, $1.22.

Soft Wheat—No. 2, $1.16@1.18; No. 3, $1.12@1.15; live weevil, $1.10.

Mixed Wheat—No. 2, $1.09; No. 3, $1.09.

Prices of corn were unchanged to a cent higher, with advance on mixed. Demand was moderate. Sales were: No. 2 white, nominally 74½@75c; No. 3, 73½c; No. 2 yellow, 75c; No. 3, 74@74½c; No. 2 mixed, 73½@74c; No. 3, 73c; sample, 60½c.

Oats prices were a cent higher for red and unchanged on others. Sales were: No. 2 white, 47c; No. 3, 46½c; No. 2 mixed, 43@44c; No. 3, 42@43c; No. 3, red, 44½c.

Kafir—No. 3 white, $1.14.

Cash Wheat in Chicago.

Cash wheat—No. 2 soft winter, $1.26½@1.28; No. 2 hard winter, $1.28½.

Cash corn—No. 2 mixed, 75¾@76c; No. 3, 75½c; No. 2 white, 75¾@76c; No. 3, 75½c; No. 2 yellow, 75¾@76c; No. 3, 75¼@75¾c.

Cash Oats—No. 2 white, 49¼@49½c; No. 3, 48½@49c; No. 4, 47¾@48¾c; standard, 49@49¼c.

Hay Quotations.

Receipts of hay for the week ended yesterday aggregated 548 cars, including 214 prairie, 9 timothy, no clover mixed, no clover, 324 alfalfa and 1 straw. The corresponding period in 1914 had 459 cars.

During the month of June 2,009 cars came in, made up of 1,216 prairie, 83 timothy, 12 clover mixed, 1 clover, 689 alfalfa and 8 straw. May had 2,045 cars, against 4,032 in April. June, 1914, had 1,478 cars.

Owing to the small supply prices for straw advanced 50 cents a ton and it is selling higher than low grade alfalfa.

Quotations follow: Prairie, $12.50@13.50; No. 1, $10.50@12; No. 2, $7.50@10; No. 3, $4@7. Timothy, No. 1, $15@16; No. 2, $10@14.50; No. 3, $7@10. Clover mixed, choice, $15@15.50; No. 1, $13@14; No. 2, $7@12.50. Clover, No. 1, $12@13; No. 2, $8@11. New alfalfa, choice, $11.50@12.50; No. 1, $10.50@$11.50; standard, $9@10.50; No. 2, $6@8.50; No. 3, $4@6. Straw, $6@6.50. Packing hay, $3@3.50.

Butter, Eggs and Poultry.

Kansas City.—Quotations on 'change were as follows:

Eggs—Extras, new white wood cases included, 18½c a dozen; firsts, 17c; seconds, 13½c.

Butter—Creamery, extra, 26c a pound; firsts, 24c; seconds, 22c; pound prints 1c higher; packing stock, 19½c.

Live Poultry—Broilers, 19@22c; hens, No. 1, 12c; roosters, 8½c; turkeys, 13c; ducks, young, 14c; old, 10c; geese, 6c.

SPECIAL NOTICE

Farmers who wish to obtain the full market price for their wheat by marketing it themselves as they do their livestock will do well to write Hodgson-Davis Grain Company, Kansas City, Missouri, for any information they may desire.—Advertisement.

WHAT BREEDERS ARE DOING

FRANK HOWARD,
Manager Livestock Department.

FIELDMEN.

A. B. Hunter, S. W. Kansas and West Okla., 614 So. Water St., Wichita, Kan.
John W. Johnson, N. Kansas and S. Nebraska. 820 Lincoln St., Topeka, Kan.
Ed R. Dorsey, North Missouri, Iowa and Illinois, Cameron, Mo.
Jesse R. Johnson, Nebraska, 1937 South 16th St., Lincoln, Neb.
C. H. Hay, S. E. Kan., So. Mo. and E. Okla., 4204 Windsor Ave., Kansas City, Mo.

PUREBRED STOCK SALES.

Claim dates for public sales will be published free when such sales are to be advertised in the Farmers Mail and Breeze. Otherwise they will be charged for at regular rates.

Jacks and Jennets.

Sept. 15—W. H. Ronejue, Atlanta, Mo.
Oct. 15—Geo. Lewis & Son, Stahl, Mo.

Shorthorn Cattle.

Aug. 12—Chris Wilson, Glasco, Kan.
Oct. 18—E. E. Carver & Son, Guilford, Mo.
Oct. 27—Henry H. Kuper, Humboldt, Neb.
Oct. 28—E. E. Dowell & Son, Hiawatha, Kan.

Holstein Cattle.

Nov 17—Mott & Sanborn, Herington, Kan.

Poland China Hogs.

Sept. 1—C. D. McPherson, Grantville, Kan.
Sept. 28—J. O. James, Braddyville, Ia.
Oct. 7—Ed. W. Cook, Pattonsburg, Mo.
Oct. 15—O. B. Clemetson, Holton, Kan.
Oct. 18—E. E. Carver & Son, Guilford, Mo.
Oct. 19—Sigel Brown, Reeds, Mo.
Oct. 20—A. F. Blinde and Geo. Brown; sale at Tecumseh, Neb.
Oct. 20—H. C. Graner, Lancaster, Kan.
Oct. 21—H. B. Walter, Effingham, Kan.
Oct. 23—Fred B. Caldwell, Howard, Kan.
Oct. 26—Herman Gronniger & Sons, Bendena, Kan.
Oct. 27—Fred G. Laptad, Lawrence, Kan.
Oct. 28—T. E. Durbin, King City, Mo.
Oct. 29—J. D. Gurthet, Pattonsburg, Mo.
Nov. 3—J. L. Griffiths, Riley, Kan.
Jan. 18—D. C. Lonergan, Florence, Neb.
Jan. 21—A. F. Blinde and Geo. Brown; sale at Auburn, Neb.
Jan. 25—A. J. Swingle, Leonardville, Kan.
Feb. 2—Frazer Bros., Waco, Neb.
Feb. 3—H. J. Beall and Wisel Bros., Roca, Neb.
Feb. 4—J. A. Godman, Devon, Kan.
Feb. 11—S. A. Nelson & Sons, Malcolm, Neb.
Feb. 15—Herman Gronniger & Sons, Bendena, Kan.
Feb. 16—H. C. Graner, Lancaster, Kan.
Feb. 17—Ed Sheehy, Hume, Mo.
Feb. 17—H. B. Walter, Effingham, Kan.
Feb. 18—J. H. Harter, Westmoreland, Kan.
Feb. 23—F. E. Moore & Sons, Gardner, Kan.
Feb. 27—Ben Anderson, Lawrence, Kan.

