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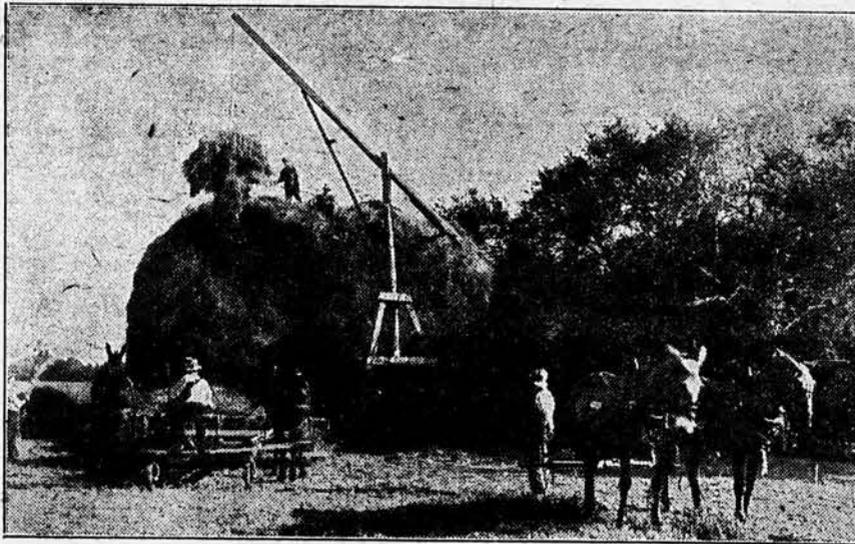
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Why Not Plant More Alfalfa?

By L. E. Call

quired to handle an acre of alfalfa than the other common farm crops and the income from alfalfa therefore represents a larger money investment. The increased labor cost, however,

is not sufficient to offset to any extent the difference in money returns. The amount of labor required to handle alfalfa can be reduced to some extent by utilizing a larger portion of the crop for pasture for hogs. If the acreage of alfalfa could be increased by planting it for hog pasture on those farms in Eastern Kansas that are not now growing it for this purpose, the proportion of land in the crop could be increased without greatly increasing the labor requirements of these farms. At the same time the money returned by the alfalfa would be greater

able on such soils, and the present acreage is needed to furnish a proper rotation for other crops that should be grown on this land. The increase in the acreage of alfalfa should result, however, largely from increased plantings on the less fertile soil. Fields that are rolling and inclined to wash should be seeded. When a good stand is obtained, washing will be prevented by the covering afforded by the crop, while if such fields are planted season after season to cultivated crops like corn and kafir they wash and blow badly and are soon in an unproductive condition. Most of the upland now growing corn and part of that usually planted to kafir and sorghum could be made to grow alfalfa. It would not only be more profitable in this crop but alfalfa is needed to add nitrogen and organic matter to these soils. From the standpoint of maintaining fertility one-fourth of the area of these cultivated soils should be in alfalfa and it should be rotated slowly with the other crops.

THE ACREAGE of alfalfa in Kansas was more than doubled between 1902 and 1912. It increased somewhat from 1912 to 1915; since then it has decreased. This is unfortunate. The acreage of alfalfa in Kansas should again be doubled. Not in one year. But it should be gradually increased until there are twice as many acres in the crop by 1925 as there are today.

It would not be desirable for everyone now growing alfalfa to double his acreage in the next five years, but many farmers could increase their acreage advantageously and many who are not now growing it could do so. Rented farms and most other farms on upland soil, as a rule, have but little land in the crop. It would be, in most cases, to the advantage of both landlord and tenant to change the type of lease in such a way as to make alfalfa growing profitable. This could be done. If only 10 acres more of alfalfa were seeded on every farm in the Eastern half of the state, the acreage would be doubled for the state as a whole. The short seed crop last season and the present high price of seed may discourage many men from seeding alfalfa this year, but with a normal seed crop, cheaper prices, and more favorable weather for fall seeding, the land planted to alfalfa should be increased rapidly.

A Real Cash Crop

Alfalfa is distinctly a Kansas crop. It is peculiarly well adapted to our soils and climatic conditions and is outstanding among the farm crops grown in the state in the following respects:

1. The money returns from an acre of alfalfa are greater than for any other field crop that is grown extensively.
2. When once established it is the most dependable crop to grow.
3. It is the only crop grown in a large way in Kansas that leaves the soil richer in nitrogen and organic matter than it was before the crop was planted.
4. It is one of the most valuable feeds and, at the same time, one of the most profitable crops to grow for market.

The reports of the state board of agriculture show that alfalfa is decidedly the most profitable field crop grown in a large way in the state. For 1918, these reports show that the average acre income for the more important field crops was as follows: Alfalfa, \$47.80; kafir, \$23.50; winter wheat, \$18.80; oats, \$15; prairie hay, \$11.90; and corn, \$10.30.

From these figures, it will be seen that alfalfa returned more than twice the income an acre derived from kafir, three times the income derived from wheat and nearly five times the income derived from corn. Would not a study of these figures indicate that it would be profitable to grow more alfalfa?

It is, of course, a fact that more labor is re-

quired to handle an acre of alfalfa than the other common farm crops and the income from alfalfa therefore represents a larger money investment. The increased labor cost, however,

To Double the Acreage

IF THE alfalfa acreage in Kansas could be doubled in the next five years and if this increase could be secured on the upland farms where a small acreage now is grown, it would make possible a better balanced and more profitable system of agriculture. This change would facilitate the production of livestock; it would furnish a better feed and increase the interest in dairying; it would supply pasture for hogs and lead to more economical pork production; and it would furnish the crop needed for good rotations. This would be the greatest step forward the farmers of Kansas had ever taken toward maintaining soil fertility and toward a more permanent system of agriculture.

even at the present price of hogs than if the crop were harvested and sold on the market.

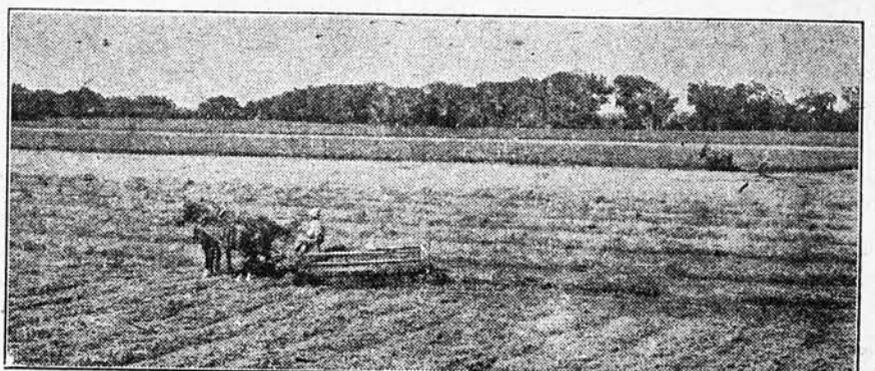
The alfalfa now grown in Kansas is produced on what probably is the best farm land in the state. This also accounts in part for the greater money returns from it. In West Central and Western Kansas where irrigation is not possible, it is necessary to grow alfalfa on the creek and river bottom soils. It is only on such soils that the moisture supply is ample. But in Central and Eastern Kansas it can be grown on almost any soil that can be cultivated. It is a mistake in this part of the state to confine alfalfa to fertile bottom land. It is the most profitable crop that can be grown on most upland soils and these soils are benefited the most by growing alfalfa on them. The quality of the alfalfa hay grown on the thinner soils is better than that grown on rich bottom land because it is finer and more leafy.

The acreage of alfalfa on good bottom land should not be decreased because it is profit-

There are some soils now under cultivation in Kansas that were more profitable in prairie grass than they ever will be in cultivated crops. Some of these soils will not grow alfalfa profitably. Alfalfa must have a soil into which it can send its roots to considerable depth. Soils that have hardpan subsoils, especially where the hardpan is above shale rock, are unsatisfactory for alfalfa. Also soils that have ledge rock within 3 or 4 feet of the surface do not furnish sufficient root room for alfalfa. These soils should never have been brought under cultivation and should wherever possible, be seeded down to shallow rooted grasses and utilized for pasture.

Good Seedbeds Are Necessary

Most other types of upland soil in Eastern Kansas will not only grow alfalfa if the soil is properly prepared for it, but they will produce alfalfa more profitably than any other crop. Soils that have subsoils made up of fragmental or broken rock mixed with soil are of this character. Alfalfa is able to force its roots in between the rock fragments and secure moisture and plant food more successfully than other crops. On other upland soils where the subsoil is open and of fair depth, alfalfa gives good results. It utilizes all available moisture and even though there is sufficient rain to produce but one good cutting a season, it is more profitable than any other crop. More care and better judgment will be needed in starting alfalfa on upland soil than on good bottom land. It also will be more expensive to establish the crop but the results to be obtained will repay. (Continued on Page 60.)



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Passing Comment—By T. A. McNeal

THE KANSAS legislature is now in special session working on an experiment in industrial legislation. If the experiment proves to be a success it will mark the beginning of a new era in the industrial life of the state and probably of the nation. It is a matter of such general interest that I am going to try to give an understandable summary of what is proposed and the events which led up to it.

When the great coal strike was called on November 1 it is estimated that there was not more than enough coal on hand in Kansas to supply the needs of the people of the state, including the manufacturing plants of various kinds for more than two weeks if the plants operated at full capacity. When the announcement was made that the government had taken a hand and thru the Federal Court had enjoined the officials of the coal miners' union from continuing the strike, the people generally supposed that the trouble was over. It was soon demonstrated, however, that at least so far as the Kansas coal fields were concerned, the injunction issued by the Federal Court had no effect. Practically all of the miners not only went out on a strike but stayed out.

At this juncture Governor Allen took a hand. At his instance the state supreme court issued an order authorizing the governor to appoint receivers and take over the coal mines and operate them. The governor appointed three receivers, one supposedly to represent the interests of the coal operators, one a union labor leader and an attorney who was neither affiliated with the operators nor the miners' union. The representative of the union refused to act and the receivership was confined to the other two.

Before beginning active operations in the mines, under the receivers, Governor Allen visited the mining district and made a number of addresses to the miners, urging them to work for the state. He promised them that if they would do so, the state would agree that they should have the benefit of any increase in wages that might be agreed upon in the final settlement with the miners by the government and that the increase should date from the time the men returned to work. He called their attention to the dire need for fuel thruout the state; to the fact that unless the need was supplied speedily there must be a great deal of suffering.

A great many of the men were moved by the appeal of the governor and expressed a willingness to go to work under the terms suggested by him, but said that they did not dare to do so without permission from their district president, Alexander Howat. Finding that his appeal to the union miners was in vain, Governor Allen issued a call for volunteers to mine coal to supply the emergency needs of the people. In response to that appeal 10,000 men offered their services. They were not experienced miners but there are in the Pittsburg district a number of surface veins of coal with an overburden of earth and rock of only a few feet. These are called "strip" mines. Steam shovels were obtained and the volunteers were set to work on these strip mines. Weather conditions were unusually bad, but more than a thousand men of the 10,000 who had offered their services, were set to work. In spite of the tremendous handicap they made a remarkable record and within two weeks, working nearly all of the time in the storm, they took out and loaded about 400 cars of coal and thus relieved the immediate necessities of the localities most in need.

The conduct of the miners' union officials tended to alienate public sympathy. They refused to permit the mining of coal by union miners, even to relieve the necessities of hospitals and homes for the aged and infirm.

Thru this crisis Governor Allen showed promptness, courage and executive ability. He established his headquarters at Pittsburg and to a large extent took personal charge of the situation. Finding that the merchants of Pittsburg, thru fear of boycott, or from sympathy for the striking miners, refused to wait on the volunteer miners and soldiers sent down there to guard them, the governor promptly announced that unless this policy was changed he would declare martial law in Pittsburg and put

the business of the town under charge of the military forces. That promptly ended the boycott.

The experience of Governor Allen in the coal fields formed in his mind a determination to undertake the solution of the industrial problem so far as Kansas was concerned. It seemed to him that there should be a way to prevent the recurrence of the deplorable condition which necessitated the calling for volunteer workers to keep the people of the state from freezing while the employers and employed in an essential industry wrangled over a question of wages and hours of labor. His position was that the rights of a vast majority of the people who did not belong to either the coal operators' or the miners' union should be paramount to the interests of either the coal operators or the miners. With this idea in mind he had a bill prepared intended to do away with strikes and lockouts and to prevent the interruption of certain necessary industries and called the legislature together in special session to consider the measure.

This bill creating the "court of industrial relation" is now before the legislature. A summary of this bill may be interesting. It provides for a tribunal of three, to be appointed by the governor. Each of the judges will have a salary of \$5,000 a year. This tribunal will take the place of the utilities commission and have the jurisdiction of that commission with a number of other duties added.

The principal business of the Industrial court will be to settle disputes between employers and employes in cases where the industry affects the public welfare. The bill designates as such industries:

1. Those which have to do with the manufacture of food products.
2. Those which have to do with the manufacture of clothing.
3. The mining of fuel.
4. The transportation of all food products, wearing apparel or fuel.
5. All public utilities as defined by section 8329 and all common carriers.

The bill declares that it is necessary for the public peace, health and general welfare of the people of this state that these industries, employments, public utilities and common carriers shall be operated with reasonable continuity in order that the people may live in peace and security and be supplied with the necessities of life and proceeds to lay down the means by which the industrial court shall prevent any person, firm, corporation or association of persons from willfully hindering, delaying or suspending such continuous operation.

The bill does not apply to industries in which the total capital invested does not equal or exceed \$25,000 or in which the total number of employes does not equal or exceed 25 persons. When a controversy arises between employers and employed in the industries covered by the bill, the industrial court may on its own motion proceed to investigate the matter and bring the parties to the controversy before it; or either party to the controversy may file a complaint before the industrial court; or any 10 citizens, taxpayers who reside in the vicinity where the controversy arises, may file complaint and have the parties brought before the court and the case tried and judgment rendered. In settling this controversy, the industrial court will have the right to determine the matter of wages, the hours of labor, the conditions under which the employes must work and what is a reasonable return on the capital invested. The industrial court will have the power to order any reasonable and necessary changes in the conduct of the business.

If either party finds that the order of the court is unreasonable, after obeying such order in good faith for a period of 60 days, such party may apply for a rehearing and modification of the order and the court must again hear the matter.

In case either party to the controversy refuses to obey the order of the industrial court, the court may apply to the supreme court of the state for an order compelling the obedience to the finding.

The part of the law to which the labor unions

most strenuously object is found in Section 17 of the bill which provides that it shall be unlawful for any person, firm or corporation, or for any association of persons to do or perform any act with the intent to hinder, delay or suspend the operation of any industry, or common carrier, governed by the bill. This the union labor advocates say would make it impossible to strike under any condition and as a result would destroy union labor organizations entirely.

The bill, however, expressly provides that it shall not be construed to prevent any individual from quitting work at any time, but shall be unlawful for such individual to conspire with other individuals to quit their employment or to induce other employes to quit or to engage in what is known as "picketing" or to intimidate by threats, abuse or in any other manner any person or persons with intent to induce such person or persons to quit work.

The penalties provided for violation of the provisions of the bill are rather drastic. The individual who as an individual violates the provisions of the bill is punishable by a fine of not to exceed \$500 or by imprisonment in the county jail not to exceed one year, or by both such fine and imprisonment, while the officer of any corporation, or the officer of any labor union or any employer of labor who violates the provisions of the bill shall be deemed guilty of a felony and punished by a fine of not to exceed \$1,000 or by imprisonment in the penitentiary for a period of five years, or by both such fine and imprisonment.

Last week the union labor organizations appeared by their attorneys before the senate and lower house of the legislature to present their argument against the proposed measure. They insisted that the passage of the law meant the destruction of union labor organizations in the state and the enslavement of labor in general. They argued that while on the face of it the industrial court would have the same power over employers as over labor unions, the court would be under the constant influence of the employing class and its decisions would be affected by this influence and environment.

This contention on the part of organized labor is not unexpected nor entirely unnatural. The member of the union has been led to believe that the courts were naturally prejudiced against him. A large number of certain unions, especially the miners' union is quite largely made up of foreigners who came from countries where they were accustomed to oppression and who naturally associate government with tyranny. In his argument against the bill Frank P. Walsh, an attorney of Kansas City, dwelt at great length on the autocratic power the bill vested in the three members of the proposed industrial court.

Even granting that there is force in this argument the answer may be made that in any event the court can scarcely be as autocratic as the official heads of some of the unions. A great many of the miners of Southeast Kansas, as I have said, would have been glad to have gone to work for the state operating thru its receivers, but by the autocratic command of a single man, Alexander Howat, they were prevented from doing so. It would be difficult to conceive of a more despotic rule than that of the labor union leader. As this is being written the indications are that the bill approved by Governor Allen will pass both houses of the legislature and become a law. How it will work out in practice of course remains to be seen.

In addition to the industrial court bill the legislature is considering a very stringent sedition law. It is to be hoped that this proposed measure will fail. Sedition laws are alien to a free government. The right of free speech is one of the cornerstones of our republic. It is a safety valve. The ranty who spouts on the street corner is a good deal of a tiresome nuisance, but he does little harm. His rantings do not appeal to the good sense of the American people.

The best way to head him off is by opening wide the doors of opportunity, suppressing so far as that is humanly possible, greed and

monopoly and dealing out even handed justice to every citizen. Our espionage law should be speedily wiped off the statute books of the nation and alien laws if passed at all should be most carefully guarded so as not to interfere with the rights of free speech and a free press.

Governor Allen also recommends that the salaries of the judges of the supreme court be raised to \$7,000 a year. Our supreme judges now receive \$5,000 a year and the salary should not be raised.

Salaries of public officials should not be high. There is nothing better calculated to cause discontent among the common people than large official salaries. The average citizen finds it difficult to pay his taxes and support himself and family. He has to work hard and live plainly. If he gets it in his head that the public officials are living in great luxury at his expense it tends to embitter him against his government. It may be that the judges of the supreme court could make more in private practice than they can as members of the highest court in the state but a public official should make some sacrifice. No one has compelled him to hold office. The size of the salary in any event does not determine the ability of the occupant of the office.

Fair Play for Farmers

WRITING from Watkins, Colo., Jesse Gardner says: "In reading your Letters Fresh From the Farm in the issue of Kansas Farmer and Mail and Breeze for November 8, I find one man who concludes a very timely article on present farm conditions in this manner. 'I am only a farmer, but I believe in fair play.' I wish to emphasize that quotation. 'I am a farmer and I demand fair play.' We farmers offer no excuses for our occupations. We are farmers from choice and we demand recognition, fair play in every sense of the word and the same protection for our business interests that other industries receive.

"The inevitable result of a price on wheat that barely covers the cost of production and a drop in the livestock market that means a severe loss to all stockmen, must eventually open the eyes of the public to the fact that they will have to look nearer home for the real profiteer. Just why the consumer jumps to the conclusion that the farmer is a natural born gouger, that he is amassing a fortune and is directly responsible for the exorbitant prices paid to retail men, is difficult to understand. A careful study of the market reports, by the consumer, would certainly prove an eye-opener, and might lead to some very interesting comparisons and investigations.

"Thomas Jefferson said, 'The chosen people of God are the people who till the soil and do their work well.' To this Elbert Hubbard has added, 'That which makes or unmakes a nation is the quiet, peaceful, productive life of its people.' Great minds concede that we are the foundation, the backbone of all industry and progress.

"Sam Jones, the well known and very eccentric evangelist, once used a splendid comparison to illustrate the relative importance of the three general classes of people. He likened them to the parts of a pie, saying, 'You all know that the upper and lower crusts of the pie are very similar in construction but enjoy different locations; but the stuffings, the filling, the real pie, the part that makes the creation of the upper and lower crust necessary, the part that measures the distance between the two is represented by us, the common people. To this class belong the ranchers. We are a part of the stuffings, we put the fill in the filling, we are the essential part of the real pie.'

"We were asked to increase our production of grain and livestock. We answered the call. We proved ourselves 100 per cent American. We stand for loyalty to our government, patriotic service to our country and a square deal for all. Thousands of farmers will try it again next season, on borrowed capital, thousands more, some from choice, more from necessity, will suspend operations until this national upheaval is over. All we ask is a fair rate of interest on our investments, an average wage for our labor. This is necessary if we are to continue to feed the world.

"What will you have Mr. Congressman, maximum or minimum production? It is up to you."

Let's Keep Out

I HAVE not been very certain in my own mind what course ought to be pursued in regard to Mexico, but the more I read of conditions in our own United States, the more I am inclined to the opinion we would better keep out of Mexico. We seem to be having troubles enough of our own without hunting for trouble on the outside.

I suppose the Mexican situation is pretty

bad; it always has been for that matter. I have no doubt that a number of citizens of the United States have been murdered in Mexico by Mexicans but I think it altogether probable that more Mexicans have been murdered by white men from the United States than the number of white men who have been murdered by Mexicans. We have not made such a good job of protecting the lives of men and women in our own country that we have ground for abusing the Mexican government for failure to protect our citizens down there. If we send an army into Mexico we probably will have to keep it there for the next 25 years to police the country.

Is It a Square Deal?

A FORMER member of the Kansas state senate writes me as follows: "Our President has said a great deal about world democracy and defines it as meaning that the weak should have the same protection as the strong. I happen to live 26 miles north of the Oklahoma line. I saw a negro soldier who was ordered by his country to offer his life for world democracy, buy a first class ticket at Parsons, Kan., to his former home in Oklahoma. He enters the car and rides to the state line; there he is ordered out into the Jim Crow car. If he had refused he would have been dragged out like a dog. After he arrives home he is required to pay taxes on any property he possesses, but when he undertakes to express any preference as to who shall spend his tax money and make laws for him, he is informed that because of the fact—that his grandfather gave all of his labor for a lifetime to someone else, he cannot participate in the elections. You said in one of your editorials that we will some day reap the whirlwind, and I think justly."

Hail Insurance By the State

WRITING from Benedict, Neb., Fred Dimond gives his experience with state hail insurance in North Dakota. He says, "I have been a farmer in North Dakota for 15 years and paid from 80 cents to \$1 an acre for hail insurance until we organized and elected farmers to the legislature and now we have a state hail insurance law. This year, with extreme hail storms, the worst storms in the history of the state, we are paying 28 cents an acre and can plainly see that in the average year we can get thru on 10 or 12 cents an acre. There is a flat tax of 3 cents an acre on all tillable land whether tilled or not, then on June 15 each year the farmer has the privilege either of withdrawing from liability or paying his share of the loss whatever it may be. The 3 cents an acre flat tax pays the expenses of the insurance department."

I have received other letters similar to this, so that I know the information given in Mr. Dimond's letter is correct. He does not state the amount of insurance an acre, but my impression is that it is \$7. In Kansas it is probable that the wheat farmers would wish to carry a larger insurance than that, but at the same proportionate rate an acre the farmer could be insured up to \$21 an acre for a charge of 84 cents. In Kansas this amount of insurance would cost at least \$1.50 an acre. Whatever may be said in the way of criticism of the Nonpartisan league the hail insurance law was one good measure and I think the state bank will be another.

A Reader's Suggestions

THE principal business of F. W. Dixon, of Holton, is raising "Everbearing strawberries" and vines, but that does not prevent him from taking an interest in public affairs and here are some of the things he is in favor of: A graduated land tax; a graduated income tax; a graduated inheritance tax. He believes that all inheritances exceeding \$50,000 should revert to the state.

"Children," continues Mr. Dixon, "have no right to inherit anything anyhow except good health and a good education. As a rule the best citizens we have never inherited a penny and I know people who would have been better citizens if they never had inherited a penny. If a man cannot make his own way and be a good citizen the sooner he is landed in the junk heap the better. Inheritances usually make people lazy snobs who think they are of superior clay because they were left a great deal of money by ancestors who probably narrowly escaped the penitentiary in getting said money.

"If any man is smart enough to go out into the world and accumulate a lot of this world's goods, honestly, I am for him. He is a benefactor to his race and his children should be accorded the same privilege of earning money and I would give it to them." Mr. Dixon also lands on Judge Kemper, head of the price fix-

ing committee. "What he needs," says Mr. Dixon, "is a year's experience on the farm. What has the drop in price of cattle and hogs done? It has reduced the meat supply and before the powers that be are done they will have to pay a dollar for a small piece of beef or pork. What are the labor organizations doing? They ask a six-hour day but expect the farmer to work his wife and children long hours so the city man can have it easy. What is capital doing? Sitting tight and getting the lion's share as usual. But capital must be reasonable because if not there always comes a day of reckoning. Labor must know that if not efficient and honest its chickens will come home to roost. The trouble is that everyone wishes a lot he is not willing to pay for.

The whole situation reminds me of a story I once heard. A preacher had a parrot which was a well trained bird. A sailor moved in next door and had a parrot which was not so well trained. One morning the preacher's parrot waked up and screamed "What shall we do to be saved?" The sailor's parrot screamed back: "Pump like hell! Pump like hell!—or the ship will sink." I might remark in passing that there is a good deal of sense in what Mr. Dixon says.

The Graft in Sugar

JUST now the greatest get-rich-quick game in America is gouging in sugar. It's a mighty sweet and rich business for profit cormorants. The Equalization Board held the refiners down as to price. So in the name of Great Britain and France they bought up the Cuban sugar crop and exported it to those countries at a higher figure than the board would allow these men to sell in the United States. And this government let them do it. As a result the increase in the price of sugar will add almost a billion dollars to the burdens now being borne by the American people.

Altho our exports of sugar to Great Britain alone have jumped 200 per cent, and we have in recent months shipped more than 300 million pounds of it to the United Kingdom, there are fairly well authenticated reports of vast hoards of sugar in New York and New Jersey. One recent deal reported, is the sale thru brokers of \$120,000 worth of sugar by a New York packing company to a Jersey City merchant for 20 1/2 cents a pound, the sugar to be sold at 22 cents retail.

The hoarders are holding up Eastern wholesalers and retailers, who in turn must hold up the consumer. Sugar at 11 cents—the war price—is tremendously scarce in these localities. But sugar at 22 and 23 cents is as plentiful as ever. Under the circumstances, the least this government can do is to put an embargo on shipping any more sugar abroad while the price at home is almost prohibitive and profiteering in sugar is so disgraceful and general.

In the United States each individual consumes 83 pounds of sugar a year. An increase of a cent a pound in the price means \$91,300,000 a year additional profit for the sugar barons.

With big business doing its best to make this country a fertile soil for Bolshevik propagandists; little business is helpless to do much better. What tempts our great corporations to profiteer is easy money—legitimized graft. I earnestly urge as a remedy to meet this emergency an active prosecution of profiteers followed by their imprisonment, and a law requiring every manufacturer to print, engrave, weave or stamp on every article he produces, along with his trademark, the exact price he receives for it.

I am convinced this would do much to put business and industry back on a legitimate profit basis. The profiteers are making it more and more difficult for the dealer trying to do a square business and charge the customer a reasonable profit to make a living. There is indisputable proof of widespread profiteering to be found in official records in Washington. It is unfortunate but true that as long as this orgy of profit-taking goes on the honest merchant will be under suspicion as well as the dishonest dealer. Many merchants who do not make a cent out of this unholy traffic undoubtedly are compelled to be a party to it or go out of business.

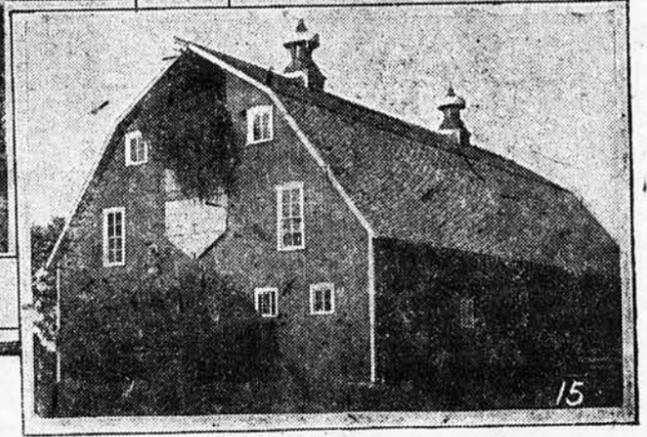
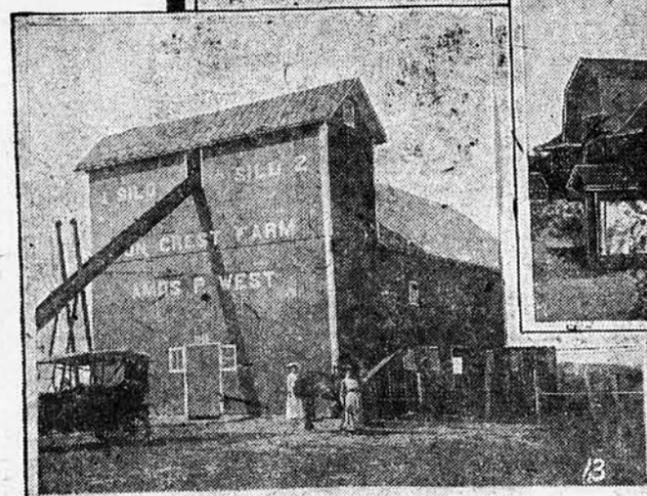
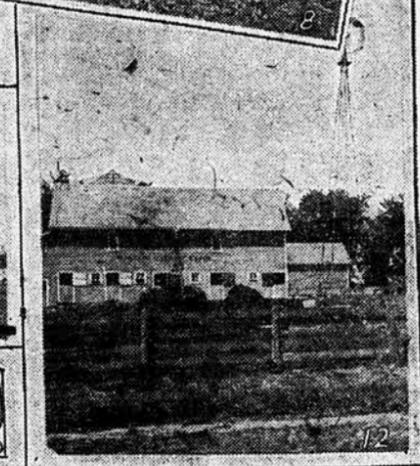
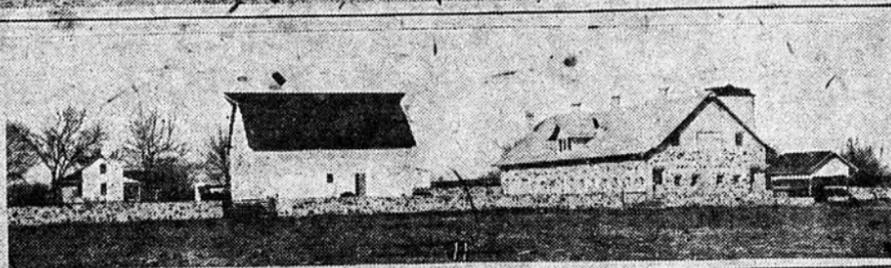
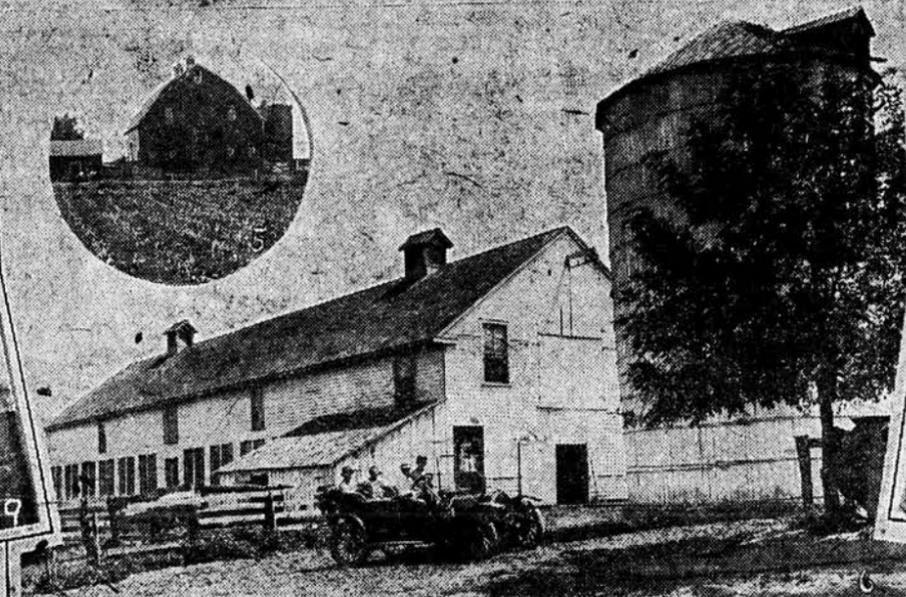
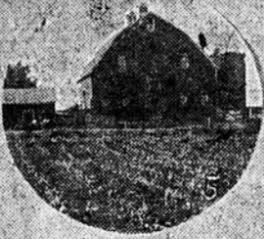
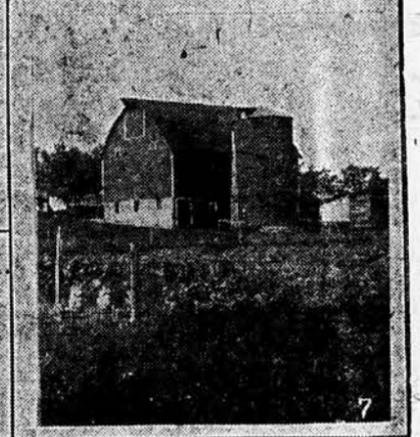
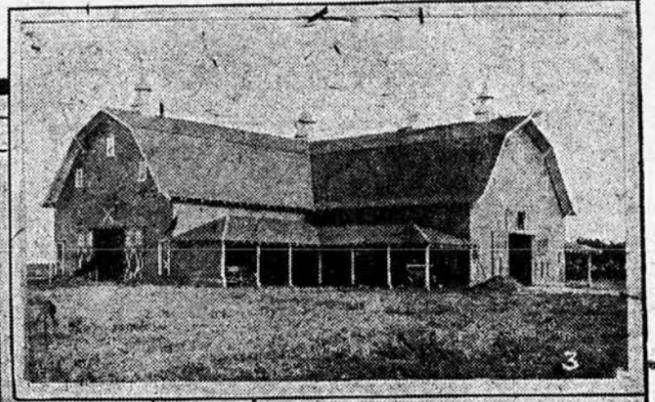
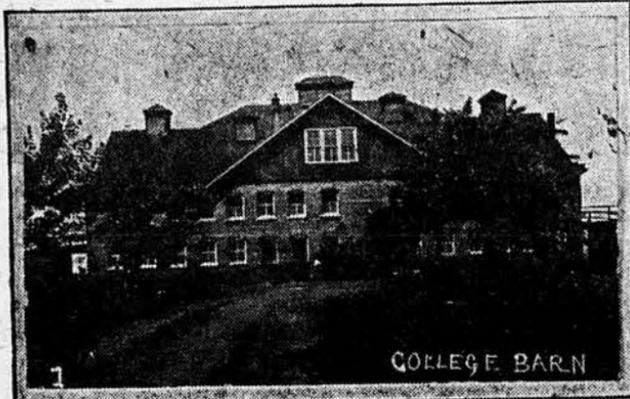
The best thing that can happen to us is to get down to a legitimate basis of profit, be that basis high or low as compared with pre-war values. The point now has been reached where legitimate business is being seriously injured by the profit-takers who will themselves ultimately have to pay the fiddler if the dance goes on.

Arthur Capper
Washington, D. C.

To Protect Crops and Animals

Good Barns Aid Greatly, in Establishing a Permanent, Profitable and Very Satisfactory Agriculture in the Middle West

By the Staff Artist



Typical Western Barns

NO FARM is complete without a good barn. When the crops have been harvested large barns are needed to take care of the grain, hay, and straw and there must also be stable room for livestock kept to utilize the feed that is not sold on the market. Silos must be built to provide green and succulent feed in the winter when pastures are not available. When the green feed has been consumed the silo can be filled a second time with corn stover and if sufficient water is added a fairly good grade of silage may be obtained. The farm barn should contain rat-proof granaries,

good hay-lofts, and well ventilated, rat-proof corn cribs. Shelter for the wagons and farm machinery also should be provided. The most popular kind of barn on Western farms is a combination of horse, cattle and hog shelters with large storage room overhead for grain and roughage. The building in the upper left hand corner is a type of college barn found at many of the experiment stations. The second one is a type of round barn found on some farms. Different forms of rectangular barns are shown in the remaining views. Many of them have excellent ventilators.

Flood Conditions in Kansas

Better Methods Can be Worked Out to Control the Surplus Waters and Thus Reduce Any Possible Damage to Farms

By H. A. Rice

AVERAGE losses by floods—in Kansas amount to many millions of dollars a year. East of the 98th meridian the state may be divided into four watersheds: (1) the Kaw River watershed, (2) the Arkansas River watershed, (3) the Neosho River watershed, (4) other independent watersheds such as the Marais Des Cygnes and Verdigris. Destructive floods occur on each of these watersheds, but that of the Kaw River is the largest and is subject to the greatest floods and the greatest destruction of life and property.

The total drainage area of the Kaw River is about 60,000 square miles, of which 35,000 square miles are in Kansas, 15,000 square miles in Nebraska and 9,000 square miles in Colorado. The dimensions of the watershed are about 150 miles wide and 400 miles long.

Frequent destructive floods have occurred in the Kaw River, three great ones being recorded. These three occurred in 1785, 1844 and 1903. Little is known of the first two, the destruction of property being small owing to the sparseness of the population in the valley at those times. The flood in 1903, while probably not the greatest, was the most destructive that has ever visited the state. Like most of the floods in this river it occurred in the spring, reaching its crest about the last day of May. The conditions of rainfall leading up to this flood were out of the ordinary for the valley. In a report to the Kaw Valley Drainage District by Alvord & Burdick the following tabulation of the rainfall at Salina is given:

Rainfall at Salina, Kan.

Month	Mean Annual	1902	1903
January	0.72	1.38	0.39
February	0.96	0.46	1.75
March	1.14	1.05	5.99
April	2.41	1.02	2.95
May	4.24	5.19	17.34
June	4.51	7.32	1.48
July	3.65	3.53	2.94
August	3.06	5.81	6.32
September	2.33	2.90	1.94
October	2.09	2.49	2.63
November	1.13	2.28	0.85
December	0.89	0.84	0.05
Annual mean	27.04	34.47	48.23
First 4 months	5.23	5.23	15.08
Last 8 months	21.81	30.56

A study of the figures shows a big excess of rainfall in the last eight months of 1902 and the first five months of 1903. This is true not only for Salina but also holds for the entire eastern half of the watershed.

The runoff for this period was greatly in excess of the 10-year average. The runoff at Leecompton was 236 per cent greater, and at Lawrence, for the last eight months of 1902, it was 300 per cent greater than the 10-year average.

Estimates of the quantity of water flowing in the Kaw River at its maximum stage based on a few gauge heights and readings at Leecompton vary greatly. The War Department estimated it at 350,000 cubic feet a second while the United States Geological Survey's estimate was 250,000 cubic feet a second. Alvord & Burdick estimated it at 250,000 cubic feet a second. These estimates were all made with reference to Kansas City.

Other destructive floods have occurred in the Kaw River, notably in 1892, 1897, 1904, 1905, 1909, 1915 and 1917. Of these the 1908, 1909 and 1915 were the most destructive, having discharges of 180,000, 105,000 and 96,500 cubic feet a second respectively. The average flood flow for a period of 15 years is estimated by Alvord & Burdick at about 66,000 cubic feet a second.

The Neosho and the Marais Des Cygnes Rivers inundate their valleys at frequent intervals with great loss of property. The flood losses in the Arkansas Valley are comparatively small. The total overflow for the state is 1,205,520 acres. This represents the best agricultural land.

The valleys of Kansas are the business arteries of the state. Eight of the 10 cities of the first class are located in or are adjacent to river valleys, and 33 of the 75 cities of the second class are so located. These cities together with the 104 cities and villages of the third



There Has Been Much Damage to Farming Land in the Kaw River Valley From Floods; This Was Especially True in 1903.

class constitute 25 per cent of the population of the state.

Of the 9,200 miles of railroad in the state 1,233 miles are in the flood areas. Much of this mileage is main line road. There are 3,400 miles of public roads in the state subject to overflow, comprising a considerable portion of the great cross-state highways.

The mean annual rainfall over Kansas decreases from about 37 inches in the extreme Eastern part of the state to about 15 inches in the Western part. In the Eastern third of the state the mean rainfall during the crop growing season, April to September, amounts to 25.97 inches. Such a high average is accounted for by the torrential downpours that occur in this section and which are frequently the cause of local floods. The following tabulation gives a few of these excessive rains:

Excessive Rains in Kansas

Duration	Amount	Place	Date
10.0	7.0	Kansas City	Sept. 1914
12.0	6.8	Iola	Sept. 1915
16.5	8.0	Topeka	Sept. 1909
14.0	6.7	Concordia	July 1907
24.0	9.65	Osage City	July 1909
24.0	1.5	Dodge City	Sept. 1906
18.5	5.9	Dodge City	Sept. 1906

Little has been done in the way of flood protection in the state. The only project of any magnitude is that of Kansas City, Kan. The great property damage in 1903 and again in 1905 in Kansas City led to the organization of the Kaw Valley Drainage district. The district extends from the mouth of the Kaw River to a point about 10 miles upstream. The district was organized in 1905 "to take charge of and exercise exclusive control over natural watercourses within its territorial limits in the interests of flood protection, and to condemn and cause obstructions in such watercourses to be removed."

And the law further authorizes the district "to have all obstructions wrongfully placed in the channel of natural watercourses adjudged public nuisances and abated as such."

"To prescribe, regulate and fix the height of the superstructures above the water, the length of all spans and the location of the piers of all bridges

across watercourses situated in the district." It has powers of taxation and in that way represents all land owners along that part of the river.

Bonds have been voted to the amount of nearly 2 million dollars, levees constructed, bridges raised, the channel dredged, debris removed and all structures encroaching on the harbor line eliminated. The levees were constructed to a height of 30 feet above standard low water. The protection now afforded is sufficient to take care of all ordinary floods but will not carry a flood of the magnitude of that of 1903. Attempts were made last year to vote a new bond issue 1 1/2 million dollars to raise the levees 5 1/2 feet higher and to dredge the channel to 5 feet below standard low water but the vote was unfavorable, so that these improvements cannot be carried out at this time. The assessed property value in the district is now about 54 million dollars and includes nearly all of the large packing plants, wholesale houses, soap factories, flour mills and many other manufacturing establishments.

After the 1915 flood sentiment in the state seemed to indicate that something should be done in the way of flood protection. Responding to this sentiment Governor Capper called a meeting at Topeka of all interested citizens to discuss the flood problem. Many engineers both from within and without the state were in attendance. The meeting was organized as the Kansas Flood and Water Congress. Committees were appointed and were asked to report their findings. The report of the engineering committee, summarized, was as follows:

"(1) We believe the co-operation and aid of the federal government is necessary in the working out of a comprehensive and satisfactory system for flood abatement in Kansas.

"(2) We believe a permanent state flood committee is essential in making a study of the Kansas flood problem, and we further believe that this committee should be the official body acting for the state in matters relating to state and federal aid.

"(3) We urge re-establishment of the stream-gauging stations in this state

which were formerly maintained by the United States Geological Survey.

"(4) We recommend that preliminary action should be immediately formulated for enacting adequate state legislation whereby the state would be empowered to make a comprehensive study of the Kansas flood conditions."