Spotted Poland China Hogs.

Sept. 23—Thos. F. McCall, Carthage, Mo.
Oct. 6—H. T. Dickerson, Jameson, Mo.
Nov. 2—Alfred Carlson, Cleburne, Kan.

Duroc-Jersey Hogs.

July 28—Dr. C. E. Still, Kirksville, Mo.
July 28—A. L. Guthridge, Clearwater, Kan.
Sept. 1—W. W. Otey & Sons, Winfield, Kan.
Sept. 2—C. D. McPherson, Perry, Kan.
Oct. 14—Geo. Klusmire, Holton, Kan.
Oct. 27—Fred G. Laptad, Lawrence, Kan.
Nov. 3—Martin Kelley, Verdon, Neb.
Nov. 4—E. M. Getchell, Lamont, Kan.
Nov. 8—E. N. Farnham, Hope, Kan.
Nov. 18—Mott & Sanborn, Herington, Kan.
Jan. 24—Geo. Briggs & Sons, Clay Center, Neb.
Feb. 11—J. H. Proett & Son, Alexandria, Neb.
Feb. 24—J. M. Layton, Irving, Kan.

Chester White Hogs.

Feb. 24—J. M. Layton, Irving, Kan.

S. W. Kansas and W. Oklahoma

BY A. B. HUNTER.

G. B. Wooddell, of Winfield, Kan., owner of the Walnut Valley Farm, maintains one of the good purebred Duroc-Jersey herds of the state. At present he is offering September and February boars on which he is making prices that should move them at once. He also has 65 early spring pigs which he can sell in pairs and trios not related. If interested write him and mention Farmers Mail and Breeze.—Advertisement.

N. Kansas and S. Nebraska

BY JOHN W. JOHNSON.

The Kansas Herd of Chester White hogs, Leavenworth, Kan., is one of the strongest herds of this popular breed in the West. The great herd boar doing service in the

FARM LOANS

FARM AND CITY MORTGAGES a specialty. Write us if you wish to borrow. **Perkins & Co., Lawrence, Kan.**

FARM LOANS, Missouri, Kansas, Oklahoma and Arkansas, low rates, liberal privileges, most favorable terms. No delay. You get all you borrow. **The Deming Investment Co., Oswego, Kan. Branch offices: Wichita, Kan.; Oklahoma City, Muskogee, Durant, Okla.; Little Rock, Ark.**

Make Your Kansas Mortgages

earn from 12% to 25% instead of 6%. Our method is authorized by our state laws and endorsed by our leading bankers, lawyers, merchants and farmers. Particulars free. **E. F. Parks, 412 Bitting Bldg., Wichita, Kan.**

IDAHO

IMPROVED irrigated lands, $60 a. up. Write for booklet. **J. C. Lindsey, Twin Falls, Idaho.**

LIVESTOCK AUCTIONEERS.

Livestock auctioneer. Write for open dates.
Jas. T. McCulloch, Clay Center, Kan. The breeder: References I am selling for every year. Write for open dates.

Spencer Young, Osborne, Kan.
Livestock Auctioneer. Write for dates.

WILL MYERS, Livestock Auctioneer
BELOIT, KANSAS. Ask the breeders in North Central Kansas. FOR DATES ADDRESS AS ABOVE.

Col. E. Walters Skedee Oklahoma
W. B. Carpenter 818 Walnut St. Kansas City, Mo.
Sell your farms and city property at auction, as well as your pedigreed livestock. Write either for dates. Also instructors in
Missouri Auction School

BERKSHIRES.

Hazlewood's Berkshires
Spring boars, bred gilts—immune: priced to sell.
W. O. HAZLEWOOD, WICHITA, KANS.

High-Class Berkshires
Winter and spring pigs of either sex and outstanding boars a specialty. Write
J. T. BAYER, YATES CENTER, KANSAS

Big Type Unpampered BERKSHIRES
Cholera Immune. 150 sows bred to Fair Rival 10th, King's 4th Masterpiece, Truetype, King's Truetype, and the great show boar King's 10th Masterpiece. All long, large and heavy boned. Sows farrow every week from March 1 to Dec. 1. 80 bred sows and gilts to farrow soon. Open gilts and boars ready for service. Not a poor back or foot. Every man his money's worth. E. D. KING, Burlington, Kansas.

Sutton Farm Berkshires
The Greatest Winners of 1914
Winning at the five leading state fairs, Missouri, (inter-state) Iowa, Nebraska, Kansas and Oklahoma where are held the largest swine shows in the world—over 100 Championships, firsts and seconds, including Grand Champion Boar Prize at each show on the 1000-pound DUKE'S BACON.
Herd headers, foundation stock and show yard material our specialty.
Sutton Farm, Lawrence, Kans.

HAMPSHIRES

REGISTERED HAMPSHIRES 150 gilts and boars, all ages. Cholera Immuned. Description guaranteed. C. E. LOWRY, Oxford, Kan.

C. T. Drumm & Sons, Longford, Kan. Breeders of Hampshires, Herefords, Spotted Polands. 4 Nov. Hampshire boars, $15 each. Spring pigs, both sexes and breeds. 1 yr. bull. Address as above.

IMMUNE HAMPSHIRES
Boars, bred gilts, tried sows and weanlings. Cut prices for 30 days.
DR. E. G. L. HARBOUR, Baldwin, Kans.

For Hampshire Hogs, Dutch Belted Cattle, Arab Stallion COLLIE DOGS AND GEESE FEATHERS.
WRITE C. W. WEISENBAUM, ALTAMONT, KANSAS.

Shaw's Hampshires
Boars ready for service. Spring pigs, either sex. Pairs and trios at reduced prices. All nicely belted. Satisfaction guaranteed WALTER SHAW, R.6, Wichita, Kan.

HAMPSHIRES Best of blood lines, well marked pigs, pairs or trios, with young boar to mate gilts. Breeding stock at all times for sale. Satisfaction guaranteed.
S. E. SMITH, LYONS, KANSAS.

O. I. C. HOGS.

Herd Boar For Sale Gilts to farrow in July and open. Pigs, pairs and trios. A. G. Cook, Luray, Kan.

O. I. C. BRED SOWS and GILTS
A few tried sows and gilts bred for summer farrow; boars ready for service, pairs and trios not related. Best I ever offered. Very reasonable prices.
JOHN H. NEEF, BOONVILLE, MISSOURI

Pleasant Vale Herd O. I. C. Hogs
Tried sows bred for September and October farrow. Fall gilts for sale, open. Also a few fall boars. Spring pigs, both sexes. Chas. N. Snyder, Effingham, Kan.

TURNER'S CHESTER WHITES
June Prices: 250 spring pigs, white and growthy. White Rock and Chief Select breeding. $15 each. Pairs $25, Trios $65. Buy early and save on express. One of the largest and best herds in the west. Amos Turner, Wilber, Saline Co., Neb.

Choice O.I.C. Pigs
AT REDUCED PRICES.
Spring pigs, $12 each, $22 per pair; $33 per trio. Bred gilts, $20 to $25 each. Have spring boars, no kin to gilts or their pigs. Bred sows, $30 to $35. My herd carries prize winning blood and represents the most popular strains in the country. Each individual guaranteed to satisfy.
F. J. GREINER, BILLINGS, MISSOURI

herd was grand champion at Topeka last season. He is the sire of over 50 pigs of last spring farrow that are for sale. Arthur Mosse, the genial proprietor, has added good sows of meritorious breeding to his herd from time to time and it is now a collection of choice brood sows. The writer had a splendid visit with Mr. and Mrs. Mosse and their family at their nice country home four miles out from Leavenworth last Monday. Mr. Mosse will be remembered as the able coach of the K. U. football team. The advertisement of his splendid herd of Chester White hogs will appear in the Farmers Mail and Breeze soon. You can write him any time about stock and please mention this notice in the Farmers Mail and Breeze when you write.—Advertisement.

N. Missouri, Iowa and Illinois

BY ED. R. DORSEY.

T. B. Durbin of King City, Mo., is one of the old time Poland China breeders of the state and he has one of the nicest lots of pigs we have seen anywhere. At the head of the herd is the old hog Blue Valley Ex. that has been used in the herd for four years and he certainly has made good in Old Trusty Poland China herd. The old hog is assisted by one of the best young hogs in the country, Trusty King, by King of All, by Long King's Equal, out of Wonder Jumbo 3d, by A Wonder. Most of Mr. Durbin's spring pigs are by Trusty King but he has them by Blue Valley Ex., Big Bob, Black Big Bone 2d, and Long Big Bone. These pigs are out of daughters by Blue Valley Ex., Long King's Best, Col. Hadley, Big Hadley, A Wonder, High Ball Look, Jumbo Jr., Ott's Big Orange, King of All, Big Nelson, Big Bob, Big Orange and Pawnee Prince. Mr. Durbin has about 200 spring pigs. On October 28 he will sell 50 of his best.—Advertisement.

Richly Bred Poland Chinas.

J. B. Gurthet of Pattonsburg, Mo., owns one of the good collections of Poland Chinas in that state. His herd is headed by Long King's Equal 2d, Orange Wonder and Model Wonder. The sows are sired by such boars as A Wonder, King of Wonders, Model King, Excellent Wonder, Major Blaine, Big Orange, Long King's Equal, Panorama, Colossal, Missouri Wonder and Expansion Wonder. The mating of these three good boars and this richly bred collection of sows has produced a very fine crop of spring pigs. On October 29 Mr. Gurthet will sell 60 of these pigs. Col. P. M. Gross of Macon, Mo., will do the selling. You will not only have the opportunity in this sale to buy the very best in Poland Chinas but you will have an opportunity to hear one of the best auctioneers in the business. A man of whom it is said, "He has sold more livestock than any other man in the world." Get your name on Mr. Gurthet's catalog list. When writing him kindly mention this paper. —Advertisement.

Popular Poland China Breeder.

Ed. W. Cook of Pattonsburg, Mo., is rapidly gaining in popularity among the breeders and lovers of Poland Chinas. This popularity is due to the strictly honest business methods of Mr. Cook and the high class Poland Chinas which he is breeding and sending out. His bred sows constitute one of the best bred collections of Poland Chinas in Missouri. They are sired by such noted boars as King Joe, A Wonder, Big Joe, Hadley's Prospect, Big Ben, Again Expansion, Big Jumbo 2d, Excellent Wonder, Big Mastin, Monticello Boy, Long Jumbo, Big Bone Chief, King of All and Big Smooth Price. At the head of this good collection of sows Mr. Cook is using King Joe and Bob the Wonder. King Joe is not only an exceptional individual but a producer of very high class pigs. He is sired by King of Wonders and out of Big Joe's Success by Big Joe, that Henry Fesenmeyer thinks is the best boar he ever owned. Bob the Wonder is sired by Big Bob and out of Long Model, by Big Wonder. Mr. Cook's spring crop of pigs is sired by his two herd boars. On October 7 Mr. Cook will hold his annual fall sale, when he will sell the tops of this spring's crop. Col. Harve Duncan of Fairfield, Ia., will do the selling. Ask to have your name placed on the catalog list and kindly mention this paper.—Advertisement.