The 1917 Kansas legislature passed a law creating the Kansas water commission "for investigating and controlling the problems of flood prevention, drainage, domestic water supply, water power, navigation and irrigation in Kansas." The law provided that the commission should "work out a systematic general plan for the complete development of each watershed in the state in order to secure the most advantageous adjustment of the interests involved in matters of floods, drainage, irrigation, water power and navigation." The commission was authorized and directed to establish and maintain river gauging stations and to make such surveys, and other investigations as might be necessary to a complete knowledge of the subjects assigned to it for investigation. It also was authorized to co-operate with any department of the federal government that might be engaged in the development of plans along the same lines.

On May 11, 1917, a co-operative agreement was made between the United States Geological Survey and the Kansas water commission for an investigation of the water resources of Kansas. The Geological Survey established a district office June 1, 1917, in the Federal Building at Topeka with Roger C. Rice as district engineer.

Small Appropriations

The limited appropriations of both the United States Geological Survey and the Kansas water commission made it necessary to restrict the investigations to the establishment and maintenance of a selected number of stream-flow measurement stations in Eastern Kansas. It was impracticable to carry on extensive investigations of stream flow in all the drainage basins in Eastern Kansas. More effective results have been secured by concentrating the work principally in the Kaw Valley where greatest flood damage occurs.

The following stream-flow measuring stations have been established since June, 1917, by the Kansas water commission and the United States Geological Survey:

- KAW VALLEY:**
 - Kansas River at Ogden.
 - Kansas River at Wamego.
 - Kansas River at Topeka.
 - Kansas River at Bonner Springs.
 - Smoky Hill River at Ellsworth.
 - Smoky Hill River near Abilene.
 - Solomon River, North Fork, at Kirwin.
 - Solomon River, South Fork, at Alton.
 - Solomon River at Niles.
 - Salline River at Tescott.
 - Republican River at Scandia.
 - Republican River at Wakefield.
 - Big Blue River at Hull.
 - Blue River at Randolph.

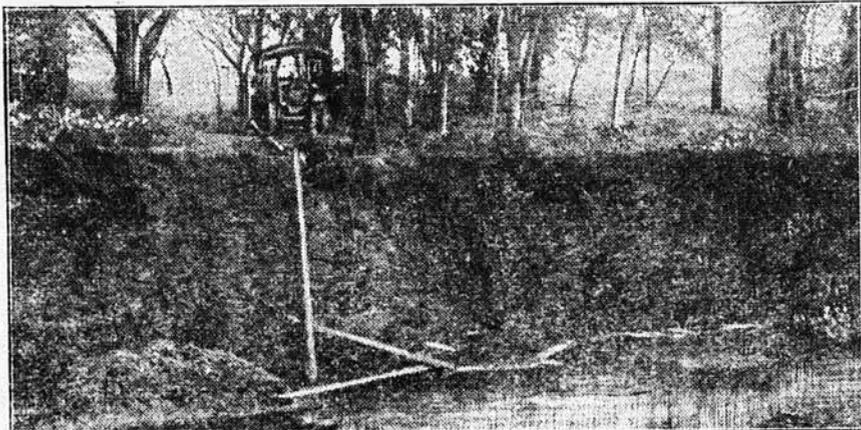
- MARAI DES CYGNES VALLEY:**
 - Marais Des Cygnes River near Ottawa.

- NEOSHO VALLEY:**
 - Neosho River near Iola.

During the last three field seasons current-meter discharge measurements have been secured at low, medium and high stages to define the relation between the stage and the channel capacity. For many of the gauging stations sufficient measurements have been procured to develop the relation between stage and discharge up to bankfull stage.

The stream-gauging investigations have been assisted by the co-operation of the United States Weather Bureau and several drainage district organizations in Kansas that are vitally interested in the flood problems of the state.

In addition to the stream-gauging work the Kansas water commission is arranging, in conjunction with the state irrigation commissioner, to make some investigations in Western Kansas to determine the possibilities of irrigation in the Arkansas Valley. There are many small irrigation plants already in operation in this district pumping from wells bored into the sands of the valley and there are possibilities of greatly extending this work.



Pumping Water From a Creek for Use in Irrigating Potatoes; a Steady Stream Flow is Essential in Reducing the Destructive Floods.

Molasses a Good Stock Feed

Five Gallons of Blackstrap Equal One Bushel of Corn and Its Use Stimulates the Appetite and Makes Other Feeds More Palatable

By George C. Wheeler

AS AN APPETIZER and a tonic "blackstrap" or feeding molasses has long been used by the skilled herdsman in fitting animals for the show ring. Probably little thought has been given to its actual nutrient value, the aim of the feeder being to stimulate a jaded appetite and to get the animal in the pink of condition for show purposes. Only in recent years has molasses been given much consideration as a practical feed. This is evidenced by the large number of molasses feeds now being placed on the market. In the Southern states the feeding of molasses has long passed the experimental stage. Near sugar plantations, the molasses is largely a waste product and can be purchased at comparatively low prices. It has not been used so extensively in the North on account of its cost.

Keep Out of the Ruts

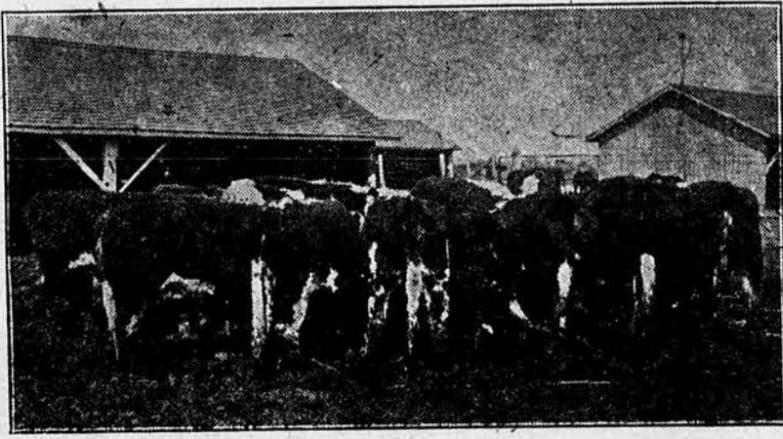
There is a tendency to get into ruts in the matter of feeding livestock as in other farming operations. Because certain combinations have always been fed, the feeder is too likely to assume that these are the only feeds that will give good results. Resourcefulness is one of the marks of a successful livestock farmer. He informs himself thoroughly as to the value of the various feeds which may be used and constantly studies the problem from the economic point of view. Changes in the relative prices of feeds often call for an entire change in methods. The uninformed man who never has given any attention to the possibility of substituting other feeds for those commonly used, is not in a position to exercise the right kind of judgment when changes in methods might be required by prevailing prices.

A gallon of blackstrap feeding molasses contains approximately 7.2 pounds of carbohydrates in the form of sugar. In corn and other cereal grains, the carbohydrates are in the form of starch which is changed to sugar as the first step in digestion. The energy from sugars, such as constitute the carbohydrate nutrients of molasses, is much more quickly available than that in the form of starch. When used as an appetizer its actual nutrient value has been overlooked.

Molasses is very palatable to farm animals and its function has been largely to stimulate the consumption of other feeds and particularly those of rather inferior quality and lacking in palatability. Molasses was used in Scotland as long ago as in the 70's, says Dr. Dalrymple of the Louisiana Experiment station, not as a regular food, however, but in connection with getting animals, and particularly horses into exhibition or marketable condition quickly. At that time, says Dr. Dalrymple, there was apparently no discrimination between cane molasses and beet molasses, and since it was used in small quantities the purgative action of the beet molasses was not objectionable.

A Good Carbohydrate

Molasses is distinctly a carbohydrate feed. Cane molasses contains about 58 pounds of digestible carbohydrate material to the hundred pounds and approximately 1 pound of digestible protein. It weighs about 12 pounds to the gallon and contains about 20 to 25 per cent water. Beet molasses is not quite so rich in sugar and contains more mineral salts. Dr. Charles A. Brown, formerly connected with the Louisiana Sugar Experiment station, who has had extensive experience in some of the best laboratories in this country and in Germany, says: "Cane molasses as compared with the beet product contains 25 per cent more sugars. Another noteworthy fact is the excess of ash ingredients in the beet molasses. This is due to the presence of a large amount of potash salts which exerts a strong purgative effect upon the animal." This would explain why the cane molasses is somewhat safer to use as an animal feed altho beet molasses has been fed successfully to stock in various parts of the country.



Since molasses is now distinctly recognized as an animal feed and valued for the nutrients it supplies, a comparison with corn will enable the feeder to form some idea as to its place in feeding farm animals. A hundred pounds of corn contains 67.8 pounds of digestible carbohydrates and 4.6 pounds of fat. Fat has a greater energy or heat producing value than starch. It has been found by careful tests to be 2.2 times more valuable than starch so the 4.6 pounds of fat in a hundred pounds of corn would have a carbohydrate value of 2.2 times 4.6 pounds or 10.12 pounds. Adding this to the 67.8 pounds of starch gives 77.92 which may be taken as the carbohydrate value of a hundred pounds of corn. Ten pounds would contain a carbohydrate value of 7.79 pounds, which is slightly more than the gallon of blackstrap molasses. On the basis of digestible nutrients alone, then, the gallon of molasses equals about 10 pounds of corn. It would require slightly more than 5 gallons of molasses to equal a bushel of corn considering the nutrient value alone. This gives the feeder in the North, not accustomed to regard molasses as a feed, some basis of comparison. In comparing the feeds in this way no consideration is given to the value of molasses in adding to the palatability of other feeds and thus increasing their consumption, nor its value in stimulating digestive and assimilative processes.

Makes Forage Palatable

In the beet sugar districts of Colorado the use of molasses in making low grade feeds more palatable is increasing. It is thinned with water and spread over hay or cut straw, some using a force pump on a wagon water tank to distribute and others simply pouring it over the rough feed with buckets. Some of the more extensive feeders heat the molasses in tanks and use machinery to mix it with cut hay or straw.

There is abundance of practical experience to draw upon in determining the status of cane molasses as a staple animal feed. Whether it is to be used

is mainly an economic question depending upon the prices of the feeds for which it may be a partial substitute.

On some of the extensive sugar estates of the Fiji islands large numbers of work horses have been fed on molasses. As much as 30 pounds a day with grain has been fed without the slightest harmful effects. It is reported that instead of being laxative as is commonly assumed it was slightly constipating, and bran was added to correct this tendency. With heavy feeding of the molasses the animal showed a slight tendency to get too fat.

Excellent for Horses

A daily feed of 15 pounds of molasses with grain for each animal was finally settled upon and the latest information we have is to the effect that for two years 400 horses had been fed in this way with excellent results.

Some 12 or 13 years ago Dr. W. H. Dalrymple of the veterinary department of the Louisiana State university investigated the feeding practices on Southern plantations. He submitted to owners and managers of these plantations among others the following questions: "What is your observation as to the economy of feeding molasses?" and "Since feeding molasses and adopting a system more in keeping with the natural requirements of the animal, namely a balanced ration, what is your observation with regard to the health of your animals; their capacity for work, general condition, etc.?" Replies were received from 47 plantation owners, and practically every one conceded that there was a considerable saving in the feed bills, ranging from 10 to 50 per cent or more, and all referred to the marked diminution in the number of cases of dietetic troubles such as colic and stated that the health, and therefore the capacity of the animals for work, was very much improved.

Dr. Carl Gay in his book, "Productive Horse Husbandry" speaks of the remarkable results that have been obtained by a liberal feeding of molasses to horses in poor condition, or just recovering from sickness. He refers to it as a valuable "coaxer" to shy

breeders. He makes the statement that whatever the ration its palatability as well as its nutrient value is increased by the addition of molasses. In the North it probably would seldom be advisable to feed more than a quart or two quarts a day to an animal unless at times such as the present when corn is abnormally high in price. Dr. McCampbell of the Kansas Experiment station has just purchased some feeding molasses in barrels at the rate of about \$40 a ton. It is to be used in a cattle feeding experiment now under way in which silage and hay constitute the sole feed except for the last 45 days of the period during which time the steers in one lot will be fed molasses in addition, and the steers in the other will be fed corn. Dr. McCampbell has since learned that molasses could have been purchased in a tank car for about \$20 a ton.

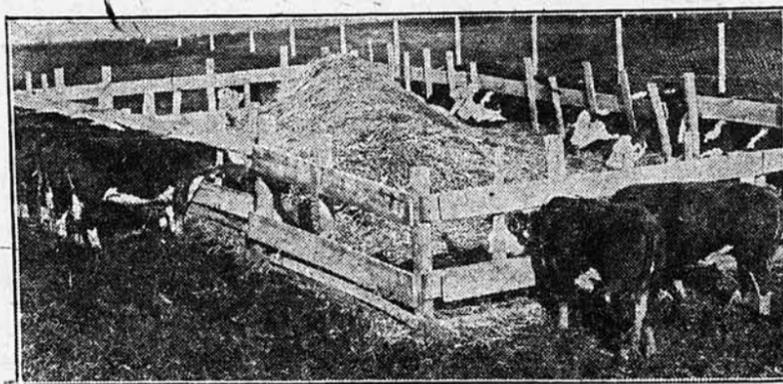
In the South molasses has been fed economically to cattle as well as to horses. Being highly carbonaceous it combines well with the cottonseed meal and cottonseed hulls of the South, these being feeds rich in protein. At the Texas Experiment station a comparison was made between corn, and corn and molasses. The cattle were fed 120 days, the basal ration being 12.6 pounds daily of cottonseed hulls to the steer and 3 pounds of cottonseed meal. In one lot the steers were fed about 15 pounds of corn daily in addition to the basal ration and in the other 8.6 pounds of corn and 6.5 of molasses. The molasses fed steers made slightly larger gains and required 60 pounds less of concentrates to the 100 pounds of gain than the steers getting corn only.

At the Pennsylvania Experiment station six choice 1,040 pound feeders were fed for 140 days all the corn and mixed hay they would eat and 20 pounds of silage to the steer daily and 2.5 pounds of cottonseed meal to each thousand pounds live weight. A similar lot received the same feeds with 5 pounds of molasses daily to the steer extra. The gains were approximately the same for each lot. With corn at 70 cents a bushel and molasses at \$1 a hundred pounds the molasses ration was the more expensive of the two—in other words the 5 pounds of molasses did not replace a great enough value of corn to reduce the cost of gain.

Indiana Makes Test

At the Indiana Experiment station steers fed for 150 days an average of 2.8 pounds of molasses, 10.9 pounds shelled corn and 3.3 pounds of cottonseed meal daily to the animal gained a third of a pound a day more to the steer than similar steers fed 13.6 pounds of corn daily and 3.3 pounds of cottonseed meal. Corn silage and clover hay were fed to the steers in both lots without limit. It is rather interesting to note that the molasses fed steers consumed 4 pounds more of silage daily than the others. With corn ranging from \$21.60 to \$24.75 a ton—60¢ cents to 69 cents a bushel—and molasses 13.5 cents a gallon—\$22.50 a ton—the steers fed the molasses made the cheaper gains. In these Northern steer feeding tests it would seem that the stimulative and appetizing value of the molasses was a factor of greatest importance under ordinary conditions, the smaller amount of molasses giving better results from an economic point of view. With corn worth from \$1.30 to \$1.50 a bushel the substitute value of the molasses would be much more apparent.

Cattlemen will watch with the keenest interest the results of the test now under way at the Kansas Experiment station. In this test molasses is being compared with corn in putting the final finish on the steers. They are not doing quite so well as the cattle fed last year. Being range bred they are quite noticeably more nervous and excitable in the feed lot than the cattle grown under farm conditions. Yearlings and calves bred at the Ft. Hays Branch Experiment (Continued on Page 29.)



Blackstrap Molasses When Thinned with Water Often is Spread Over Hay, Cut Straw or Other Low Grade Feeds to Make Them More Palatable.

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T. A. WILLARD, President



Couldn't Defeat Kansas Boys

Capper Pig Club Members for 1919 Produced 300,000 Pounds of Pork and Showed a Net Profit of \$126 Apiece

By Earle H. Whitman
Club Manager

THE VALUE of an investment usually is judged by the returns it gives. So numerous and varied are the benefits and advantages of club work that perhaps the only fair, unprejudiced way of considering results is in dollars and cents. On this basis alone, then, putting aside all consideration of business training, experience with livestock, the social side of club organization, and kindred advantages, let us examine the results of the Capper Pig club contest for 1919.

An average net profit of \$75 on an average investment of \$30 was made by Capper Pig club members in 1916, the year the club was founded. The profit in 1917 was slightly more than \$100, with an average investment of \$40. The club for 1918 showed an average profit of \$151, and the investment averaged \$63.

The members of the Capper Pig club for 1919, facing the loss of thousands of dollars in the drop in the market during the fall, and with feed higher than it ever before had been, show thru their annual reports an average net profit of \$126.72, on an average investment of \$69.47.

These figures are based on the reports of 15 Kansas boys, and the net profit quoted was obtained by figuring the increased valuation of the contest sow, the contest litter, fall litter if there was any, and sale of breeding stock, all cost of feed being deducted. The total net profit reported by these boys amounts to \$19,134.44.

The profits show the work of the average boy. One must rise above the average to be a winner in club work, just as in the bigger contest of life. The winners of the cash prizes for 1919 made individual records that are well worthy the honor of being placed at the top. Here are the 15 winners and their grades:

Name, County and Breed	Grade.
Edward Slade, Stafford, Duroc Jersey	.100
Vance Lindahl, Republic, Poland China	.99
Wayne Forney, Kingman, Duroc Jersey	.98
Ernest Newingham, Cloud, Duroc Jersey	.97½
Max Barnes, Labette, Duroc Jersey	.97
Albert Segerhammar, Republic, Poland China	.96¾
William Dewey, Wilson, Chester White	.96½
Elwood Shultz, Jefferson, Duroc Jersey	.96¼
Lloyd Winterrowd, Wilson, S. Poland China	.96
Howard Lucas, Stafford, Duroc Jersey	.95½
Dwight Williams, Jefferson, Poland China	.95
Evert Wilson, Shawnee, Poland China	.94½
Noble Bazil, Osage, Duroc Jersey	.94
Darlington Holtman, Riley, Duroc Jersey	.93
Orlin Hardesty, Clay, Duroc Jersey	.93

The winners deserve the heartiest congratulations of their teammates, for it was in the face of the stiffest kind of competition that they won. The closeness of the race for the cash prizes may be judged by the fact that two boys tied for fourteenth place, and two for fifteenth, while three were equal in grade just below the lucky fellows. That club members have the ability to repeat their winnings is evidenced by the presence in the list of Albert Segerhammar, second in 1918, and Darlington Holtman who, with his dad, pulled down the father and son prize that year. Cash prizes going to this year's winners are: First, \$20; second, \$15; third, \$12; fourth, \$10; fifth, \$8; sixth, \$7; seventh, \$6; eighth, \$5; ninth, \$4; tenth, \$3; and five prizes of \$2 each.

Prize awards were based 40 points for pork production, 40 points for cost a pound, and 20 points for contest story and records. Without an exception the winners for 1919 turned in high class stories and reports—so good in fact that nearly every one received a perfect grade, leaving the awards to be fought out on the basis of pork production and cost. A study of feeding methods goes clearly to prove that good pasture, preferably alfalfa, is the biggest factor in cheap pork production. Costs of production were figured on the arbitrary prices provided in the club rules, but it is interesting to note that in the many instances where club members kept a record of actual as well as contest cost, there was only a few dollars' difference. The amount of profit reported by club members



Lloyd Winterrowd, Wilson County, and a Bunch of His Fine Spotted Poland. This Hustling Chap Produced 1835 Pounds of Pork in 1919.

was not considered in making awards, except in the placing of the trophy cup for the highest profit reported. This goes to Vance Lindahl of Republic county, who is able to show a net profit for the year's work of \$700. The sale of breeding stock gave Vance his big money, just as it made possible the excellent showing of the club in general. And it should not be inferred that the boys reporting are able to show the cream of the profits. Probably no club ever has shown a higher percentage of reports from its members than has the Capper Pig club, but those not reporting should not be considered failures. Various factors, such as sickness, unavoidable absence from home, lost records, and similar misfortunes kept these boys from completing the contest work. Certainly with 151 boys reporting it is safe to take the averages shown as a fair estimate of the entire club.

The total pork production reported by club members was 179,453 pounds. On this basis it is entirely reasonable to estimate the total pork production of the Capper Pig club for 1919 at 300,000 pounds. The average production was 1,188 pounds, higher by a couple of hundred pounds than that reported in 1918. Figured at contest prices, the average cost a pound for producing this pork was 8 cents. A total of 1,112 pigs were raised by the boys reporting, or an average litter for the club of seven pigs.

But comparisons are most interesting when it comes to figuring the showing made by the different breeds. As usual, the Duroc Jersey breeders reporting are largest in number—68—with a pork production of 92,993 pounds at an average cost of 7 cents a pound. These red hog boosters are able to show a total profit of \$9,250.41 on the 494 pigs raised. The Poland come next in number of reports, with 60, while their pork production is considerably less—54,851 pounds at an average cost of 9.4 cents. There were 380 black pigs raised, while their owners reported profits amounting to

\$6,622.83. Of the breeds, with fewer entries, the Spotted Poland stand at the head with 17 boys reporting a pork production of 15,851 pounds at an average cost of 7.4, while the profit on the 114 pigs amounted to \$2,025.67. Nine Chester White breeders sent in reports, showing 10,131 pounds of pork produced at an average cost of 7.7 cents. The total profit was \$977.63, and 78 pigs were raised. Next come the Hampshires with 6,360 pounds of pork, produced at an average cost of 8 cents. Profits amounted to \$257.90, and 41 pigs were in the contest litters. Only one Berkshire breeder reported, Reginald Phelps of Rooks county, and his report was incomplete because of a string of bad luck which would have put out of the contest any boy without an exceedingly strong stock of pep. The Berkshires, however, have proved their worth in past contests, and probably will again.

Nothing in the list of prizes offered for competition by Capper Pig club members causes more enthusiastic work than the fine hogs offered by Kansas breeders. Thruout the life of our club the cordial co-operation and assistance of the hog men of the state have meant many dollars and much valuable experience to the boys. Ten prize pigs were offered in 1918, but for the contest of 1919 it was decided to accept only one pig for each breed, these pigs to be awarded to the boys making the best grades for their respective breeds. To eliminate the possibility of a breeder feeling obliged to give a valuable pig to a club member with a poor record, but which was the best for his breed, it was provided that to become a winner of a prize pig a boy also must be a winner in the open contest. Owing to this ruling, only four pigs were won in 1919. The fine \$50 Duroc Jersey gilt offered by D. O. Bancroft of Osborne, Kan., goes to Edward Slade, first winner in the cash prize contest. "It doesn't seem possible that I've really won that prize gilt," writes Edward. "I certainly thank Mr. Bancroft for making such

a splendid offer." Vance Lindahl is the lucky winner of the \$50 Poland China gilt offered by Bruce Hunter of Lyons, Kan. Vance, too, is almost too excited and grateful for words to use in expressing his feelings. "I surely was surprised to know I am winner of second prize and that fine gilt offered by Mr. Hunter," writes Vance. "I want to thank the club folks and Mr. Hunter for such liberal prizes." The third pig awarded is the \$50 Spotted Poland China gilt offered by William Hunt, Osawatomie, Kan. "I love my neighbors as myself, but my Spotted Poland better than either," says Mr. Hunt, so Lloyd Winterrowd, who will receive this gilt, may consider himself a lucky fellow.

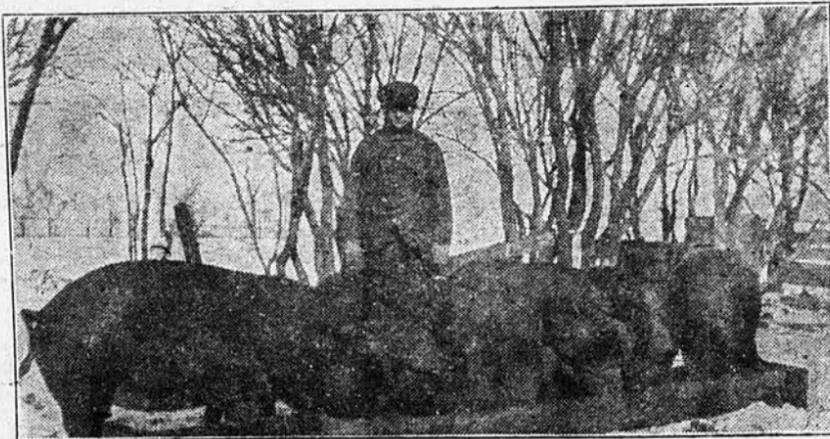
What might well be called the sensation of the contest is the winning of William Dewey of Wilson county, who produced 1850 pounds of pork with his entry at a contest cost of 5.1 cents a pound. In every previous year boys with Chester White entries have come exceedingly near winning, but it remained for William to put his entry of white hogs in seventh place, and by so doing win the dandy \$50 gilt offered by Arthur Mosse of Leavenworth, Kan. Congratulations, Bill, you've proved the worth of your favorite breed.

But what about the father and son department for 1919, you ask? The work of the "dads" last year consisted of record keeping on the entire farm herd. The total valuation of the herds entered in the contest was \$7,657.02, and the task of judging the reports was not completed in time to announce the winners at this time. It is planned now to give the results of the contest in the Kansas Farmer and Mail and Breeze for January 24. Undoubtedly the work of keeping records on the farm herds has been of immense value to the contestants, and the results will be read with interest by every man interested in raising hogs.

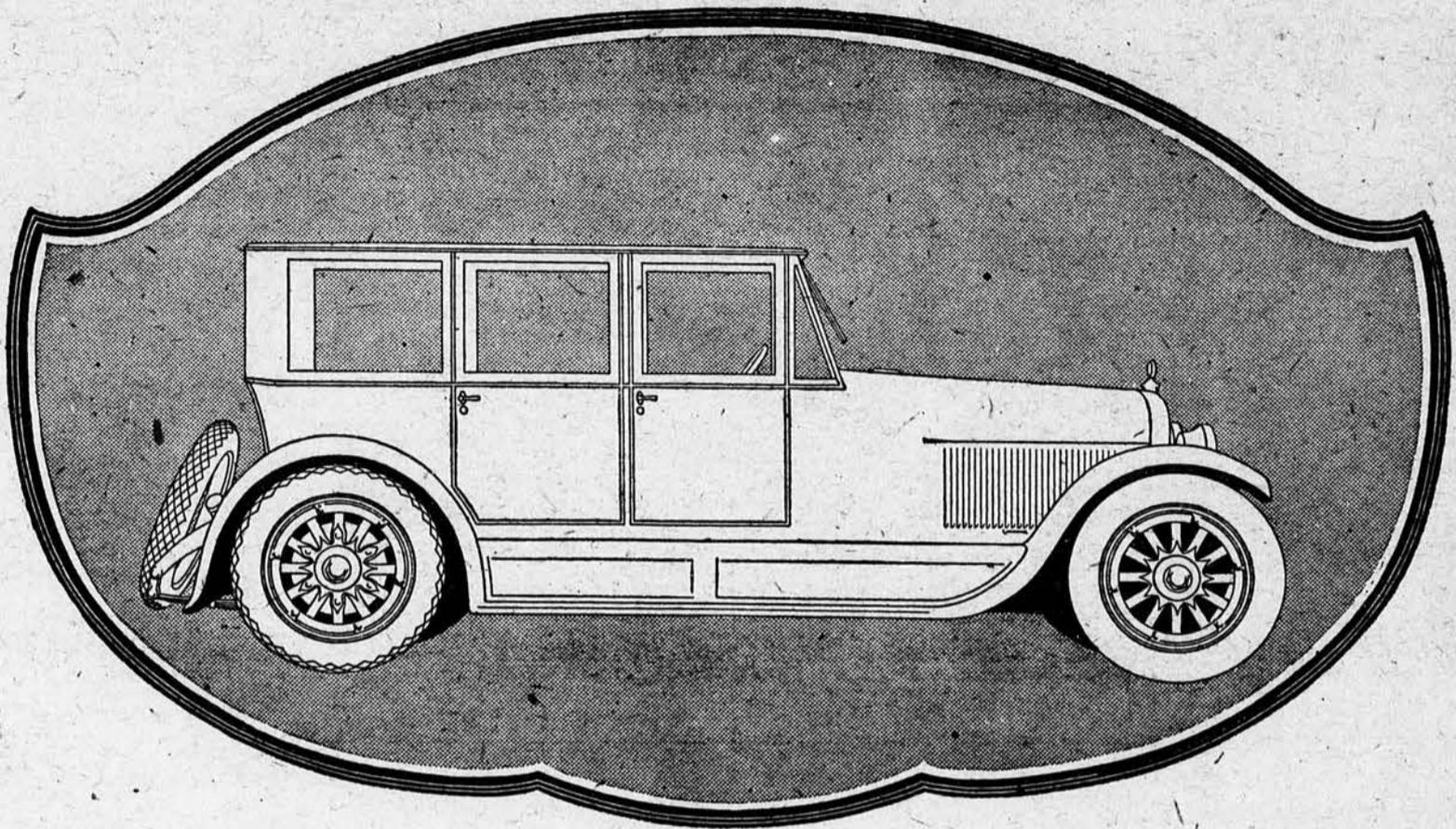
The stories written by the boys winning the cash prizes will be printed in the regular club department. Every winner deserves special commendation for his work. One of the features of the winning records was that the average of pork production was only moderately high. Indeed, Vance Lindahl's record of 2,075 pounds is the highest reported. These results go to prove that when a contestant has a large litter, farrowed early, he's not sure to be a winner. A factor that counts just as much as amount production is cost of production, and that necessarily is true wherever hogs are raised. The net profits reported by the winners, however, are far above the average, the 15 boys showing a total of \$3,641.36, or an average of \$242.75. Add to this profit the prizes won, and the winners will have something to show for their year's work.

Don't you think, after reading what Capper Pig club members did in 1919, that there's a genuine chance for profit in the club for 1920? If only a few boys had made winning showings, there would be room for doubt, but when so many are able to show good profits for their year's work, the boy who still says, "I couldn't make anything at club work," is admitting that he isn't as good as the average.

There's room in nearly every Kansas county for some energetic, ambitious boys who wish to take advantage of an opportunity to get a start for themselves. Arthur Capper is ready to lend money to deserving boys to use in buying contest sows. The same liberal prizes are being offered for the club in 1920. No members will be accepted after March 1. It's time to make up your mind now that you're going to get into the game. Clip the coupon which you will find in another part of this paper, fill it out and send it in today. Perhaps next fall you'll be one of the lucky fellows who are patting themselves on the back when they think of the prizes they have won. And if you're not a winner, you'll have a good start for a bank account and a herd of hogs for yourself.



A Clay County Winner, Orlin Hardesty, and His Contest Litter of Duroc Jerseys. Orlin's Profit for 1919 was \$263.30.



The JORDAN Silhouette Sedan

STYLES travel from east to west with the sun. That which Fifth Avenue approves today becomes the country-wide accepted vogue tomorrow. The Jordan Silhouette Sedan anticipates advanced styles.

It marks the advent of the new light-weight, four-door Sedan, compact in capacity, European in lowness, square cornered—a little bit of what friend England calls "nippy."

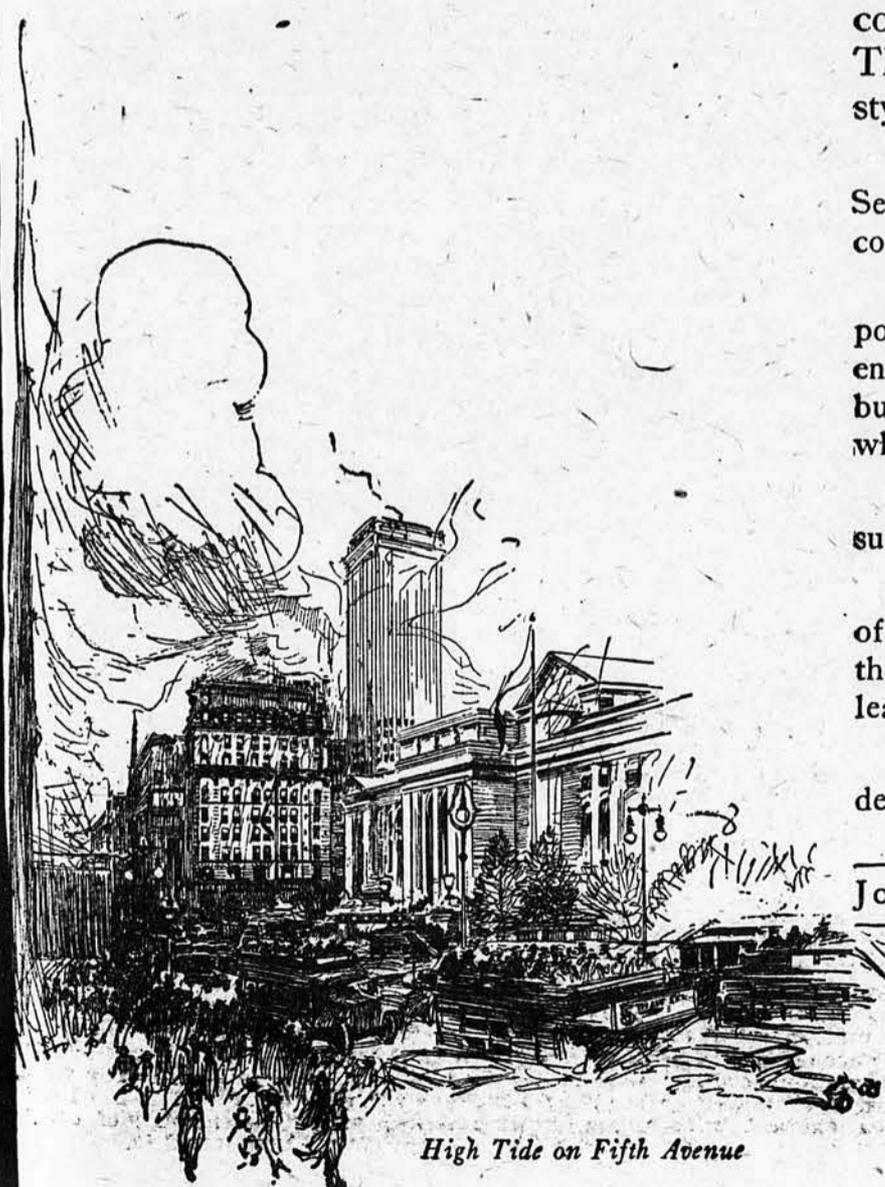
In common with the other new Silhouette models it possesses a new power unit—a dynamic, light bundle of energy, which marks the passing of the days of bulk and burden in open and closed cars, driven regretfully by people who love snap.

A new motor—designed and built exactly to suit such an ideal car—was necessary, of course.

It's a Six—assuredly—because that is the world trend of motor design. The answer is simple. The Six furnishes the greatest power for its weight and simplicity with the least vibration.

In this motor, the forces of vibration go down in defeat.

JORDAN MOTOR CAR COMPANY, INC., *Cleveland, Ohio*



High Tide on Fifth Avenue



Letters Fresh From the Field



Farmers Discuss Need of New Legislation, Profiteering, Selecting Seed Corn, Fruit Raising, Growing Crops and Other Subjects

THE KANSAS Farmer and Mail and Breeze desires to have as many of its readers as possible write about their experiences in farming during the past year. Short letters will meet our requirements best. Cash will be paid for all letters accepted and published. Address all communications intended for this department to John W. Wilkinson, Farm Letter Department, Kansas Farmer and Mail and Breeze, Topeka, Kan.

Farmers Ask Relief

Cannot something be done to save the producer from bankruptcy? Everything we buy here is still going up, but the farmer need not expect anything from a government run by lawyers and bankers.

There will be hundreds of acres of idle land here next spring and summer. The boys have gone to town for the wages we farmers cannot pay. The farmer will have to suspend activities until conditions are more settled. May the Lord hasten the day when we will be a government of the people, by the people and for the people. Hired labor on the farm should receive the same pay that clerks in town get but we don't get enough for our produce so that we can pay such wages and as a consequence our help is gone. You can look for a shortage in farm crops in 1920.

J. T. Rickard.
Fairland, Okla.

Urges Stricter Laws

I find that there are very few young men between 18 and 25 years old on the farms. The farms of today are either operated by old men or boys under 15. As soon as a boy gets thru high school, he graduates from the farm. The short hours in the city and good pay and its bright lights, make him hate the farm. This is a serious condition.

If labor is able to dictate the short hours and big pay you may look for this tendency to increase and in two or three years production will be cut down until our nation will not produce sufficient food for its needs. Any man who ever farmed knows the successful farmer must work from sun to sun in the planting and harvesting seasons. My opinion is that the bunch of men at the head of organized labor today are the most dangerous men our nation ever produced. When a little handful of leaders wilfully defy the government as they have done, it is time to pass some wholesome laws and enforce them and show these anarchists, Socialists, I. W. W.'s, red Bolsheviks, that the Constitution of the United States of America is greater than any secret organization. We readily understand there are thousands of members of organized labor who are not members by choice but were forced to join in order to get work. Please pass a law making it treason against the United States of America for any man or set of men to threaten the lives of women and children and destruction of property as these leaders have done and are doing.

Hallowell, Kan. R. A. Beggs.

Sweet Clover for Pasture

I have been growing Sweet clover for pasture hay and seed since 1914. That year I planted 15 acres with a grain crop with which it grew the first year without detriment to the wheat. The next year, 1915, I pastured 15 sows with their pigs, about 100 all together from June 1, until August 15 besides keeping three milk cows and three teams of horses when they were not at work. I cut the clover with a binder for seed, harvesting enough to net me about \$800. In

1915 I sowed 10 acres with a wheat crop which brought \$410.50 for seed. In 1916, I sowed 80 acres which was planted with grain, wheat, oats and barley. In 1917 I pastured this with 10 head of horses and about 100 pigs until June 15. They were then put in another pasture until August 1, from there into the third pasture until September 20. The clover was then cut and shocked. In 1917, 80 acres was sown with grain which was pastured from June, on thru the summer. There were about 100 pigs, 23 sheep, 10 head of horses. In 1918 I sowed 80 acres with wheat and pastured it with 300 ewes during lambing time from April 25 to June 5. About June 10, I put in 10 sows, 30 pigs, 87 sheep, 10 cows and 15 horses. I fenced 20 acres off and they lived and did well on that until September 15, I then cut the 60 acres which had been pastured, and threshed it for seed.

Sweet clover seed has sold here at from \$8 to \$15 a hundred pounds but many now are offering \$17.50 or more. The kind I am growing is the yellow blossom variety. I have cut it for hay, getting about 4 tons to the acre. The hay is excellent for milk cows. I have had it ground in an alfalfa mill and find it pays as there is no waste of coarse stems as when it is fed without grinding.

I think more of Sweet clover than any crop I can raise here. I believe if anyone has hilly land, used for pasture, it will pay well to seed it to Sweet clover.

John A. Smith.
Manassa, Colo.

Oklahoman Urges Speedy Action

With so many classes of workers threatening to go on a strike, and the critical condition in which the coal strike left us it seems to me that we live in a difficult and trying period. Can't the Senators and Representatives get together in constructive work and let politics alone for a while? What would happen if the farmers decided that they would work only six hours a day?

Two young farmers, renters, sold all the crops and stock they had this fall and are working by the day. One of them told me he was making more money than he did when farming. Rent is only one-fourth of the crop here delivered to the elevator. Farm labor is scarce, there is no use to hire help as there is not much left after the crops are sold. Last fall farm labor to gather mijo was \$4 a day and board. Milo on market here was \$2. At Kansas City it was \$2.95 to \$3.05. Somebody is making a lot of money much easier than they could make it by farming. I am a Democrat, but I would like to have the chance to vote for Arthur Capper for President of the United States in 1920.

Optima, Okla. William Brune.

Fruit Raising in East Kansas

Fruit raising in Eastern Kansas was at one time more general than at present, but the industry is picking up admirably and it is generally hoped that the interest in fruit raising will continue. Thirty-five years ago, fruit trees planted on new soil grew and bore remarkably well with little care, while others did not do so well. At the present time, few orchards grow well or produce well. High-grade fruit is not produced without constant and skilled care. Many small commercial orchards, advertising and selling apples of poor quality, advertise selling apples but they are of such poor quality they are refused as soon as the high-grade apples are put on the market.

Success in fruit raising cannot be hoped for unless good trees are planted and are given the care that comes from

study, experiment and the experiences of successful orchardists. Caring for an orchard often makes 100 per cent difference in the fruit quality. One old tree in my orchard always bloomed profusely, but never was sprayed or pruned. Last spring a number of large limbs were cut off and as a result, there were fewer canker worms, the apples held on until ripe and were large and of superior quality. With correct pruning and spraying, the apples would have been much better. Apple trees of good quality diminish in size and quality unless properly cultivated, sprayed and pruned.

There is much money in investing in a good orchard. Last summer two of my early apple trees, old and uncared for, produced more than \$35 worth of apples. About \$26 worth were sold at 7 cents to 10 cents a pound. In one day, \$10 worth of farm apples were sold. Communities should take a joint interest in fruit raising, each farm having a good orchard. County shows would be a first aid to interest more farmers in fruit raising. Few orchardists of large experience recommend fruit raising for the average farmer from a commercial standpoint, but an orchard for family use on each farm in Kansas is earnestly urged.

F. Lincoln Fields.
Burlington, Kan.

Selecting Seed Corn

Selecting seed corn becomes an arduous and dangerous task if left until corn planting time. If delayed until the last minute, one has a smaller amount of corn in the crib from which to select and in the hurry of the moment poor quality is often chosen.

The time to pick seed corn begins in fall or early winter. There are some who select when they are husking and this is the best way. They have a box in the end of the wagon and when a likable ear is found it is thrown into this box and placed in a separate place in the crib. This discrimination of course takes time but in the course of the process judgment may be used in picking the ears that grow in single hills or double hills and ears that grow in the knolls and uplands.

Another method of picking seed corn after the corn has been gathered is to have a box in the crib and when one goes to feed the stock select the good ears and place them in the box. This is a very good method as it can be done when one has a lot of time and hence care may be exercised in picking out the best ears.

If one has the quality, there is virtue in picking the seed corn that grows on one's farm. The seed has been acclimated to that particular land and seems to thrive better. However, after a course of three or more years it is better that a new grade of seed corn be obtained from a neighbor if possible.

Seed corn, however, is better if selected in the field in the fall and should be stored in the proper way. This is best done by hanging it up in some dry place, as the garret. If possible, it is a good plan to hang the corn in rows by the shucks, or strings or wires and out of the reach of mice.

Gardner, Kan. Robert McGrath.

Reckless Plundering

I congratulate you and the people you seek to benefit on your speech condemning profiteering. It is foolish to prate about the Reds and deport Berkman and Goldman so long as we maintain a condition that incites to extreme radicalism. When has the law been enforced with prison sentence upon corporation thieves of railroad exploitation? What has been done with the men who wrecked the New York,

New Haven and Hartford? The man who steals a loaf of bread to feed his hungry children goes to jail while the man who steals a million is a financier and may go to the United States Senate, but he doesn't go to jail. Our chamber of commerce, stock exchanges and our select clubs often are nesting places of privilege and plunder.