Nebraska

BY JESSE R. JOHNSON.

J. H. Proett & Son, Duroc-Jersey breeders, at Alexandria, Neb., ask us to claim February 11 as the date for their winter bred sow sale. The Proetts own and have at the head of their herd the great line bred Valley Chief boar, Big Lincoln Valley Chief. He is a boar of great size and smoothness and his get are all good. His dam, Mo. Lady, was one of the greatest show sows of the breed. Remember this as one of the good sales to attend and get your name on Proett's mailing list.—Advertisement.

S. E. Kan., S. Mo. and E. Okla.

BY C. H. HAY.

E. M. Getchell, Duroc-Jersey breeder, of Lamont, Mo., will hold his annual sale November 4. Mr. Getchell moved to Lamont about two years ago. Previous to that time he was in the Duroc business at Ottawa,

LIVESTOCK AUCTIONEERS.

FLOYD CONDRAY, Stockdale, Kansas

R. L. Harriman, Bunceton, Mo.
Selling all kinds of pure bred livestock. Address as above

ANIMAL PHOTOGRAPHY and sketching: all kinds of farm animals. Write for prices. Harry Spurling, Taylorville, Ill.

John D. Snyder AUCT., successfully sells pure bred live stock, real estate and general sales. HUTCHINSON, KAN.

Be an Auctioneer
Travel over the country and make big money. No other profession can be learned so quickly, that will pay as big wages. Next 4 weeks' term opens Aug. 2, 1915. Are you coming?
Missouri Auction School
Largest in the World. W. B. Carpenter, Pres.
818 Walnut St., Kansas City, Mo.

Your Pick My Band 27 Blk, 3-4-5-Yr.-Old
Stallions, $400; Your pick my band 18 blk. 2-yr-old stallions, $300. Registered Percherons. Sound, big-boned, extra growthy. Sire black 2200 lb. Imported; dams mostly ton imported blacks. It's the peddler's profit that makes stallions dear; buyers can save hundreds of dollars by coming to this ranch for growers prices and big selection. Just above Kansas City. Fred Chandler, Percheron Ranch, R. 7, Charlton, Ia.

Percheron Stallion SAMMASETTE 44601, black, 9 years old, a sure breeder, sound, priced to sell.
T. M. WILSON, LEBANON, KANSAS.

HOGS FEED CHICKENS
Meat Meal—Feeding Tankage, Ground Bone—Meat Scraps. For particulars and prices address,
COCHRANE PACKING COMPANY
Central and Water Streets, Kansas City, Kansas.

MULE FOOT HOGS.

Mule Foot Hogs Stock of all kinds for sale. More premiums won in 1912, '13 and '14 than any herd in the U. S. Write your wants. ZENE G. HADLEY, Wilmington, O.

Registered Mule Foot Hogs
Large, growthy kind. Some choice stock for sale. Write for prices and particulars. Freeland & Hildwine, Marion, Kan.

DUROC-JERSEYS.

Duroc Boars and Gilts September farrow $20 each. Boar and gilt sale Nov. 10
J. B. Duncan, Flush, Ks. (Shipping Point, St. George, Ks.)

DUROCS 200 FALL and SPRING PIGS, both sex. Priced for quick sale. ALEX C. HILL, Hope, Kansas

TRUMBO'S DUROCS
Choice gilts, bred or open, sired by The Climax, by Climax A, out of the great sow, Doty; also a few fall boars. Spring pigs pairs and trios unrelated, priced reasonable, and satisfaction guaranteed. Wesley W. Trumbo, Peabody, Ks.

Walnut Grove Durocs
One herd boar, also several other boars. Spring pigs, either sex; also booking orders for bred sows.
The Man with the Guarantee. R. C. Watson, Altoona, Kan.

Ash Grove Durocs
Choice gilts, bred for September farrow. Fall and spring boars at farmers' prices. Everything guaranteed.
PAUL SWEENEY, BUCKLIN, KANSAS

Rice County Herd Durocs
U need a boar—better buy him now. 1 fine Sept. boars, sired by Good Enuff's Chief Col. and Otey's Dream. From excellent dams. 80 spring pigs. Every hog immune. Write your wants today.
G. M. SHEPHERD, LYONS, KANSAS

Immune Bred Gilts $25 Each
Ten classy fall gilts, bred for September farrow, also bred sows. Large easy feeders, very best of breeding. Fall boars ready for service.
JOHN A. REED, LYONS, KANSAS

BONNIE VIEW STOCK FARM
Spring pigs for sale, sired by Tat-A-Walla, Kant's Model Enough and A Critic; also three registered Holstein bulls, 6 months to 3 years old.
SEARLE & COTTLE, BERRYTON, KANSAS

WOODDELL'S DUROCS
September and February boars for sale, priced to move at once. 65 early spring pigs, pairs and trios not related.
G. B. WOODDELL, WINFIELD, KANSAS

Duroc-Jerseys!
FROM WORKMAN
100 spring pigs $10.
Gilts with litters $40.
Johnson Workman, Russell, Kan.

Maplewood Duroc-Jerseys
For Sale: 20 fall boars by I Kan't Be Beat and 25 March boars by Geiman's Good Enuff by the 1914 grand champion, Good Enuff Again King. Every hog on farm immunized. Mott & Seaborn, Herington, Kan.

Howe's Durocs
Sows and gilts strong in the best blood of the breed and bred to my good herd boars. I am now ready to book orders for early spring pigs, pairs and trios unrelated. Priced where you will buy and be pleased. J. U. HOWE, Route 8, Wichita, Kansas.

Hillcrest Farm Durocs
30 October boars and gilts for sale. Also spring pigs, both sexes at weaning time. Popular breeding and popular prices. Give me a trial order.
DR. E. N. FARNHAM, HOPE, KAN.
(Dickinson Co.)

Bancroft's Immune Durocs
We hold no public sales. Nothing but the best offered as breeding stock. Choice fall boars. Spring pigs at weaning time. Pairs and trios not related. Customers in 13 states satisfied. Describe what you want, we have it.
D. O. BANCROFT, OSBORNE, KANSAS

POLAND CHINAS.

Big Type Poland China Pigs
Big husky fellows ready to ship. Pairs or trios not related, sired by Smooth Columbus, Mc. Wonder, Big Wonder and Wonder Chief. Farmers prices. Write for guaranteed descriptions. Ed. Sheehy, Hamer, Mo.

Big Smooth Polands Breeders of Poland Chinas for 11 years. Long Look and Black Orange head herd.
LAMBERT BROS., SMITH CENTER, KAN.

HEDGE WOOD STOCK FARM
Leading Big Type Polands
For the next 60 days we will make special prices on weanling pigs. R. F. ROCKADAY, PECULIAR, MO.

Fairview Poland Chinas
For Sale: Choice fall boars, some good enough to head herds. Write us for prices and guaranteed descriptions.
P. L. WARE & SON, PAOLA, KANSAS

I Am Booking Orders for a fancy line of spring pigs sired by my blue ribbon, reserve champion and grand champion boars, also out of prize winning sows. Satisfaction guaranteed. Express prepaid. Start a fancy herd from one of the greatest show herds in existence. W. Z. BAKER, Rich Hill, Mo.

ENOS BIG TYPE POLANDS!
Extra good young boars ready for service by Orphan Chief and Giant Jumbo; 5 herd headers in the lot. Also a few choice gilts for first of May farrow. Prices right. Quality high. Must sell soon. A. R. Enos, Ramona, Ks.

Becker's POLAND CHINAS
Spring gilts, Hadley, Expansion, Mastodon, and other leading strains and safe in pig to Orphan Boy, by Orphan Chief. Fall pigs, pairs and trios, by Orphan Boy and Hadley's Wonder, a grandson of A Wonder.
J. H. BECKER, NEWTON, KANSAS

Elkmore Farm Poland Chinas
Large type blood lines. Herd headed by the thousand pound Elkmore's Jumbo, assisted by O. U. Wonder, by Giant Wonder, by A Wonder. Breeding stock for sale, reasonable. Fred B. Caldwell, Howard, Kan.

Original, Big-Spotted Polands
Fall gilts bred or open. Tried sows for sale. Spring pigs, either sex. Boar and gilt sale November 2.
Alfred Carlson, Cleburne, Kansas

Erhart's Big Type Polands
A few choice late fall males sired by Orphan Big Gun and Big Hadley Jr. Also a few late October pigs by the great 1200 pound Robidoux. Am now booking orders for spring pigs by these boars to be shipped in June. Send your order early. Address
A. J. Erhart & Sons, Ness City, Kan.

Private Sale
75 big type Poland China boars and gilts of March farrow. Nothing but good ones offered. No public sales. Prices right. Address
John Coleman, Denison, Ks.
(Jackson County.)

GALLOWAYS.

CAPITAL VIEW GALLOWAYS
Bulls from 6 months to 2 years; also a few females of modern and quick maturing type.
G. E. Clark, Topeka, Kan.

Registered Galloways
25 bulls ready for service. 30 females all ages. The blood of the 2200 pound Carnot.
W. W. DUNHAM,
Doniphan, (Hall County) Nebraska

RED POLLED CATTLE.

FOSTER'S RED POLLED CATTLE Write for prices on breeding cattle.
C. E. FOSTER, R. R. 4, Eldorado, Kansas.

RED POLLED CATTLE
BEST of BLOOD LINES and cattle that will please you. Cows, heifers and young bulls, at attractive prices.
I. W. POULTON, MEDORA, KAN.

POLLED DURHAMS.

Double Standard Polled DURHAMS
Six yearling bulls. A number of under yearling bulls. 2 good French draft stallions and some jacks. C. M. HOWARD, Hammond, Ks.

DUROCS $10
Baby boars $10 February and March farrow, sired by Bell the Boy, the undefeated first prize winner at Kan. State, Tenn. State, and Interstate fairs, in 1914. This is the largest, best boned boar we have ever used and a strong sire. A few fall gilts bred to Bell the Boy, for $25. All stock immune. Any hog not satisfactory can be returned by paying express one way. Call and see our hog and poultry farm. Half section fenced hog tight with two big farrowing barns, modern equipment and up to date watering system.
Rose Comb Rhode Island Reds Bred from prize winners. 20 incubators and 7 colony brooder stoves. 1000 young birds. Also HORNLESS SHORTHORN CATTLE. Shipping points: Conway, McPherson, Modoc.
R. W. BALDWIN, CONWAY, KAN.

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 Girod, Towanda, Kansas

SHORTHORNS.

Shorthorn Bulls For Sale!
1 two-yr-old, 4 yearlings and 1 long yearling. Reds and roans. L. M. Noffsinger, Osborne, Kan.

Pure Bred Dairy Shorthorns
Double Marys (Flatcreek Strain) and Rose of Sharon families. Registered Poland Chinas. Breeding stock for sale. Address R. M. ANDERSON, Beloit, Kansas

Shorthorn Bull
Fine roan, 14 months old, Pure Scotch.
C. E. HILL, Toronto, Kansas

ABERDEEN-ANGUS.

AberdeenAngus Cattle
FROM WORKMAN RUSSELL KANS
Herdheaded by Louis of Viewpoint 4th. 150624, half brother to the Champion cow of America.
Johnson Workman, Russell, Kan.

ABERDEEN-ANGUS CATTLE
Young stock sired by reliable herd bulls for sale, singly or in car lots. See our herd of cows and show herd at Lawrence or write us. Phone. Bell 8454.
Sutton & Porteous, Route 6, Lawrence, Kan.

HEREFORDS.

Registered horned and double standard polled
Hereford Bulls For Sale
Also a few horned heifers. JOHN M. LEWIS, LARNED, KANS.

Homestead Stock Farm
We have a few extra fine Hereford Bulls for sale and twenty cows. Get our herd catalog. J. J. EARLY, Box B-186, Baring, Mo.