God-speed the day when justice and law shall stand together to protect the common good.

George Muller.
Collingdale, Pa.

Profiteering and Its Remedy

I desire to thank Senator Capper for his brave, sensible and timely address before the Senate, on profiteering and its remedy. If we had more men like him in Congress, matters would be better in our country. The right thinking people are with him and I hope most sincerely that he may bring about better times in our country.

Hardwick, Ga. C. M. Verdel.

Deport Undesirable Persons

The shooting of our ex-soldiers by the I. W. W.'s only goes to show what they would do if they had the chance. The Americans all over the country were shocked at the cowardly act, and demand a law at the hands of Congress, a bill to drive every one of the I. W. W.'s from the country, and all other undesirables with them.

The sooner we clean up Mexico the better, before too many Bolsheviks and Reds get in there. They miss no opportunity of abusing us and the sooner we clean them out the better. We know that Senator Capper will do his part from past experience. I wish to thank Senator Capper for what he has done for the farmers. I hope to vote for him for President sometime.

Rosebud, Mo. S. J. Crongan.

Texans are Discouraged

Of course the farmers are discouraged. With everything high and getting higher that they buy, and everything getting lower that they produce, what else could they do but cease their patriotic endeavors. Less bread and meat than ever before will be produced, here in Texas next year. Not a single man in Congress has sounded this warning but Senator Capper. Where will the city man and the non-producer come in? Here in Dallas county under the wing of the metropolis of Texas and the Southwest where adversity of farm crops has been the rule in the past, not 10 per cent of the meat and bread will be produced this year that was produced last year, for sale or for export and not a single Texas Congressman has found it out. The country is looking for a change, be it Democrat or Republican, the people are waiting for a display of some interest in their behalf. Would to God that America had a thousand more men to sound the warning as Senator Capper has done.

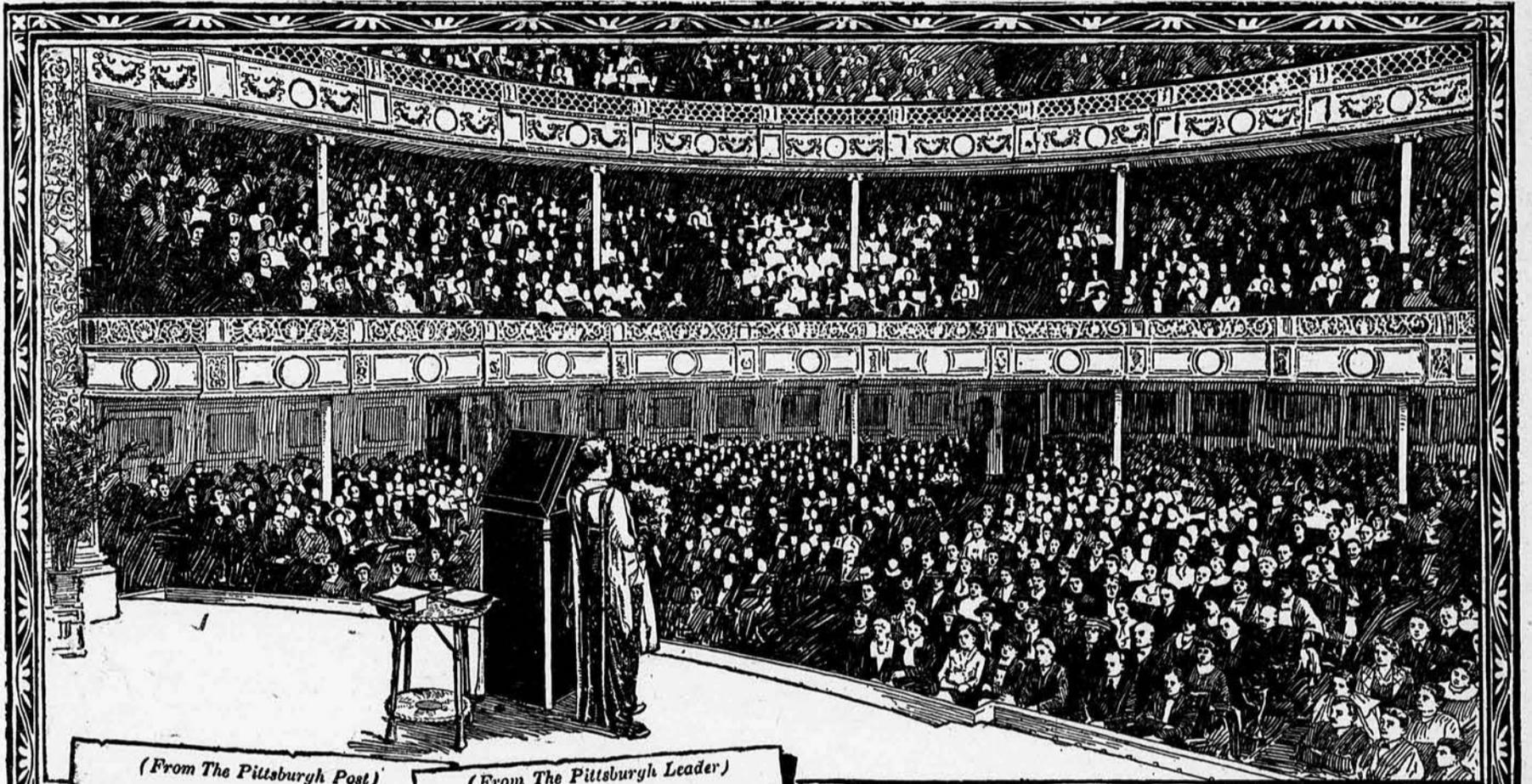
Charles P. Nance.
Duncanville, Tex.

The League of Nations

We appreciate what Senator Capper has done and is trying to do, and feel that he will work for the best interest of all of our citizens, and are willing to let him decide as to whether the League of Nations should be ratified or not. We are emphatically opposed to any more wars and we wish the boys brought home immediately.

And we are bitterly opposed to any kind of military training in any form, and will not stand for it. When I say this, I voice the sentiment of every citizen that I have talked to.

John N. Armstrong.
Doniphan, Kan.



(From The Pittsburgh Post)

RECORDS VIE WITH SINGERS IN OWN SONGS

Madame Rappold and Laurenti in "Miracle Concert."

Madame Rappold sang the initial number on the program. In the midst of it her lips ceased to move but the song went on. Slowly it dawned on the astonished audience that the artist was no longer singing, though her voice came forth to them as clearly and sweetly as before. Again she sang, and the audience only knew it was the living Madame Rappold, because of the motion of her lips. Her lips ceased to move—but her voice continued. The same magical effect was obtained when Mr. Laurenti

(From The Pittsburgh Gazette-Times)

Record Reproduces Voice Accurately

Demonstration Given in Carnegie Music Hall with Edison Phonograph

A demonstration of the exactness with which the human voice may be reproduced on a phonograph record was given last night in Carnegie Music Hall with the new Edison machine. Several selections were sung personally by Mme. Marie Rappold, celebrated soprano, and Mario Laurenti, baritone of the Metropolitan Opera Co. Simultaneously the same selections were produced on the phonograph, and with a subdued lighting effect, it was impossible to distinguish the actual voices from the reproduction.

(From The Pittsburgh Leader)

Rappold and Laurenti Entertain Big Audience At Carnegie Music Hall

The tones which came from the New Edison phonograph matched those from the living artist so perfectly that it was impossible to detect any difference. The instrument produced not an echo or copy, but the real thing—the voices of Mme. Rappold and Mr. Mario Laurenti, untainted by any mechanical transformations, unspoiled by any metallic ring.

(From The Pittsburgh Sun)

Singers and Music Boxes in Concert

Vocal and Metallic Tones Unable to Be Distinguished

A unique concert was given last evening in Carnegie Music Hall in which Mme. Marie Rappold, well-known American soprano, and Mario Laurenti, noted young Italian baritone, took part. The audience heard not one Mme. Rappold and one Mr. Laurenti, but two, the phenomenon being accomplished by means of a cabinet which stood on the stage beside the performers and matched their performance, note for note and tone for tone.

FREE! a true and educational book

An official of the Edison Laboratories (one of Thomas A. Edison's right hand men) has written a book which tells, without exaggeration, in a plain, straightforward way, the fascinating story of Edison's wonderful new invention. This book also tells about the beautiful English, French and Italian cabinets in which the New Edison is encased. In order that we might be able to supply the book to music lovers without charge, we have issued a paper covered edition. Write for your copy today. It is something you will want to keep. Just write us a letter or postal and ask for the book "Edison and Music."

THOMAS A. EDISON, Inc.
ORANGE, N. J.

Pittsburgh Baffled!

DO you want an exact and guaranteed duplicate of the phonograph that made musical Pittsburgh gasp with astonishment. Read below what happened at Pittsburgh, but first fix in your mind that for the modest price of \$295 you can own an exact duplicate of the wonderful instrument used at Pittsburgh. Fix in your mind that

the Edison dealer will guarantee it

without question or quibble—to be able to sustain precisely the same test as the test made at Pittsburgh.

On the night of September 30th, two thousand and six hundred critical Pittsburgh music lovers gathered at Carnegie Hall to learn whether it is true that Thomas A. Edison's new phonograph sings and plays so naturally that the human ear can not tell whether it is listening to the phonograph or to living artists. Read what the Pittsburgh newspapers said next day.

Edison spent three million dollars in cold cash on experimental work to produce the first Official Laboratory Model. The instrument used at Pittsburgh was a duplicate of the original three million dollar model. The Edison dealer in your town also has exact duplicates of it and will guarantee them to be capable of doing everything that was done by the instrument used at Carnegie Hall, Pittsburgh, on September 30th, 1919.

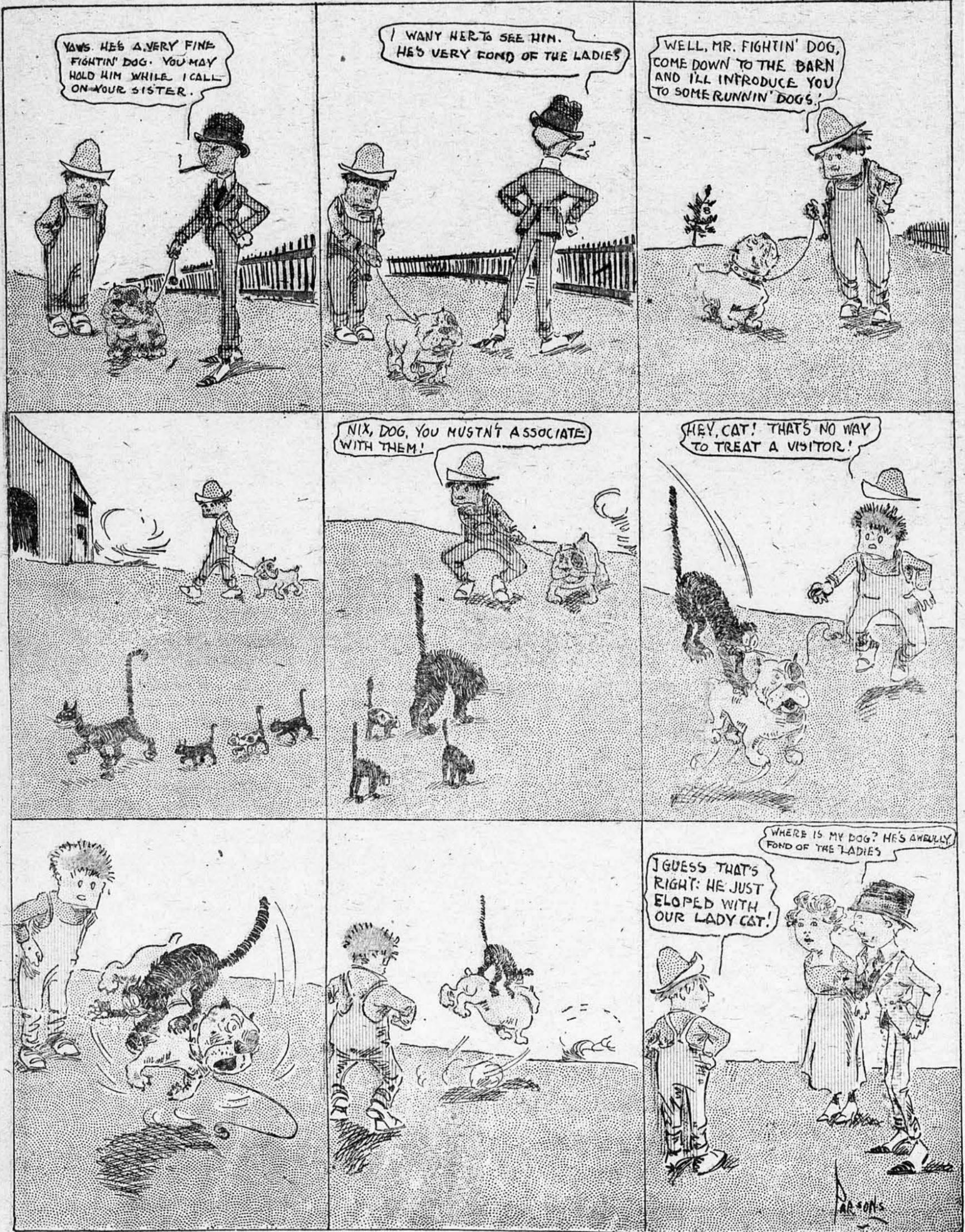
The best is not too good for you. Hear the New Edison; investigate the tests (4000 in all), similar to the Pittsburgh test, that have been made in every large city from Maine to California by fifty great singers and instrumentalists, before audiences aggregating more than three million people.

*Go to the Edison dealer's store and ask him to let you hear
The Official Laboratory Model of*

The NEW EDISON
"The Phonograph with a Soul"

The Adventures of the Hoovers

*Sister's Beau Said His Dog Was Very Fond of Ladies So It Was No Wonder
Buddy's Lady Cat Showed Such a Strong Attachment for Him*



Washington Comment

by Senator Capper

I AM opposed to the 13 billion dollar loan which speculative international bankers are now seeking to foist upon the American people. We already have about 10 billion lent to Europe.

Two facts are clearly established in regard to the proposed huge international loan:

Sir George Paish, the English banker who recently visited New York and Washington for the purpose of promoting this staggering financial scheme, puts the total at 35 billion dollars, and Lloyd George has stated what is expected of the United States in this language, uttered in the House of Commons on November 27, 1919:

"They (His Majesty's government) have reached the conclusion that only a comprehensive arrangement for a large international credit would meet the situation adequately, and it is essential to the success of such a proposal that the United States should contribute that part of the expenditure which is to be incurred in dollars. "Urgent representation accordingly has been made to the United States government."

Great Britain's Smooth Game

Lloyd George's official utterances leave no doubt that Great Britain's expectation is that the United States will provide the cash—all the cash—which is but another way of saying that Great Britain proposes that she and our other associates in the world war will pay the principal and interest of their loans to us in new promises to pay. Then she proposes that the United States shall guarantee the payment of this loan to herself by making the loan international.

A Tangible Illustration

The people will be better able to understand this fine scheme if it is stated in business terms with which they are familiar. Let us put it this way:

Sam and John and Tom and Dick and Harry associated themselves together in a business enterprise. Sam was the only one that had much money. John had a little money, but still not enough to make it unnecessary to borrow from Sam. Tom, Dick and Harry were worse off than John, so they borrowed liberally of Sam likewise. After some time has elapsed and the time has arrived for Sam's creditors to pay him the interest on his loan, John comes to him and says: "Sam, I am hard up, and Tom and Dick and Harry are on the verge of bankruptcy. We can't pay you what we owe you now, and we can't even pay you the interest. But I'll tell you what we will do. If you will make out a note for us to sign, covering all that we owe you, both principal and interest, and then will lend us twice as much as we already owe you, and in addition will sign the note with us, I believe we will be able eventually to pay you."

"No," says Sam, "I don't believe I like that deal. It looks as if I am merely standing back of you and if you fail to pay me I shall have merely to pay myself. Besides I haven't got this additional money that you wish me to lend you."

An Easy Matter

"That's easy," John argues. "There are your nieces and nephews. They know you are worth a great deal of money and even if you are short of cash now your note is good and if you will sign this note of ours they will know that it, too, is good then, and they will let you have the cash to lend to us. Then, after we have made some money, we will pay you your interest, and if we have luck, eventually we will pay you the principal also."

"How about your own sons and daughters?" Sam might ask John. "Haven't they got some cash? Why don't you get them to lend you the money and first pay me what you owe me, before asking me to go on your note? At least pay me the interest you owe me."

Can't you imagine the answer John would have to make? It would be about like this:

"Well, you see, Sam, I have borrowed so much already of my children that they won't lend me any more without better security than I can offer them, and as for Tom and Dick and Harry, their children are even more suspicious of their credit, but if you will just sign this note with us, I am sure that all the money we can't get from your nieces and nephews we will be able to get from our children, because they will all know that with your name on it the note is good."

Stated that way, I believe the American people can understand fully just what is proposed.

Foreign Nations Bankrupt

The European nations, with the exception of Great Britain, are practically bankrupt. They are not paying the interest on their loans to the United States government. They see no way of getting the money they need except to borrow it. They know the money lenders of the world will not lend them more money unless the United States stands back of their bonds—signs their note, in other words. That is the meaning of the proposed international loan—which would have been executed thru the League of Nations had the treaty been ratified by the United States Senate, but which now is proposed as an international loan, either with or without the League of Nations.

Enormous War Debt

The United States already owes an enormous war debt as the price of crushing German militarism in Europe and saving civilization. One wonders at the effrontery which would ask her, having saved Europe, now to pay her war debts for her, or at least guarantee their payment, which, in the case of any countries that go bankrupt thru idleness, Bolshevism or any other cause, is the same thing.

Just as Sam, in the case mentioned—and the personages are thinly disguised as Uncle Sam (United States) John Bull (Great Britain) Tom, Dick and Harry (other Associated Powers)—looked on the proposal to sign his associates' note as bad business, I am sure the American people will look on this proposed international loan as bad business.

I am sure any Administration that would propose putting the government behind such a scheme would be immediately turned out of office by the people. The United States has quite enough to carry in her enormous war debt, with its billion dollar interest charge yearly, without further cheapening her money and forcing the prices of commodities still higher by adopting this astounding proposal for a further expansion of credits.

His Majesty's government may be greatly disappointed at the unwillingness of hitherto gullible America to be gulled once more, but it is time for the United States to cease being the International cats paw.

American Troops for Siberia

The report is revived that the state department at Washington and the foreign office at Tokio have reached an agreement for further joint military action in Siberia. If true, and there is every evidence of its truth, it should occasion no surprise. It would be but following out a course which from the outset has been unwarranted and from its very genesis is a violation of our constitution.

We are not at war with Russia, of which Siberia is a part; we never have been at war with that country, and we have no occasion to be at war with that nation. Yet we have at this moment between 8,000 and 10,000 American boys fighting and freezing and dying of disease in Siberia and destined to remain there, according to the recent declaration of the Secretary of War, until volunteers, also to be sent to Russia without authority from Congress, are found to take their places.

How eager these recruits are for that kind of service is shown by the fact that out of 100,000 men recently

enlisted by the Army, less than 1,100 asked for Siberian service. And doubtless this number would have been much less could these recruits have known that American soldiers there, in despair of getting home any other way, were committing crimes so that they might be sentenced to military prisons in America.

Purely a Russian Problem

Our troops there can serve no good purpose. They have no more business there than Russian troops or the troops of any other country would have in this country. Their presence in that country can but create a mischief-breeding situation in this time of unrest.

Not only do our people wish us to withdraw from Russia but they are utterly opposed to the recent sending of troops for police purpose to Silesia. They would be far better pleased if our National Administration would devote more of its time to the solution of pressing domestic problems and less to figuring out how this country can do still more for Europe which it has saved by freely feeding and clothing its idle populations and lending its quarrelsome governments more and more money.

Must Retire From Europe

We should get out of Russia and out of Silesia and out of all Europe, and Europe should get busy and work out its own salvation. Perhaps this is too much to expect of an Administration that has done more talking about democracy and engaged in more practice of actual autocracy than any in the history of our government. But this is one demand made by the American people about which there can be no doubt.

Let us get out of Russia and stay out. Our whole conduct in the Siberian matter has been absolutely inconsistent with all the Administration's idealism expressed in the "fourteen points." Our handling of the situation has made of us a laughing stock among our allies, and our boasted "idealism" has won us the sneers of our enemies.

Arthur Capper
Washington, D. C.

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To Increase the Wool Profits

The Purchase of Better Rams Having Fleeces of Good Length, Density, Covering and Fineness is an Essential Factor In Production

By D. A. Spencer

TO INCREASE profits from the wool crop it is necessary to have the right kind of wool to sell. The purchase of better rams having fleeces of good length, density, covering and fineness, will often be an essential factor in producing the right kind of wool. Fine and medium wool is selling from 15 to 25 cents more a pound than coarse braid wool. The fineness of the fleece is a matter of type and breed. It is therefore necessary to give some attention to breed in order to be sure that your sheep have the inherent capacity to produce wool that will sell at satisfactory prices. The finest wool is produced by Merinos and Rambouillets. The dark faced breeds such as Shropshires, Hampshires and Oxfords produce medium wool, while the long wool breeds, Cotswolds, Lincolns and Leicesters, produce braid wool.

To produce the best wool it is important that the flock have plenty of the right kind of feed. This does not imply extra heavy feeding, but rather the supplying of a reasonable amount of the kind of feeds that will keep the flock in thrifty condition. Two pounds of corn silage and 2½ pounds of clover hay is a good ration for a pregnant ewe in fair condition, weighing from 125 to 150 pounds. This supplies approximately the amount and kind of nutrients required daily by the ewe up to within a month of lambing. Another ration is a daily allowance of 2 pounds of corn silage, 2 pounds of clover hay and ½ pound of shelled corn, or feed all the corn stover they will eat and 2 pounds daily of clover hay. A daily allowance of 2 pounds of corn silage, 1 pound of oat straw, ¼ of a pound of linseed oil meal and ½ pound of shelled corn to each ewe is an excellent ration.

Alfalfa, soybean or cowpea hay may be substituted for the clover hay. Do not feed breeding ewes timothy hay or prairie hay, for these are not good sheep feeds. In the absence of the legume hays the necessary protein may be supplied by ¼ of a pound to ½ pound of linseed oil meal or cottonseed meal daily to each ewe. Some protein feed is needed to grow the wool properly.

Provide Comfortable Shelter

Shelter the flock from cold rains and snow storms, and see that their quarters are always dry and comfortable. This, together with good feed at the right time, will help to keep the flock healthy and health is very necessary for the production of strong, bright, salable wool. When sheep are sick the wool fibers weaken at the point of growth, resulting in a tender fleece of reduced value.

It pays to keep the fleeces clean and free from burs, chaff and excess foreign material of all kinds. At a co-operative wool sale in central Missouri last summer, I was talking with a farmer of that community who usually had received the top price for his wool. I asked him how his clip was this year and what he expected to get for it. He said his wool was as good as usual only he let his ewes run to a straw stack for quite a while and they got considerable straw and chaff into their fleeces. He asked me if that would make much difference. To this I replied, "It will make a difference to the manufacturers and it is likely these dealers from St. Louis will object to it." In a few minutes the four buyers who were bidding against each other were digging into this man's clip. They had quite a laugh over it and called it the "straw stack lot." When all bids were in it was found that these buyers had all bid way below the top on this "straw" lot and it finally sold for more than 6 cents below the top. That man said he would try to keep the sheep away from the chaff next year.

Manufacturers and big wool dealers discount "slightly burry" wool about 15 to 20 per cent and "hard burry" wool about 25 to 50 per cent.

It is best to wait until the weather becomes fairly settled in the spring



A Small Flock of Sheep Will Prove Very Profitable in the Future on Many Farms in Kansas, Oklahoma, Nebraska, Missouri and Adjoining States.

before shearing but it is a mistake to wait until the weather gets very warm, for the flock is likely to shed considerable wool if shearing is too long delayed. This results not only in a loss of wool but the fleeces will be ragged and less attractive than they would be if shorn before the flock begins to shed. In Missouri, Kansas and similar territory, late April and early May is usually a good time to shear.

It is advisable to use a shearing machine especially if an amateur is to do the work. It is easier to learn with the machine, and most men can shear faster and do a neater job with the machine than they can with hand shears. An expensive machine is not necessary. Avoid cutting the wool twice for this reduces its value. Shearing should be done on a clean, well-swept floor. If a clean board floor is not available, a canvas may be spread on the ground as a substitute.

Dampness Causes Mildew

Never shear when the fleeces are wet for wool that is stored damp may mildew, which would injure its value considerably. Even if fleeces are dried out after they are shorn wet, they cannot be made as bright and attractive as they could had they been shorn dry. Furthermore, it is very unhandy to dry out wet shorn fleeces and even the sold before they have mildewed they will retain so much moisture that buyers cannot estimate the value of this wool very accurately. To play safe, they will naturally try to estimate plenty low enough and may pay less than the real value when they really mean to be honest.

Keep the fleeces clean and remove all dung locks. When wool is sold to a buyer who will pay a full price according to actual value, he will be

sure to examine the wool carefully. If he finds dung locks in a fleece or two he will naturally be skeptical about the whole clip.

The wool should be tied up in single fleeces flesh side out. A wool box may be used, but do not tie the fleeces into bundles too hard and tight. Careful buyers who try to place actual values on wool wish to hunt for dung locks and in general give the fleeces a thorough examination. They, therefore, prefer that the fleeces be tied only fairly firm and not too tight and hard.

Methods of Tying

If a wool box is not used, fleeces may be tied up properly by the following method: Spread the fleece on a clean floor, flesh side down. Fold the sides over so the flesh side is up and the belly wool meets belly wool in the middle. Fold down the long stapled side wool so that the belly wool is hidden. Begin at the rear end of the fleece and roll toward the neck. When you reach the shoulder, fold the neck over the shoulder so that it will be tucked in and finish the roll. Tie with paper fleece twine or good glazed wool twine. Never use binder twine as its fibers become mixed with the wool and reduce its value. Do not use more twine on the fleece than is necessary. The buyer who tries to place honest values on the wool is confused by an excess of twine. It will usually be possible to bind a fleece securely by two bands in each direction.

The wool should be stored in wool sacks and kept in a clean, dry place. Never put it on a floor strewn with chaff, straw or litter of any kind. When sacking, separate the dirty, burry and black fleeces from those that are bright and choice.

It is certainly a big mistake to sell

wool at a price lower than its actual value. Nevertheless this has been done by many. A dealer to value each clip accurately, must be especially well informed in regard to commercial grades, qualities and shrinkages as well as current prices. In many localities local buyers do not have the opportunity to keep themselves informed on these important factors of the wool trade and find it impossible to render the service in wool buying that the farmers desire. This condition is resulting in co-operative wool sales thru farm bureaus, county and state sheep and wool growers' associations and other farm organizations. Co-operative wool selling is making rapid progress and methods are improving every year. Reliable authorities are reporting that this system of wool marketing has saved the American sheep raisers many thousands of dollars this year.

Hemorrhagic Septicemia

BY H. J. METCALF

Sheep are commonly supposed to be rather susceptible to the poisons contained in moldy feed. Occasional trouble develops in feeding lambs or older sheep which feeders are unable to explain. A disease known as hemorrhagic septicemia attacks sheep as well as cattle. Recently we have heard a good deal about this disease which is quite common among all classes of livestock. Dr. K. W. Stouder of the Iowa State college states that in some cases he believes this disease has been somewhat overworked. It does occur however and probably among sheep as often as among other animals.

Cause of Disease

This disease, says Dr. Stouder, is caused by a small organism which, in true cases, is found by the bacteriologist in the blood and vital organs. When death occurs from this disease it is not uncommon for some to attribute it to molds in the forage. There are some, too, who believe it is a form of apoplexy caused by too heavy and too rich a ration. Such instances often are found among feeding lambs. Recent experiments lead us to believe that molds are not often dangerous to sheep and also that sheep can endure some very heavy diets as well as sudden and radical changes of diet, with no ill effects resulting.

Asked as to the symptoms of hemorrhagic septicemia, Doctor Stouder said: "These vary somewhat, but as a rule there are cases of some sudden deaths which have but little history to go with them. The lesions found in the carcass are of the more value because they usually show either some inflammation of the larynx or some bright red sharply defined spots on the lungs, and in most instances bright red hemorrhages along the intestine with a much inflamed fourth stomach. Sometimes these pin-point blood spots are found in other parts of the body, such as the abdominal walls or even in the tissue just beneath the skin.

"This disease, so far as my experience has gone, is more likely to be seen in feeder sheep that have been thru large central markets or handled in stock cars than among native sheep. The loss it produces may be large or it may stop very suddenly and not amount to much.

Control by Vaccination

"Recently hemorrhagic septicemia has been better controlled than ever before by vaccinating with a bacterin made of cultures of the organism causing the disease. This treatment has been almost a specific in preventing the further spread among healthy sheep and the protection has lasted during the entire period, but in some cases under my notice it has protected for only a short time.

"In these latter cases the vaccination should be repeated, as it is cheap and not dangerous to healthy sheep, but no hope should be entertained that it will act as a curative agent to sick sheep."

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Each package contains a sufficient quantity of seed for a satisfactory test and will be accompanied by a circular giving full instructions regarding the crop supplied. If you are willing to co-operate with the government in developing better forage crops by carrying on one of these tests, send me your name and address, stating the kind of seed you desire, and I will be glad to see that the seeds are forwarded to you in plenty of time for spring planting. Only one package of each variety will be sent to an individual and because of the limited supply it is suggested that not more than one variety or two varieties at the most should go to each person.

Arthur Capper
Washington, D. C.



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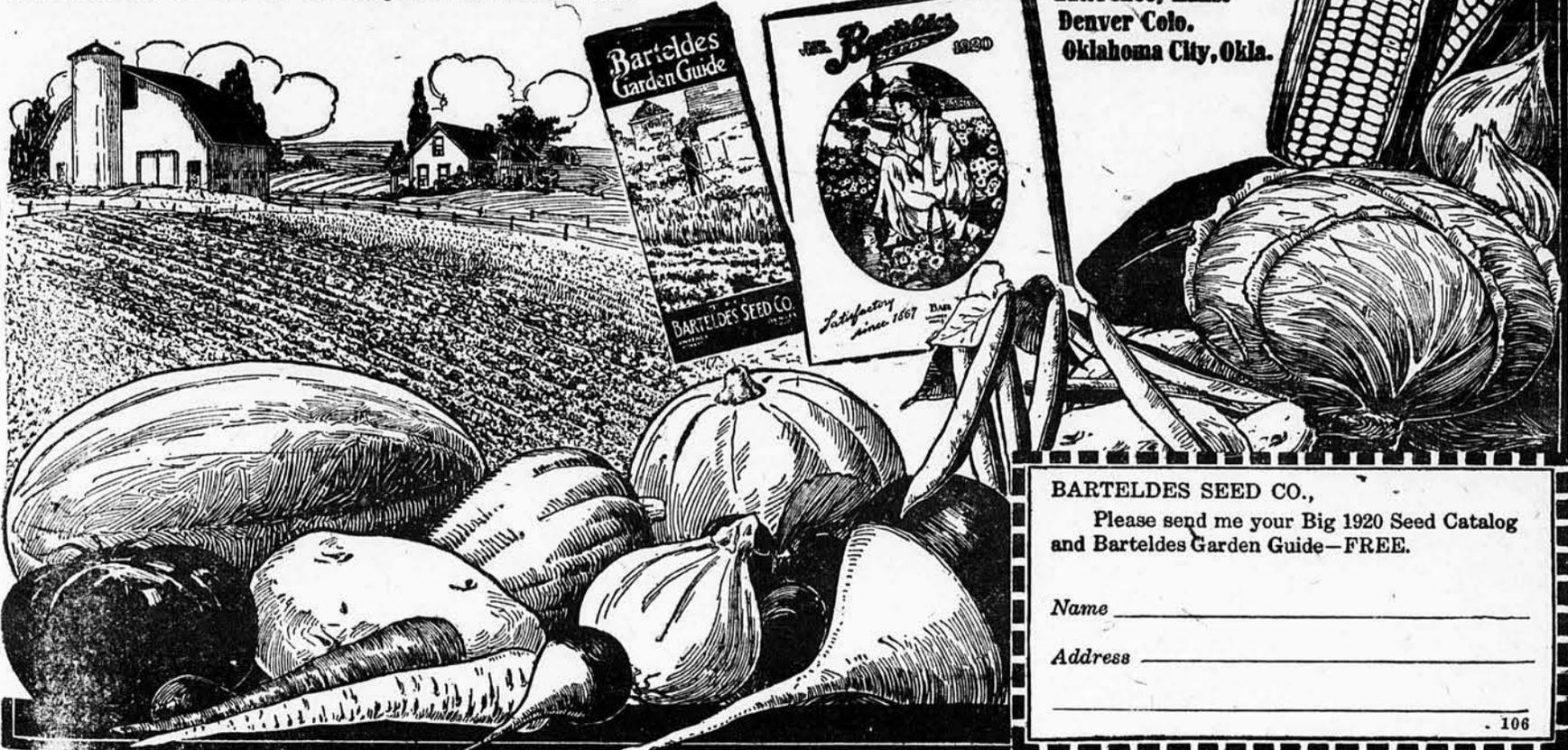
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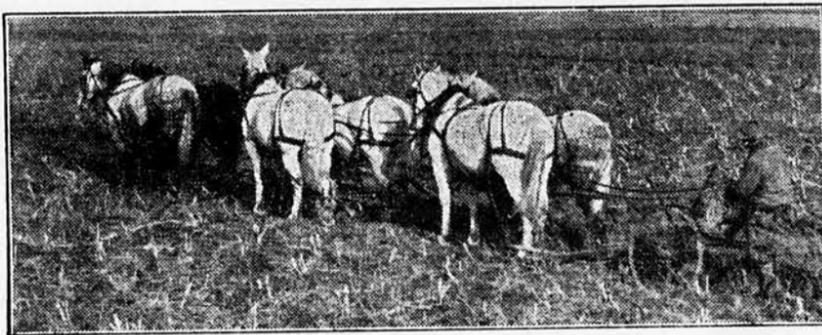
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Good Harness for Farmers

Horses Work Best When Kept Comfortable

BY JOHN W. WILKINSON



FARMERS in buying harness desire something that is serviceable and not too expensive. Highly ornate equipment with polished brass or silver mountings, may be demanded by the city gentleman, but most farmers feel that they cannot afford to invest in such a luxury. In pioneer days a simple outfit of trace chains, backband, bellyband, hames, collar and bridle met all the requirements, but the farmer of today demands and expects a little more elaborate equipment. The trace chains which so often chafed and irritated the horse's skin have been replaced largely by the leather tug which gives much better satisfaction. Another commendable feature in modern harness equipment is the tendency to eliminate all unnecessary buckles. Many of these buckles where they come in contact with the skin cause unnecessary irritation and discomfort for the horse.

The various parts of the harness should be properly adjusted, as a perfectly fitted harness adds much to the comfort of the horse and increases his usefulness to a corresponding extent. Ill fitting harness may abrade the skin and start ugly sores which will make an ordinarily tractable horse vicious and difficult to control. A sore mouth caused by a poorly fitted bit or bridle often may cause a horse to run away. Sore necks or sore shoulders caused by ill-fitting collars often may induce horses to balk that ordinarily would be reliable in every emergency. A sore tail produced by an improperly adjusted crupper often provokes the horse and causes him to indulge in vicious kicking spells.

The Collar is Important

One of the important parts of the harness upon which much of the horse's efficient service depends is the collar, and it is of the utmost importance that it fit the neck and shoulders perfectly. The unequal pressure due to a poorly fitted collar causes the horse much pain and often results in a sore neck and sore shoulders. A great many cases of balking and kicking are started in this way. Some of the leading types of collars are the common leather; the pneumatic, the metal and the so-called humane form. The humane collar consists of a metal frame and two broad

leather pads, one for either shoulder. The pneumatic collar has a metal framework lined with rubber which is inflated with air similarly to the automobile tire. The bearing surface of a metal collar is shaped somewhat like that of a leather collar, and the parts are of metal. The leather collars are made in many shapes, chief of which are full sweeny, half sweeny, kangaroo leather face, Irish or cloth face, and the common leather face. In these collars it is important that the surface be kept clean, soft and pliable.

Sometimes sweat pads are used in order to insure a more perfect fitting of the collar, but there is some objection to them as they are very warm in the summer and cause heavy sweating of the shoulders. If pads are used, they must be kept absolutely clean, and free of dirt and sweat stains. During the winter or during rainy weather horses should have their necks protected by housings or neck covers to keep out the water.

The importance of the saddle and back-band cannot be overestimated. On its proper adjustment will depend the efficiency of the breeching and holdbacks. Should the holdback be so arranged that in backing pressure is brought upon the saddle, it is important that it be fitted properly. When this is neglected a sore back is sure to result. When there is much backing to be done the breeching and holdbacks are very important. Altho there are many varieties of holdbacks on the market, they can be divided into four general classes: Breeching and shaft holdbacks; yoke and collar holdbacks; breeching and belly martingale holdbacks; and Boston holdbacks. The breeching and shaft holdback is used with single rigs. The yoke and collar holdback is intended only for light rigs. When the loads are heavy and there is considerable backing required the Boston holdback is used to good advantage.

The Importance of the Crupper

Another matter of some importance that should be considered in selecting harness is the arrangement for the crupper and back-strap. To meet the needs of the horse a variety of types of cruppers has been devised. A crupper of medium size and free from folds is usually to be preferred. Care must be exercised in fitting the crupper and also in adjusting the check rein and back-strap, for if either are too short the crupper will be drawn tightly against the tail. This may cause soreness to develop and may make the horse difficult to control.

The head stall and blinds also are important matters to consider. Upon the adjustment of the cheek straps much of the comfort and usefulness of the bit will depend. If the cheek straps are too long the bit drops and is applied loosely so that the horse is not forced to be obedient to our wishes. If the cheek straps are too short the bit may be drawn upward into the angles of the mouth and may become a constant source of annoyance to the horse and may produce a sore mouth. The advisability of using blinds will depend largely upon conditions, but in most instances they seem to be more of a nuisance than a necessity. If they are used they should be attached firmly to the bridle so that they cannot swing back and forth and interfere with the horse's vision too much.

The selection of the bridle bit too often is given very little attention and many of the troubles we have in managing horses can be traced to this

source. Bridle bits fall into three general classes: straight bar, the jointed and the curb. The straight bar bit consists of a solid mouthpiece without lever action. It is a mild bit as there is a minimum amount of pressure on the bars of the horse's mouth. The jointed or snaffle bit consists of a jointed mouthpiece also without lever action. This also is a mild bit altho considerable pressure may be brought to bear upon the bars of the horse's mouth. Curb bits are made in a great number of styles, but each one consists primarily of a solid mouthpiece, which may be straight or slightly curved. This bit is used with a curb chain or strap attached and a lever action is obtained. There are many types of bridle bits on the market that are decidedly severe in their action and as they destroy the sensitiveness of the horse's mouth, such types as a rule should not be used. They usually consist of double bars so arranged that when tightly drawn by the lines they have a tendency to pinch the jaws and may cause the horse much discomfort. The straight bar bit is especially useful for horses with tender mouths. To make the bit still more mild, it is often covered with leather or rubber. The jointed bit is a fairly useful type and many horses work more agreeably with it than with the bar bit as it gives more room for the tongue. The curb bit is used to improve the action of driving and high-acting horses. However, in the hands of inexperienced persons it may become a very cruel instrument. Any good harness dealer will be glad to explain to purchasers the strong and weak points of the various kinds of bits to those who desire such information.

In selecting a set of harness every part of its make-up should be carefully considered. Strength and durability are desirable but these must not be the only features considered. Whatever form or type of harness is purchased the comfort of the horse should not be overlooked. In fact, it should be the first consideration. Useless buckles and metal parts that chafe the skin of the horse are a source of much discomfort and interfere largely with the horse's usefulness. A few buckles are of course very necessary, but in buying a new set of harness let's make sure that the set selected is not overloaded with them. A good set of harness is almost worth its weight in gold. Don't accept anything that is offered just because it is cheap, but make sure that you are getting something that will meet your requirements and that will prove satisfactory.

Concerning Food Costs

BY ALFRED VIVIAN

There is a chance for considerable reduction in food costs thru the reorganization of our means of distribution. It now costs more to deliver food to the consumer than it does to produce it. This is partly due to the overlapping of our distribution or shipping of the same commodity in two directions. The proper co-operation with the city market should enable us to take advantage of perishable materials which are sometimes produced in certain localities in larger quantities than can be utilized locally. There should be some way to make retail prices follow the wholesale prices more closely. The increase in price from the time it leaves the producer to the time it reaches the consumer is altogether too great. I do not mean by this that there should be an attempt to eliminate the middleman, but there should be some scientific reorganization of our methods of distribution.

Something can be done by the introduction of more scientific methods of farming, so the quantity of food may be increased at a lower cost to the consumer while still leaving a fair price for the producer. This can be accomplished only thru education. But the farmer will insist upon being better paid than he has been in the past, and farm labor will continue to demand shorter hours than have heretofore been customary. In other words, the maintenance of even our present food supply depends upon making farm life sufficiently attractive to keep the best boys on the farm.

Out of 800,000 women in Texas, only 7,000 paid their poll tax in expectation of voting on future elections of the year.

The Cow's
UDDER
Must be
Healthy

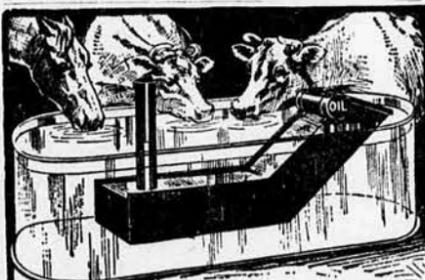
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Greatest improvement ever made in tank heaters. Fits any tank. Burns from 14 to 16 hours on one gallon of kerosene. Any child can operate it with safety; no sparks, ashes or smoke. The heating chamber is entirely under water; no heat wasted. Guaranteed. Saves feed—pays for itself repeatedly.

Empire Non-Freezeable Hog Waterer

Made of heavy galvanized iron—large capacity (70 gal.); drinking trough on outside where hogs can reach it; oil burner directly under trough—guaranteed not to freeze. Keeps water warm for 2c per day. An abundance of fresh, clean water at right temperature. Keeps hogs healthy—fatten faster on the same feed.

FARMER AGENTS

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NOVELTY HOUSE, Dept. 20, Topeka, Kan.