DAIRY CATTLE.

HOLSTEINS A few choice registered young bulls for sale at prices that are right. Higginbotham Bros., Rossville, Kansas.

Wanted to Buy Some Yearling Holstein Heifers
And two year olds, bred to freshen this fall.
J. R. KOHLER. HERINGTON, KAN.

HOLSTEINS Bull calves better than the common run. Two ready to use H. B. COWLES, TOPEKA, KANSAS.

REGISTERED HOLSTEINS 1 yearling and one five months old bull, by Shadybrook Gerbon Sir Korndyke. Write for further information BEN SCHNEIDER, Nortonville, Kas.

QUIVERA PLACE JERSEY CATTLE
Duroc-Jerseys. 3 young bulls of choice breeding for sale. Address E. G. MUNSELL, Herington, Kansas.

MAPLEWOOD HOLSTEINS
Herd headed by Canary Butter Boy King. You are invited to visit our herd of Holsteins. Write for general information, as to what we have for sale.
Mott & Seaborn, Herington, Kansas

HOLSTEIN BULLS—DUROC-JERSEYS
Holstein bulls, six months to 3 years old. Also fall gilts. Very reasonable prices.
Bonnie View Stock Farm, Berryton, Kansas, or 1429 Topeka Ave., Topeka, Kansas.

Holstein Cattle
Herd headed by a grandson of Pontiac Korndyke. Average record of dam and sire's dam, butter 7 days, 29.4 pounds, 30 days 117.3 pounds. Bull calves for sale from extra good producing dams.
T. M. EWING, INDEPENDENCE, KANSAS

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

LINSCOTT JERSEYS
Premier Register of Merit Herd, Est. 1878. For sale at farmers prices noted Golden Fern, herd bull of proven quality. Greatest official butter tests.
R. J. LINSCOTT, HOLTON, 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.

TREDICO HOLSTEINS!
Registered Herd each individual will make 8000 pounds as 2-year-old or equivalent. Head of herd has nearest 7 dams that average 22.32 pounds butter in 7 days. Bull calves to sell that are right.
GEO. C. TREDICK, KINGMAN, KANSAS

PURE BRED HOLSTEINS
Herd headed by Sir Julianna Grace DeKol. 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
SOLD OUT Will have some choice young males and females to offer about August 1, 1915. A cordial invitation is extended to anyone wishing to visit the farm.
OVERLAND GUERNSEY FARM, OVERLAND PARK, KANSAS
8 miles from Kansas City on the Strang Electric Line.

Kan. Watch the Farmers Mail and Breeze for display ads later.—Advertisement.

Moore & Sons' Poland Chinas.

A most interesting two hours were spent recently looking over the herd and farm of F. E. Moore & Sons of Gardner, Kan. Here I find one of the real progressive ranches of Kansas. As one looks through the herd and notes the breeding and the good individuals, notes the good farm equipment and everything in general, he cannot help but think that it certainly is their aim to have the best. They are making preparations to vaccinate the spring pigs and with no misfortune will have a splendid offering of immune gilts and sows February 23.—Advertisement.

Great Herd of Poland Chinas.

It is quite possible that to J. A. Godman of Devon, Kan., belongs the credit of having assembled the best herd of Poland China sows in the state and it might be possible to include other states. For the past two or three years Mr. Godman has attended most of the important sales of Kansas and Missouri and has topped or nearly topped practically every one of them. Like a great many other breeders he lost a good many of the early pigs, but what he did save are coming along in great style and will be dandies by the time he has his sale. Following is a list of the sires of some of the good sows in the herd. Wedd's Long King, Wales's Mo. King, Big Hadley, Wedd's Expansion, Long King's Choice, Prince Monarch, Long Prospect, White Sox Chief, Expansion Hadley, and Gold Medal. At the head of the herd is the good boar, Big Wonder, sired by Frazier's A Wonder and out of Aggie 158074. Mr. Godman has claimed February 4 for his sale. We will have more about this herd later but it might be well for all Poland China admirers to make note of this sale and not let any other business conflict with the date.—Advertisement.

Bayer's Berkshire Hogs.

J. T. Bayer & Sons of Yates Center, Kan., have the oldest and best established herd of Berkshires in southeast Kansas. They have shipped foundation stock to almost every state in the Union and their hogs have given universal satisfaction. The list of outstanding herd boars used in this herd includes Dictotor 69899; Royal Star 76263; Lee Star 88238; Field Marshall 103300; Lee's Masterpiece 99715; B. D.'s Centerpiece 125412; Second Masterpiece 127900; Ideal Centerpiece and Bayer's Beacon. B. D.'s Centerpiece was the greatest son of Mistresspiece, the undefeated show sow of America. Second Masterpiece was also used by the Kansas State Agricultural college. Mr. Bayer was unfortunate in losing Ideal Centerpiece by injury. They have recently purchased Improver's Robinhood 207375, an outstanding son of the great, undefeated Improver B. 181000. Students of Berkshire history will recognize that these boars trace to the best American and imported breeding. They have stamped their wonderful qualities of size, type and easy-feeding tendencies on the Bayer herd. Their foundation stock of both young and aged sows is of such quality that it is a pleasure to show the herd to prospective customers. Bayer's Beacon has to his credit some of the best young sows they have ever been able to produce. These are a credit to the Berkshire breed. This boar is still doing service in the herd. If in need of breeding stock write J. T. Bayer & Sons, Yates Center, Kan., and mention the Farmers Mail and Breeze.—Advertisement.

Publisher's News Notes

Dancing in the Farm-Home.