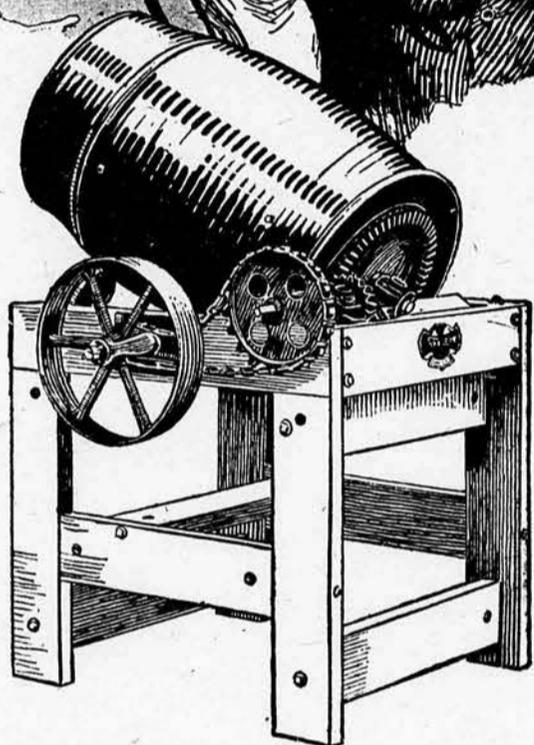
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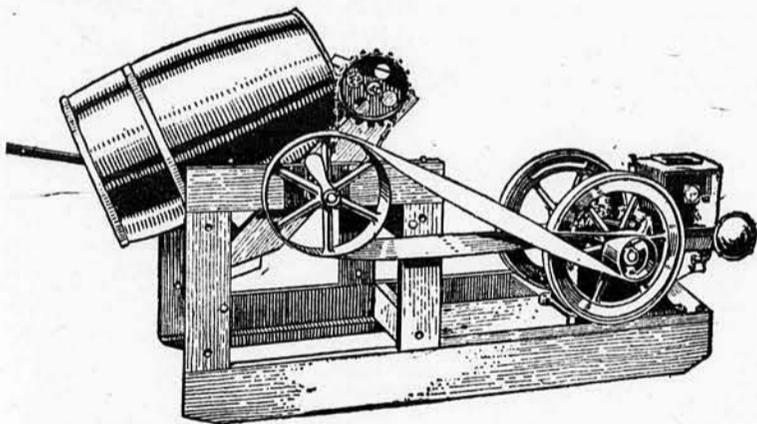
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This is the most popular Sheldon Mixer. It is a general utility machine. Operated by gasoline engine. Can be hauled anywhere in a wagon box. Works in close quarters and is a wonderful work-eater. Costs less than a cheap cultivator.

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Why pay a contractor's profit? Why wait till the contractor is ready? You can put in your own concrete improvements—cheaper, better, and when you want them—if you make the Sheldon Concrete Mixer a part of your regular farm equipment.

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No. 6X.

Mounted on skids so it can be sledged from place to place—but can be hauled in a wagon. Equipped with Stover 2 H. P. engine.

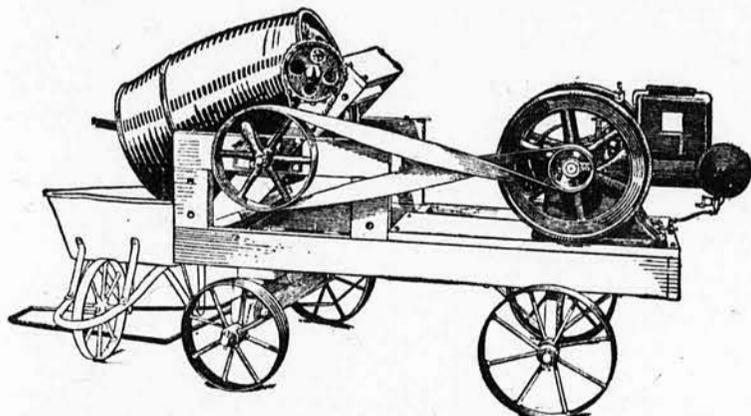
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Its dependable Crawler traction makes the Bates Steel Mule independent of poor footing conditions.

This feature brings quick appreciation from the farmer who knows.

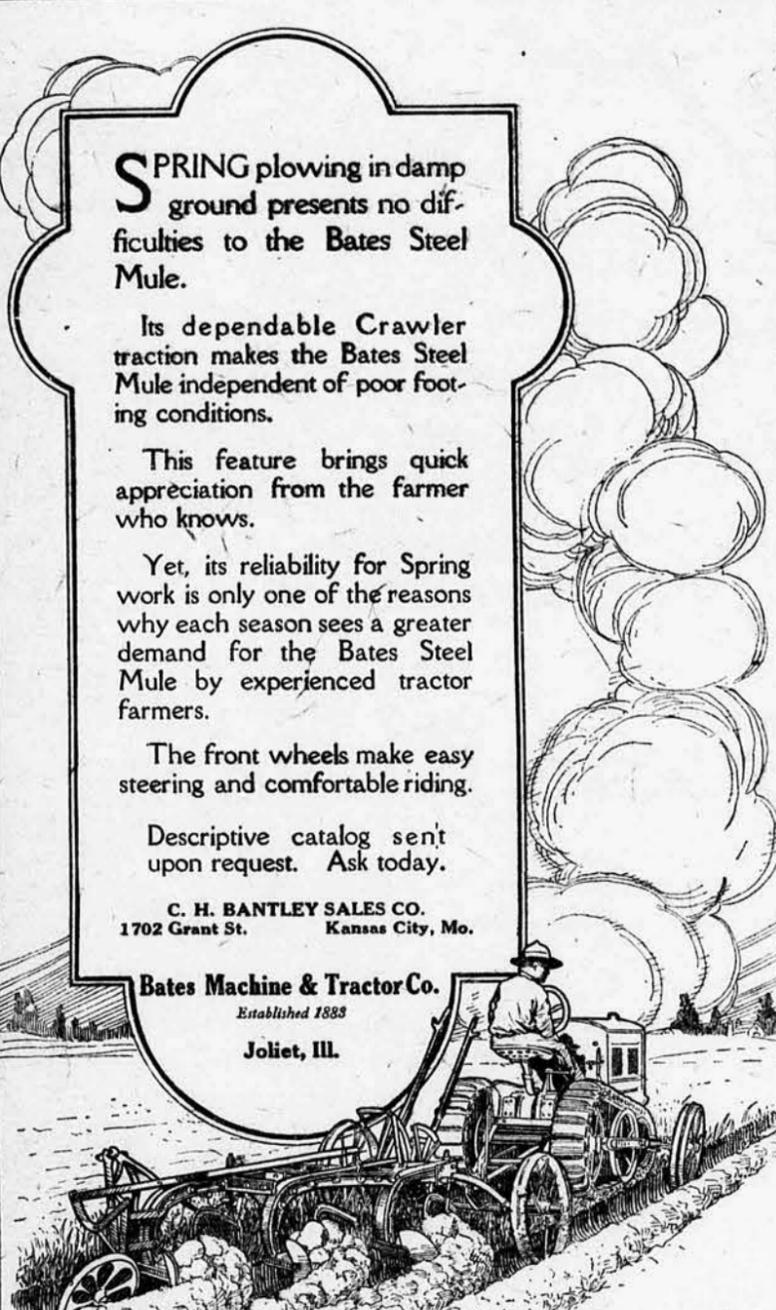
Yet, its reliability for Spring work is only one of the reasons why each season sees a greater demand for the Bates Steel Mule by experienced tractor farmers.

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Bates Machine & Tractor Co.
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The most efficient tractor in America-

Put QUALITY Windows On YOUR Hog House

There's a big extra profit waiting for you if your hog house isn't equipped with O-K Sun-Lite Windows. You'll begin to reap that extra profit as soon as you put these windows on; you'll continue to reap it as long as your hog house stands.

have been in actual use for years on the hog houses of farmers and breeders who make a special study of hog raising for greatest profit. They're recognized as the best, most economical and convenient hog house windows. Screens easily removed.

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Scene on the farm of Henry Hall, Le Mars, Iowa

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Growing Wheat in Furrows

A New Method of Planting is Being Developed

BY F. B. NICHOLS

INCREASED yields are being obtained in Northwestern Kansas on wheat fields sown with the furrow drill. It is probable that this method of seeding will become the common farm practice north of the main line of the Union Pacific railroad and west of Salina. The furrows are placed 12 inches apart and they are about 4 or 5 inches deep, depending on the kind of soil and its condition.

An advantage of this method of seeding is that the ridges help catch the snow during the winter; the snow which lodges in the furrows protects the wheat plants instead of being blown off the field and leaving them entirely bare as is commonly the case in Western Kansas and similar areas to the north. The rough condition of the ground tends to prevent injury from blowing which frequently causes serious damage in Western Kansas, and better germination is secured in dry falls. By this method it is possible to put the wheat much deeper in the ground without covering it too deep, which enables one to get the wheat in moister ground and also prevents drying out to a considerable extent after it is planted. In some seasons the wheat planted in the furrows appears to be able to stand drouth much better than when sown in the usual way.

This method has shown up most favorably at the Colby station. One would naturally expect this as damage from cold winters and blowing frequently occurs there. The first comparison of yield at this station was secured in 1918. In the fall of 1917 the new method was used on three fields, a part of each field being sown with the common drill for comparison. One of these fields had been fallow, another in corn, and a third in kafir. On the fallow field the wheat sown with the new drill produced 3.2 bushels more than that sown with the common drill. On the corn ground there was a difference of 4.4 bushels in favor of the furrow drill. On the kafir ground there was practically no difference, the ground in this case being so dry that the wheat did not get a good start by either method of seeding and produced a very low yield.

An Increase of 10 Bushels

In the fall of 1918 a rather complete set of experiments was begun at the Colby station in which some of the wheat was sown early and some late, some north and south and some east and west. Both the furrow drill and the common disk drill were used. Averaging all plots which were sown north and south at the normal date of seeding there was a gain of 10 bushels an acre for the furrow drill. The plots sown east and west on the same date showed a gain of 5 bushels an acre for the furrow method.

Almost exactly the same differences were secured when the wheat was sown late, except that the east and west seeding showed a larger difference than did the north and south seeding. Averaging all tests there was a gain of 7½ bushels for the new method. This difference was attributed to the method of seeding will become the com-

uted to an early spring drouth which appeared to injure the wheat sown by the common drill much more than that sown with the furrow drill, also to the fact that there was some injury from blowing to the soil on plots sown late.

The results at Hays have not been so favorable, largely because there has been no winter killing and practically no injury from blowing in any season since the experiments were started. About 10 acres were sown at this station in the fall of 1916, a similar area in the same field being sown with the common disk drill for comparison. This field had grown wheat continually for several years and was in poor condition. This and the very dry season caused practically a failure regardless of the method of seeding. The furrow method produced 3.29 bushels an acre and the other 1.75 bushels an acre.

Good Germination

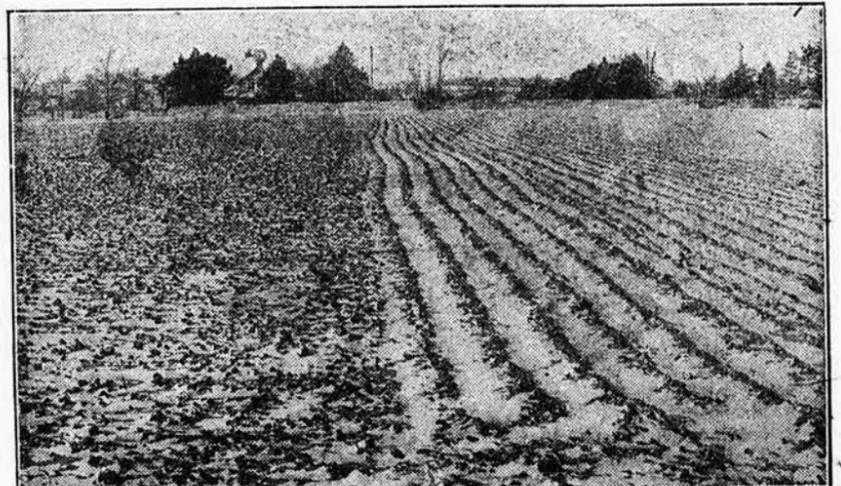
About 200 acres were sown with the furrow drill in the fall of 1917 on eight fields, a part of each field being sown with the regular disk drill for comparison. Conditions for germination were good and there was no winter killing or blowing of the soil to injure the wheat. There was very little difference in the yields secured by the two methods. The average of all fields showed that the furrow drill increased the yield by about 1 bushel an acre.

About 200 acres were again sown in the fall of 1918. Records for three fields are available at this time. They show an average gain of 3.1 bushels an acre for the furrow drill.

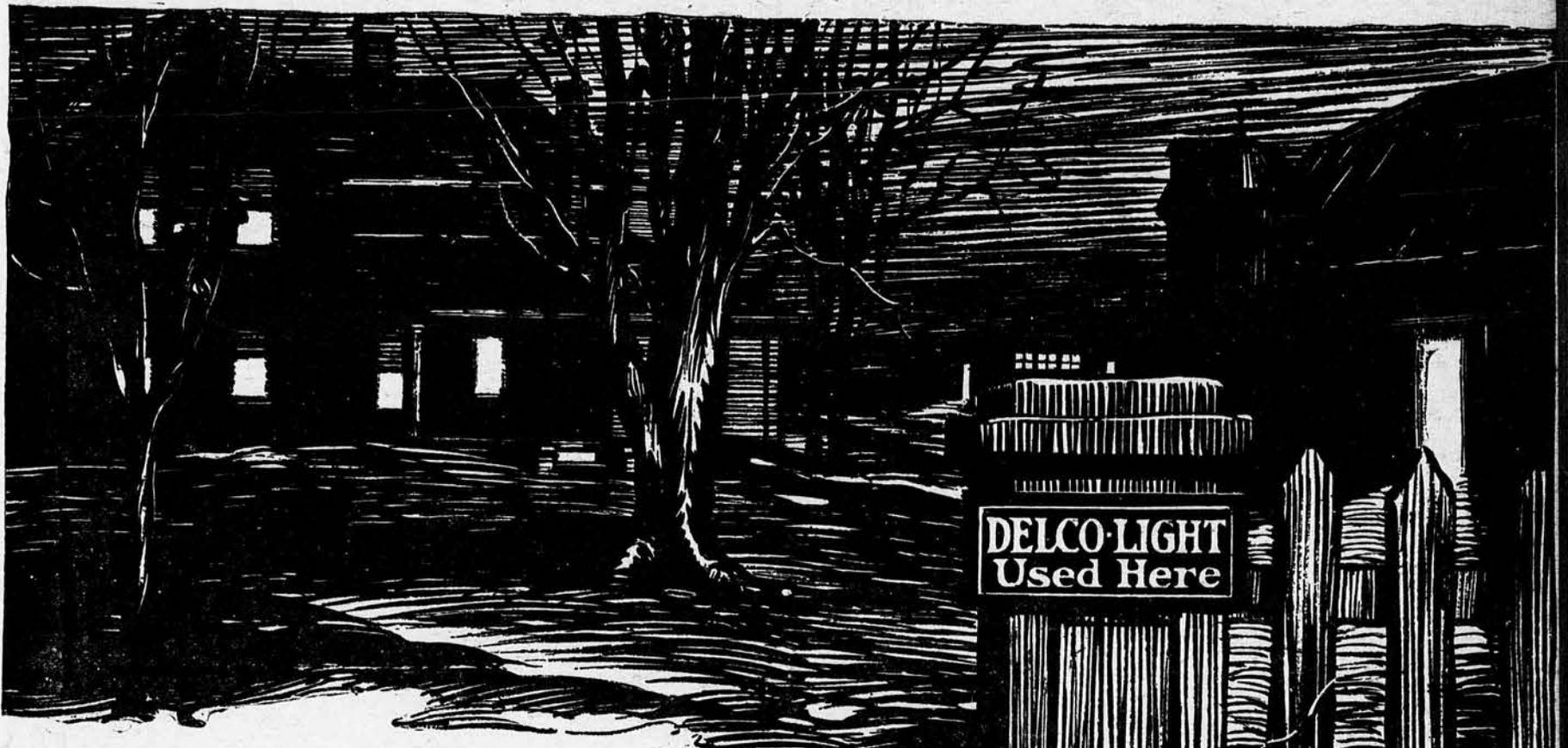
S. C. Salmon, professor of farm crops in the Kansas State Agricultural college, believes there is considerable merit in furrow planting. "We think the showing for the new method has been good, despite the fact that the increases at Hays were not especially large," he said recently. "The results show at least that we are not likely to suffer any loss in yield from spacing the rows 12 inches apart instead of 7 or 8 as is commonly done. This suggests that if we can break even with this method of seeding in favorable seasons, we will come out much ahead with it on the average, because I am satisfied from our other work and from general observations that the wheat is much more likely to come thru in good condition when sown in furrows, especially in seasons of severe winters, than if sown by the usual method.

"For example, we have found quite striking differences of winter survival of winter oats and barley sown by the two methods both at Hays and at this station. In one season we found at Manhattan 86½ per cent of oats came thru the winter when sown in furrows and only 7½ per cent when sown in the usual way. In another case 87 per cent of barley came thru the winter when sown by the furrow method and entirely killed out when sown in the usual way. At Hays we have observed differences of 25 to 50 per cent in winter survival of these grains depending on the method of seeding, in every case being in favor of the furrow method.

(Continued on Page 51.)



A View of Experimental Plots in February, Showing the Excellent Way in Which the Snow Was Held by the Furrows.



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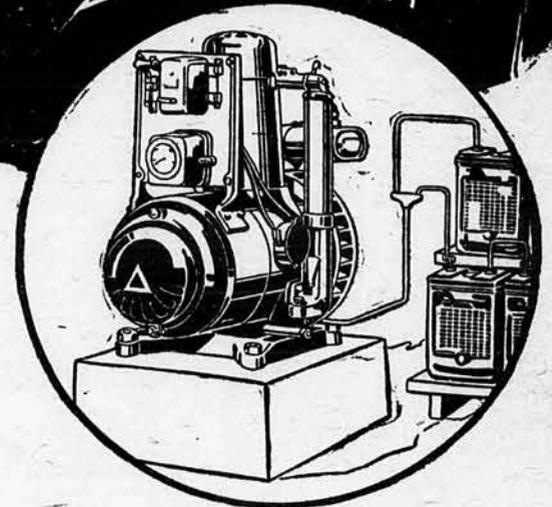
Of the electric power that it is providing to pump the water, operate the washing machine, the churn, the cream separator and the milking machine—the vacuum cleaner, electric iron and other similar conveniences—

Of the contentment and happiness that it has brought into his home on account of the improved living conditions.

And of the actual saving in time and labor that make it the best paying investment he has on the farm—It is little wonder that Delco-Light users are Satisfied Users.

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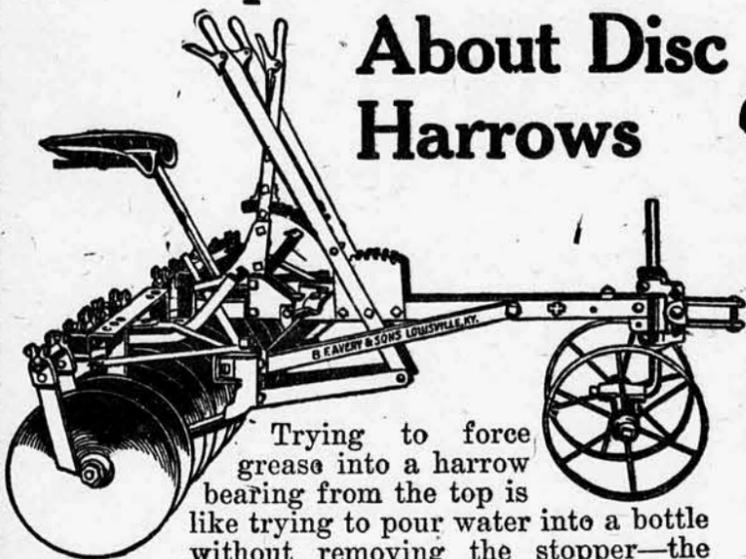
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LOUISVILLE, KENTUCKY

Ice House for Every Farm

Country Produce Will Spoil Unless Kept Cool

BY JOHN W. WILKINSON

ORDINARILY January is one of the best months in the year to obtain a supply of natural ice. Judging from present indications the season of 1920 will be no exception to the rule. Every farm should have a good ice house. An ample supply of ice is of greater importance in the rural home than in the city residence. City persons can buy perishable supplies as needed, but the remoteness of country homes from market often renders it necessary to use canned, corned or smoked meat products during the season of the year when the table should be supplied with fresh meats. Not only is ice appreciated because of its use in the preservation of fresh meats, butter and other table supplies, but the production of high grade domestic dairy products is almost impossible without it. Many markets to which milk is shipped now demand that it be cooled before shipment. In Oklahoma, Kansas, Missouri and Nebraska, ice is a luxury which can be had for the gathering. The cost of harvesting and storing it will not be great as compared with the comfort that it brings.

may be frozen in metal cans or in special fibre containers.

A cubic foot of ice weighs about 57 pounds, so in storing ice it is customary to allow from 40 to 50 cubic feet a ton for the mass of ice. At least 12 inches must be left between the ice and the wall of the building for insulation, unless the ice house has permanently insulated walls and an unusually large space for insulation beneath and above the ice. From these figures it is possible to calculate readily the quantity of ice that any given ice house will hold.

A room 14 by 14 by 14 feet will provide room for 38 tons of ice. This amount will be enough to cool the milk produced by 20 cows and provide additional ice for home use. If only the cream is cooled, much less ice will be required. Under average conditions it will take from two to three times more ice to cool the milk from 20 cows than the cream produced by the same herd. From 40 to 50 cubic feet are required for a ton of packed ice, so for 10 tons about 500 cubic feet of space will be required. One should always count on having ice for use in the house as well as in the dairy.

Having an available supply of ice for use in the house during the hot summer days is a great saving for the housewife. A refrigerator can be located in a convenient place on the porch or in the kitchen and all the perishable table products can be kept fresh and wholesome. This saves many trips up and down the steps to the cellar. Victuals can be saved from one meal to another without danger of spoiling. This results in an economy of energy and a conservation of food.

Few Tools Required

When a small quantity of ice is to be harvested, but few tools are required. The following list contains those actually needed for harvesting ice on a small scale: Two ice saws, one hand marker, one pulley and rope, two pairs of ice tongs, two ice hooks, one pointed bar, and one straight edge. While these tools are all that are necessary, additional ones, such as the horse plow and marker, horse scraper and marker, and a calking bar, are convenient, and will help to expedite the work of ice harvesting.

Ice Costs Little

The ice-harvesting season fortunately comes at a time when there is the least work on the farm for men and teams, and consequently the actual money cost is usually not very great. The quantity of ice needed depends upon the location of the farm—whether in the North or in the South, the number of cows milked, and the method of handling the product. In the Northern and Western states it has been found that, with a moderately good ice house, 1/2 ton of ice a cow is sufficient to cool cream and hold it at a low temperature for delivery two or three times a week. One and one-half or two tons a cow should be provided where milk is to be cooled.

Good Insulation Essential

The success of the ice house will depend, to a great extent, upon the effectiveness of the insulation. A very common construction by which good insulation is achieved is to set up joists 2 by 10 and 10 feet long, and cover these inside and out with a double layer of boards, with waterproof building paper between the boards. The spaces between these partitions in the walls should then be filled with saw dust, mill shavings, ground cork, or straw. Dry saw dust when obtainable will be found the most satisfactory as a rule. The ice house if possible should be located upon a well drained piece of ground. If there is shade afforded by trees on the south and west sides it will help to prevent the melting of the ice.

Water for the ice supply should be entirely free from contamination or pollution. Ponds and sluggish streams usually have grass and weeds growing in them, so that the ice harvested is likely to contain decayed vegetable matter, which is always objectionable. They should therefore be thoroughly cleared of such growths before the ice has formed.

To insure good insulation, on either side of the walls should be placed a "T" and "G" flooring, then a thickness of building paper, and following this, on the outside of the building, a layer of drop-siding, while the inside should be covered with another layer of "T" and "G" flooring. The space between the studs should be filled and well packed with dry saw dust in order to exclude the air.

In some sections it is necessary to impound the water for producing ice. This may be done either by excavating, and diverting a stream into the excavation, or by constructing dams across low areas. In localities where very low temperatures prevail for several weeks at a time, and the supply of pure water is limited, blocks of ice

Concrete Floors are Best

The floor will be more satisfactory if made of concrete. This should be about 8 inches thick and should slope toward the center from which a drain should lead to the outside. It will be

(Continued on Page 35.)



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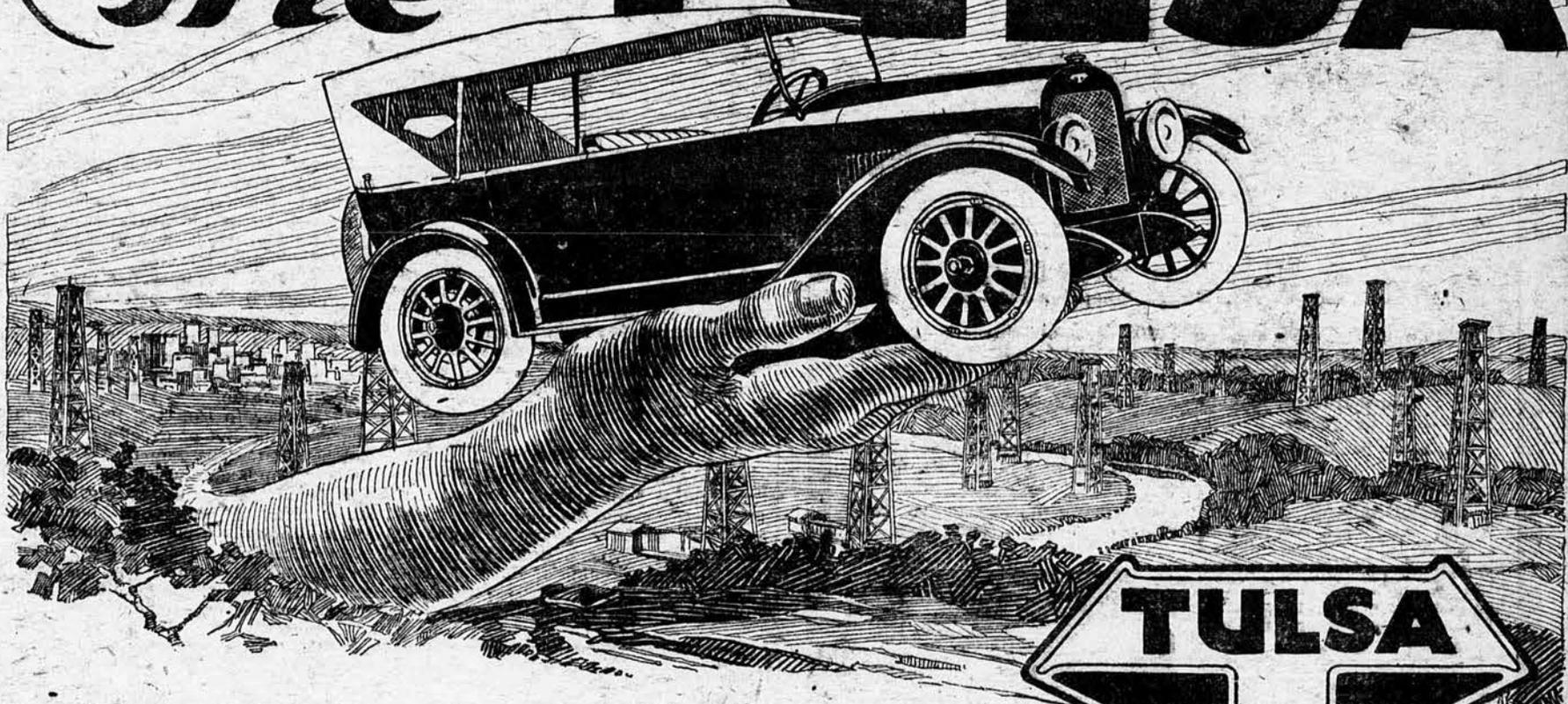
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For more than two years the TULSA has been subjected to the most gruelling test. Day in and day out it has gone down into the very depths of mud, mire, gumbo, ruts and sand—over roads, the condition of which is utterly impossible of description.

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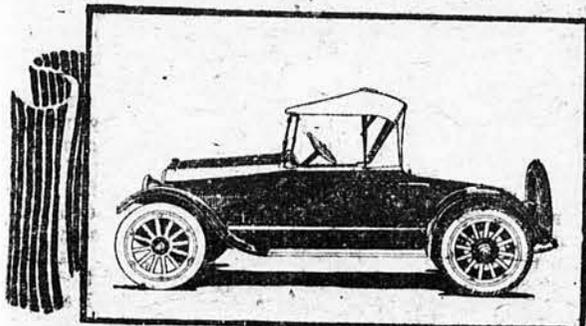
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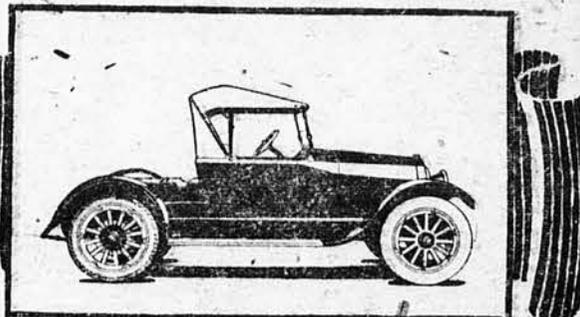
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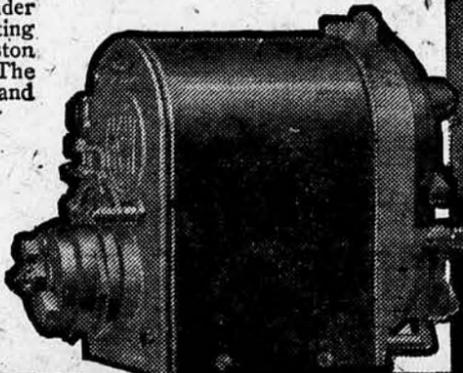
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Weeks Financial News

BY SANDERS SOSLAND

THAT the forecast of further advances in interest rates by the Federal Reserve Bank of Kansas City and sister institutions was well founded is indicated by the fact that sharp increases have been announced by these banks. The increases have carried the rediscount rates of the Federal Reserve Bank of Kansas City to 5 1/2 per cent on commercial, agricultural and livestock paper running to 90 days, while the rate on livestock and agricultural paper running between 91 days and 6 months is 6 per cent. These rates show an advance of one-half of 1 per cent. The Federal Reserve Bank of Kansas City is now charging 5 1/2 per cent to discount even loans secured by Liberty and Victory Bonds. The advances have put the rediscount rates of the Federal Reserve Bank of Kansas City to a level which is the highest in the history of that institution.

Rates Are High

"The rates are too high. We are surprised at your action. We protest." These are among the comments which have followed the advances made by the Federal Reserve Bank of Kansas City. The readers of The Kansas Farmer and Mail and Breeze who have followed the reports of financial mar-

ler, Jr., of the Federal Reserve Bank of Kansas City, said. "We will welcome, in fact, we seek, a reduction in our loans, which will mean less interest to collect. It is essential for the improvement of financial conditions that the loans of the Federal Reserve Banks be reduced."

Questions and Answers

Several interesting questions bearing on financial markets have been submitted to the writer. I welcome these, and hope to be able to answer many more for readers of the Kansas Farmer and Mail and Breeze.

A Greenwood county pasture owner, who collected \$8,000 for pasture leases the past season, asks for suggestions on investing the money in securities. He writes that he wants a conservative investment which might enhance in market value.

In answer to the Greenwood county query, a long list of excellent offerings can be cited. The Fourth 4 1/2 per cent Liberty Bonds can be bought at around \$92, or almost on a 5 per cent basis. Many Kansas municipal bonds are available on a 4 1/4 per cent basis. These are extremely conservative investments, and are cheap. But one can be relatively conservative, obtain higher returns and experience perhaps a

To Reduce Borrowing

WITH the Federal Reserve Bank of Kansas City and other Federal Reserve Banks carrying loans practically to their legal maximums, they have found it necessary to advance rediscount rates to reduce borrowing. Protests against these rates have developed from some quarters, but the Federal Reserve Banks must improve their gold reserve position and have practically no other recourse. While their rates are already at record high levels, they may find it necessary to order further advances, and then borrowers, including farmers and stockmen, will feel the effect of this change more than at present.

Speculative enterprises are the first to be hit by the higher money markets. This is a good time to avoid such enterprises. Sound investments are too attractive to permit the money of intelligent investors to go into untried business or questionable speculations.

Higher rise in the market price by purchasing railroad bonds of the better class and one or two foreign issues. Atchison general 4 per cent bonds at 80, St. Louis and San Francisco prior lien 5 per cent bonds at 70 and Chicago, Rock Island and Pacific refunding 4 per cent bonds at slightly less than 70 are desirable. Favorable railroad legislation is likely to enhance the value of these bonds. They are now five to seven points cheaper than the top prices of 1919. Another bond proposition which ought to be included is the Anglo-French five-year 5 per cent external loan, which England and France are obligated to pay jointly or individually. This bond matures in October of this year, and is now quoted at 96. In addition to the interest, the investor will profit by the difference between 96 and 100, or \$40 on every \$1,000 bond thru the payment of the principal at maturity. This bond is very cheap. If the Greenwood county investor does not plan to use his money for some other purpose, then he might buy a foreign bond with a longer maturity, say Japanese 4 1/2 per cents, due in 1925, at 79 or Japanese 4's due in 1931, at 66. These are around a 9 per cent basis.

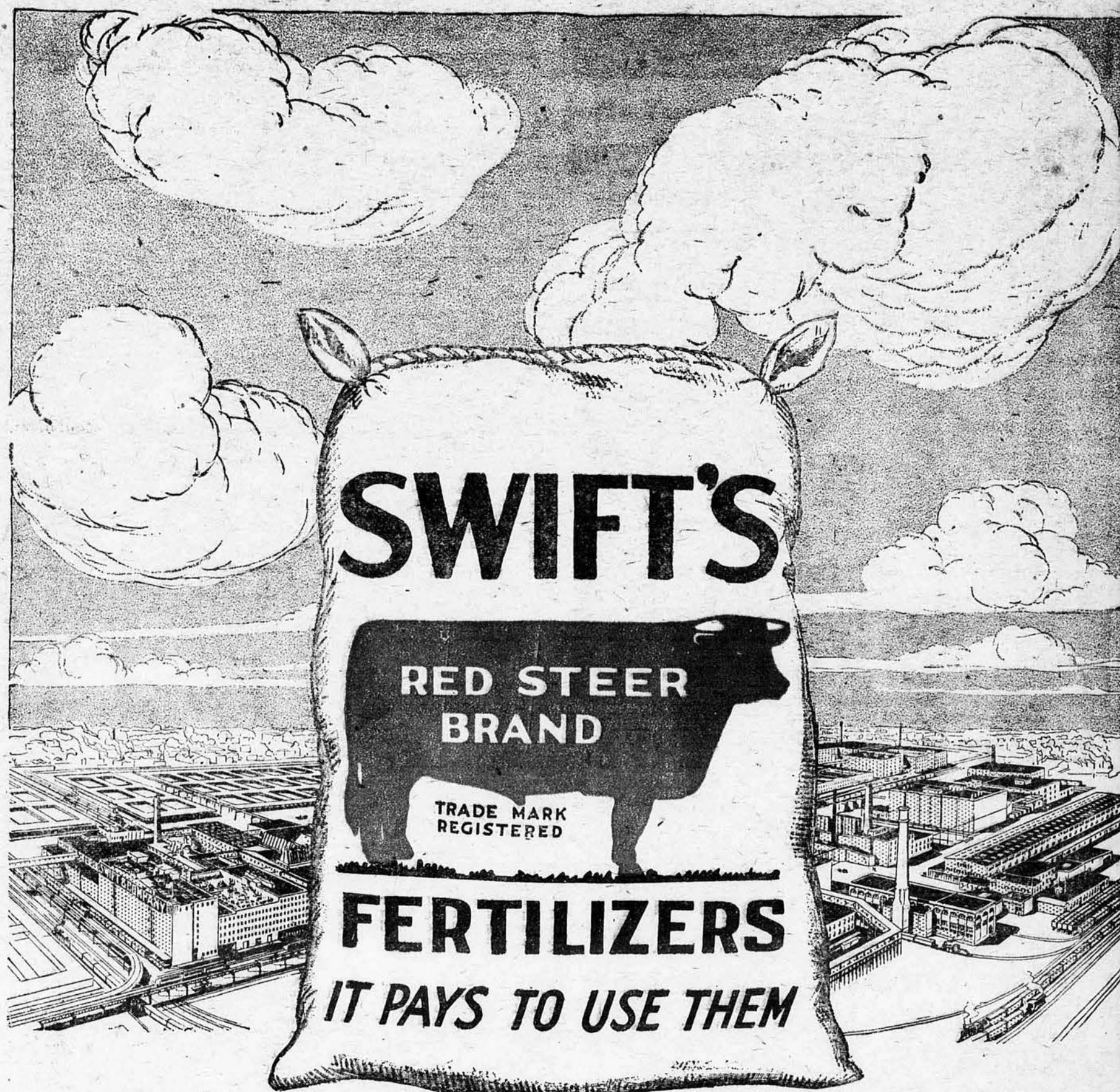
Another question: "I am urged to buy Kansas City-Nevada Consolidated Mines company stock. Do you think I could make money by paying 19 cents a share for this mining stock?"

National Banks Affected

A raise in the rediscount rates of the Federal Reserve Bank of Kansas City means that the national bank of your community or the national banks of Kansas City which are members of the Federal Reserve Bank, will have to pay more interest on the loans they make, or, to be plainer, they will have to allow the Federal Bank more interest on the paper of their customers which they want to rediscount to increase their supply of loanable funds. Thus, suppose a national bank desires to sell to the Federal Reserve Bank of Kansas City a loan of \$6,000 it is carrying on cattle. The loan will not mature before 100 days. The higher rediscount rate of the Federal Bank means that the national bank selling the loan must let the Federal institution earn 6 per cent interest on it, compared with 5 1/2 per cent prior to the increase.

While the Federal Reserve Bank of Kansas City and the others have made enormous profits in the past year, their increasing loan rates are not due to a desire to add to their earnings. "We wish to cut down our loans as sharply as possible without disturbing business in order to strengthen our reserve position," Governor J. Z. Mil-

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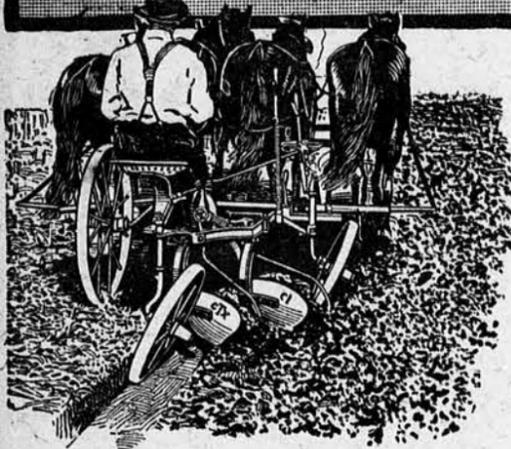
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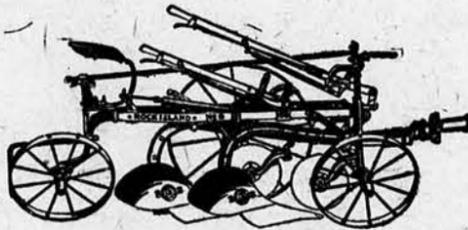
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SHIRTS—First Grade Reclaimed, U. S. Regulation, Olive Drab, Wool. Sizes 14½, 15, 15½ and 16 only. Guaranteed without holes, rips or tears; can hardly be told from new. **\$3.70 each**

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Reference: Any Bank in Omaha.

Jayhawker's Farm Notes

By Harley Hatch

A DRY, BRACING week was the one with which the new year began. During that time the roads dried and were dragged and we now have smooth riding again. At no time during the winter have the motor cars ceased running here but they did travel some days when they would have been much better off in the garage. It is no small trouble now for a farmer to hitch up a team and drive to town; if he can't go by car he is likely not to go at all.

Holding Wheat Proved Profitable

Since the roads improved many farmers have been hauling wheat. It did seem hard last fall not to be able to take advantage of the good roads but with elevators full and no cars to be had the wheat had to stay in the bin. But improved price conditions have made this enforced wheat holding profitable; good milling wheat is today 50 cents a bushel higher than it was last November and there has been virtually no loss of weight in store. We growled at the railroads because they could not haul our wheat when at the same time every day of the enforced holding was making money for the wheat owners faster than they made it while growing the grain.

Wheat Prices at Burlington

The Excelsior Milling Co., at Burlington is paying today \$2.05 for 60 pound wheat and \$2.55 for 58 pound. If the grain has a good dark color, 10 cents is added to the foregoing price; if the color is yellow, 10 cents is deducted. There was but little dark wheat raised here last year; there was not much yellow berry, either, greatly to the surprise of those who harvested a large acreage of lodged grain. I am free to confess when we harvested our wheat and found fully half of it lodged, and all of it ripened under continuous rains which were followed by hot weather, that a grade of yellow berry for the whole lot would not have surprised me. Virtually all the wheat raised in this county grades as hard, with nothing said about the color.

Less Demand for Mill Feeds

While the Burlington mill is paying the prices mentioned for wheat they are selling high patent flour for \$3.25 for a 48-pound sack and are charging \$2.10 a hundred for bran and \$2.45 for shorts. At this price, shorts cost a little less than corn by the hundred as corn is selling here for \$1.50 a bushel. There is much less demand for mill feeds than there was one year ago; there are far less hogs in the country to feed than at this time last year and I imagine that by another year the howl that will arise from the city regarding the price of hog products will make the present outcry about egg and butter prices sound like the roar of Dry creek as compared with Niagara.

The Story of a Renter

Just 24 years ago from March 1 we moved into Kansas and to this farm. At the same time we moved on this farm another farmer was moving to one which he had rented a few miles away. That farmer remained

on that farm until a short time ago. He was, and is, one of the best farmers in the county and for the 24 years he has prospered and has made money for the owner. During all that time he had intended in a year or so to buy a farm of his own but as he kept making money on the rented land and as the price of farm land kept gradually getting higher, he put off from year to year the purchase of the farm. A short time ago the farm changed hands and our friend was asked a rent so largely increased that he figured he could make more money by selling out, moving to town and living on the interest on his money. So his property was put up at public sale and he has moved to town and one of the best, farmers and producers in the county has joined the ranks of the consumers.

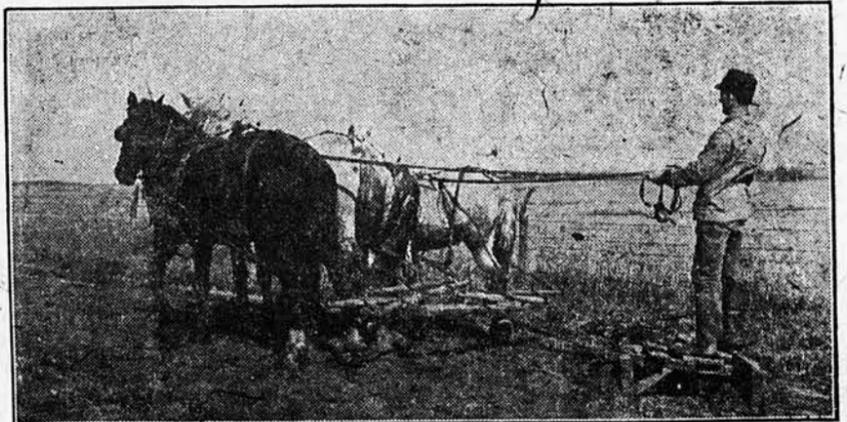
Land Values Advance

One of the peculiar things regarding the purchase of farms by renters has been, during the last 10 years, the fact that, no matter how much they may have prospered or how much money they may have laid up, the price of land has so increased that ever their increased capital will buy them less land than they could have bought 10 years ago. Their work of an entire decade is thrown away so far as increased land buying power is concerned. Our friend mentioned in the foregoing paragraph kept thinking that the rise in land prices was but temporary and that by the next year they would be reduced so that farm owning would look profitable to him. But at no time in the last 20 years have land prices been reduced; the trend has been upward every year and the last two years have witnessed the greatest increase of all.

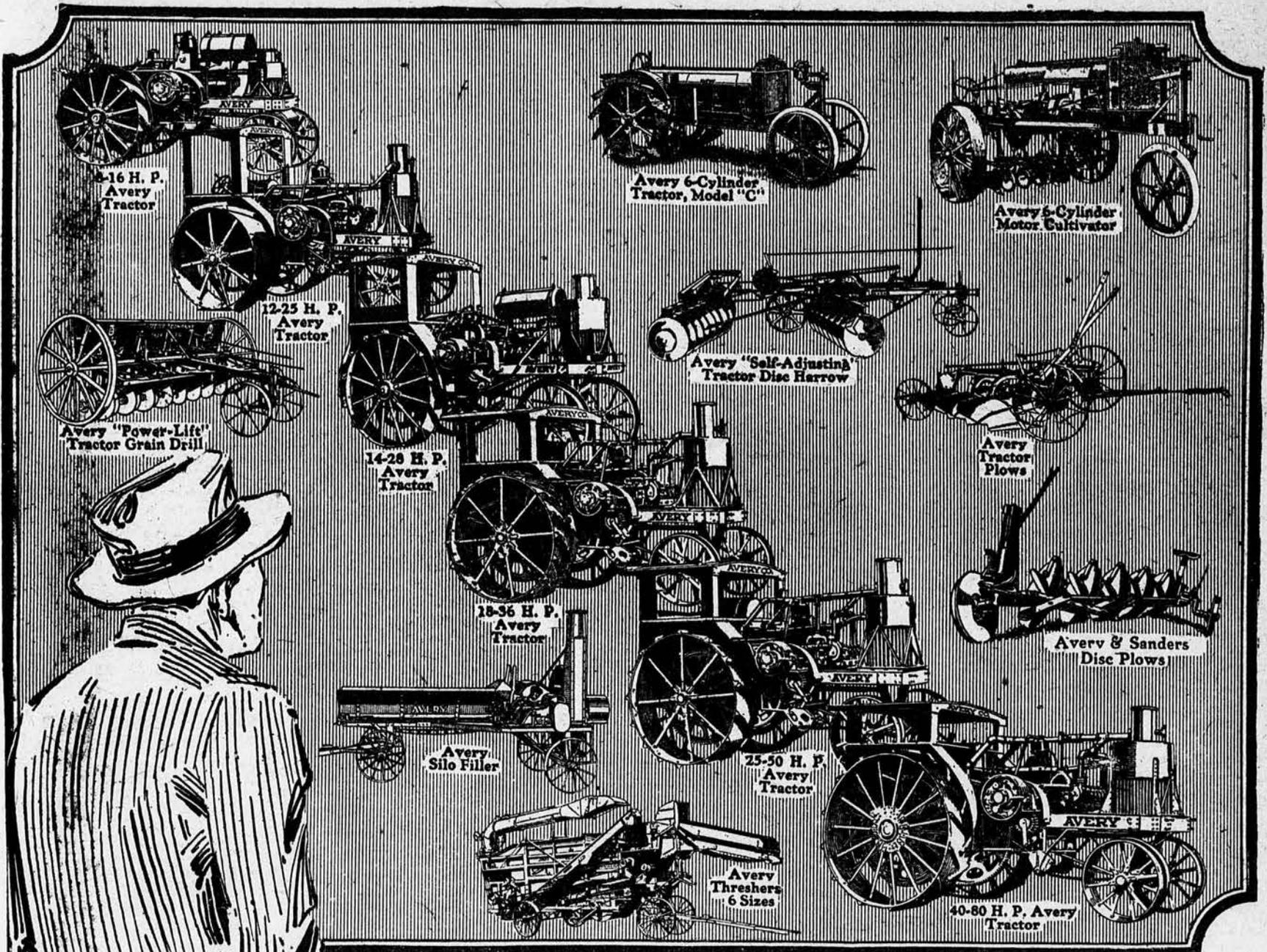
Sudan Grass

From Chapman, Kan., comes an inquiry as to the value of Sudan grass for hog pasture. This inquirer has a draw which he has sown to oats in the past but they grow very rankly on the rich land and provide but little pasture for the hogs as they last for so short a time. I should not consider Sudan grass as being of much value for hog pasture; it is too much of the nature of cane altho it would no doubt be a great deal better than no pasture at all. If I had such a piece of land here and wished to make temporary hog pasture of it I should sow rape. This on such rich land will make a very heavy and quick growth and it will provide pasture for hogs until freezing weather comes in December. We have tried many things on this farm for temporary hog pasture and have yet to find anything that will equal rape. On our upland we sow it with oats but on rich land where oats lodge I am afraid they would get the start of the rape and choke it out. If rape is sown on such land the last week in March or the first week of April it will provide pasture by May 15 and from then on until real winter comes. No other temporary pasture will do this.

It is not economy to go without a good farm paper. It may be the most extravagant thing you do.



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To the five sizes of Avery Tractors with "Draft-Horse" Motors and "Direct-Drive" Transmissions, we have added a 14-28 H. P. Tractor. This is a 4-cylinder, 3-4 plow tractor and was thoroughly tried out last year. You now have your choice of six sizes of Avery Tractors—8-16, 12-25, 14-28, 18-36, 25-50 and 40-80 H. P.—all built alike with the same successful standardized design.

In addition, we are building a new Six-Cylinder Model "C" Tractor which, with our 5-10 H. P. Model "B," makes motor farming a success even on the smallest farms.

The two-row Avery Motor Cultivator is now built with a six-cylinder motor. It has proved a wonderful success not only for planting and cultivating corn and other row crops but for a wide variety of other farm work. We are also building a four-cylinder, one-row motor cultivator.

A new Avery light "Power-Lift" Tractor Plow has been added to our former line of "Self-Lift" Independent Beam Moldboard and Disc Plows in sizes to fit any size tractor.

Also a new Tractor Disc Harrow built with new "Self-Adjusting"

features; a two-row "Self-Lift" Lister, and "Power-Lift" Tractor Grain Drills.

Avery Separators for 1920 are all regularly equipped with roller bearings. We are also building a new light weight individual separator and a roller bearing silo filler.

The Avery Line for 1920 has in it the machine you need for doing your farm work easier and cheaper. You can get an Avery Tractor in the size you need. You can handle an Avery Tillage Outfit alone. Avery tools are power operated—handled by a cord from the tractor platform.

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Market prices on hogs and cattle are such that the problem of selecting the most productive and economical feed is of utmost importance. Trimo Feeds are the result of years of practical experience and laboratory analysis and the splendid results that stock raisers in Iowa and Missouri are getting through the feeding of Trimo feeds is one of our best advertisements. Corn when fed with Trimo Feeds give maximum results.

Trimo Hog Feed

Trimo Hog Feed is all hog feed and is made to produce pork, bone and growth. Trimo Hog Feed runs 9 per cent ash. Its alfalfa content causes the brood sow to give more milk. Hog feeding is no longer a matter of guesswork, nor is it a matter of feeding whatever you have to the hogs. The successful hog raiser knows that he is repaid over and over for their proper care and attention. Especially is this true regarding the feed chosen. Feed is the material from which a hog makes weight and weight is what brings home the "bacon." Trimo Hog Feed will bring you home the "bacon."

Trimo Cattle Fatner

In the manufacture of Trimo Cattle Fatner it has been our aim to build up and manufacture a feed from the standpoint of the feeder—just as though he were making the feed himself for his personal use. Trimo Cattle Fatner is a distinct feed for a distinct purpose—that of fattening cattle for market or for use where one wishes weight and finish. It has proved itself daily to be the cattle feeders' ideal feed. Those who are using it are getting results at a low cost which at all times is gratifying. Another big point in its favor, Trimo Cattle Fatner is easy to feed. Another point, you can cut your corn ration from one-quarter to one-half. This at any stage of the game would be quite a saving no matter at what price corn was selling.

Trimo Dairy Feed

Regardless of your stock or the capacity of each animal, the various milk dairymen agree you can practically double your milk production by proper feeding. Trimo Dairy Feed is a scientific product and a sure milk producer containing only the best ingredients known to the scientific milling of feeds for milk production. It furnishes a palatable, bulky laxative and juicy dairy ration. The cow when fed Trimo Dairy Feed is supplied with feeds properly proportioned, enabling her to produce her maximum milk yield.

Trimo Horse Feed

To meet the varied needs in the feeding of the horse, the Triangle Milling Company manufactures a variety of horse and mule feeds. Trimo Horse Feeds are balanced properly and contain the nutrients which build tissues and supply energy.

Trimo Lassies Feed Green

Trimo Lassies Feed Green is a fine leafy alfalfa of bright green color, properly cured, sound and sweet, ground fine, and blended with 40 per cent cane molasses. Since alfalfa belongs to the wonderful family of legumes having the power to extract free nitrogen from the air and convert it into protein, we use it in all our feeds. This compound protein is absolutely essential to animal life. In the formation of milk, lean meat, growing of wool, hair, horns, hoofs, hides, and the development of fetal growth, stock must have food containing the proper amount of protein for young or growing stock; in fact, any living thing on the farm, rooster, hen, mule, horse, hog, cow or calf—all thrive on Trimo Lassies Feed Green. It is an all-around feed; in fact, its uses are so many that it is just up to the feeder as to what he wants to use it for.

Feed Determines Your Profit Free Sample—Use Coupon

By using Trimo Feeds you will be able to get maximum results from your feeding expenditure. Your profits on hogs and other live stock in the next few months will be controlled to a great extent by your selection of feeds. Write today for samples and prices. In coupon check names of samples desired. We can prove to you that Trimo Feeds are what we claim.

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Farming in Western Kansas

CALVES purchased by Robert G. Smith of Mattoon, Ill., from the Fort Hays Experiment station sold for \$19.75, Chicago. These calves were shown by the Fort Hays Experiment station at the Denver show last year, winning fifth place and selling for 14 cents, the second highest price paid for calves. Mr. Smith says in his letter that these calves struck "a rotten market. They sold for \$19.75, weight 1,063 pounds. They were a fancy lot of cattle and would have sold for 50 cents more money the week before." A constantly increasing number of Eastern buyers are looking to Western Kansas for feeders.

Wheat Losses

James Kelley of Alton, Kan., has 24 stacks of wheat still remaining unthreshed on 100 acres of ground. Examination of each of these stacks shows that eight of them are an absolute loss. The other 16 may be threshed and possibly 500 or 600 bushels of low grade wheat recovered. This is a condition that exists in many parts of Western Kansas.

More stacks are being ruined by the moisture on account of the inefficiency of the labor during harvest this year, resulting in many stacks being poorly built. Farmers who produce wheat must not only count the cost of production in rent on land, interest on money invested, labor, machine repairs, horse labor, but they must also count on an annual insurance from \$4 to \$5 a year to offset losses as a result of drouth, hot winds and other damaging conditions.

Wheat Doing Well

A trip over Ness, Ellis and Rush counties indicates that there has been a slight improvement in the wheat conditions during the past week. The wheat has a green color and is stooling some. This is especially true of the wheat that is on fairly well prepared ground. Wheat on heavy stubble may be doing as well but does not show up on account of yellow volunteer. Examination of these fields shows quite an infestation of Hessian fly.

Alfalfa Pays

Jake and Elmer Bleam, cattlemen of Covert, Kan., report that in the last two years they have purchased the alfalfa raised by a neighbor and in figuring up their records they find that they have paid this neighbor at the rate of \$82.50 an acre for this alfalfa. This means a little over \$41.25 an acre a year on land worth from \$60 to \$70 an acre. This is a strong argument on increasing the acreage of alfalfa on the bottom lands in Western Kansas. Many farms have land suitable for alfalfa. Results at the Fort Hays Experiment station show that upland alfalfa will not make profitable yields.

Cattle Doing Well

Dauber Brothers, Bunkerhill, Kan., report that their purebred herd of registered Herefords is going into the winter in better condition than usual. This seems to be a common report among the better cattlemen of the section. These men are improving their farm and are going to put down some silos. Their herd is headed by a bull purchased from the Col. E. H. Taylor herd of Frankfort, Ky.

Feeding Kafir

Whether it pays to feed a 20 bushel to the acre kafir crop either in the form of silage or fodder with the heads on is being tested out as an addition to the livestock experimental work at the Fort Hays Experiment Station

this year. Four lots of yearling heifers are used in this experiment, one lot being fed kafir with the heads on, the other kafir with the heads off. Associated with these are two other lots, one being fed kafir silage with the heads on and the other kafir silage with the heads off. Last year's experiments showed that it took 1 acre of kafir fodder to go as far as .56 of an acre of kafir silage.

Soil Blowing

A method that gives great promise as a remedy for soil blowing on wheat ground is that of putting wheat in with a lister drill which leaves the ground ridged. The drill furrows should run at right angles to the prevailing winds.

For the past three years one-third of each of the large fields on the Fort Hays Experiment station has been planted with a lister drill and harvested in comparison with the rest of the field which had been planted with the regular drill. One of the objections to this method is that the ordinary commercial lister drill has a tendency to clog up. To overcome this Prof. S. C. Salmon of the Kansas State Agricultural college has invented a tandem disk drill which gives promise of overcoming the objections of the commercial drills now on the market. This has been tried out and improved during the past few years in these large field tests at this station. The results with this furrow drill so far show considerable advantage in preventing soil blowing over the methods of drilling now commonly used.

Sorghum and Corn

Sorghums in Western Kansas are making a greater tonnage of silage an acre than corn. Recently a number of clippings have been received at the Fort Hays Experiment station urging a Wisconsin variety of corn that is especially recommended for silage. Careful experiments conducted at various experiment stations have proved that seed corn transported even 50 miles does not do as well as where it was grown. This loss in yield is increased when the corn is moved from a more favorable to a less favorable region. On the other hand results even as far east as the Kansas State Agricultural college at Manhattan show that sorghum outyields corn for silage.

Farmers Pleasing Customers

Many shipments of Western Kansas products often bring lower prices because of the careless way in which they are sometimes prepared for the market. The price that any producer gets for his commodity often depends upon how well he caters to the demands of the buyer.

A circular letter received from R. A. Smith, Supervisor of Agriculture for the Union Pacific under the United States Railroad Administration, presents an appeal for the co-operation of the Western stations to help in urging farmers to prepare their commodities for shipment, sacking their potatoes and varieties of seeds in uniform sacks, the weight and quality of each being the same. It is quite often true in non-uniform shipments that the poorest sack will be opened first and the price fixed for the shipment on the poorest sample in the entire shipment. This is very true in shipping a car of baled alfalfa. Three-fourths of the bales contained in the car may be No. 1 alfalfa, the other one-fourth may be bales that have been wet and therefore would grade low and the whole shipment be graded low as a result.



Alfalfa Makes Good Yields on Bottom Lands in Western Kansas, But on Uplands It Produces Very Unsatisfactory and Unprofitable Crops.

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Orchard and Garden

NURSERY stock of all kinds never has been so scarce as it is this year. Fruit stocks of all kinds will not begin to meet the demand and ornamentals of many classes cannot be supplied.

House plants should not be kept in a dry atmosphere. Water thoroly when water is given and then wait till they need water again before applying any.

The peanut business of this country is said to be worth nearly 200 million dollars and other nuts have a value of about 35 million dollars. Many persons are using nuts or nut products as a daily food. Black walnuts and pecans can be grown in many parts of Kansas to good advantage. Overflow lands can be planted very profitably to pecans, especially in eastern Kansas.

Cheap vegetable and flower seeds are often expensive at any price. It pays to buy good seeds from reliable firms of established reputation. Seeds are a small part of the cost of raising a crop. The best are none too good.

A school boy sold \$800 worth of melons from an acre of land last year. He kept an accurate record of all operations and can tell just what they cost him to grow. That kind of book-keeping pays on any farm.

Send for seed catalogues and choose the seeds and plants to be used next year. It will be a good plan to order seeds and bulbs early for there is pretty sure to be a shortage of good stock again this year.

Get the hotbed ready now, and as soon as the weather will permit be ready to start early lettuce, cabbage, and cauliflower plants. A little later have everything arranged to start the tomato and sweet potato plants.

Next Year's Garden

It is time now to plan for next season's garden. See that all of the trash is picked up and the bean poles and pea sticks are piled in an out-of-the-way place. If you intend to apply manure it should be scattered now. Then give the ground a good plowing. If you have not been plowing at least 8 inches deep you should add at least two inches to the depth. Do not harrow the ground after plowing but permit it to lie up in the ridges left by the plow.

See that the ground drains thoroly. If you have had trouble in the past by the water standing on your garden, put in tiles if possible during the winter. If for any reason you cannot use the tiles make a ditch that will lead off the water and see that it does it properly and thoroly. Watch it to see that it does not wash out a deep gully. If one should start fill it with brush and straw. Drive down some stakes to hold the filling if necessary.

If you have drained the plot well and plowed under a good coat of manure, your ground will warm up quickly in the spring, and it will be in an ideal condition for an early planting

of vegetables. The early ones are the ones that bring the big money and then they taste so good when we can have them earlier than our neighbors. Your garden will work well all of the summer and will give you very little trouble.

Decide what you are going to plant in each part of the garden. Lay out the plans on paper. If you have saved your own seed get them ready for use at the proper time. If you must buy them get your catalogs and pick out what you desire and order them early. Fix up the fences. Make your hotbed and have it ready. Prepare a cold-frame to help in having early cabbage, tomato, pepper and egg plants. Do not experiment too much with untried crops or varieties. The good old stand-bys are the most certain and best paying. Be sure to have some of the old fashioned flowers in the garden and in the yard. They will do a great deal to make things bright and attractive around the house. A few cut and placed on the table will make the food taste better. A good supply in the living room will make things seem homelike and pleasing.

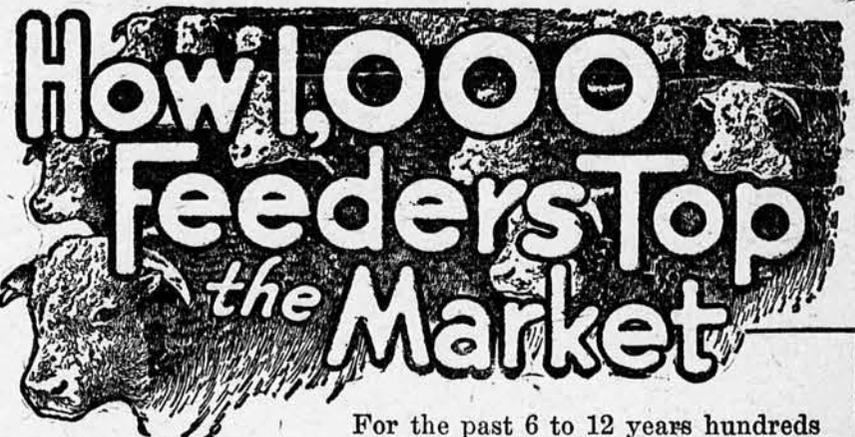
Columbus, Kan. S. W. Black.

Molasses a Good Stock Food

(Continued from Page 8.)

station are also in feed lots at Manhattan and one cannot help noticing the extreme quietness and docility of these animals as compared with the 2-year-olds in adjoining lots.

In feeding blackstrap molasses it should be kept in mind that it is in itself a very one-sided feed. Its nutrients are almost pure carbohydrates in the form of soluble sugar. Its natural supplement would be protein-rich feeds as cottonseed meal and alfalfa hay. Dr. Dalrymple, who is probably the best known authority on feeding blackstrap molasses, in speaking of its value, says: "Blackstrap is a valuable feed for at least three very good reasons. So far as Louisiana is concerned I believe it is our cheapest present source of the carbohydrate element; its high carbohydrate content or about 66 per cent; and the almost complete digestibility of this nutrient. It is my opinion that the marked success which has attended its adoption during the past few years is almost entirely due to its palatability, its condimental effect in promoting a more perfect digestion of other feeds fed with it and the readiness with which it can be absorbed into the circulation of the animal body for nutrition purposes. When the true value of this material is better and more widely known, its consumption is bound to increase and over a much greater area of the country than is using it at the present time. It simply requires to be known to be more fully appreciated. At the Louisiana Experiment station we use it in the stable of the work stock, in the dairy, and in the feed lot; and practically every ration we compound in replying to the inquiries of our planters, farmers or feeders contains its legitimate proportion of feeding molasses."



For the past 6 to 12 years hundreds of the big, successful feeders of the country have met with uniform success in Topping the Market time after time. For instance, John Hubly, of Mason City, Ill., has topped the Chicago Market twelve or fifteen times during the past fifteen months. Without exception these successful feeders and breeders feed

TARKIO MOLASSES FEED

—the feed that has gained the reputation of being the "World's Greatest and Cheapest Fat Builder." Tarkio is cheaper than corn and goes farther. It is partially pre-digested in manufacturing and ready to start making fat almost as soon as it reaches the stomach. Tarkio creates a natural thirst and for this reason is an especially valuable winter feed. There is practically no wastage.

Shortens Feeding Period

Because it is readily assimilated and produces fat so rapidly, Tarkio invariably shortens the feeding period from 10 to 30 days.

Average Gain 3 to 4 Pounds Daily

Feeders in seven states report gains of from 3 to 4 pounds daily on Tarkio. J. G. Green, Cassoday, Kan., writes, "The returns received on a drove of cattle fed on Tarkio Molasses Feed show a gain of 3.6 pounds per head daily for 52-day feed. I am convinced after personally trying it, that you have the best commercial feed ever put on the market. Ship me 80 tons more."

Free Feeding Service

For over 12 years Tarkio has been made under the same successful formula by men who are successful feeders and breeders themselves.

On six big farms owned by Tarkio men and operated by practical farmers some very valuable experiment work has been done. Many unique and successful methods have been worked out.

For instance, we have compiled invaluable information on the feeding of beef cattle—the best type to buy, etc.; also how to get more milk at less feeding cost, how to fatten hogs at less expense, how to put a high finish on horses, and how to make sheep more profitable. If you want information on some particular feeding problem we will be glad to answer any questions without charge.

FREE Samples Any feeder who wants to lower feeding costs and shorten the feeding period should write for free samples of Tarkio and prices. The man who uses 15 to 30 tons of feed a year or who can form a neighborhood club to buy in quantities will be particularly interested in car lot prices. Send coupon below for free sample, feeding information and prices delivered to your station.

Big feeders and breeders like O. Harris & Sons, Missouri; Wm. Gallo-way, Iowa; Park Salter, Kansas; P. S. Haner & Co., Illinois; L. R. Kershaw, Oklahoma; Warren T. McCray, Indiana; Wm. Rees, Nebraska; Shannon Millet, Summer & Co., South Dakota; W. M. Riggs & Son, Iowa; Harry F. Copeland, Iowa; Geo. Hanks, Colorado; Frank Ronne, Nebraska, and hundreds of others continue to report gains of from 3 to 4 pounds a day and Market Topping prices month after month, year after year. J. W. Barker & Sons feed 30 tons of Tarkio per week. Men who know the feeding game wouldn't continue to feed Tarkio year after year if it didn't make them good money. For instance, J. G. Majers, of La Plata, Mo., like many of the above, has been feeding Tarkio for over 10 years.

TARKIO MOLASSES FEED CO.

561-7 Live Stock Exchange Bldg., KANSAS CITY, MO.

FREE SAMPLE COUPON

TARKIO MOLASSES FEED CO.,
561-7 Live Stock Exchange Bldg., Kansas City, Mo.
Gentlemen: Without any obligation on my part, please send me Free Sample of Tarkio, also price per ton in ton lots delivered to located on R. R.
Please give me feeding information on
I feed an average of
..... hogs, cattle, Name
..... sheep, cows. Address



A Load of Grimes Golden Apples at Picking Time. Thoro Spraying, at the Right Time, is Necessary in Growing Such Fruit.

Dayton Airless

Can't Puncture Can't Blow Out

No tube, no pumping, no delays. Dayton Airless look and ride like pneumatic tires but are absolutely trouble proof.

8,000 MILES GUARANTEED

They wear until they are worn clear through. Ten, twenty, thirty, and even forty thousand miles are the records of users.

Made in 30x3, 30x3½ and 30x4 inch sizes only.

Write for Prices and Booklet.

BIG MONEY Business men write for exclusive county agency offer.

THE DAYTON RUBBER MFG. CO.
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Pendant and Chain

Premium No. 44

The Pendant we offer is artistically executed in a filigree design. And the chain is included in our remarkable offer. What could be more attractive for low-neck dresses! The chain is 15 inches long and as dainty as a chain of solid gold.

Special 10-Day Offer: We will send this Chain and Pendant, premium No. 44, to all who send us two yearly subscriptions to the Household at 25 cents each. 50 cents in all.

THE HOUSEHOLD MAGAZINE
Dept. M-44, Topeka, Kansas



What Song is this?

How often do you hear melodies that are familiar, and yet you do not know what they are! Our book, "Songs of Long Ago", contains the complete words and music of 26 of the most popular old time songs and ballads. We will send you this 32-page song book free. Simply fill out the coupon below and mail it to us.

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PIANOS AND PLAYER PIANOS

There are many things that have helped make Baldwin-built Pianos the standard the country over. First, is our policy to produce only high-grade instruments. Second, is our two completely equipped factory groups and experienced organizations of piano builders in Cincinnati and Chicago. Third, is the tremendous demand for our instruments which enables us to buy the choicest materials at the lowest prices. Fourth, is our selling method which eliminates jobbers' and wholesalers' profits. The Baldwin line includes the Baldwin, Ellington, Hamilton and Howard Pianos—and the Manualo, "the player-piano that is all but human." Send for Book to Dept. A3

Songs of Long Ago

The Baldwin Piano Co.
Cincinnati Chicago St. Louis New York
San Francisco Indianapolis
Denver Louisville Dallas

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Send me your free song book "Songs of Long Ago."
Name.....
Street or R. F. D.....
City and State.....
Would you like to have a piano or player-piano?.....



FINE CAMERA FREE

What would be more enjoyable next summer when you and your friends are wishing dear old winter time to come again, than to be able to pick up your Photograph Album and turn to some of the pictures which were taken while you were rolling snowballs, making snowmen, out on sleighing, coasting and skating parties—pictures that were taken by you and your own camera. A picture is something that you can keep for years, and you will value it highly when you are grown up and can look back at the happy times you had during your childhood.

Guaranteed to Give Perfect Satisfaction

This camera is strongly made of seasoned wood with seal grain covering, and carrying strap. Loads by daylight, and takes pictures regulation size, 2 1/4 x 3 1/2 inches. It is the lightest and most compact camera for that size picture made. Everybody should have a good camera about the home. Useful, besides all the pleasure and enjoyment, and nothing is nicer than to have a big lot of good Kodak Pictures taken by yourself of the various places you go, and things you have seen.

Send No Money—Just Coupon Below

Hurry if you want a dandy good camera free. All I ask you to do is to distribute ten beautiful colored pictures among your friends on our special 25 cent offer. These pictures go like wildfire. Everybody wants them. You can distribute them in less than an hour's time. This is your chance. Don't miss it.

M. LIPPER, Manager,
50 Capper Bldg., Topeka, Kan.

I want to get one of your cameras FREE. Please send me ten beautiful pictures to distribute at once.

Name.....
Town..... State.....
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Fill Out Coupon
Mail Today

Rural Engineering Hints

By C. E. Jablow

Far too many gas engines on the farms in our Middle West lack a great deal of being serviceable. When a gas engine has had a long and useful life and is then found to be in an unserviceable condition, no criticism is offered, altho according to my opinion, the only factors that tend to shorten the life of a gas engine, are exposure to the elements which results in rusting the parts and in rendering them inoperative and useless. The gas engines have been developed to a point where an engine purchased a number of years ago when compared to the newer engines would be considered obsolete now. Some slight repairs may of course be necessary from time to time, but that is no reason for relegating the entire engine to the scrap heap. The winter was responsible for salvaging an engine that was considered useless by reason of a burst jacket. This engine was put in condition and already has given several years service since the repair with a promise of many years to come.

Utilizing Old Machines

A conversation with a farmer in Muskogee county, Okla., suggested to me the idea of preparing the present article. On this farm there were several small engines, two automobiles and an assortment of power machinery. One small binder engine was used several years ago for the saving of a crop that otherwise could not have been harvested. The farmer said that the engine already had paid for itself so therefore he had not bothered about using it more than that one time. Of course with a recurrence of similar weather conditions he undoubtedly would have come back to his friend, the binder engine. One of the automobiles, no longer filled the needs or perhaps the desires of the family so it was set aside for a larger and more expensive car. In this particular family there was one young man somewhat technically inclined and before I could even offer suggestions for harnessing this latent power on this farm, this young man presented a well thought out scheme for bringing the family out of darkness by using one of the engines for the generation of an electric current. There is little doubt that this farm home will stand out from among their neighbors as an example of modern living conditions on the farm. Only one use was thus made of the machine but it might have been used also for pumping, operating a churn, or cream separator, running a feed cutter and a dozen other uses that could save the manual labor of the men or some of the heavy work that is required of the women on the farm.

Load the Engine

By loading the gas engine, we do not imply overloading the gas engine, for very discouraging and disappointing results may be found, under such conditions. It is true, however, that if a large engine is used continually on a small load, poorer fuel economy will result. As a rule, more power can be had from a gallon of gasoline or other fuel when the engine fits the load than when the same load is put on a much larger engine. This fact tends to explain why more mileage can be had from a gallon of gasoline when the car is driven rapidly than when traveling

at a slow rate of speed. In the first instance the engine is more nearly loaded. It is important to note that most automobiles operate the greatest portion of the time under a partial load and the excess horsepower is only called into use on comparatively few occasions.

It is to be hoped that these remarks will not tend to make speed demons of many, for the element of danger is ever present and besides the arm of the law will be applied within municipalities. When the load varies greatly as it does in the pleasure car, the only thing that can be done is to have an engine adequate for the greatest load, but many jobs of a stationary character are reasonably constant. The loads that are put on tractors are more nearly constant in amount and therefore we should reasonably expect more economical results for each horsepower available than with the automobile.

Keep the Engine Busy

All of us know that the patience of the younger men in the family, as a rule, much exceeds that of their fathers. Therefore it will not only be considered by them a privilege to operate the gas engines but if they are familiar with the mechanical details, they will be able to put an otherwise unserviceable engine into good condition and will enjoy themselves while so doing. It is no secret to many of us, that the younger generation have the perception that is lacking in the head of the family. Therefore a plea is entered to give the young man proper instruction and then give him free rein. Above all do not permit an engine to remain idle month after month with no duty for it to perform. If it is not needed on your place, your neighbor will be willing to pay a fair price and include it among his possessions.

If the engine is really beyond repair and has outlived its usefulness there is still no argument for retaining it on your farm. Under such conditions the price of the scrap iron will be more appreciated than the ornamental effect of a dilapidated engine about the house or barn.

On one or two other occasions, there was discussed in these columns the proper size of engines for the work on the average farm. It will be remembered that two engines of the stationary portable or semi-portable type were recommended to fit most conditions. One of these engines should be about four horsepower and the other about 10 horsepower. However, as a general thing I do not recommend the use of the motor car engine for the various uses for power on the farm.

"God's in Heaven" Still

O troubled hearts, forget your pain,
Your grief and loss, now once again
The merry Yule-tide brings
Its joy of giving, song and mirth
To gladden all the hearts of earth,
And once more celebrate the birth
Of our great King of Kings!
Come, little birds and friendly beasts,
And share with us the Yule-tide feasts
Earth spreads so lavishly!
O children, let your voices ring
Banish all gloom and doubt away!
Be wholly happy for this Day,
And dance around the Tree!
Ring, Christmas bells! Your message gives
Faith to believe that Truth still lives!
Ring, ring, with right good will!
For the humanity's bruised breast
Is throbbing with a wild unrest,
Man longs and strives yet for the best!
God's in His Heaven still!



Here is a Car That Has Been Utilized for Breaking Sod. Binder Wheels were Substituted for the Rear Wheels to Increase the Traction Power.

Tom McNeal's Answers

Question of Moving

A rents B his farm for the year 1919. B moved on the farm and farmed it in a good and careful manner. Then A told B verbally that he could have the farm for another year and acting on this agreement B sowed the farm in wheat. A wrote B in December saying that he would send him a lease in a few days, but now he comes to B and tells him to move off as he has sold the place. Can he compel B to move? D. L. L.

No.

Rights of Daughter's Husband

A and B are husband and wife. They had five children, C, D, E, F and G. A died about five years ago leaving no will, B is still living. F, a daughter died about 25 years ago leaving a husband, but no children and no will. According to the laws of Kansas, if B should die, leaving no will, what rights would the husband of F have in the property, real and personal left by A and B? REGULAR SUBSCRIBER.

None whatever.

Fencing Against Hogs

Does one have to fence against hogs and what is the law in regard to hogs and poultry running at large? S. M. R.

Unless the electors of your township have voted to permit hogs to run at large you are not required to fence against them.

Poultry is not permitted to run at large under our law.

Loan From Land Bank

How does a man obtain a loan from the government for the purpose of buying a farm? What rate of interest does the government charge, or where can I get information? SUBSCRIBER.

The government does not make loans, but what you have in mind no doubt is the Federal Farm Loan Bank. Write Federal Farm Loan Bank, Wichita, Kan., for full information concerning organization of local association; manner of application for loan and rate of interest, including amortization fee.

Rights of Outside Relatives

A man and wife have no children and have made no will. The man dies. Can his relatives come in and get some of his property under the Kansas law? If his wife dies can her relatives come in and share any of the estate? The man and wife have no children. READER.

At the death of the husband without will the property would all go to the surviving wife. At her death without will her property would go to her parents if they are living at the time of her death. In case her parents are both dead her estate would go to her surviving brothers and sisters if there are any or to their children if her brothers and sisters are dead. If she marries again, however, and her second husband survives her he would inherit all of her property if she leaves no will.

Is He Responsible?

I had a daughter who after becoming of age went to a large city to make her own living. She contracted tuberculosis and left for the West in search of a better climate, but did not improve and died out there. Now the doctor who attended her writes me and asks me to pay his bill. Can he collect his bill from me? I never made any agreement with him. A READER.

From your statement of the case, I would say no. But did you as a matter of fact tell your daughter to get a doctor, the best she could obtain; which I may say would be the natural thing for you to do. If so it seems to me that you are under some moral obligation to pay the physician for his services, but with the facts as you have stated them you are not legally bound.

Rights of Widow

A owned a 120 acre farm which has always been our home. There is a mortgage against it of \$2,100. It lies in Coffey county, Kansas. Last May A died leaving widow and three minor children and eight of age. He left personal property and had a crop started, which the widow cared for until it was harvested. She then had a sale of stock, farm implements and grain but the proceeds were not sufficient to settle all the debts, not including the mortgage on the farm. The widow is not able to run the farm and therefore wishes to sell it for the purpose of paying debts against the estate.

- (1) Can she sell the farm for the purpose of paying all debts against the estate?
- (2) If so can she sell it privately?
- (3) Will she have to vacate the farm?
- (4) If she cannot sell what must be done with the mortgage when due?
- (5) Will she have to have the consent of the older children in order to sell?
- (6) If she can sell the farm please advise what steps are necessary to start the proceedings. F. M.

(1). The property may be sold to pay the debts.

(2). Before selling the land to satisfy the debts the widow who I presume has been appointed administratrix of the estate, must make application to the probate court to be permitted to sell. The court may permit the sale to

(Continued on Page 33.)

HERMOLINE

A BETTER LUBRICANT

-FROM THE FORMULA OF A MOTOR COMPANY

Don't Ask Merely For "Oil"

When you drive up to a garage for lubricating oil, don't ask just for "oil."

Know good oil from the other kind—know just why one oil is better than another and then buy the oil about which there is no question as to quality.

The best oil is the only kind you want to put into your car, truck or tractor—know it by name and ask for it by name.

Ask for an oil made from pure, Pennsylvania crude—which anyone who knows will tell you is the very best lubricant you can buy.

Ask for HERMOLINE—and you are sure of getting a lubricant made from Pennsylvania crude—a better lubricant made especially for motor cars, trucks and tractors from the formula of a motor company, not an oil company.

In asking for HERMOLINE you are sure of getting an oil that stands up under the intense internal heat of the automobile engine and the even greater heat of truck and tractor motors—far better than any other lubricant not made from Pennsylvania crude. You are sure of getting an oil whose clear color is the result of thorough filterization, not the result of the counterfeiting use of acids. You get an oil free of sediment.

When you buy HERMOLINE, you buy not merely "oil,"—you buy motor safety and protection. You buy added years of satisfactory and profitable motor performance.

There should be a HERMOLINE dealer in your town. If not, send us the name of your garage man, and we will see that he supplies you at once.

Put it to any test you like, HERMOLINE is the lubricant you should insist on.

HERRING MOTOR COMPANY
Des Moines, Iowa



The Test of Oil Value

There are five tests, by which the supreme quality of lubricants made from Pennsylvania crude oils are shown, and by these tests HERMOLINE lubricants are proved superior for use in your motor car, truck, tractor or aeroplane.

Gravity

The gravity of an oil shows its density. Lubricants like HERMOLINE, made from Pennsylvania crude oils, run high in gravity (from 30 to 33 degrees), and are invariably filtered oils that contain a small percentage of carbon.

Viscosity

The viscosity test shows the ability of oil to retain its body under extreme heats. Inferior oils usually have a high viscosity, while Pennsylvania oils have low viscosity (from 150 to 240 at 70°), but when subjected to a heat anywhere near the temperature of a working motor Pennsylvania oils surpass all in viscosity and lubricating capacity.

Flash and Fire

The flash test shows at what temperature the vapors coming off the oil will ignite when a small flame is brought close to its surface.

The fire test shows at what temperature the oil itself will burn. Oils refined from Pennsylvania crude show a flash of 400° Fahr. and over—a fire test of 450°.

Color

Some of the lightest colored oils often contain the most carbon, so that tests of color should never be taken as proof of quality without the other tests described in this column.

Filtering

Oils made from Pennsylvania crude may be depended upon as being truly filtered oils when they have a high gravity (from 30 to 33 degrees). You will note that HERMOLINE oil has both light and color and high gravity.

Ask your dealer for the HERMOLINE booklet—it tells in detail how to prove oil value.

Bees for Profit

Make big money with little work. Small expense to start. Bees find own food. Honey brings good prices. We buy all you can spare. Bees are easily kept and cared for

The Root Way

Our special hives give winter and summer protection. We've made complete line of Beekeepers' supplies for 50 years. Tell us your occupation and whether you keep bees now. This helps us help you. Handsome free booklet, "Bees for Pleasure and Profit," packed with beekeeping information. Write for it today.

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Farmers and Mechanics Attention!

Save time and money. Use "SOLDERWELD" Special prepared acid. Solderweld at home any broken castings, cylinders, etc., of iron or steel. Full instruction and enough "Solderweld" for several jobs for \$2.50 prepaid. Dealers wanted. ILLUMINATING SPECIALTIES MFG. & SUPPLY CO., Belleville, Ill.

BOYS GIRLS HURRY!

WE'VE GIVEN AWAY MANY PONIES FREE
We're Giving Away Four More FREE
Now. Be Quick. Get Yours



Three Ponies, Buggy, Harness and Saddle Given FREE. I have one for YOU—it won't cost you one cent either—I'll even pay the Freight on it to your home. I know YOU want a pretty pony, and buggy—This is your chance, but you must HURRY. Send me your name and address TODAY—QUICK. A post card will do. Just say "I want a pony"—HURRY.

E. MCKENZIE, Manager
205 Capital Building, Topeka, Kansas

When writing to advertisers mention this paper

4 BIG BEAUTIFUL PICTURES GIVEN SOLVE THIS PUZZLE

**\$1500.00
IN
PRIZES**

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2-9-7 16-9-3-20-21-18-
5-19 6-18-5-5

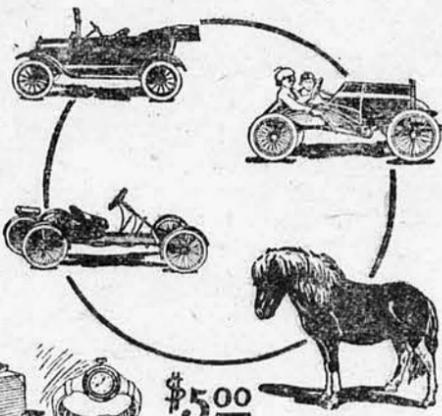
This is a very interesting puzzle. It is not hard either—just requires a little ingenuity and skill. The above figures represent 4 words. We have used figures instead of letters in spelling the words. For instance, there are 26 letters in the alphabet, letter A is 1, B is 2, C is 3, etc. If you can spell out the 4 words, write them on a piece of paper and mail to me at once and I will send you POSTPAID 4 big beautiful pictures. See offer below. But you must HURRY. Do it TODAY. A post card will do—just write the 4 words on a post card and mail it NOW.



This is the most wonderful series of pictures on the market. Very newest and appropriate designs. Beautifully colored and 12x16 inches in size. Elegant to frame. You can't realize the real beauty and value of them until you have received them. Everyone is wild about these pictures and they go like wild-fire. Solve puzzle and write TODAY—QUICK. See offer below.

A Total of 15 Grand Prizes

1. FORD AUTO.
2. \$250 Culver Auto.
3. \$200 American Flyer Auto.
4. \$100 Shetland Pony.
5. 17-Jewel Elgin Watch 20 year case
6. 17-Jewel Elgin Watch 20 year case
7. 15-Jewel Elgin Watch 20 year case
8. 15-Jewel Elgin Watch 20 year case
9. 7-Jewel Elgin Watch 20 year case
10. 7-Jewel Elgin Watch 20 year case
11. 3 1/2 x 4 1/2 Folding Eastman Kodak.
12. 3 1/2 x 4 1/2 Folding Eastman Kodak.
13. 3 1/2 x 4 1/2 Folding Eastman Kodak.
14. Ladies' or Gents' Fine Wrist Watch
15. \$5.00 in Gold.