There are no happier men and women this summer than the farmers who are enjoying dancing in their own homes. A new era of pleasure is now displacing the usual dull summer evenings, for the music of the Victrola is heard throughout the land. Farmers need all the entertainment they can get, and a Victrola is unquestionably one of the best investments a farmer can make. The Victrola brings to our farms all the best music of the entire world and satisfies the desire for either an evening's concert or dancing. The choice is almost unlimited—it doesn't matter what our tastes, there are records to suit us all. After a day's hard work when relaxation is so essential to the cultivation of mental health and physical strength, nothing in the world is more soothing. When friends visit us, nothing offers an easier or more delightful manner of entertaining them. When home seems dull and the boys would go away, there is no better or stronger influence to keep them at home. Everybody, everywhere, all the time appreciates the Victrola, and the great variety of models places it within the reach of all. Every reader who does not already possess a Victrola should write to the Victor Talking Machine Co., Camden, N. J., for the handsomely illustrated catalogs, containing full particulars of all the models and giving a complete list of the more than 4000 Victor Records.—Advertisement.

Farmers Mail and Breeze Pays Advertisers

Capper Publications, Topeka, Kan.

Gentlemen—I want to thank you for the real service you give me. Thanks for the attractive way in which you set up my ad, and for your all-around co-operation with me to effect Percheron sales. I appreciate these things and I am a stand-by of yours.

Very truly yours,
FRED CHANDLER,
Breeder of Percheron Horses.
Chariton, Ia., Jan. 4, 1915.

Farmers Mail and Breeze, Topeka, Kan.

Gentlemen—Advertising in the Farmers Mail and Breeze has always paid me. Your fieldman, Mr. Johnson, has handled my advertising in a careful and painstaking manner and the services he has rendered have been very satisfactory. I have already given him my advertising order for this season's advertising.

Yours very truly,
A. J. SWINGLE,
Breeder of Poland Chinas.
Leonardville, Kan., May 15, 1915.

Every week for years the Farmers Mail and Breeze has printed voluntary letters from its advertisers and different letters are printed every week.

Marshall Co. Pure Bred Stock Breeders

Nothing but first class animals offered for sale for breeding purposes. It is economy to visit herds located in one locality. For the best in purebred livestock write these breeders or visit their herds.

HEREFORD CATTLE.

Willowbrook Farm Herefords Yearling and two-year-old heifers for sale. Also a choice lot of young bulls. B. M. WINTER, IRVING, KANSAS

HEREFORDS—POLANDS Herds established 30 years. 125 Herefords. 90 spring pigs, and 18 bulls, 11 to 15 months old, for sale. S. W. TILLEY, IRVING KANSAS

Sedlaeck Herefords! A nice lot of young bulls for this fall's trade. Address, JAS. F. SEDLAECK, BLUE RAPIDS, KAN.

PRESTON HEREFORDS
Herd established in 1881. Come to Marshall county for Herefords. Address F. W. PRESTON, Blue Rapids, Kansas

Choice Two-Year-Old Bred Heifers
and a Feb. bull for sale. Also 10 spring bulls. Address, GEO. E. MILLER, Blue Rapids, Kansas

B. E. & A. W. Gibson, Blue Rapids, Kas.
Breeders of Hereford cattle. For sale: a good 10 months old bull and some choice young bulls. Address as above.

Home of Parsifal 24th 150 head. Write me about a good herd bull. 25 spring bulls for this fall's trade. C. G. STEELE, BARNES, KANSAS

FIVE YEARLING BULLS FOR SALE!
12 spring bulls for the fall trade. For prices and descriptions address, Tom Wallace, Barnes, Kansas

Wm. Acker's Herefords!
About 25 spring bulls for this fall and winter trade. Address WM. ACKER, Vermillion, Ks.

Clear Creek Herefords—
Choice last March bulls for fall and winter trade. 30 breeding cows in herd. J. A. SHAUGHNESY, Axtell, Kansas

7 Bulls For Sale Coming two years old. Big and rugged. Farm two miles out.
W. B. HUNT & SON, Blue Rapids, Kansas

DAIRY CATTLE.

For Sale—4 Jersey Bulls
sired by Lorne, out of St. Lambert bred cows. Ready for service. C. H. MILLS, Waterville, Kansas

2 Yearling Jersey Bulls
Grandsons of Silverine's Lad, out of 1100 pound cows. Best out of 50. Farmers prices. Joseph Krasny, Waterville, Ks.

JERSEY BULL By a grandson of Golden Fern's Lad, out of a 500 pound cow. Price $50. Duroc-Jersey spring pigs for sale. B. N. WELCH, Waterville, Kans.

HOLSTEINS Cows and heifers for sale. Registered and grade. Address LACKLAND BROS., AXTELL, KANSAS

SHORTHORN CATTLE.

Dr. P. C. McCall, Irving, Kansas Shorthorns. For sale: One 10 months old pure Scotch bull and one 18 months old Scotch topped bull. Write for prices.

Eight Bulls reds and roans. 6 to 18 months old. Scotch and Scotch topped Write for prices. G. F. HART, Summerfield, Ks.

Shorthorns, Polands 1 yr. bull for sale. 1 tried herd boar for sale. March and April boars. A. B. Garrison & Son, Summerfield, Kansas

10 Shorthorn Bulls 5 yearlings in September. 5 March and April calves. Write for prices. H. A. BERENS, SUMMERFIELD, KANSAS

HAMPSHIRE HOGS.

Registered Hampshires Weanling pigs, $10 each, pairs not related. Satisfaction guaranteed. F. B. Wempe, Frankfort, Kan.

POLAND CHINA HOGS.

Albright's Polands For Sale, Jan. boars and gilts. 12 last fall gilts. 34 March and April boars and gilts. A. L. ALBRIGHT, WATERVILLE, KAN.

COPELAND'S POLANDS
For Sale: 14 Sept. gilts bred to your order. 40 March and April pigs. Address N. E. COPELAND, Waterville, Kansas

DUROC-JERSEY HOGS.

Red Polls, Duroc-Jersey, and O. I. C.
hogs. Boars of both breeds at reasonable prices. Bred sow sale, Feb. 24. J. M. LAYTON, IRVING, KAN.