NOTICE! Every Club Member Rewarded HOW TO JOIN



This is a wonderful bargain in a Gold Filled Signet Ring. Beautifully designed and engraved and suitable for either man, woman, girl or boy. It is given for promptness only and is in addition to the 15 grand prizes.

I am conducting this puzzle in connection with a big introductory campaign, whereby we will give away 15 grand prizes as listed in this advertisement. When I receive your solution to the puzzle, I will send you the 4 beautiful pictures to distribute on my wonderful fast selling 25c offer. When distributed you will be an Honorable Member of my club and receive as a reward the beautiful Signet Ring POSTPAID, and 10,000 votes towards the grand prizes. Many do it in an hour's time. But you must be prompt. The first thing to do is to solve the puzzle and send the 4 words on a post card. Attend to it NOW. Don't miss this wonderful opportunity.

M. House, Mgr., 609 Capper Building Topeka, Kan.

Why Not Join the Calf Club?

Only Profits, Business Training and Good Times Ahead

BY EARLE H. WHITMAN
Club Manager

WHAT in the world you doing in there?" shouted Sam Smith's dad, as sounds of exclamations, grunts and tramping about came from the box stall adjoining the cowshed where Mr. Smith sat milking the cows. "Tryin' to teach this pesky calf to drink, but—" and the rest of the sentence was lost in the "bra-a-a" of the calf and the thud of its head butting the milk pail against Sam's shins.

"Better let me take hold of the job, son" advised dad. "No, sirree," declared Sam. "This is my calf and I reckon I can stand bein' butted around some, for I'm thinking about the fine cow she'll make some day. Believe me, this calf's goin' to be the start for a real herd of milkers. You just watch me!"

And that's the way a lot of hustling Kansas boys and girls are going to feel about those calves they'll have for their very own next spring. You can stand having a calf bite your finger, butt you over, raise his head and nearly knock your nose off, and committing numerous other indignities which only a calf can think of, when the calf belongs to you, instead of dad, can't you? You can look forward, as Sam Smith was doing, to the time when that calf will be worth several times the amount you paid for it, or better yet, will be your start toward a profitable herd on a farm of your own.

Get a Start for Yourself

Calf clubs are becoming more popular every year, but it's not often that boys and girls are given the opportunity to join such an organization as the Capper Calf club is going to be. First of all, you have the opportunity to buy the calves if you haven't them already, with money borrowed for yourself in a business-like way. Arthur Capper says, "Every Kansas boy and girl between 12 and 18 years of age is to have an opportunity to own two good calves to enter in the Capper Calf club. I'll provide the money for them to borrow at 6 per cent interest, payable the first of next January. I trust them, and ask only that they enter the contest and do their level best to make good and prove that I made no mistake in offering them help."

Then, too, while you're taking care of your own stock and enjoying all the pleasures of club work, you're working for some prizes any boy or girl would like to win. Next fall, when the contest ends there will be many happy winners.

There are so many good things to tell you about the Capper Calf club that I have to keep reminding myself that there will be other stories in which I shall be able to talk calves and club work with you. Yes, we'll have a Capper Calf club department in the Kansas Farmer and Mail and Breeze every week, and soon I'll be showing you the pictures of peppy, ambitious boys and girls, with their calves, who are out to win.

Among other things, don't forget that there's a beautiful trophy cup which will be awarded next fall to the five boys and girls in a county who have shown the most pep during the contest. And what fun the fight for

the pep trophy will be! A county leader will be appointed in each county; there'll be monthly county meetings and picnics; we'll have a special Capper Calf club pep meeting at Topeka during Kansas Free Fair week next September; and of course a big joint picnic of all Capper Calf, Pig and Poultry club members in a county, with their folks too, will be planned for. Doesn't that sound as if club work will be interesting? There'll be something doing all the time.

Just another thing or two I wish to mention. When a boy or girl joins the Capper Calf club it isn't necessary to worry about the loss of the calves. Of course, that doesn't mean a member ever will be careless, but it does mean that by means of the mutual insurance plan every calf in the club will be protected. And there's the breed club work, too. After all entries are made, members will be divided into breed clubs according to the breed of calves entered, officers will be elected, stationery printed, and breed advertising done.

But in addition to the many advantages I've mentioned, there's the business training a club member receives. Record keeping is something that always will be of genuine value in farming; the study of the best methods of feeding and caring for the contest calves will be just the thing for farm boys and girls; and the handling of your own financial affairs will give you independence and ability to take care of yourself.

What Others Think

"The effectiveness of the calf club as a means of creating interest in better livestock has been clearly demonstrated," says The Shorthorn in America. It is doubtful whether there is any better way of getting young people, and older people as well, interested in purebred cattle than the forming of a calf club. The movement now has become quite general and many herds already have been founded thru the means of the calf club. Yet the calf club is in its infancy. It is barely started. The boys and girls who participate in the contest not only get a definite and workable knowledge of the value and desirability of purebred cattle, but they learn a few of the basic principles of business. They learn something of the methods necessary in growing and caring for fine calves."

Did you read the Capper Calf club rules in the Kansas Farmer and Mail and Breeze for January 10? If you didn't, and still have the paper, better take a good look at them. But if you're as ambitious and ready to take advantage of an opportunity as I believe most Kansas boys and girls are, you won't wait to hunt up the paper for that date, but will send in at once for rules and instructions. Remember, only five boys and girls to a county this year. Clip out the coupon, write your name and address plainly, and mail it to me today. By return mail you'll receive a letter of welcome, a copy of the club rules, and within an exceedingly short time you'll be ready to begin looking for a place to get your contest calves.

The Capper Calf Club

Capper Building, Topeka, Kan.

Earle H. Whitman, Club Manager

I hereby make application for selection as one of the representatives

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

Signed Age

Approved Parent or Guardian

Postoffice R. F. D. Date
Age Limit: 12 to 18

Tom McNeal's Answers

(Continued from Page 31.)

be made either publicly or privately. If the widow has not been appointed administratrix she should be.

(3). She does not need to vacate the place until after the sale and transfer of the same to the purchaser.

(4). The holder of the mortgage can of course foreclose if his mortgage is not paid when due.

(5). The consent of the older children is not necessary if she has the order of the court to sell.

(6). I think I have already answered question 6. She should make application to be appointed administratrix of the estate and then proceed as suggested.

Joint Stock Land Banks

I am writing for information about the joint stock land banks, where they are and what you have to do to get a loan. G. M.

The only joint stock land bank so far located in Kansas is at Salina. A joint stock land bank is authorized by the same federal law that provides for the organization of the Federal Farm Land Loan Banks.

Before a joint stock land bank is authorized to begin business it must have a paid up capital of at least \$250,000. It may issue bonds but the government does not guarantee the bonds. It is limited in the way of the interest it may charge for a loan the same as the Federal Land Loan Banks are limited. The loans are amortized just as the loans made by the Federal Land Loan Bank loans are, but there is no limitation placed on the amount that is lent to one individual, neither is it necessary that the loan be made to an actual resident on the land; neither is it necessary to organize a local loan association as is the case where loans are made by the Federal Land Loan Banks. The individual may apply for his own loan and if the appraisal is satisfactory he may get his own loan. For further and more particular information write the Joint Stock Land Bank, Salina, Kan.

Electors—Toys and Games

Will you please publish the number of Presidential electors allotted to each state? Could you give the address of some reliable manufacturer of toys and games? If one invents a game is it necessary to get a patent on it in order to protect the inventor? LEWIS REGNIER.

(1). Alabama 12; Arizona 3; Arkansas 9; California 13; Colorado 6; Connecticut 7; Delaware 3; Florida 6; Idaho 4; Illinois 29; Indiana 15; Iowa 13; Kansas 10; Kentucky 13; Louisiana 10; Maine 6; Maryland 8; Massachusetts 18; Michigan 15; Minnesota 12; Mississippi 10; Missouri 18; Montana 4; New Jersey 14; Nebraska 8; Nevada 3; New Hampshire 4; New Mexico 3; New York 45; North Carolina 12; North Dakota 5; Ohio 24; Oklahoma 10; Oregon 5; Pennsylvania 38; Rhode Island 5; South Carolina 9; South Dakota 5; Tennessee 12; Texas 20; Utah 4; Vermont 4; Virginia 12; West Virginia 8; Washington 7; Wisconsin 13; Wyoming 3. Total 531.

(2). Write John Wanamaker Company, Philadelphia or New York for information in regard to manufacture of games and toys.

(3). If you have invented a new game you should get it patented in order to sell it on the general market.

Various Questions

1. Is it a violation of the Kansas law to plant Johnson grass in an isolated pasture for pasture. If the grass is not permitted to go to seed?

2. Explain the widows' pension law and tell how to proceed to get a pension for a widow with three small children. J. M. K.

1. The law passed by the legislature of 1909 in regard to Johnson grass was repealed by the legislature of 1911, so that it is at present neither unlawful to sow Johnson grass nor unlawful to permit it to go to seed.

2. A widow such as you describe is entitled to a pension of not to exceed \$25 a month, provided she has to depend on her own labor to support herself and children and provided further she has been a resident of the county in which she resides for one year. She must make her application for pension to the county commissioners.

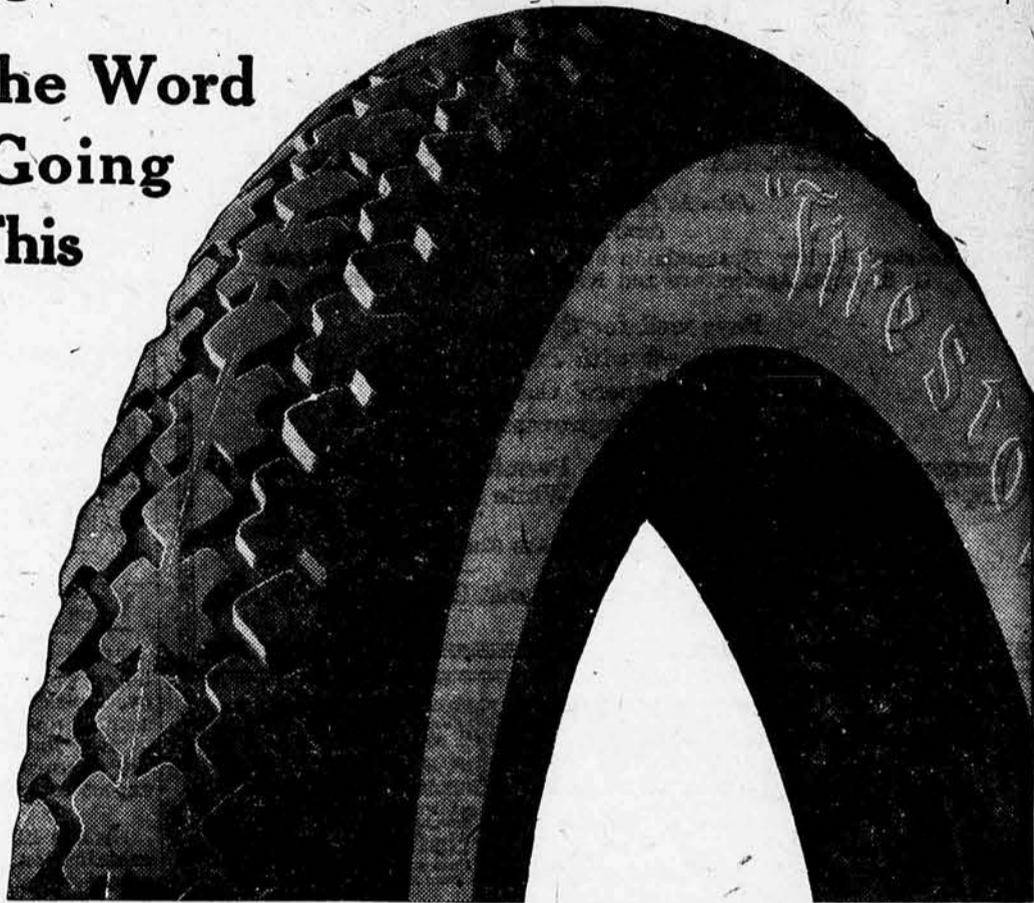
Tim McCarthy

Will you please tell me in what year Tim McCarthy was elected auditor of our state? MRS. W. S.

In 1886 and again in 1888.

"Buy Firestones"

**That's the Word
That's Going
Round This
Year**



WHEREVER you go you hear car owners passing the word—"Buy Firestones. They're the best cords this year." The reasons are many, but the conclusion is the same—Buy Firestone Cords.

Read these spoken advertisements for the New Standard Oversize Firestone Cord with Extra Heavy Non-Skid Tread:

"It gives me a lot more service than the mere guarantee."
"Not only fine service but a tire that looks right."

"The extra air gives easier riding."
"The non-skid tread is fine; it holds in all kinds of roads and yet there's no power wasted."
"I bought it because of its extra size and the Firestone reputation."
"You'll notice that you go farther on a gallon of gas."
"It steers easy and grips the road."

With the mouth-to-mouth tire advertising centered on Firestone this year no thinking tire buyer can afford to remain uninfluenced. See your dealer.

FIRESTONE TIRE & RUBBER COMPANY
Firestone Park Akron, Ohio
Branches and Dealers Everywhere

Firestone
Most Miles per Dollar

Get My Price—FIRST
30 Days' Trial—Satisfaction Guaranteed

I want to quote you a price that will cause you to sit right up and take notice on the grandest, best plow that ever turned a furrow. I can do it because we are the actual manufacturers, and sell direct to you. You buy at the actual factory price when you order direct from us. But that isn't all. You get a better plow. I say to you that the

Monmouth OR GANG Plow

will prove easier for you to handle, easier on your horses and will do your work better than any plow you can buy, regardless of price. It's positively the only plow that actually carries the beams on top of the frame. No pressure on bottom of furrow—no friction. Single Rail and Horse Lift; and "Point First" action. I'll give you a chance to prove every statement I make and will pay the "damages"—freight both ways—if we "fall down" in a single assertion.

All Kinds of Farm Tools Sold Direct from Factory To You. Quick Shipments from Monmouth, Kansas City, Omaha and Fargo.

I want to tell you all about these plows and our other implements—Cultivators, Disc and Spike Tooth Harrows, Corn Planters, Grain Drills, Mowers, Rakes and other farm tools—all sold at factory prices. Satisfaction guaranteed. Just write a postal for our complete catalog. It's free. Write to me, **The Plow Man**, with

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Monmouth Plow Factory, 121 So. Main St. Monmouth, Ill.

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Send for Our **FREE CATALOG** which gives information in regard to making coats, robes, mittens, caps, sets, etc., and instructions about shipping and caring for hides. It is yours for the asking. Send for it **TODAY**.

All Work Guaranteed and Done Promptly.

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34 South First St., Marshalltown, Iowa

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Hickory Cured Hams are Best

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WRIGHT'S FARM BUTCHERING SET (Nine regular butchers' tools, including saw and cleaver) should be on every farm. We buy in carload lots and resell at cost—**\$3.95**.

Send for instructive booklet: "The New Way of Smoking Meat."

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E. H. WRIGHT CO. Ltd., Established 1895
816 Broadway Kansas City, Mo.

Announcement

PREMIUM POULTRY PRODUCTS Co.

210 NORTH KANSAS AVE., TOPEKA, KAN.

John L. Prehn, Manager
formerly

Extension Poultry Husbandman and State Poultry Club Agent
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Pays well for Quality.
Deals Direct with Producer.
Furnishes Shippers' Coops Free
Encourages Improvement.

Larger Breeds Especially Solicited
Premium Prices on Heavy White and Buff Varieties

Write for further particulars and prices.

Reference—The Central National Bank, Topeka, Kansas.

Capper Poultry Club

Reports for Year Come In—Ready for New Term

BY BERTHA G. SCHMIDT
Club Secretary



YOU SAY you get the same total mate of the feed consumed by her as I, Mrs. Ellis?"

"Yes,"
"Well, now, that's too bad. I had hoped you'd find something had been overlooked and that the monthly and annual reports did agree after all."
"But just think how many of them do," returns Mrs. Ellis. "We can't expect to have all of them perfect."

If you're planning to join the club cut out the application and send it in at once.

You Might Try This Plan

A number of girls who have been in the club during the last year or for longer have asked if they may pen more than eight hens and continue in club work. The contest rules state that each girl in the pen department shall enter eight hens or pullets and a cock or cockerel. To permit girls to enter more than this would destroy the uniformity of the contest work. However, had you members who have been in the club before thought of this plan? It would be possible for you to belong to the baby chick department, entering 20 purebred chicks, to be marked for identification; and compete for prizes in the baby chick department. You could continue with your pen project, penning more than eight hens and a cock, but not entering them in competition for prizes. Now kindly read this proposition carefully; better still, paste it in your scrapbooks. Remember, you will be competing only for the baby chick prizes. Your pen project will have nothing to do with your club work. But there will be this advantage—by paying your breed club dues you may list in next fall's catalog any purebred chickens that you raise.

Sounds like a bit of discussion over examination papers at the end of a school term, doesn't it? You would have thought the discussion sounded even more school-like if you had happened to stop at the Capper Building for a friendly chat with the poultry club secretary. And my! That desk piled high with reports and contest stories—it certainly did look like mid-year examinations!

Then from the rear of the room where the pig club manager and his assistants hold forth came such remarks as these:

"That's some pork production, I'll say!"
"For the love of Mike, Miss Morrow, did it cost that boy 10 cents a pound to produce pork?"
"No," answers Miss Morrow, "he made a mistake. He divided his pork production by his cost instead of his cost by his pork production. The cost a pound should be 8 cents."
"Some pep that boy shows! Only two pigs, but he sent in a good report."

Altho all of the papers have been graded the prize winners in the Capper Poultry Club contest for 1919 will not be announced until January 24.

Membership in the new club is steadily growing. Every county leader and her team mates should remember that a similar basis of finding the pep standing of the county clubs will be used this year as last year, and it will be well to get started in the work as soon as possible. Girls who are in the pen department may pen their eight hens or pullets and cock or cockerel February 1 and begin record keeping at once. The latest date for beginning to pen is April 15. Girls in the baby chick department also may begin record keeping February 1. Each girl in this department is to make an esti-

We would like to have as many mothers in the club in 1920 as there are girls. If your mother cannot join the club perhaps some other grown person would like to join as your sponsor. If so, she will enter her own farm flock, but of course she will always be interested in your work and you'll find that this will help your county club. The interest of the mothers, and of the fathers too for that matter, counts for much in the success of a club. Here is a part of a good letter from a mother:

"I do so want to see our girls get a Standard of Perfection this year. I know all of us, both mothers and daughters, need it. Our girls do not understand as they should the requirements of their own particular breeds and cannot make intelligent sales without knowing. For instance, when my

Capper Pig and Poultry Clubs

Capper Building, Topeka, Kan.

Earle H. Whitman, Club Manager; Bertha G. Schmidt, Secretary. Send Pig Club applications to Mr. Whitman; Poultry Club to Miss Schmidt. I hereby make application for selection as one of the representatives

of.....county in the Capper

.....Club.

(Write pig or poultry club)
I will try to get the required recommendations, and if chosen as a representative of my county I will carefully follow all instructions concerning the club work and will comply with the contest rules. I promise to read articles concerning club work in the Kansas Farmer and Mail and Breeze and will make every effort to acquire information about care and feeding of my contest entry.

Signed Age

Approved Parent or Guardian

Postoffice R. F. D. Date

Age Limit: Boys, 12 to 18; Girls, 10 to 18.

BOTH for \$17.25 Freight Paid East of Rockies

You Take No Risk with an Ironclad THE IRON COVERED INCUBATOR

Why pay more? For \$17.25 you can get these 2 unbeatable machines, set up complete, ready for use, delivered, freight paid east of Rockies. **Money Back if Not Satisfied** We will send both machines back—we'll pay the freight charges and return your money. You are absolutely safe.

150-Egg Incubator—150-Chick Brooder Don't class these as cheaply constructed machines. Ironclads are not covered with cheap, thin metal and painted, like some, to cover up poor quality of material. Ironclads are shipped in the natural color—you can see exactly what you are getting. Made of genuine California Redwood, triple walls, asbestos lining, galvanized iron covering. Large egg tray, extra deep chick nursery, hot water heater, COPPER tank and boiler, self-regulator, Tyson thermometer, glass in door, and many other special advantages fully explained in free catalog. Write for it TODAY or order direct from this advertisement.

IRONCLAD INCUBATOR CO., Box 87, Racine, Wis.

Progressive Poultry People Are Raising Their Chickens with the SURE HATCH INCUBATORS AND BROODERS

You can raise more chickens and do it easier than with hens. Less work and greater profits. Sure Hatch Incubators are time-tried and scientifically correct. Made of California redwood. Double walls, insulated. Copper hot water heating system. Automatic heat regulator. Roomy nursery with chick tray. Built in three sizes.

SURE HATCH COLONY BROODER beats 'em all for raising chicks. Cast iron stove heated with coal. Pure fresh air and even heat. No crowding or smothering. Raise all your chicks. Let us tell you about our Sure Hatch System.

FREE Send for Sure Hatch profitable poultry raising. **SURE HATCH INCUBATOR CO.** Box 14 Fremont, Neb.

FREE Startling BOOK About This New Kind of Hatcher

Just send in your name. Read about 16 wonderful new improvements in Radio-Round Incubators. Built round, like hen's nest—no cold corners. Only 1 1/2 gallons of oil to hatch. Amazing economy secured by powerful triple heater, long upright draft, patented heat diffuser, complete circuit radiators. Heat regulation secured by cutting down flame at burner automatically.

RADIO-ROUND has simple Vaporizing Moisture Attachment built in, keeps heat moist, mild, even. Big oil tank needs filling only twice to a hatch. Double glass in hinged top means daylight egg chamber, and only 5 seconds to turn eggs. No lifting of heavy tray. Only 5 minutes' time a day required.

Mail Postal Now Know all about the Radio-Round before you buy any hatcher at any price. Shipped promptly to you direct from factory, express prepaid. Mail postal NOW for beautiful new FREE book about bigger, easier poultry profits.

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Get 20 to 50% more Eggs, have healthier hens, make more money, with the Everlasting, Sanitary **KNUDSON** Galvanized Steel Lice Proof Nests. Costs less than wood. Unlimited guarantee. Send name today for Special Offer and interesting literature. 40,000 in use.

SEAMAN-SCHUSKE METAL WORKS COMPANY Box 127 Manufacturers St. Joseph, Mo.

Read the classified advertising columns. They may save you many dollars.

HomeMade Brooders With warm medicated dirt floors and feather hovers. Saves the incubator chicks. You can change any old brooder into these, or make them from an ordinary box. We will send you this information absolutely free. Also tell you why chicks die in the shell just at hatching time. Send us your name today.

RAISALL REMEDY CO., Blackwell, Okla.

PLANS FOR POULTRY HOUSES. ALL STYLES, 150 ILLUSTRATIONS, SEND 10 CENTS. INLAND POULTRY JOURNAL, Dept. 15, Indianapolis, Ind.

Indian Runner Duck and Hare Culture Finest Illustrated Duck and Hare Book. Tells all about the greatest egg producing fowl and meat producing animal on earth. How to get a start; quotes lowest prices. Sent for 5 cents.

BERRY'S FARM, Box 159 Clarinda, Ia.

daughter started she knew nothing about her breed, but by talking to breeders we felt that we had become quite competent judges. We picked out the pen that won first prize over all varieties at the fair."

But the writer explained that they were not fully versed in all of the qualifications of standardbred chickens yet and asked where she could purchase a Standard of Perfection. Since then the book has been bought and will be used at the monthly meetings of the club girls.

In the picture used this week are shown the Johnson county club girls. They won third place in pep standing. Reading from left to right they are: Norma Reynolds, Leon Moll, Nola White, Ollie Osborn, Ethel Agnew, Lucy Cristler, Fredonia Silvers, Helen Andrew, Edythe Brown, Gladys Bryan.

Ice House for Every Farm

(Continued from Page 22.)

best to have the concrete floor cast separately from the foundation so that when it is heavily loaded with ice it will not break near the foundation as a result of the slight settling that may occur. The roof may be either a simple even-span one-third pitch roof with gables boarded up, or a hip roof.

The ice should be placed on a bed of sawdust or other good packing material at least 15 to 20 inches deep, and the rick of ice should not approach the side walls closer than 15 to 18 inches. The intervening space should be filled with packing material thoroly tamped.

When the ice house is filled, the blocks are packed close together, having been cut so as to be as uniform in size and shape as is possible. Every little crack in the ice blocks should be filled with crushed ice, which will ultimately freeze and thus unite the blocks in one solid mass. This will present as small an exterior surface as possible. Each succeeding layer of ice when packed should be placed so that it will overlap and break the joints of the layer beneath and thus reduce the possibility of the formation of air passages in the ice heap. The roof should be provided with ventilators at both the front and back. The top of the ice heap should be covered with at least 2 feet of dry sawdust. Every few weeks additional sawdust should be tamped around the sides as the ice and former packing settles. During the summer when the ice is being used be sure to see that the sawdust is replaced promptly and in the right way. Attention to these details will prevent the unnecessary loss of much ice. The advancing cost of artificial ice and cold storage of food in the cities make it very important now that every farm home have a good ice house well filled each season in order that the farmer may prevent the loss of many valuable food products.

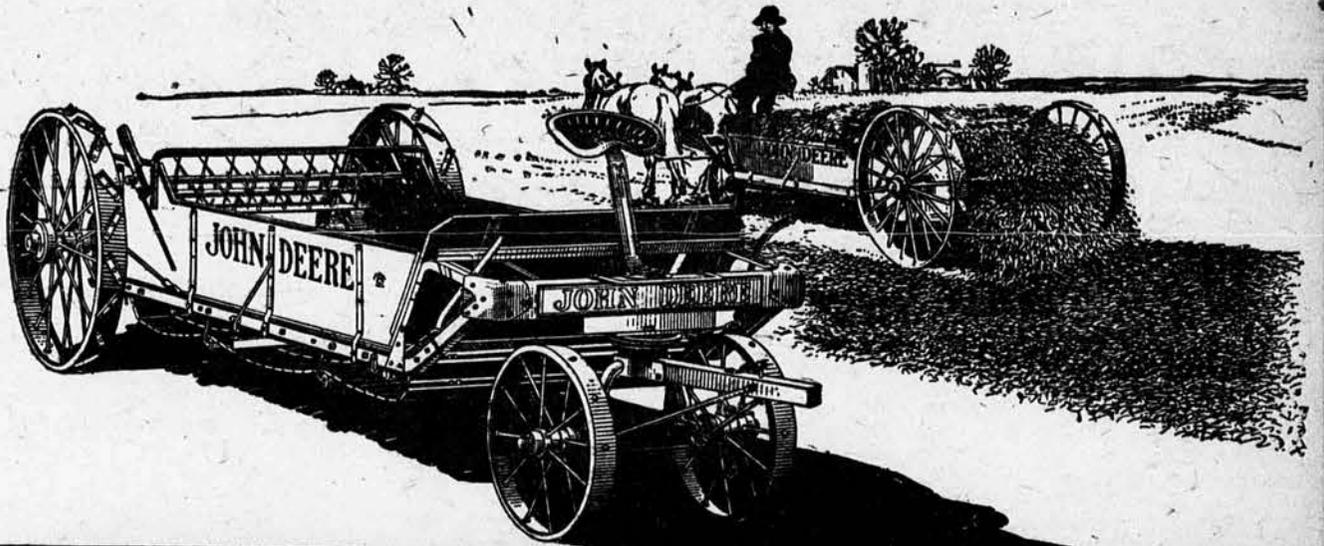
SOMETHING DIFFERENT

A Farm Paper Edited on a Farm

Capper's Farmer, published by United States Senator Arthur Capper of Kansas, is a farm paper that is different. It is edited on the farm by a farmer and for the farmer. It is published in the heart of the greatest agricultural country in the world. It stands for a square deal for the consumer and fair profits for the producer thru eliminating grain gamblers, market jugglers, and other trusts and combines. For that great body of American Farmers who live with ideals, who want to be progressive, there is no such favorite as Capper's Farmer. There is a department for the women folks, boys and girls, marketing, livestock, poultry, dairy, field crops, farm machinery, horticulture, health, etc. In addition to the regular editorials, Senator Capper's Washington Comment is one of the most interesting and instructive.

In order to introduce this bright and breezy farm paper to readers of the Kansas Farmer and Mail and Breeze, the publisher agrees to send the paper six months for ten cents. This is a special offer, good for ten days only. You should send in your dime today. Address, Capper's Farmer, 507 Capper Bldg., Topeka, Kansas. You can't afford to miss a single copy.

Guest—"Waiter, this steak is like leather and the knife is dull."
Waiter—"You might strop the knife on the steak."—Gargoyle.



Its Simplicity Means Dollars to You

Think of a manure spreader with no chains to break and cause annoyance and loss of time; no clutches to wear out and to replace; no complicated adjustments to make during the life of the machine—a spreader with only about one-half the parts necessary on the ordinary spreader. That is the extreme simplicity you get in the

JOHN DEERE SPREADER
The SPREADER with the BEATER on the Axle

Only by mounting the beater of the John Deere Spreader on its axle (a patented feature) is such extreme simplicity made possible.

All of the main working parts are mounted directly on the axle—this prevents the working parts from getting out of alignment to cause heavy draft and breakage.

Its beater drive is simple. The gears, arranged much like a triple-gear horse power, are enclosed in a dust-proof case and operate in an oil bath—no wearing out.

Its revolving rake insures even distribution in all kinds of manure—no bunching or choking.

Another big advantage—by adding the straw spreading attachment, the John Deere spreads straw of all kinds just as evenly as it spreads manure—and the quantity per acre can be just as accurately controlled.

In no other spreader can you get the many advantages found in the John Deere. In no other spreader can you get as many years of usefulness. From every viewpoint it's a most profitable investment.

Write for This Valuable Spreader Booklet—It's Free

Drop us a post card today for this attractively illustrated booklet that gives much valuable information about manure and fertilizers, and tells all about the John Deere Spreader. Address a card to John Deere, Moline, Ill., and ask for Booklet S-511.

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THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

When the Cows are Stabled

dirt and filth stick to the flanks and udder and fall into the milk pail. Clip the parts every three or four weeks, wipe off in a jiffy before milking and get pure, wholesome milk. A Stewart No. 1 Ball Bearing Machine will clip the parts in 5 minutes. Also good for clipping horses and mules. Lasts a lifetime. Price \$12.75. Get one from your dealer's or send \$2 and pay balance on arrival.

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10 Patriotic Cards 10c We will send 10 lovely colored post cards postpaid for 10 cents in stamps or silver. NOVELTY HOUSE, Dept. 20, Topeka, Kan.

Four Piece Jewelry Set FREE
Adjustable Bracelet, Pendant and Chain, Set Ring and a Signet Ring, all given free to anyone for selling only six of our lovely Patriotic Pictures at 25 cents each. Send no money, just your name and address.
R. MCGREGOR, Dept. 10, TOPEKA, KANSAS

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Stella Gertrude Nash
— EDITOR —

Modern Equipment Takes the Drudgery out of the Washing and Ironing

IT SEEMED impossible for years to get away from the confusion of washday, but the time has come when the housewife may look ahead to it as one of the pleasant days of the week. It is not very difficult to put a partition in the woodshed, or the smokehouse, and thus have a room in which the wash can be done, and avoid the se of the house. I need not relate the old familiar story of how washday tears up every room in the house, or the homemaker knows only too well how the house must be given a thorough cleaning and scrubbing after the clothes are on the line and while the suds is still hot.

It is an easy matter on most farms to get enough "pick up" lumber to put up a partition in the woodshed. The laundry room should be large, for to have it the most convenient all equipment used in washing and ironing should be kept therein. If possible place the partition so the outside door will lead directly into the washroom. Entrance to the wood or smoke room can then be had thru a small door in the partition. After the partition has been completed, see to it that an opening is made near the floor on the side of the room on which you have planned to set your tubs. This opening must be large enough to enable the water to be poured from the tubs into a trough which is connected with an outside drain pipe, and in this way the burden of lifting heavy tubs of water off the work bench and out in the yard, or the carrying of numberlessails of water, may be avoided.

Arrange Furniture Conveniently

After the carpenter work is done the old kitchen stove which was put in the smoke house when the new range was purchased can be set in one corner of the room, or the oil stove can be brought in for the day. In planning the arrangement of the room, keep in mind that everything must be placed to save the housewife every possible step. A wood box placed by the stove and kept filled with wood and kindling will save much time on washday, not only in time used in carrying it in before washing, but also in cleaning up the trash after the wash.

One of the most essential of energy saving pieces of equipment for this room is the wash bench. Most certainly the ideal would be three stationary concrete wash tubs, made with drain pipes leading from the bottom of the tub, the pipe closed with the ordinary rubber stopper, which is easily kept in place, and easily removed. Such an arrangement, however, is not always advisable, and the work bench must be used. In planning the work bench, attention must be given to the height of the bench with relation to the height of the person or persons who will use it. A great deal of muscular energy is lost by having to work over a tub which is too low or too high. No special height can be given here because individuals differ so in their needs.

A Place for Everything

A small box fastened on the wall in which to place the soap, washing powder, bluing, starch, iron, will save the wife many steps, because she will not have to run back and forth gathering together the necessary materials with which to work.

One of the hard problems of washing in the winter is the drying of the clothes. The individual who has been working over the heat submits herself to cruel exposure when she goes out of doors to hang up the clothes on a cold day; and not only that, the clothes do not dry, but must be brought into the house and hung around on chairs and over doors. This makes the house unattractive in appearance as well as damp and chilly. In the outside laundry this can be handled sat-

isfactorily, by the placing on the wall of a clothesline which can be wound into a tin container, when not in use. The line is always clean, for no dust can reach it; and it is easily strung criss-cross about the room, providing ample space for the clothes to dry.

Very few housewives have ever considered how many extra steps they take in doing their work, and ironing is one of the duties in the home that calls for a great deal of walking. The trips from the iron board to the stove for the purpose of exchanging irons soon mount up to a long walk, and then having to stand four or five hours at the iron board, calls for the expenditure of a great deal of energy. Modern inventor has placed in the commercial world equipment which enables one to do an entire ironing with-

ever, is the machine belted to an engine or run with a motor attached to an electric light circuit. The washing machines are built to remove the dirt without the wear and tear of "washboard and elbow grease." This is done by so constructing the machines that the hot suds passes thru the mesh of the garment with enough force to remove the dirt, and the textile is not worn out by the hard rubbing on the washboard.

Mrs. Ida Migliario.

January 25 is Child Labor Day

Child Labor day will be observed by churches, January 25, synagogues, January 24, and schools and clubs, January 26. In this connection Jane Addams says: "Because certain states have se-

profits of establishments employing children under 14 years in factories, mills, canneries and manufacturing houses; of children under 16 years in mines and quarries; and of children between 14 and 16 for more than 8 hours a day, six days a week, or at night. The great value of the federal law lies not so much in the number of children it affects, for they are a small proportion of all the children gainfully employed, but in the fact that it makes uniform the laws of the 48 states and sets an example for the states to follow in the industries that are not reached by the federal law. It does not apply to the vast number of children regularly employed in agriculture, nor to those working in street trades, in department stores, grocery stores, laundries, amusement places, hotels, restaurants, in the messenger service and other trades.

The National Child Labor Committee, 105 E. 22d St., New York City will be glad to send information on child labor and suggestions as to the possibilities of effective service in the campaign against this still persistent evil.

Hear Good Concerts at Home

The phonograph is no longer a little box with a big brass horn and a squeaky sound but has been improved, upon until now it does justice to the very best music and its case is an ornament to any home.

We find phonographs in the homes of all classes, from the working man living on a rented farm to the retired farmer and city man. They are rapidly replacing the piano in homes, where there are no musicians. Children too small to play the piano can easily learn to adjust the phonograph.

Where there is a phonograph, children learn songs sung by master voices. With a few interesting games, good books and a phonograph, parents need have no worry about the young folks drifting away from home to find questionable amusement.

Mrs. Ralph Baker.

Jefferson Co., Kansas.

And the Sunday School Grew

I once went into a strange neighborhood to teach school. There were no churches or Sunday schools nearer than 3 miles. The community schoolhouse where I was teaching was near my boarding place, and in the center of a large district. When I asked why we could not have a Sunday school there, they told me there was no one to take the lead. I was very young and as this was my first school so far away from home, I was homesick and oh, so lonely. The Sundays seemed endless, so I decided to make an effort toward organizing a Sunday school.

I told all my scholars to tell their parents and every one else they saw to meet me at the schoolhouse on Sunday at 2 o'clock to talk it over. I felt very timid and insignificant but there was a good crowd there and we organized a Sunday school that lived and grew and people came for miles around and joined in with us.

One old man in the neighborhood would pray in public so we selected him for superintendent. We had no treasurer for money was not to be mentioned at all. We read from the New Testament and sang from the song books that could be collected in the neighborhood. One motherly woman, who had three little children of her own, took charge of the infants' class. She taught them to spell little words and to memorize short sentences from the Bible, and finally they learned to repeat the Lord's Prayer. Then she told them Bible stories which interested them very much. The larger children read from their Testaments as well as they could have from a quarterly.

The class of grown folks consisted of 30 members. Every one took part in

Hot Desserts for Cold Days

"OH DEAR," Mrs. Jones sighed. "It's such a problem in cold weather to have the meals planned so they will be nourishing and satisfy the enormous appetites of farm men and hungry school children without overtaxing their digestive powers, especially at supper. I don't like to have the children top a heavy meal with pie for dessert and they are so fond of it."

"But pie is not the only good dessert. I think that plain puddings which are served with cream are much more wholesome," said Mrs. Gray.

"Perhaps I've found a solution to my problem," laughed Mrs. Jones, as she drew tablet and pencil toward her. "Do tell me how to make good nourishing, satisfying, hot desserts."

"Why that's easy. My grandmother used to make delicious cobbler, apple, peach, apricot, blackberry; almost any fruit, canned or fresh, formed the basis of them. The fruit was put in a shallow pan, sprinkled over with sugar and flour and dotted with butter. Then a rich biscuit mixture was rolled about 1/2 inch thick and large enough to cover the pan, with little holes made in it to let the steam escape. Baked quickly and served hot with plenty of good cream, it is almost a meal in itself but is more easily digested than pie. Pudding, too, and it is especially good for these times of sugar shortage. Melt 1/4 cup of butter, add 1/2 cup



of milk and Mix and sift flour, 1/2 tea-

spoon of salt. Add 1 cup of chopped raisins, then stir in the liquid ingredients. Turn into a buttered mold and steam 2 1/2 hours. Serve with cream.

"To make the old-fashioned brown betty, mix 1/2 cup of sugar, 1 salt-spoon of nutmeg and the grated rind of a lemon. Add 1 pint of bread crumbs and 2 tablespoons of butter. Peel and slice 3 pints of sour apples, butter a baking dish, put in a layer of crumbs, then one of apples and the sugar mixture and repeat, having a layer of crumbs on top. If the apples are not juicy, add water. Bake slowly, covered at first, until the apples are done. Serve with cream.

"We are very fond also of apple tapioca. Soak 3/4 cup of tapioca 1 hour in cold water enough to cover. Drain, add 2 1/2 cups of boiling water and 1/2 teaspoon of salt. Cook until transparent. Pare and core 7 tart apples and put them in a buttered pudding dish. Fill the cavities with sugar and pour the tapioca over and around the apples. Bake until the apples are soft and serve with sugar and cream.

"Shortcake made with any canned fruit also is liked by my family. In fact there is an infinite variety of hot desserts. Most of these hot puddings are to be eaten with cream or milk and that is one reason why they are better for both children and grownups."

Riley Co., Kansas.

Mrs. John Dobson, Jr.

out changing the iron, or being troubled with having to wait for a too-cool iron to heat. These irons are kept at an even heat by electricity or gasoline. The time has passed when anything electrical was impossible for the farm home, for we now have complete electric plants built purposely for use on farms. These irons have made possible the use of the high stool on which the worker can sit, and save her strength and energy for other household duties which require activity. As for washing machines the variety seems endless. The popular kind, how-

cured satisfactory legislation for the protection of children, it is easy to assume that it is no longer necessary to push child labor reform and similar measures, forgetting the wretched conditions still obtaining in vast areas of the United States. One day set aside for the discussion of the needs of children, viewing the subject in its higher moral aspects and urging a furtherance of child welfare as a religious duty would, to my mind, be most valuable."

The year 1919 marked the passage of the federal child labor law which places a 10 per cent tax on the net

the lessons. Questions were asked and answered by the school, and when there was a question that no one could answer, everyone read or searched his Bible during the week in order to answer the question the next Sunday. All were interested and did their best to make the school a success and it was a success. I have taught in many Sunday schools since but I look back upon that first Sunday school year as the happiest year of my life. What we did, others can do. It is not difficult to organize a Sunday school in a rural district, if one is endowed with enthusiasm and perseverance and has a desire for higher and holier things than the common pleasures of life.

Mrs. S. E. Bandy.

Farm Home News

The oil-man made a mistake when he poured 5 gallons of gasoline in our neighbor's kerosene barrel. Not daring to use the mixture in lamps and stove he left the opening in the barrel uncovered so the gasoline could evaporate. We asked the man who delivers oil here, a different agent, what he would advise. He smiled as he said he'd advise the owner to use the mixture. "He'll find it the best kerosene he's burned," he said. He stated he was even then going to fill a coal oil barrel with about 50 gallons of kerosene and 5 gallons of gasoline. According to the agent, the mixture gives a brighter light in a lamp with less smoke and a hotter blaze in an oil stove with less smoke. In his experience, he has found that one may turn the blaze in a lamp up until it nearly touches the chimney and it will not smoke. In the summer, the agent mixes 5 gallons of gasoline with 25 gallons of coal oil; in the winter he makes the proportion 35 or 40 of kerosene or even more to 5 of coal oil. We did not ask him how the two blended or if it was necessary to stir up the contents of the barrel before drawing out a can full. We paid 55 cents more for our barrel of oil than we should have done had we bought two days sooner. By the barrel we now pay 15.7 cents a gallon.

We should certainly miss having oil now and then if we trusted to the old way of getting a 5 gallon can filled when we went to the store. It costs less and is a great deal less trouble to have the truck come out and fill the barrel than it is to buy small quantities in town.

One of the requirements for a standard school is that there shall be a thermometer. It probably ought to be required in every home as well. The teacher dressed according to modern ideas of dress is not likely to freeze the pupils. She might regulate the heat in a haphazard fashion according to her own feelings. In the home where small children are playing around or elderly people sitting, the temperature that suits their needs may be different from that of the busy woman who is working over the cook stove. A thermometer would tell the story of what the temperature of the room really is.

A cellar is sometimes nearer the freezing point than a person might think if she went down for vegetables and came back quickly. We find it advisable to keep a thermometer near the base of a pile of potatoes.

A clinical thermometer is almost a necessity in a country home if sickness is to be wisely dealt with. It helps in telling the home nurse what the patient's temperature is, helps her in reporting to the doctor when he comes and by a report over the telephone, they save him the necessity of a visit. We do not find many physicians who are eager to travel long distances over bad roads in stormy weather.