10 September Gilts bred for fall farrow, a few boars and gilts by Illustrator. 40 March and April pigs. B. F. SKADDEN & SON, Frankfort, Kansas

W. J. HARRISON AXTELL, KAN. Red Polled cattle. Duroc-Jerseys and white Leghorns. Breeding stock for sale. Correspondence invited.

Bred Sows and Gilts for Sept. and Oct. Farrow. A few last fall boars. A nice lot of March and April pigs. Address HOWELL BROS., HERKIMER, KANS.

FANCY POULTRY.

Plymouth Rocks Barred (Thompson strain) and white. Stock for sale. Eggs in season. Address JOHN BYRNE, Axtell, Kansas

AUCTIONEERS.

S. B. CLARK, SUMMERFIELD, KANS.
AUCTIONEER. Write or phone for dates, address as above.

Jesse Howell, Herkimer, Kan. of Howell Bros., breeders of Durocs and Herefords can make you money on your next sale. Write for dates.

B. F. WEMPE, FRANKFORT, KANSAS
I specialize in Pure Bred Stock and general farm sales.

LOOKABAUGH'S SHORTHORNS

300 Head From Which to Select—60 Head Must Sell Next 60 Days

20 Extra Good Young Bulls and 40 Fine Young Heifers. 14 to 18 Months Old.

We guarantee satisfaction and any time within 12 months when you buy two or more of these Shorthorns and feel you have bought them too high ship them back and get your money. 6 to 9 months' time if required. A written guarantee will also be given to pay you 50 per cent of purchase price of any female for her calf at a year old. We have recently purchased Fair Acre Sultan, by White Hall Sultan and 40 head of richly bred cows and heifers from the best herds of the north and east, to mate with him and our other herd bulls and hence this summer sale of Shorthorns to make room for them.

Every day, right now, is bargain day at Pleasant Valley Stock Farm. If you have been planning to give us a visit come soon. Write, phone or wire when to meet you.

H. C. LOOKABAUGH, WATONGA, OKLAHOMA

Reduction Sale of Shorthorns
Come to Doyle Valley Stock Farm

175 Head of Shorthorns consisting of many choice animals that carry the blood of noted sires and fashionable families. Built up from foundation stock purchased from the best breeders of the Southwest.

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 Oderic 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

When writing to advertisers mention the Farmers Mail and Breeze.

We are now prepared to furnish the famous Columbian Metal Granary in two styles, Galvanized or Enameled. The European War has caused a great shortage of zinc spelter with which galvanizing is done, with a consequent enormous advance in the price of all galvanized metal. On account of this shortage of galvanized metal and to meet the demand for a serviceable and economical metal bin we have equipped our plant to enamel steel sheets instead of galvanizing them. This enamel is put on under high temperature giving a hard finish similar to that on automobiles. This makes a most satisfactory and serviceable bin that is wonderfully wear and rust resisting. It is the most economical bin on the market as the only upkeep expense will be an occasional touching up with enamel which can be secured from us in liquid form at any time at very small cost. This enamel can be applied like ordinary paint. Prices delivered to any station in Kansas, Missouri, Arkansas, Oklahoma, Nebraska, Iowa, Illinois, Indiana, Minnesota, Wisconsin and the Dakotas, are as follows:

500 Bushel Galvanized . .	**$90.66**	**1000 Bushel Galvanized .**	**$118.88**
500 Bushel Enameled . .	**66.66**	**1000 Bushel Enameled . .**	**88.88**

Hold Your Grain For Higher Prices

Profit by the experience of thousands of those who bought Columbian Bins last year and who got the benefit of the high prices of wheat. Many sold their grain at from $1.25 to $1.50 per bushel instead of around 65c which is all they could have gotten at harvest time. You should do as well this year as indications point toward $2.00 wheat before another crop is harvested. Be prepared for the higher prices by having your grain stored on your own place in Columbian Bins, where it will be safe from rats, mice, vermin, fire and lightning. Columbian Bins save every grain. An advance in price of only 9c a bushel will pay for an enamel bin, a 12c raise will pay for a galvanized one. All over this is clear profit to you.

Read This Description

These bins are exactly similar in construction. The body of both is 20 gauge metal, the roof of 26 gauge and the bottom of 24 gauge. Sections are joined together by means of a patent reinforced joint (see illustration) which not only makes erection easy but makes the bin strong and rigid. The bottom fits into the double flange of the lower section (see illustration) where it is securely bolted. The roof is joined with a square standing seam rendering it strong and water-tight. Each bin is equipped with a 5 foot by 2 foot door, 22 inch porthole and a 22 inch manhole in the roof. A metal shoveling board, metal door boards and a metal ventilating tube are furnished, giving you a complete bin. By erecting this bin on a sled platform such as is illustrated you will be able to move it to any part of your field where you can thresh directly into it; saving the expense of teams for hauling and men for shoveling. Two handy men can erect the 1000 bushel bin in a few hours time. All bolts, tools, etc., as well as illustrated instructions for erecting are furnished.

Order Your Bin Today

Don't wait until you are ready to thresh. Get your bin today. Our manufacturing capacity of a bin every four minutes insures prompt delivery. All orders are filled the same day they are received. SEND NO MONEY. Simply fill in the attached coupon, giving us the name of your bank, and we will make shipment to you direct and send bill of lading with draft attached to your bank. Pay for your bin when you get it but get it now. Or if you prefer have your dealer order for you but insist on getting the Columbian.

USE THIS COUPON

COLUMBIAN STEEL TANK COMPANY, Kansas City, Missouri.

Please ship
- ..... 500 bushel Enameled Bin, Price ..... $ 66.66
- ..... 1000 bushel Enameled Bin, Price 88.88
- ..... 500 bushel Galvanized Bin, Price 90.66
- ..... 1000 bushel Galvanized Bin, Price 118.88

} Delivered

Name .....

P. O. .....

Shipping Point .....

Send bill of lading to (Give Bank) .....

.....

1710

Columbian Steel Tank Co.

1710 W. 12th St., Kansas City, Mo.

The Largest Manufacturer in America of Metal Grain Bins