It is not often that people in their twenties have better health than they had 30 or 40 years before. We know one woman who finds that she is much freer from colds and in better general health at 74 than she was at 54. She attributes the change to the widening of the crack in the window at night. Years ago, the window was raised on a latch and only a very small open space left. Now it is raised several inches even in the coldest weather and results seem to show the wisdom of the course. In our school days there were six pupils from one family that were remarkable specimens of health and flesh.

Their mother earned the family's living by doing family washings at 50 cents a washing. We used to marvel at the children's rugged health. Our parents were wont to attribute it to the fact that they lived on cornbread and milk—an argument for "Johnny cake" that they felt was needed. The doctor of the village had another idea. Pointing to the upper story of the house, he said: "Do you see those windows with half the lights gone? There's where those fat children get their good health."

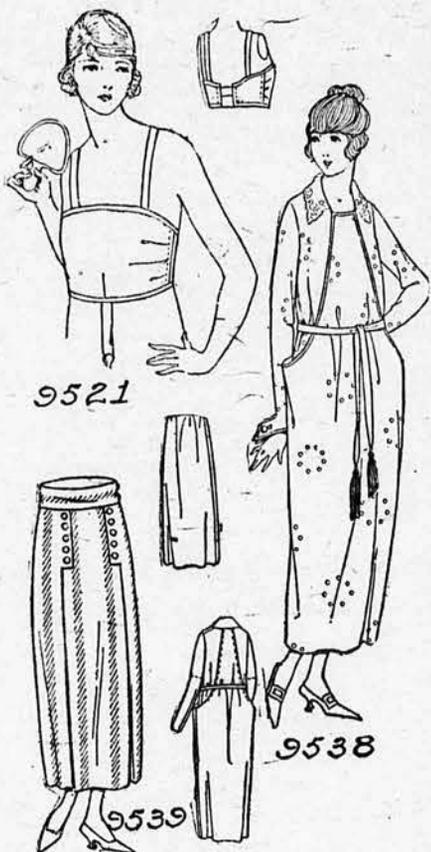
We regret that the bill passed by our last legislature for the enforced dental inspection of school children was limited to that one line. It should have included a physical examination, we think. Such inspection is now required in some states. During our visit in Wisconsin last fall, the local school children were given a physical examination by local doctors under the direction of a state board of health official. Sixty pupils were given a second examination—probably most of them were found to have enlarged tonsils or adenoids.

Mrs. Dora L. Thompson.

Popular Brassiere Pattern

9521—Ladies' Brassiere. This style is very easy to make and can be worn under fancy camisoles without being seen. The front is gathered into fitted back sections. A narrow strip of elastic is inserted between the latter to give freedom of movement. Sizes 34, 36, 38, 40, 42, 44, 46 and 48 inches bust measure.

9538—Ladies' One-Piece Dress. The



skirt of this frock has wide pockets at the sides which continue up to the neck. Sizes 36, 38, 40, 42 and 44 inches bust measure.

9539—Ladies' Four-Piece Skirt. A plait at each side of the front conceals the joining of the side and front gores. The back gore is gathered across the waistline. Striped or plaided serge, velours or tricotine are serviceable materials from which to choose. Sizes 26, 28, 30, 32 and 34 inches waist measure.

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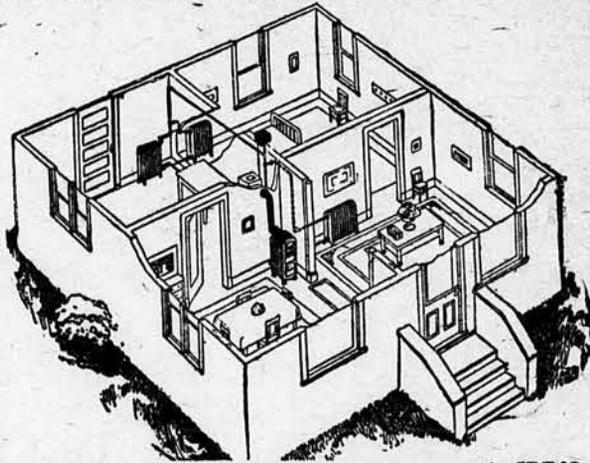
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School Girls Learn to Sew

Homemaking and Books are Taught in Meade

BY MRS. IDA MIGLIARIO

THE SCHOOL girls in district No. 37 in Meade county are taking sewing lessons along with their other studies. Every two weeks Ethel McDonald, home demonstration agent for that county, teaches them how to sew. Miss Wilson, the teacher at this school, says she believes the sewing is helping the girls to do better work for they are not permitted to sew unless they have their lessons.

There are seven girls taking the work in this school and it is so conducted that it is costing the parents very little. The girls brought thread, needle, thimbles and scissors from their homes and the work is so planned that they



School House in District 37.

can make useful articles out of small amounts of materials. The distances in Meade county are so great that it is not always possible for members of the family to go to town frequently and it is very convenient to know how to make practical things out of small amounts of material found in the sewing bag.

The first lesson given the girls was that of making for themselves a small kitchen apron. Each of them found at home pieces of material large enough to make an apron, and at the same time too small to make any other kind of a garment. The pattern used for making the apron was governed entirely by the amount of material, and under the instruction of Miss McDonald the girls cut their aprons.

The girls then learned how to turn a hem and it was very interesting to watch how carefully they made the first turn of the hem 1/4 inch and the second turn 1/4 inch. They were next taught how to thread a needle, tie a knot, and wear a thimble and they learned that the secret of attractive work was to sew neatly and to have the wrong side of the garment entirely free from large knots and long ends of thread. They learned to hide the knot whenever starting a needle of thread and always fastened the thread securely and trimmed the ends close to the garment.

The secret of success in hemming is in correctly placing the needle, for a slight difference in the slant of the needle will change the stitch entirely. Some of the little girls found this part of the work rather difficult but they were so interested and eager to learn the correct way they did not become impatient. Miss McDonald says the hardest thing about giving the sewing lessons to the girls in the country is to

get them to quit sewing. They always want to stay after school and work and some of them live so far from the school house that it makes it rather late when they reach home.

No instruction is given the girls as to the best color and quality of material to be used for the kitchen apron until after the apron is made. Miss McDonald feels that when the girls have finished their garment is the best time to discuss these things, for it is a very easy matter to explain the good and bad points in a ready-made garment, and the girls profit greatly by a class study of this kind.

Instructions are left for the class so they may use any extra time they have in school for the sewing and they always try to have a garment at a certain point by the next lesson.

It is one of the great things in modern education that the girls can be taught the fundamental points in successful homemaking along with their regular school work. Almost every homemaker has so much housework to do she finds it almost impossible to devote much time to teaching her daughters the things that she knows so well how to do herself. And so it is often left for the school teacher to find some little time to devote to teaching these essential and necessary things.

Hominy is a Cheap Food

This is how I make and can hominy: Shell the corn and add water to cover it in the kettle, sift in the lye (enough to make a medium lye. Care must be taken for if too strong the hominy will not be good. If not quite strong enough it takes longer to hull off.) Stir the corn until the ends and hulls come off, and rinse until the lye is washed out. Use boiling water for the last washing. It now is ready for use.

To can, pack the hominy into jars, put on rubbers, adjust caps, screw on part way, and boil pints 2 1/2 hours and quarts 3 1/2 hours. Count time when the water begins to boil. Screw caps on tightly as soon as removed from the canner. Water and salt may be added to the hominy if desired but it is not necessary to have any liquid to keep it.

Mrs. W. H. Penix, Saline Co., Kansas.

From An Old Farm in the Hills

We are planning to plant a strawberry patch as soon as the spring work opens up. We have found that good vigorous plants raised by a grower who understands his business, are much superior to those we grow ourselves, so we shall place our order early so as not to be disappointed. With us, the Senator Dunlap is an old standby.

Soak soiled overalls and jumpers overnight in water to which has been added 1/2 cup of gasoline. In the morning run them thru the washing machine and then put them on the stove in a boiler with hot soap suds to cover. Let them scald a few minutes, stirring occasionally, then rinse and dry. You

will be surprised to see how easily they come clean.

Save the waxed paper that comes around crackers for cleaning the irons on ironing day. As soon as one sheet is soiled, remove and replace with a clean one.

When the men discard their khaki trousers I always wash and rip them up, saving the best parts for making over into everyday knee pants for my 4-year-old son. They are easily made, launder easily and wear long enough to more than pay for the making.

A salad dressing that is new and very tasty is made by mixing peanut butter and vinegar half and half.

A small washboard such as may be purchased at any variety store at small cost is very convenient for use in a lavatory or even a pail when one desires to wash just a few small pieces. When placed in a dishpan the day's accumulation of tea towels may be washed quickly and easily.

One-half pound of borax and 4 ounces of household ammonia to each can of lye used, make a much better homemade soap than the ordinary recipe.

Serve sour pickles or tart fruits with backbones and spare ribs. If you have any acid jellies, butchering time is the time to use them. The meat is too rich in fat for ordinary stomachs.

Here is a sugarless cake recipe I have found excellent: Cream 1/2 cup of butter and 2 cups of sirup together; beat 2 eggs and add. Sift 2 1/2 cups of flour, 2 teaspoons of baking powder, 1/2 teaspoon of soda, and 4 tablespoons of cocoa and add with 1/2 cup of milk to the first mixture. Add 1 teaspoon of vanilla and beat thoroly. Bake in a moderate oven.

Save tart fruit juices to cook raisins in for making pies. Very little sugar is required for raisins, in fact the sugar may be omitted and sirup substituted with good results.

Add a spoonful of peanut butter to sirup taffy just after removing from the stove. The children consider it a great treat. Mrs. Clara Smith, Chase Co., Kansas.

No Gossiping in This Club

While visiting relatives in a small town in another state, I was invited to attend a meeting of a club called the "Sunshine Club." The women meet twice a month at one of the members' homes, every member taking her turn. They bring their own fancywork or sewing and sew while they visit. One woman was crocheting a rug while others were crocheting fancywork, and tating.

This club has just one rule and that is "No gossip." If any gossiping is done, the one who is guilty pays a fine of 5 cents into the club. I was told no money had been received for this fund. The women often prepare a program of music and readings. Refreshments are served at each meeting by the hostess. E. A. G. Atchison Co., Kansas.

Music In the Parlor

There's a heap of satisfaction, when the nights are growin' long, And the lark has ceased to wake you in the mornin' with a song, When the leaves are turnin' yellow and a blaze is in the grate, When there isn't anybody in the whole world that you hate, To sit dreamin' as you're smokin', with your wife beside your chair, And your daughter in the parlor, gladly singin' something there.

There's a heap of satisfaction when there ain't no debts to pay, And you've got a little money laid up for the rainy day, When there isn't any mortgage that'll soon be coming due, And you know that there's nobody who can blame his woes on you, To sit back and take it easy, with your feet up on a chair, And your daughter in the parlor, singin' "Annie Laurie" there.

There's a heap of satisfaction, as I've mentioned heretofore, When you needn't worry over makin' payments any more, When you're wearin' easy slippers and the nights grow long and cool, And your girl ain't gittin' ready to go off somewhere to school, To sit back and hear her gladly trillin' out some sweet old air, To the well-to-do young, follow with her in the parlor there. —S. E. Kiser.



Ethel McDonald, Home Demonstration Agent, Giving the Girls in the Meade County School Their First Sewing Lesson

Women's Service Corner

Readers are invited to make use of this department. When you have a perplexing problem you cannot solve, send it to the Women's Service Editor, Kansas Farmer and Mail and Breeze, Topeka, Kan., then look for the answer in this column. There will be no charge.

Recoat the Mirror with Mercury

The coating is coming off of a large mirror of ours. Can you tell us how to recoat it?—W. K. S., Kansas.

Perhaps the simplest method is the following: Spread a sheet of tinfoil corresponding to the size of the plate of glass evenly on a perfectly smooth and solid marble table, and carefully rub down every wrinkle on its surface with a brush. Pour on a portion of mercury and rub it over the tinfoil with a clean piece of very soft woolen stuff, or a hare's foot, apply two rules to the edges, then pour mercury on to the depth of a coin. Carefully remove any oxide on the surface, remove the old coating from the glass and be sure it is clean and dry, then slide the glass over the surface of the liquid metal so no air, dirt or oxide can possibly either remain or get between them. When the glass has arrived at its proper position, apply gentle pressure and slope the table a little to carry off the waste mercury, cover the glass with flannel and load it with heavy weights. After 24 hours remove the glass to a wooden table and slant it a little more. Keep slanting it a little more every day until at the end of a month it becomes perpendicular. It is then ready for service.

Making French Knots

Where can I get instructions and patterns for French knot work?—Mrs. J. B. S., Culer, Kan.

The French knot is very easy to make. Simply draw the thread thru the cloth, wrap it around the needle four or more times, according to the coarseness of the thread and the size of the knot you desire to make, then put the needle back in the cloth near the place it was pulled thru first. All pattern companies have patterns for garments on which French knots are to be worked. I suggest that you go to some dry goods store which sells patterns and select the one you wish. If you cannot go they no doubt will send you a book showing the patterns, if you write for it.

Paper Towels Save Washing

I read something recently about paper towels. Are they practicable for use in the home?—S. S. F., Kansas.

Yes, paper towels are inexpensive and save labor on washing and ironing. They are soft and pliable and absorb water almost as well as the cotton or linen towels. They may be used in the kitchen about the cooking and also in the bathroom in place of hand towels. These towels come in rolls of about 150 towels at a cost of about 45 cents a roll.

Pass Dishes to the Right

Should dishes at the table be passed from the left to the right or from the right to the left?—Mrs. Bertha Callihan, Kansas.

Dishes should move from the left to the right. If there is a waiter she should offer dishes from which persons at the table are to take a helping from the left. If she is merely placing serving in front of them, she places them from the right.

Deep Fat Cooking

Will you kindly tell me what utensils are required for cooking foods in deep fat?—T. O., Linn Co., Kansas.

One needs a large, flat bottomed kettle (preferably iron), a long fork or spoon, a wire basket for convenience in handling the food, and a draining pan containing absorbent paper.

Take Odors from Fat

Is it possible to remove burned particles required for cooking foods in deep fat?—Mrs. J. J. O., Wichita Co., Kansas.

Yes. Melt the fat and add a few slices of raw potatoes. Heat gradually. When the fat ceases to bubble and the potatoes are well browned, strain thru a double thickness of cheesecloth, and set aside to cool. Repeat if necessary.



Hudson's Four Year Old Prophecy Fulfilled

The Super-Six Motor Patented, Controlled And Exclusive to Hudson Has Met Every Promise

"The superior type which all must concede" is a claim we made for the Hudson Super-Six nearly five years ago.

Today close to 80,000 Super-Six owners and scores of official records reveal the truth of that prophecy.

Hudson originated through the Super-Six a principle which added 72% to power and 80% to motor efficiency. It reduced vibration almost to nil and thereby increased motor life. The forces which in other types destroy are in the Super-Six directed to useful employment.

They account for Hudson becoming the greatest speed, hill-climbing and transcontinental car ever built. Its position is not questioned. Everyone knows it.

Hudson Alone Controls the Super-Six

There is little doubt that all would adopt its invention were it not for the patents which Hudson holds.

Think what it means to add 80% to efficiency without increase of weight or sacrifice of simplicity. That advantage was recognized by engineers as soon as the principle was revealed. Everyone admits the unrivaled position of Hudson. Who questions its superior ability in any performance that calls for power, flexibility and endurance?

Further development of the first Super-Six was inevitable. But nothing has called for a change in the principle which gives it exclusive advantage. Improvements have come through refinement and in raising other car units to the standard of its motor.

Each Year Has Seen a Greater Hudson

No one at first realized the Super-Six capable of withstanding such punishment as it

has taken in the hardest tests ever imposed on a motor car.

The fastest 100 miles ever officially recorded of a stock car did not show Hudson's limit. So harder tests were imposed. The twenty-four hour run was one; and although a Super-Six stock chassis in that time traveled a distance greater than from New York to Denver, its endurance limit remained unknown. The trip across the continent from San Francisco to New York, in a seven-passenger touring car, was made in 13 hours less time than its nearest rival. And then, since that did not show its endurance limit, the car was turned about and completed a test never attempted by any automobile before or since. The round trip was made in 10 days, 21 hours.

So the Present Hudson Is Even Greater

Each successive Super-Six model has added to Hudson's leadership. Each Hudson has become even more dependable, and now it seems to be as nearly perfect as it is possible to make an automobile.

And Everyone Admits Hudson Leads in Style

Look about in any assemblage of fine automobiles and note the dominant distinction of Hudson. Even sellers of rival cars, unwilling to admit the mechanical superiority of the Super-Six, because in that particular they know none other can use its motor, openly say Hudson sets the style in body types.

The Super-Six motor made Hudson the largest selling fine car in the world. Buyers have always had to wait for delivery of favorite models. They are waiting today. You will surely want a Super-Six sometime within the next year. Now is not too early to order.

Hudson Motor Car Company, Detroit

(3002)

SEEDS Reliable and Full of Life SPECIAL OFFER Made to build New Business. A trial will make you our permanent customer. PRIZE COLLECTION Radish, 17 Varieties, worth 15c; Lettuce, 12 kinds, worth 15c; Tomatoes, 11 the finest, worth 20c; Turnip, 7 splendid, worth 10c; Onion, 8 best varieties, worth 15c—55 varieties in all; worth 75c GUARANTEED TO PLEASE. Write today, mention this paper. SEND 10 CENTS to cover postage and packing and receive this valuable collection of seeds postpaid, together with my big instructive, beautiful Seed and Plant Book, tells all about Buckbee's "Full of Life" Seeds, Plants, etc. H.W. BUCKBEE Bookford Seed Farms Farm 100 Bookford, Ill.

TOPEKA HIDE & FUR CO. Highest Market Prices Always PAID for Furs, Tallow, Wool and HIDES Green Salt Cured Hides, No. 1, 31c Horse Hides, No. 1, \$8 to \$10 Green Salt Cured Hides, No. 2, 30c Horse Hides, No. 2, \$7 to \$9 Prompt payment and satisfaction assured. Send for shipping tags and price list. Topeka Hide and Fur Co., Burton Hill Mgr., 116 No. Kansas Ave. Phone 361 Topeka, Kansas

Classified Advertisements Reach Classified Buyers You don't try to shoot ducks at night, so why "shoot in the dark" when you have something to buy or sell. The 125,000 readers of Kansas Farmer and Mail and Breeze fall naturally into the classes of buyers and sellers for myriads of articles. A classified ad shoots straight to the mark; it isn't a matter of luck.

GURNEY'S BUGLESS POTATO



LAY aside the old sprayer. Forget about Paris Green. Devote your time to making money by raising my big Bugless Potatoes. Thousands of farmers grow them almost exclusively, because they outyield and outsell other varieties. You can raise magnificent crops of these immense, solid potatoes and the bugs will not bother them to any great extent.

Practically Immune to Bugs

A few bugs may light on my Bugless Potato-vines. They may stand around on them and look at the scenery, but the point is that bugs won't eat the vines. They may lay their eggs on them but when they want a square meal, they go to some other variety in a neighboring field. Yes, my Bugless Potatoes are practically immune from potato bugs.

Yield Up to 300 Bushels Per Acre

A great many of my customers write and say they are getting as high as 300 bushels of my Bugless Potatoes to the acre. Harry Jensen, of Hubbard, Nebraska, writes that he is planting no other kind of potatoes and that he has had no trouble with potato bugs. F. C. Lorence of Larson, N. Dak., writes that he has been growing them for two years and that they are the best potatoes. A. B. Reamsbottom of Kamloops, B. C., Canada, writes that they yield about 12 tons per acre and that they are of the very best eating quality. Hundreds of such letters prove that my Bugless Potatoes are becoming more popular every day.

"I want to get the price on your Bugless Potatoes. One of my neighbors received half a bushel from you last spring and he dug 19 bushels this fall of excellent large white potatoes. I want the same kind of potatoes."

H. D. Kane, Dundee, Minn.

"I got a bushel of your Bugless Potatoes, cut them in small pieces, planted them May 10th, dug them September 15th and harvested 3 1/2 bushels of very fine potatoes. A good many weigh one pound, and I want to say that these are very fine potatoes and the best I ever raised."

Paul Odland, Newport, Minnesota.

GROW EVERYWHERE ANY POTATO WILL GROW

No matter in what section of the country you are, you can raise immense crops of these wonderful potatoes. No matter how you have been bothered by the potato bug pest in the past, you should have no more such trouble. These splendid potatoes are sold under my usual guarantee of satisfaction. If you are not perfectly satisfied with everything you buy of me, return the goods, and I will return your money together with all transportation charges you have paid. Order a bushel TODAY and you will surely be more than pleased.

15 lbs. . . . \$1.60 300 lbs. . . . \$16.50
60 lbs. . . . 3.50 600 lbs. . . . 32.00

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You have never seen as handsome a Seed and Nursery Catalog. Full of beautiful illustrations and valuable information. It will pay you to send for it, and it is FREE.

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"Salzer" has, for years, been the accepted symbol of purity in field seeds.

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FREE RINGS, WATCHES, GUNS, and other useful things to those selling 30 packs of our Quality Brand Garden Seed at 10c a pack. Send no money. We trust you. Order at once. Be first.

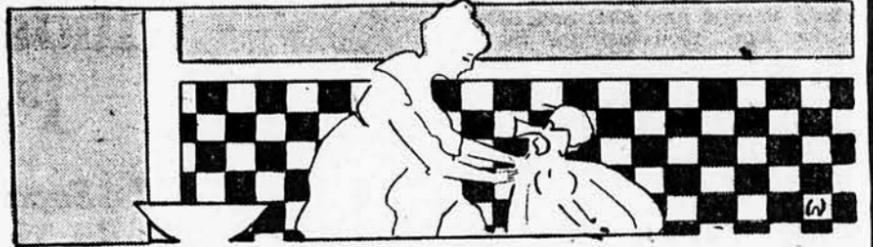
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A story of the building of this great canal; 36 pages; profusely illustrated; will be sent postpaid for 10 cents, stamps or silver. Novelty House, Dept. 2, Topeka, Kan. Mention this paper when writing advertisers.

Health in the Family

BY DR. CHARLES H. LERRIGO



IN EVERY issue of this paper our readers are invited to avail themselves of the services of Dr. Lerrigo thru the columns of his department. No charge is made for this, but when a personal answer is desired postage should be enclosed for reply to each inquiry.

Poisoning by Wood Alcohol

Many questions have been asked recently about wood alcohol. It was not generally known how deadly is this poisonous concoction until the enforcement of national prohibition led to the many attempts of unscrupulous dealers to sell wood alcohol for drinking purposes. Since then the numerous deaths and cases of blindness resulting have stirred a very deep interest in the subject of its manufacture and appearance.

The National Committee for the Prevention of Blindness has issued important pamphlets showing that the liquor is even more deadly a poison than was supposed, that its harmful action may be induced by breathing its fumes and by absorption thru the mucous membranes of the body, thus clearly demonstrating that it is a dangerous agent even to work with. Even in cases not resulting fatally there is often total loss of vision.

How It Is Made

The wood alcohol used in the United States is obtained chiefly from the destructive distillation of wood—hard wood, birch, beech, maple, oak, elm and alder being those most frequently used. The chief uses to which it is put are for the denaturing of grain alcohol; for various purposes in lines of common manufacture especially as a solvent in the preparation of shellac, varnish and dyes, as an ingredient in medicinal and pharmaceutical preparations; in the chemical industries and as a fuel and illuminant.

Only within recent years has wood alcohol become so dangerous to life and sight. Formerly it was a dark, bad-smelling, bad-tasting fluid which no one was tempted to drink. Later, a process was developed by which this color, smell and taste are removed. Wood alcohol, when purified in this way, looks, smells and tastes like grain alcohol, and may thus be easily substituted for it by unscrupulous persons.

The Denatured Article

In 1906, Congress, following the lead of European countries, enacted a law permitting the general use of a tax-free industrial denatured domestic alcohol in order to stimulate industrial purposes for which the high cost of grain alcohol made its use prohibitive. Denatured alcohol usually consists of 90 per cent grain alcohol and 10 per cent wood alcohol, thus rendering it unfit for drinking. It is being increasingly substituted for wood alcohol in many industrial uses, to eliminate the great dangers attendant upon the use of the latter.

Medicated Alcohol

Pharmacists who hold permits and have given bond are permitted to medicate alcohol and sell it for non-beverage purposes in quantities not exceeding 1 pint, provided they first medicate it in accordance with any one of nine formulas specified by the Commissioner of Internal Revenue, United States Treasury Department. Carbolic acid, formaldehyde and bichloride of mercury are the chief of these denaturing agents. The container of such medicated alcohol must bear a "poison" label. The sale by pharmacists of medicated alcohol for industrial purposes

is prohibited. It is sold chiefly for rubbing purposes.

One teaspoonful of wood alcohol taken internally is sufficient to cause total blindness—a larger quantity often causes death. If you value your eyesight or your life, never use wood alcohol, denatured alcohol or medicated alcohol for drinking purposes. Pass this knowledge on if you would assist in reducing the fatalities which are occurring from this cause.

Answers to Questions

Your questions will be answered in this department without charge. This service is maintained for your benefit, and Dr. Lerrigo will be glad to give you advice upon any matter that you may desire to consult him about.

Remedy for Corns

I have corns and callouses on the bottoms of my feet. I have tried several kinds of corn cures but all have been unsatisfactory. Have you a remedy that you would publish in the Kansas Farmer and Mail and Breeze?

J. B. V.

When a person has corns and calloused spots on the soles of the feet that absolutely refuse to heal, the chances are that there is a reason for them. It is waste of time to dope them with corn cures. They are either due to awkward ill-fitting shoes, or to weak or broken arches. Shoes are selling at absurd prices just now, but in spite of the price it pays to get the kind that are made to conform to the natural shape of the foot and that will support the arches instead of destroying them. Old persons who have weak or broken arches do well to buy and use artificial arch supporters. Young, vigorous persons should not do this, but instead should train their feet so that the natural arch may be strengthened and restored.

Kidney Trouble

I have read so many of your excellent suggestions, that I feel confident you can give me some help for our little girl nearly 4 years old. She seems not to have the control of her kidneys properly. During the summer time she often came into the house with her clothes soiled, and I repeatedly punished her for it. Now this winter her clothes are almost constantly wet and she tries to avoid it too. I feel as if something else is the cause, and not carelessness as I thought at first. She is perfectly normal other ways. I have four other children but none like this one, so I felt as if I ought to seek aid some where. Please tell me what I ought to give or do.

N. A. S.

The reason the condition is worse in winter than in summer is because in cold weather the skin excretes less moisture and there is a greater burden on the kidneys. Otherwise the child is probably just as she has been in summer.

Some children seem to have very little tolerance of the bladder for retaining urine. In some cases this is because of some fault in the urine such as too great acidity. This needs the attention of a doctor.

In other cases it is because the child has not yet trained her sphincter muscles to resist. This you can help by insisting that the urine be voided at certain regular times. You can keep meats and sweets out of the diet in great degree. You can promote the activity of the skin by the use of woolen underwear and socks. And even then you may find that improvement comes but slowly. Occasionally a little girl is troubled with this incontinence of urine because of some congenital defect of the genital organs, such as a "hooded clitoris." Such a condition can promptly be corrected by a doctor.

It is quite important at all times that a child should have regular movements of the bowels but especially so in a case of this nature.

The Farmiscope

Readers of the Kansas Farmer and Mail and Breeze are invited to contribute freely to this column. Bright sayings of children, witticisms, and good jokes especially are desired. Address all communications intended for this page to the Feature Editor, Kansas Farmer and Mail and Breeze, Topeka, Kan.

Two Versions of the Order

Customer—Bowl of oyster soup, two scrambled eggs, coffee and brown bread!

Waiter (an ex-soldier)—Marines in the mud, two squads, deploy 'em, cup o' reveille an' colored shock troops.—Cartoons Magazine.

A Railroad Complaint

"Did you get any satisfaction when you put in your complaint about the way this railroad is run?"

"Yes. The clerk I talked to said he had to ride on the road himself and he agreed with me thoroly."—Washington Star.

Modern School for Women

"Is this a strictly modern school for young women?"

"Judge for yourself."

"Well?"

"Dancing, motoring, aviation, and stump-speaking are featured in the curriculum."—Birmingham Age-Herald.

An Ideal Son

The fussy old gentleman turned to his chance traveling companion: "Have you any children?"

"Yes, sir; a son."

"Ah, indeed! Does he smoke?"

"No, sir; he has never so much as touched tobacco."

"So much the better, sir; the use of tobacco is a pernicious habit. Does he frequent clubs?"

"He has never put his foot in one."

"Permit me to congratulate you. Does he never come home late?"

"Never. He goes to bed directly after dinner."

"A model young man, sir; a model young man. How old is he?"

"Just six months."

His Garden Experience

"How did your husband's gardening turn out?"

"Not well so far," responded the serious woman. "The preliminary outdoor work gave him such an appetite that he ate the potatoes instead of planting them."—Pittsburg Chronicle-Telegraph.

The Honest Farmer

Two piles of apples were on the ground. One contained a large-sized and rosy selection; the fruit of the other was green and small.

"Large on the top, sir, and small at the bottom?" inquired the new assistant of his master, as he prepared to fill a barrel.

"Certainly not!" replied the farmer virtuously. "Honesty is the best policy, my boy. Put the little apples at the top and the large ones at the bottom."

The assistant complied. His master was evidently as green as his greenest fruit.

"Is the barrel full, my lad?" asked the farmer.

"Yes," answered the assistant.

"Good," said the farmer. "Now turn it upside down and label it!"—London Tit-Bits.

Outside or Inside

"There are two sides to every question," remarked the ready-made philosopher.

"There's two sides to a hickory nut," rejoined Farmer Cornstassel; "an outside and an inside, but only one of 'em is worth payin' any attention to."—Washington Star.

What She Missed

Landlady—I'm sorry you think the chicken soup isn't good. I told the cook how to make it. Perhaps she didn't catch the idea.

Boarder—No, I think it was the chicken she didn't catch!—Stray Stories.



Better Penetration With E-B Harrows Means Cleaner Cultivation

E-B Harrows, both disc and spike-tooth, are designed to give the most perfect penetration. Over rough, uneven ground they have the flexibility that assures even, thorough preparation of the seed-bed without skipping the low places.

The Right Disc Harrow for Your Purpose

The E-B line includes just the harrow to fill your individual requirements, whether you use horses or a tractor. E-B Tandem Disc Harrows have the strength combined with the ease of handling that is essential.

E-B U-Bar Harrows

In all E-B lever harrows the teeth in the two front bars have a different slant from those in the rear bars. This patented feature prevents these E-B Harrows from "riding over" the clods in the field.

There is an E-B Tool for every type of soil. Let your dealer fit your needs out of the E-B full line.

Emerson-Brantingham Implement Company, Inc.

Established 1852

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A Complete Line of Farm Machinery Manufactured and Guaranteed by One Company

Handsome FREE Wrist Watch

Guaranteed time keeper GIVEN for selling only 40 packs vegetable seeds at 10c per large pack. Easily sold—EARN BIG MONEY or premiums. Get sample lot **70-DAY**. Send no money. We trust you till seeds are sold.

AMERICAN SEED COMPANY
Lancaster, Pa.
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Write for Book Today FARM WAGONS

High or low wheels—steel or wood—wide or narrow tires. Steel or wood wheels to fit any running gear. Wagon parts of all kinds. Write today for free catalog illustrated in colors.

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Why use Coal or Wood?

Turn a Valve and Cook or Heat

THE OLIVER OIL-GAS BURNER makes any cooking or heating stove a gas stove. Burns coal oil (kerosene). No coal or wood. Cooks and bakes better. Cheaper. Keeps your home warmer. You regulate flame. **FITS ANY STOVE ANYWHERE.** No fires to start, no ashes, no chopping, shoveling, poking and dragging of coal. Saves hours of work and loads of dirt. Simple. Safe. Easily put in or taken out. No damage to stove. Lasts a lifetime. Thousands of delighted users. In use eight years. Money-Back Guarantee. Free literature.

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Western Orders Shipped From Chicago.

The Oliver Oil Gas Burner makes 2 gals. oil equal 97 lbs. coal

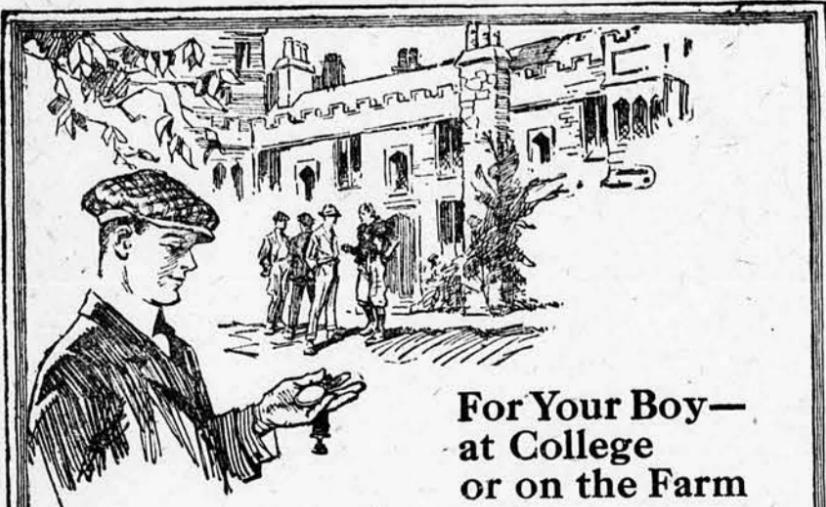
CHINESE PRIZE PUZZLE

\$1000.00 In Prizes Given

This picture shows a "Chink" doing his daily wash. In the picture are a few faces of his customers—these faces can be discovered by a little figuring, and by turning and twisting the picture in various positions. It looks easy and simple, but if you can find as many as two faces, mark them with an (X), and return the picture to us, and we will send you full information regarding the \$1,000 in prizes which will be given away FREE.

OUR OFFER: We are the largest Magazine Publishers in the West, and are conducting this big club in connection with our big Introductory and Advertising Campaign, and want to send you a Sample Copy and full particulars as to how you can become a member of this club. We are going to give away a Ford Speedster, Culver Racer, Shetland Pony, and a number of other valuable prizes. **Does not cost you a single cent to join the club, and every club member is rewarded.** Any one may enter, and bear in mind, there is absolutely no chance to lose. Every new club member also receives a beautiful GOLD FILLED SIGNET RING free, just for being prompt in joining the club. Get your share of the \$1000.00 in prizes. Write today.

CHINESE PUZZLE CLUB, 104 CAPPER BUILDING., TOPEKA, KANSAS



**For Your Boy—
at College
or on the Farm**

NOTHING you could get for your boy at college would be of greater help than an accurate watch. College days are crowded days—it's both important and demanded that students be on time.

And for any boy, anywhere, there's inspiration and pride in owning a watch that really keeps accurate time. That sort of watch gets willing co-operation from a boy.

Buy your son a Hamilton. It will help him form habits that lead to success—and twenty-five years from now will still be serving him faithfully.

Hamilton Watch

"The Railroad Timekeeper of America"



Most of America's fastest trains are run on Hamilton time. Because of its remarkable accuracy, the Hamilton Watch has become truly "The Railroad Timekeeper of America."

There are 22 Hamilton Models to choose from, with prices from \$38 to \$200. Hamilton movements alone, \$20 (\$22.00 in Canada) and up. See them at your jeweler's.

Send today for "The Timekeeper." It tells how Hamiltons are made and shows the various models with prices

HAMILTON WATCH COMPANY
Lancaster, Pennsylvania

For Our Young Readers

What One Boy Made from Carpenter's Waste

BY JAMES L. STEWART

THIS BOOKCASE and stool for a boy's room were made by the boy himself from carpenter's waste. The material was given to him for a few minutes' work helping pick up about a newly erected house.

For the stool a board 1 foot square and 2 inches thick are required. The corners are cut out 2 inches on each edge. The legs were made from four pieces of wood each a foot long and 2 inches square. The legs were fitted into the cut-out corners and allowed to extend up just a trifle above the top of the stool. Two strong screws held each leg in place but some glue was used between the edges also. After

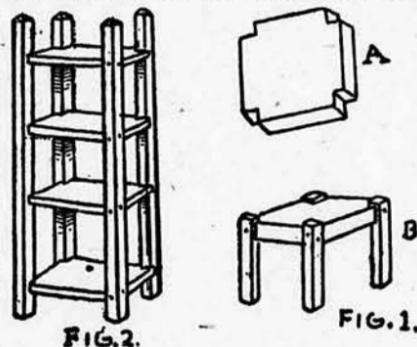
one but still not without barriers to be surmounted. We profit by overcoming obstacles. I know of no worthwhile life that was entirely free from hardship, pain and grief.

We older folks, Robert, are inclined to dwell in the pleasant valleys of the past. How keenly interested all of us were in your grandfather's reminiscence of the "good-old days." And those days, days when a nation was in the making and men like your grandfather were hewing out homes in the wilderness and breaking the virgin prairie sod, were great days in which to live. The later days, too, when your father and I took up the tasks from failing hands and carried them on have been worthwhile days. The handiwork of the American manhood of yesterday and today has left its imprint upon the nations of the earth. But, Robert, no "good old day" or no day of the living present held such promise as does the "glad new day"—the day of tomorrow. With its coming the door of opportunity is opening.

The boys like you will be the men who must face the issues of tomorrow. Greater opportunity will mean greater responsibility and greater problems which must be solved. Opportunity, too, means service. Success cannot be measured in title to land or in cash in bank. The poorest man I know has lands and gold and many servants to do his bidding but not one to call him "friend." The richest man I ever knew left but little of this world's goods when he passed on. Rich and poor alike, tho, braved the storms of a bitter winter day to pay the last tribute of respect and my friend lives again in the lives of a hundred boys who caught the vision of service thru association with him.

I should not like to have you think, tho, that the accumulation of property is unimportant. I want you and my own son to look forward to the time when you will have homes of your own and a full share of the good things of life. Wealth, too, adds but greater opportunity for service. It should not be difficult to win all the things we hope for if in building, our foundation is strong and sure. And now, dear son of my friend, in closing this first letter may I hope that you will not consider it a "preachment" when I say that the greatest stone in this foundation is faith in Christ. All enduring work of the ages has rested upon this foundation stone and it has not failed.

Sincerely your friend,
John Francis Case.



the stool was smoothed up nicely with sandpaper it was stained a fumed oak color.

For the bookcase which may also be used for magazines four pieces of 2 by 2 wood were used, each 3 feet in length. Four pieces of board each a foot square and an inch thick were used for shelves. The corners were cut from the boards as in A, Fig 1. After the tops of the legs or corner strips were smoothed and cut in a fancy shape the shelves were put in each, being secured to the corner strips by screws and glue. In placing the screws one should be sure to make one come a trifle lower than the other at each corner so that they may pass in the wood.

Sandpaper all rough surfaces and edges before applying the stain or varnish.

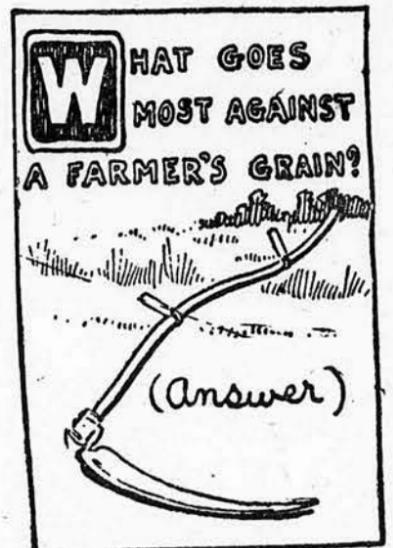
Around almost any new building there are to be found pieces of waste wood that simply go into the kindling pile. A boy may obtain enough for several pieces of furniture for his room by offering to help in the cleaning up process.

Letters to a Farm Boy

Dear Robert: How the years slip away. It seems but a little while since your father and I were boys together and yet I find you growing into young manhood and my own son stretching upward until he has reached the shoulder of his dad. Such good comrades did we become on my last visit to your home that I feel as if I may talk to you as man to man. Soon you must face the great issues of life. My wish for you is that the pathway to success may be a pleasant

Every farm boy who read the Capper Pig club news year before last and two years previously formed an intimate friendship with John Francis Case, even if he never met him personally, for Mr. Case understands boys thoroly and whatever he writes bears the imprint of his personality.

We are giving you the first of a series of letters today, written by Mr. Case to a farm boy. These letters are full of encouragement and will be read with interest not only by the youth but by the "grown-up boy," also. Even the adults still may apply wisely these "stones of success" in the further building of their lives. For the young where the foundation is just in the making they will insure the molding of a personality which infuses the spirit of progress and uplift into the entire community.



Send your answer to this riddle to the Puzzle Editor, Kansas Farmer and Mail and Breeze, Topeka, Kan. There will be packages of postcards for the first six boys and girls who send correct solutions.

Solution January 3 riddle—Why is Ireland like a bottle of wine? Because it has a Cork in it. The prize winners: Oretta Jones, Agnes Nelson, Anna Goldhammer, Ernest Burghardt, Melven Brindle, Clarence Gibson.

You Can Save Money Now!

Many magazines have announced an increase in their subscription price. Others are contemplating advancing. We can still offer a few magazines however, at bargain prices. Order today.

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NOTE If you do not find your favorite magazine in clubs listed above make up your own combination of magazines and write us for our special price. We can save you money on any two or more magazines providing they are clubbed with our publication.

KANSAS FARMER AND MAIL AND BREEZE, Topeka, Kansas
Enclosed find \$..... for which send me all the publications in Club No..... for the term of one year.

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

Farm Questions

All inquiries about farm matters will be answered free of charge thru the columns of this department. Those involving technical points will be referred to specialists for expert advice. Address all inquiries to John W. Wilkinson, Farm Question Department, Kansas Farmer and Mail and Breeze, Topeka, Kan.

Treatment for Warts

I have a mule that has a wart of considerable size on his shoulder. It has been growing larger for the last three months. Please tell me how to remove this wart. Cheney, Kan.

C. C. BECKETT.

The best thing you can do to remove the wart is to have some competent graduate veterinarian cut it out. It is not sufficient to cut it off, but the incision must be made in the healthy tissue surrounding the base of the wart and then carried under it deep enough so that all of the wart will be entirely cut out. The resulting wound should then be treated by applying, for a period of five minutes, a pledget of cotton saturated with a 5 per cent solution of formalin. This drug will cause a scab to form over the sore in the course of 24 hours, so that the latter will require no further treatment other than the reapplication of the formalin solution whenever the scab shows a tendency to come off. The wart should be removed under the influence of a local anaesthetic.

R. R. Dykstra.

Preparation of Corn

I have a piece of bottom land that I want to put to corn next spring. It was in wheat this year. The straw was very heavy and rank. It now has a very heavy growth of covering of crab and other grasses on it and quite a few cockleburrs. Would you advise plowing this under before severe winter weather comes? If it is plowed now, what treatment would you give it before planting to corn? Would it be likely to do as well if burned, then plowed and prepared for corn? Iowa, Kan.

EDWARD RUSSELL.

It will improve the productiveness and the physical condition of your soil if you plow under the heavy growth of stubble and crab grass that is now on your field. I would, therefore, recommend plowing the field in the fall and leaving it rough over winter. Next spring, the ground should be worked down with a disk as early in the spring as conditions will permit and should be disked and probably harrowed again before planting. If the ground is handled in this way it will enable you to kill a crop of weeds before the corn is planted in the spring and to assist just that much in keeping the corn crop clean during the season.

If the cockleburrs are not too abundant, it would probably pay you to gather and burn them rather than to turn the seed under with the plow. The freezing and thawing in winter should improve the physical condition of the type of soil that you have on this field and if the field is left rough this fall, it will catch and hold considerable snow, altho not as much as would be caught by the weeds and stubble. The physical condition of the soil and the fertility will have more to do with the character of crop produced than the amount of water that the soil contains in the spring.

S. C. Salmon.

Horsepower of Cars

Will you please give me the respective horse powers of the Ford, Chevrolet, and Dort cars? Iowa, Kan.

E. B. MCKENZIE.

The horsepower of the Ford is given as approximately 22 horsepower; the Chevrolet, practically the same amount; and the Dort about 19½ horsepower. Of course conditions of operation may vary that the horsepower will be somewhat different from this, but not appreciably when operating on full load.

C. E. Jablow.

Cow Has Fatal Malady

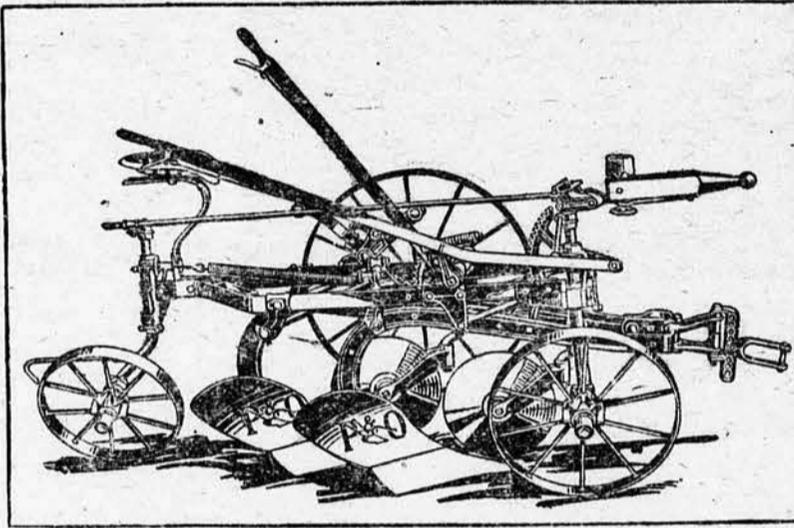
We have a fine Holstein cow. After her calf in 1917 she milked splendidly. In 1918 she had a poor, sickly calf which later died. Since then, she never did well. She ate heartily. Her eyes at times, would seem to sink back in her head. A few days before due to freshen, she would not get up unless helped. We called a veterinarian. He said we were mistaken about her being due to freshen as she was not making bag. We said if we gave her good feed she would get all right. In 36 hours she died. Gallons of water came from her side but there was no blood. We later talked to another veterinarian, and he said it was common and curable. As we are raising dairy cattle, we

(Continued on Page 45.)

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Good Profits From Calves

Proper Feeding and Care Will Bring Success

BY J. B. FITCH

NO DAIRY operation has been talked of or written about more than that of raising calves, and still we find evidence of valuable calves poorly developed. Perhaps, it is not so much the lack of knowledge of raising calves as it is the lack of appreciation of the details in feeding and caring for the calves. On most dairy farms where good calves are being developed, you will find that one member of the family or one of the most careful men have as their hobby the caring for the calves. Not infrequently do we find the housewife or one of the younger members of the family assigned to this duty, and where interest is manifested good results will follow.

ance and it is upon the care in feeding this skimmilk that so much depends. That one is justified in depending upon skimmilk for most of the calf's nourishment is now quite generally accepted. Trials at many of the experiment stations have shown that the butterfat in the milk is not essential after the calf has started to eat grain, and also that the high price of the butterfat makes it prohibitive as a feed for calves.

An experiment at the Kansas Experiment station on methods of feeding calves is interesting in this connection. The following table shows a comparison of feeding calves on skimmilk, whole milk, and permitting the animals to run with their dams:

Feed Tests With Skimmilk					
Method used	Number calves	Days fed	Av. gain a head, lbs.	Daily gain, lbs.	Gain cost 100 lbs.
Skimmilk	10	154	233	1.51	\$2.25
Whole Milk	10	154	287	1.86	7.06
Running with dam	22	140	248	1.77	4.41

When we consider that the value of any animal can be measured in a degree by the treatment it receives during the early months of its life, and then think of the artificial conditions under which dairy calves are reared almost from birth, we may be able to realize that at best, calf raising is a most painstaking operation. Most animals that suckle their young permit their offspring to be dependent upon them until they are able to care for themselves. This was nature's intention with the dairy calf, but by artificial development the dairy cow has been made to produce more milk than the calf will need, and the value of the milk as human food has in itself made the calf dependent upon other sources for its sustenance at a very early age. With the exception of the first few days of the calf's life the calf is dependent upon the knowledge and experience of the caretaker, and the results in calf raising can be measured usually by the man who has them in charge.

Selling Calves for Veal

It is a practice in many dairy herds, especially near large cities where there is a great demand for milk, to sell all calves for veal at a very young age. There they depend upon buying fresh cows to replace their dry cows. Their herd is constantly changing and the production of the herd is uniformly low. Hence the meager profits. The quality of the veal produced does not as a rule receive a premium on the market. It takes milk to make good veal and the calves are sold in order that more milk can be marketed.

If the men using this system of producing milk would take the time to find out which were their best cows and raise the heifers from these animals out of a dairy bull, they would find that their heifers would grow into better producers than their mothers and that they would cost no more, than cows equally as good that they go out and buy.

The high price of dairy products and dairy animals has caused many farmers to pay greater attention to raising calves than in former years. The men in the newer dairy districts are coming to realize that the best way and the cheapest way to get a milking herd, is to start with the best they have or the best they can get in their neighborhood, and by using a purebred bull of one of the dairy breeds, raise their own cows. This method takes time, but is the most certain.

Methods of Handling Vary

The methods of handling and feeding dairy calves vary widely, depending upon the feeder and the feeds available. As a rule, however, the dairy calf receives skimmilk in abundance

It will be noticed that the gain for each calf and the daily gains are practically the same in each of the cases. The greatest difference is noticed in the cost for each 100 pounds of gain. It shows a difference of practically \$5 a hundred in favor of skimmilk over whole milk, and a difference of over \$2 in favor of feeding skimmilk over the practice of permitting the calves to run with their dams. The calves receiving skimmilk and whole milk were fed grain in addition to the milk fed. The calves receiving skimmilk consumed 122 pounds of grain for 100 pounds of gain. The calves on whole milk consumed 58 pounds of grain and 31.8 pounds of butterfat for 100 pounds of gain. In other words the 31.8 pounds of butterfat in the whole milk is equal in feeding value to 64 pounds of grain, or 100 pounds of grain is equal to 48 pounds of butterfat. While butterfat is twice as valuable as grain in the case mentioned, it generally costs about twenty-five times as much as grain feed. So it is apparent from the financial standpoint that it pays to substitute some carbohydrate food for the butterfat in milk for calf feeding.

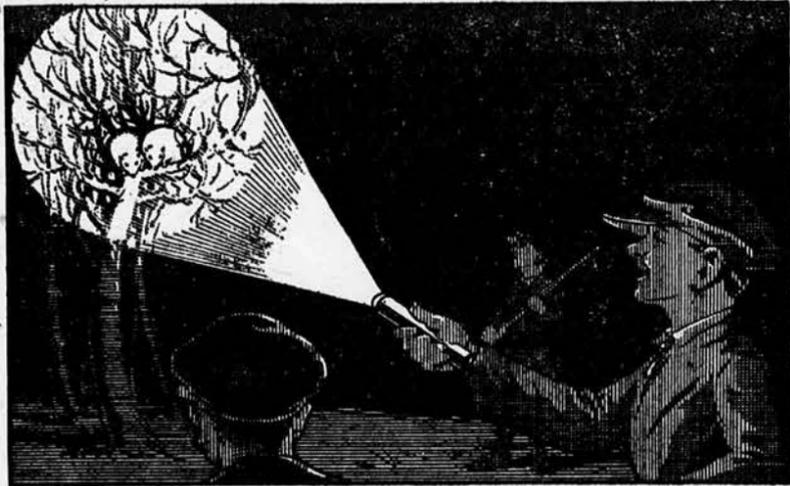
Skimmilk Gives Best Gains

The animals in the experiment were later placed in a feed lot and fed for seven months. At the end of this feeding period the skimmilk calves had made the best gain, the whole milk calves next, and those permitted to run with their dams the poorest. It is evident that better results can be obtained and much more cheaply, by feeding grain and skimmilk instead of whole milk.

The animals mentioned were from the beef breeds, but the same applies to dairy calves as well. It is true that for the first six months the calf getting whole milk often will look a little smoother than the skimmilk calf, but at the end of the year the difference disappears. The stunted, pot-bellied calves that often are attributed to skimmilk, show the ignorance and carelessness in feeding rather than the effects of the food.

It is a practice on most dairy farms to permit the calves to run with their mothers for three or four days, or until the milk of the cow is good for table use, which is generally five or six

(Continued on Page 46.)



BOYS! BOYS! Here's Your Chance

Use Your Flashlight Whenever You Want To

What would be nicer these cold winter evenings when you are out setting your traps, skating, or coasting down some big long hill than to have a reliable flashlight that you can call your own? Wouldn't it be more enjoyable when you go out for an evening's outing, skating, coasting, etc., with your boy and girl friends to reach up on the shelf and get your own flashlight instead of borrowing your mother's or father's? How often have you been out in the evenings enjoying yourself when some little thing went wrong that spoiled your evening, and which could have easily been fixed in the dark if you only had a flashlight?

Make Your Batteries When You Need Them

The beauty of our Flashlight Outfit is, if some night you have had a little hard luck, and have had to burn your flashlight until the battery was exhausted, you can immediately make a new battery in just a few minutes' time. You won't have to wait until the next day to go to the store for a new battery—you make your own. It is so simple that a boy or girl 10 or 12 years old can make these batteries by following the instructions. It's great fun to make these batteries, and when you get one of the outfits, invite your neighbor boys and girls over some evening and surprise them

by showing what you can do. You can make a battery absolutely fresh, full of life and power which will give a brighter light, and a longer lasting light than the battery you buy at the store. Be the first one in your neighborhood to get one of these outfits, and you will always have a crowd of your friends watching you make these batteries. They will think you are a genius—you will be envied by all of them. It's so simple they will all be wanting you to show them how it is done. You will be considered a wonder when it comes to making your own battery with our outfit.

Why You Should Make Your Batteries

Here Are the Reasons:

The life of a battery depends upon its age. The minute a battery is made, chemical action caused by the combining of different elements, starts. Deterioration begins, and the term of the battery life is definitely fixed. With ordinary batteries, if you are fortunate enough to secure one fresh from the store, you secure a battery of usefulness—but never 100 per cent—some deterioration is sure. Our MAKE-

OUR-OWN outfit comes "knocked down," ready to assemble in a jiffy, and here is the big point. Until you assemble the parts—at the time you need a fresh battery, the MAKE-OUR-OWN principle keeps all the life intact. There's no life lost in deterioration before you get the battery. The battery reaches you all complete and packed in a nice carton, consisting of six zinc receptacles, six electrodes, one stirring stick and COMPLETE INSTRUCTIONS.

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If you have no flashlight, order Offer No. 1.
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 Mail coupon today; don't miss this opportunity.

OFFER No. 1. This offer includes Outfit No. 1, with flashlight, and is given FREE and POSTPAID for distributing only twelve of our big, beautiful colored pictures. Mail coupon TODAY.

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Dear Sir—I am very much interested in your Battery Offer. Please send me enough pictures to get Outfit No.

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Town..... State.....



Skimmilk Calves Thrive Best When They Get Plenty of Grain and Hay as Soon as They Will Eat Dry Feed, Good Care Insures Results.

Farm Questions

(Continued from Page 43)

would like to know what this disease is and whether it is common. What is the cause and how can it be told? Is it contagious and what is the treatment? Winfield, Kan. W. F. WALTON.

From the symptoms you submit it appears to me that your cow was affected with a condition known as excessive secretion of amniotic fluid. I know no common name for the condition. It simply means that there is a greatly increased amount of the normal fluid which surrounds the calf in the uterus. The cause for this excessive secretion of fluid is not known. The condition is very rare. It is always a grave condition and the attempts may be made to remove the fluid by tapping the uterus. death of the cow is frequently the result. R. R. Dykstra.

Top-dressing Wheat With Straw

I have an inquiry as to the advisability of spreading straw immediately as a top dressing on wheat that has just been sown but has not come up and may not until we get rain. What do you think about it? I do not think I ever have seen it tried, or read about it. E. V. M.

I see no objections to spreading straw as a top dressing on wheat at this time. The straw should not be spread too thick. A good load to the acre will be as much as should be applied. It would be advisable to run over the field with a disk set straight and weighted for the purpose of forcing the straw into the ground unless the ground is especially rough or unless rain or snow comes soon to germinate the seed.

Straw spread at this time and forced into the ground with a disk would be helpful in preventing blowing should blowing occur and it would be very likely to occur on this field if the wheat did not germinate and make some growth this fall. L. E. Call.

Gestation Period

Please tell me where I can get a table giving the gestation period of various farm animals, especially the mare, cow and sow. Ottawa, Kan. J. F.

This information can be had in practically all of the books that treat on diseases of the farm animals. There is considerable variation in the length of time. Younger animals carry the young longer than the older animals. The male offspring usually is carried a little longer than the female offspring in the case of animals that give birth to one only. The duration of pregnancy in the mare is about 11 months with considerable variation, being almost 13 months at times. The cow's period is 284 days, with some variation. The ewe's period is five months with some little variation. The sow's period is 16 weeks, with very little variation. The dog's period is nine weeks. J. H. Burt.

Wood Ashes for Trees

I would like to ask if wood ashes are good to throw around young fruit trees? Cedarvale, Kan. G. W. WEBB.

Wood ashes are particularly valuable as a fertilizer. They contain some little phosphate but are most valuable because of the potash they contain. The amount of potash varies from 2 1/2 to 6 per cent.

Ashes will tend to lighten heavy soils and are rated as one of the most valuable of the farm home fertilizers.

Coal ashes have practically no value as a fertilizer and are doubtless worth much more for making paths and roads than any other purpose. Albert Dickens.

Removing Warts from Cattle

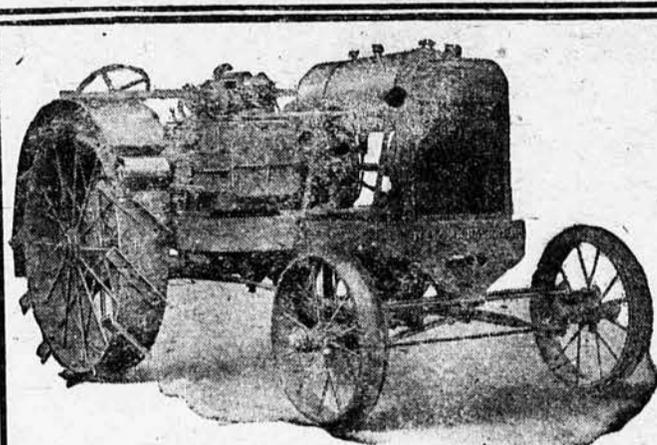
Please tell me how to remove warts from cattle. Is the meat from cattle having warts suitable for home consumption? Ashland, Kan. WM. DURHAM.

We have been successful in removing warts from cattle by rubbing into them once daily some cold pressed castor oil. The larger warts we have been able to remove only by surgical means. For your information I may state that the meat of animals affected with warts is perfectly fit for human consumption. R. R. Dykstra.

Government Free Land

Is there any government land in Kansas that has not been taken up? Where can I get information in regard to such land? Girard, Kan. M. H. WEAVER.

There is still some government land in Kansas, but the most desirable sections were taken up several years ago. Write to the United States Land Office at Topeka, Kan., for additional information. J. W. Wilkinson.



HART-PARR 30—Winning the Official Tests Today Price \$1395 f. o. b. Factory

The Great Granddaddy of All Tractors

Nineteen years ago Hart-Parr founded the tractor industry—built the first successful oil tractor. Many of the old Hart-Parrs that plowed the virgin prairies of the Northwest are working the same fields today. The construction of our present tractor—the Hart-Parr 30 is based on these many years of experience—it is the result of nineteen years of knowing how.

HART-PARR COMPANY Founders of the Tractor Industry

584 Lawler Street Charles City, Iowa

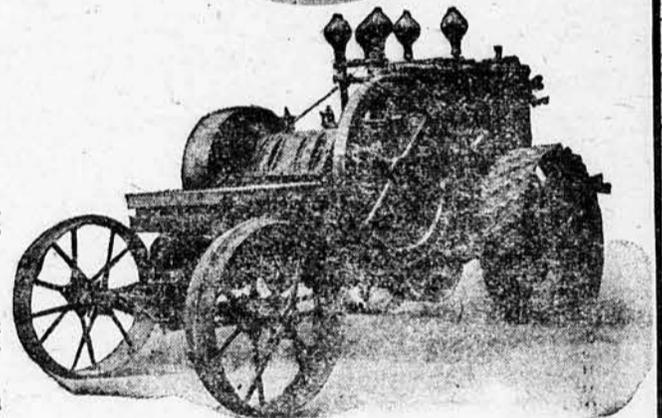
It has a Family Record for Long Life

When you buy life insurance, one of the first and most important questions asked by the examiner is: "How old were your parents when they died?"

The longer they lived, the better risk you are for the life insurance company.

When you buy a tractor, its ancestry is an important thing for you to consider, because the best tractor is the one that gives you the biggest day's work, for the greatest number of days, at the lowest total cost for labor, fuel and upkeep.

The MOST POWER for the LONGEST TIME at the LOWEST COST



OLD-HART PARR No. 1 Built in 1901 The First Successful Oil Tractor



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Somebody Wants Everything

Whether it be cow or chicken, hay press or sewing machine—somebody wants it. If you called every person listed in your telephone book you might find that "somebody." But think of the time and trouble. With no trouble at all and very little cost a classified advertisement in Kansas Farmer and Mail and Breeze will "plug you in" with classified buyers—men and women looking for what you have to sell. Try it!

"Plug in" with buyers



Make Your Milkers Pay

Good Health—Good Appetite—and Good Digestion are the essentials of a good milker.

Dr. Hess Stock Tonic promotes health—makes cows hungry. Remember, it takes a healthy, hungry cow to convert a big mess into pails of milk day after day.

Dr. Hess Stock Tonic produces appetite, aids digestion, conditions a cow to stand the stuffing, cramming process necessary for heavy milking. Dr. Hess Stock Tonic contains the salts of Iron that supply rich red blood so necessary to cows in milk. It contains Laxatives and Diuretics that assist the kidneys and bowels to throw off and carry off the poisonous waste materials that so often clog up the system during heavy feeding.

Dr. Hess Stock Tonic

Ever notice a cow slack up on her milk—not quite so keen for her mess—apparently not sick? Her system is clogged. This never occurs where Dr. Hess Stock Tonic is fed. Start right—by conditioning your cows for calving with a course of Dr. Hess Stock Tonic before freshing.

There is not a day during lactation that Dr. Hess Stock Tonic cannot be fed to cows at a profit. This is especially true where heavy feeding is the practice. Dr. Hess Stock Tonic is good alike for cattle, horses, hogs and sheep. It makes the ailing animals healthy, the whole herd thrifty. It expels worms.

IMPORTANT: Always buy Dr. Hess Stock Tonic according to the size of your herd—five pounds for each cow to start with. Get it from the responsible dealer in your town. Feed as directed and note the results in the milk pail.

25-lb. Pail, \$2.25; 100-lb. Drum, \$7.50

Except in the far West, South and Canada.

Smaller packages in proportion.

DR. HESS & CLARK, Ashland, Ohio



Dr. Hess Dip and Disinfectant Keeps the Dairy and Stables Healthful and Clean Smelling

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Read the Advertisements

—and mention where you saw them.

Good Profits from Calves

(Continued from Page 44.)

days. It is true that the sooner the calf is taken from the cow the easier it will be to teach it to drink from a bucket. For this reason, in some cases, the calves are not permitted to suck from their mothers at all. The first milk of the cow is essential to the calf, and if the calf is not permitted to suck it must learn to drink at once.

The length of time that a dairy calf should stay with the cow depends upon the condition of the cow's udder and the ability of the man who feeds the calf. If the cow's udder is badly inflamed and hard, the sucking of the calf will help it. In this case the calf should be left with the cow. A careful and experienced feeder can feed a calf without the calf sucking its mother, while an inexperienced person might overfeed or in other ways start the calf off wrong at first.

As previously stated, the common practice is to let the calves follow their dams for three or four days. After this time they are separated and fed by hand. For the first week or 10 days the calf should receive its mother's milk. After this time it can be given milk from the herd or from another cow, but by all means it should receive whole milk.

The time that the calf can be changed to skimmilk will depend upon the thrift of the calf. As a rule, however, with the calf in good condition, the change can be started at about the end of the third week and the change made gradually until at the age of 4 weeks the calf will be getting the skimmilk instead of the whole milk. When the calf is taken from its mother it is a good practice, if time permits it, to feed the calf three times daily for the first two or three weeks. The calf is accustomed to getting small amounts of milk at a time, and feeds often. The amount of milk to feed will depend upon the size of the calf. For large calves, 5 or 6 quarts or 10-13 pounds a day will be sufficient, while for the smaller calves 4 quarts or 8 pounds a day will suffice at the start. These amounts can be divided equally into the number of feedings given. As the calf increases in size the amount of milk should also increase gradually. When the change to skimmilk is made, as already stated it is best to substitute gradually skimmilk for whole milk until at the end of a week the calf will be receiving all skimmilk. One of the most common mistakes made in calf feeding is that of increasing the amount of skimmilk fed just because the butterfat has been removed. The fat is replaced by feeding corn, kafir, or some other home grown carbohydrate which is much cheaper than the butterfat it replaces. The limit for skimmilk is often placed at 8 to 9 quarts or from 16-18 pounds. But the amount fed must be regulated by the judgment of the feeder and the appetite of the calf.

The temperature and condition of the milk fed to calves is important. The skimmilk should be about 90 to 100 degrees F., or about the temperature it comes from the separator when separated just after milking. If the skimmilk is cold it should be warmed up to this temperature. To eliminate guess work in regard to temperature, a dairy thermometer can be purchased which will make the temperatures absolutely accurate. The temperature should be the same at each feeding. When the calf gets 4 or 5 months old the temperature is not so important and the milk does not necessarily have to be warm, but to get the best results warm sweet milk is to be preferred.

To Prepare for Spring

Seedsmen's catalogues should be consulted, and orders should be placed for seeds, tools and fertilizers needed a good while before planting time arrives, to avoid annoying delays. Buy only the best seeds from a reliable seedsmen. By so doing a stock of superior strains will be secured, free from weed seeds, and of strong vitality, which will insure a full stand of plants. It is poor economy to invest in cheap seeds.

Winter time is repair time on the well kept farm.

Where Dairying Has Won

Farmers Near Lamar Believe in Keeping Cows

BY F. B. NICHOLS

MORE THAN 3,000 cows are being milked near Lamar, Colo., to supply milk to the plant of the Helvetia Milk Condensing Co. This plant, which is in charge of C. Stocker, the superintendent, has done much in the last five years to develop a higher type of dairy farming in that section. When it was started the average daily supply of milk was about 8,000 pounds; it is now about 37,000 pounds, and it has been as high as 50,000 pounds.

The dairy farming in this community is based largely on Holsteins, which indeed is the rule in most communities where the aim is to produce milk for the condenseries. There now are about 2,000 Holstein cows, of which perhaps 75 are purebreds. There are 75 purebred sires, many of which are from 30 or 32-pound cows. There are cows in this community with a production of 103 pounds a day to their credit, and many with a production of more than 80 pounds. In some cases the condensery advanced money for the purchase of these cows, when they were brought in from other communities, at a low rate of interest.

Prices paid in the Lamar community compare favorably with Illinois prices. The rate, month by month, last year was: January, \$3.70 a hundred; February, \$3.45; March, \$3.25; April, \$2.65; May and June, \$2.50; July, \$3; August, \$3.52; and September, \$3.55. Some good profit records have been produced. L. C. Dingus of Lamar, for example, made a profit of \$46 in one month from one of his Holsteins. The original cost of this animal, by the way, was but \$100. Of course this is an extreme profit, but there has been a good profit made by most of the producers despite the fact that grain and hay prices have been high.

Small Capital Required

There is a good opportunity at Lamar for a man to get started in the dairy business with but little capital. He cares to go out on the "dry land" farms above the irrigation ditches—and use dry land methods. Three of the 12 milk routes which supply the milk for this condensery run out on the dry land country, and give good delivery service. A farm can be purchased or rented on favorable terms and as a rule the condensery is willing to help a man get the cows if it is believed that he will become a good dairy farmer.

A cow testing association has been organized in this community, and the better herds are all under test. This association, of which Harry E. Heath of Lamar is secretary, is making it possible for a farmer to get definite information in regard to his costs and profits—to know definitely just what his cows are doing, so he can eliminate any animals which are not supplying a good profit. It is obvious that the intelligent leadership which this community has will carry it on to a position of power in Holstein affairs—in deed, it is already the Holstein center of Colorado. Ten years from now there will be a big yearly income from the sale of surplus breeding cattle alone. Dairy farmers at Lamar have demon-

strated quite well what can be done in a community which had been given over mostly to raising sugar beets, alfalfa and grain crops. It had begun to be realized along about 1914, when this condensery was established, that it would be necessary to enter a little more deeply into livestock farming. That was before the present era of abnormally high prices for hay and beets, and the returns from these crops were not satisfactory. More than this, there had been a considerable decline in crop yields, especially with sugar beets, which had in many cases been injured greatly by crown rot and other diseases.

In considering the type of livestock farming which should be taken up, dairying was fortunately considered carefully. The Lamar section offers many advantages in dairy farming, especially in that a high yield of alfalfa andilage can be produced. The pulp obtained from the beets is a great advantage, of course, which most dairy communities do not have. Beet pulp is a decidedly superior feed for dairy cows.

The building of silos has kept up with the increase in the number of cows. There are now more than 125 of the above ground types of silos in this section, and perhaps 50 pit silos. The number of both types is increasing rapidly—that was especially true last year—for there has been a good yield of silage crops. There are excellent yields of the sorghums on the hills south of Lamar—these are rated as high upland. The yields under irrigation, in the bottom and on the hills north of the town are always good.

Sound Type of Farming

There has been nothing forced, nothing abnormal in the growth of dairying in the Lamar community. It has grown because it was a fundamentally sound type of farming—because it would give a better return than any other type of farming. It is putting this section on a substantial basis so far as production is concerned, and it is tending to get away somewhat from the violent seasonal demand for labor which always occurs with sugar beet, hay or grain farming. It is providing a profitable market for these crops right at home, and is allowing a larger share of the men needed in the summer to be employed profitably the year around. The wages for farm labor are high in the Lamar community, as they always are in a prosperous dairy community for the men with the skill needed in handling cows.

Good returns apparently are being obtained by both the small and large herds. If one has a large herd, such as that managed by G. L. Penley on the Center Ranch of the American Beet Sugar Co., with good modern equipment he can make a satisfactory profit—which usually is obtained with high producing animals and efficient equipment. Profitable returns also are being obtained, however, by the men with the small herds, both on dry land and under irrigation. Many a man has made the dairy cows pay for a home, either in the valley or on the hills, in the last five years.

(Continued on Page 49.)

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The older people know from experience that the De Laval skims cleaner, runs easier and lasts longer. They also remember the service they have always received from the De Laval Company and its agents.

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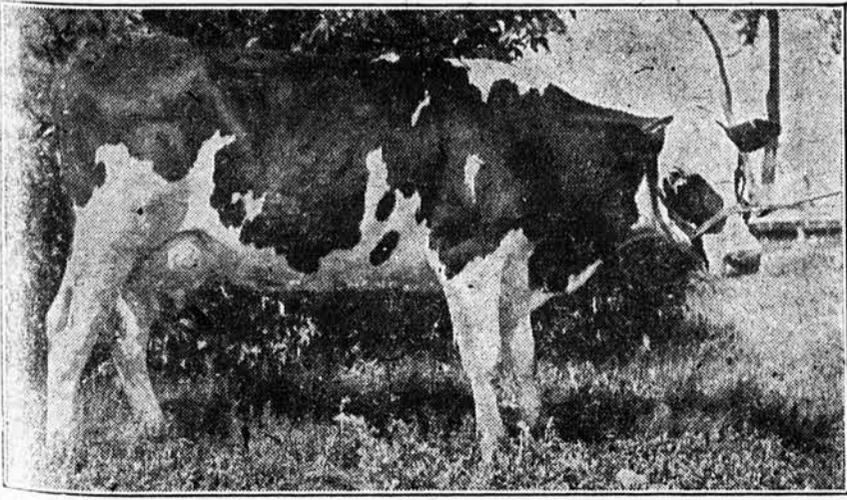
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Hatch With the Incubator

Hens are Poor Dependence in Raising Chicks

BY H. L. KEMPSTER

ALL WHO ARE interested in poultry will be interested in the story of Bill Jones. Bill was an ordinary farmer. He had been accustomed to hatch and raise chickens in the usual way. In the spring hens were used for hatching the eggs and later on the chicks were permitted to run with the hens. Now Bill's flock of growing chicks were of many ages. He had half grown chicks and also those which had just hatched. The different ages were permitted to run together and as a result the little chicks did not get a fair show. They also demanded different care which was practically impossible under the conditions under which Bill was laboring. No wonder Bill was discouraged. He couldn't get enough hens to sit at any one time. Those which were sitting were not laying eggs. The chicks were coming along at a discouragingly slow rate and the problem of getting a new flock of birds was difficult.

A Fisherman's Luck

Now Bill was a great fisherman. As soon as spring opened up the lure of the fish pond tugged at Bill's heart. But if he went fishing a rain would come up and kill a number of the chicks. No sir. He couldn't go fishing without paying an enormous price. When a rain came up the brooding hen would squat down just where she happened

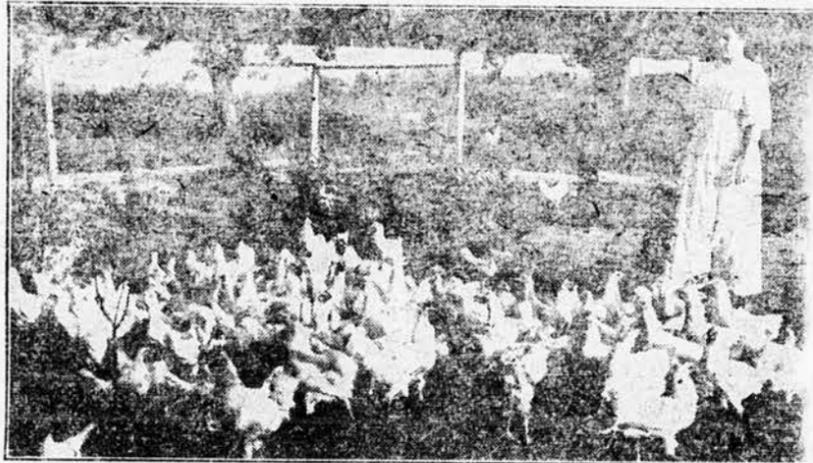
practically took care of herself. If a rain came up they immediately took to shelter. There was no loss of rains. Bill could now go fishing without worry. And how those chicks grew! They were all of the same age. Each one had just as good a show as the other. How different from previous experience. The poultry flock was the pride of the farm. The chicks were never troubled with lice. There was indeed a new experience. Now had chickens been so easily raised.

Much Better Than Hens

As fall came on the combs began to enlarge and get red. In October the eggs began to come and to Bill's surprise every day saw an increasing number of eggs. Every week Bill took eggs to the market while the neighbors were marketing none. Winter eggs had become a reality. Poultry was indeed a crop which would pay.

This happened several years ago. One experience was enough. Bill never hatched chickens with hens since his experience with an incubator.

Incubators are fast coming into use on the farm. Their advantage over hens is being recognized and each year many farms equipped with methods of the artificial raising of chicks. The use of an incubator has become a necessity. People are coming to know their value. They are always ready



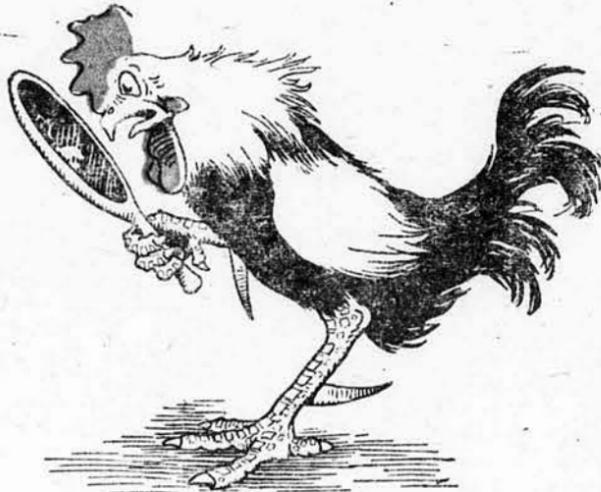
Nothing is More Helpful in Solving Food Problems Than a Flock of Chickens, Especially When Meat is Scarce and So Expensive.

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Thousands in use. More being sold than ever. Better and more durable construction. Built of curved, hollow Flint Tile. Cheaper than wood. Lasts forever. Low special price now! Free Book—write a card for it today.
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Low steel wheels, wide tires, make loading and handling easier. We furnish Steel Wheels to fit any axle, to carry any load. Plain or grooved tire. Catalogue sent free.
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The February 7th issue of the Kansas Farmer and Mail and Breeze will be largely devoted to the interests of poultrymen. It is our big Annual

Poultry Number

This edition will be read, re-read and filed by all interested in poultry—and read by 125,000 farm families. By all means your ad should be in it, so turn to the classified page and get our rates and then send in your order today.

Send in Your Ad Today

to be. It might be right where a pool of water would accumulate. From long experience Bill knew that he must stay close at home or his chicken crop would be a failure. Then too every once in a while he would notice a chick which was not doing well. An examination showed a little head louse was causing the trouble. Greasing the heads of the chicks caused a lot of work and worry. And when it came fall what was Bill's reward? He had a flock of uneven pullets. Some were excellent and started to lay. Most of the flock were not up to his expectations. In order to keep as large a flock as he desired a large proportion of the hens had to be kept over in order to fill the house. The late hatched chicks did not start laying until February. The old hens took a winter vacation and did not lay until spring. Bill concluded that hens did not lay when the price of eggs would make it pay. The poultry flock was not worth the effort. But now Bill has a different story.

The Incubator Banished His Worry

One year a friend sent Bill a lot of eggs for hatching. This friend knew just when was the best time to hatch chickens. There were too few sitting hens. What was Bill to do? A neighbor had an extra incubator. He offered to hatch these eggs. To Bill's surprise a fine lot of chicks were delivered three weeks later. He couldn't see but that they were just as good as any he had ever hatched. And such a lot of them. He had never seen so many at one time before. Being all of the same age and too many of them for brooding with hens Bill bought a brooder. His enthusiasm was contagious. These chicks took to the brooder. They leaped to come and go without being told. A few weeks later Bill found that they

use. It is unnecessary to wait for a hen to go broody before setting, making it possible to hatch when wishes. Then too on a farm where few chickens are to be raised there is an advantage in having them hatched at practically the same time. This makes the growing of chicks of the same age possible. It is a decided advantage over that of having different ages in the same flock in which conditions the old injure young. It is much easier to care for the chicks without the use of hens. Trouble with lice is practically eliminated. Then too artificially raised chicks are less wild and are more under the control of the poultry raiser. If for no other reason than the saving of time the use of an incubator brooder is advisable. But there are other reasons why incubators and brooders are a necessity.

The best argument for an incubator is that the time of hatching is under the control of the poultryman. This is a best time to hatch chickens just as there is a best time to plant corn. Prof. Graham of the Ontario Agricultural college states that a difference of three weeks in the time of hatching made a difference of \$1.50 in the price on each bird. The early hatched birds started laying in the fall and made enough more winter eggs to make an advantage of \$1.50 a bird.

At the University of Missouri following observations were made:

Egg Production Nov. 1 to June 1	Average of Hatch
Over 100 eggs.....	Mar.
90 to 100 eggs.....	Mar.
80 to 90 eggs.....	Apr.
70 to 80 eggs.....	Apr.
60 to 70 eggs.....	Apr.

These birds were White Leghorns and it is seen that the birds hatched

before April 1 averaged from 30 to 40 eggs more than did those hatched after April 15. It also shows that a difference of only a few days makes considerable difference in the winter production. In fact later data show that birds with an egg production of more than 180 eggs for their pullet year were hatched before April while those hatched April 20 averaged from 20 to 140. From an egg production point of view early hatching is essential. Early hatching is also advisable from the viewpoint of growing the chicks. Early hatched chicks grow better than those hatched late. They get a start before the hot weather comes and continue to grow during the summer while the late hatched chick remains stationary. Lewis shows in the New Jersey Experiment Station Annual report the chicks hatched April 1 averaged 1.7 pounds heavier on November 1 than those hatched June 1. At three and a half months the late hatched chicks did not weigh as much as did the early hatched ones at 3 months.

To summarize the advantages of early hatching we have the following: Early hatching, that is, by April 15, means that the chicks are past the danger point before hot weather sets in. The early hatched chick is stronger and more likely to live. The late hatched chick never does well. It pays to give them a start before the extreme hot weather. Early hatched chicks are less troubled with lice, mites and disease. Parasites breed more abundantly during the hot weather and it is more difficult to keep their feed fresh and sweet.

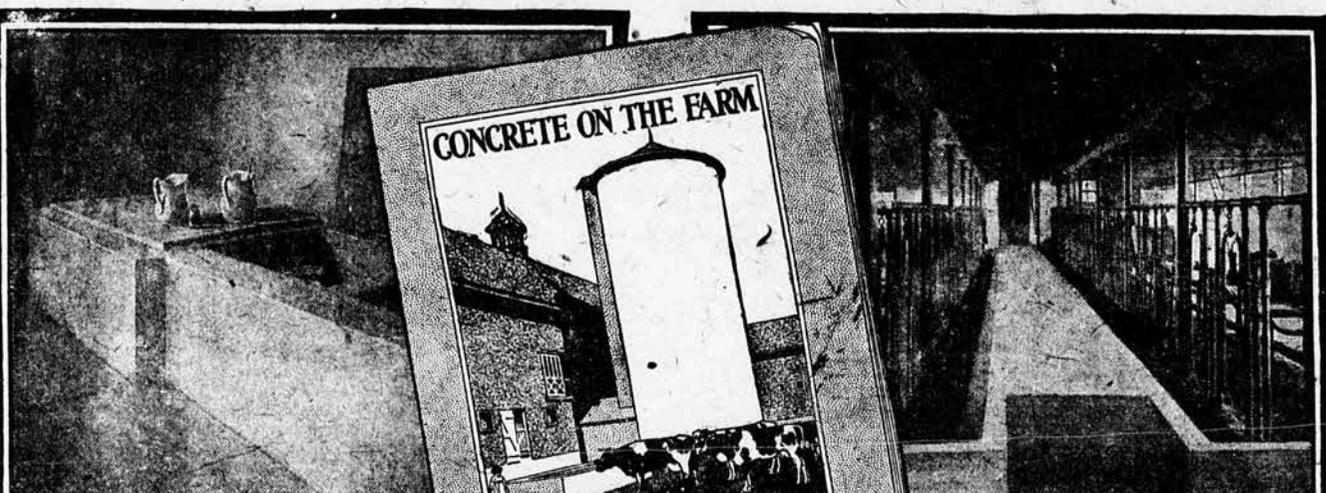
Early hatched chicks mean a greater proportion of chicks raised. Experience shows that the mortality with early hatched chicks is less than with those hatched late.

Early hatched chicks means a longer growing period. This is important. Most of us do not give the pullets sufficient time to mature. We fail to recognize that for a period of six weeks during the summer chickens do little more than to hold their own, to say nothing of making growth.

Early hatched chicks mean better grown chicks. The better start we can give the chicks the better the pullets. Chicks which get a poor start in life very seldom recover from the handicap. It is the good strong vigorous chick that makes the profitable producer later.

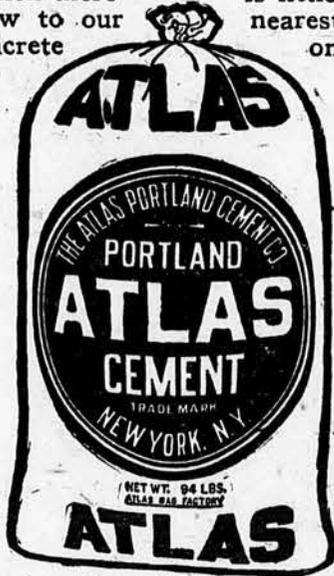
Early hatched chicks mean a higher price for the surplus broilers. A two pound chick in July will sell for as much money as a 3 to 3 1/2 pound chick in September.

Early hatched chickens mean well hatched pullets in the fall. The kind which will lay winter eggs. Early hatched chicks mean greater profit. Early hatched chicks are possible only when an incubator is used. The incubator is a necessity.



For Winter Concrete Construction

ATLAS Cement can be used successfully for indoor concrete construction during the Winter months, particularly when there is little other work to keep farm help busy. Send the coupon below to our nearest office for our books "Concrete On The Farm" and "Concrete on the Farm in Cold Weather" which tell what and how to build with ATLAS.



Milk Cooling Tanks

Now is the time to build your indoor cooler. Then when warm weather overtakes you, it will be ready to keep milk cool and sweet. The protection afforded against loss will save many times the cost of the few bags of ATLAS required. Build now—in spare time.

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Built with ATLAS Cement they not only prevent food waste but permit cleaner, weight-producing food consumption. Easily kept clean and sanitary—and are permanent. Another suggestion; concrete your cellar floor this winter. Make it warmer in winter, cooler in summer and dry always.

"The Standard by which all other makes are measured"

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(Address, the Atlas Office nearest you)
Please send me a copy of "Concrete On The Farm" and "Concrete On The Farm in Cold Weather" without cost or obligation.

Name

W4 Address

Where Dairying Has Won

(Continued from Page 47.)

Some farmers, such as Mr. Heath, have established good herds by gradually growing into the business, and building up herds with the smallest possible direct outlay. This is always a good way to get into the business. Mr. Heath now has about 40 Holsteins, with an average production of from 40 to 55 pounds a day. He hopes to get his herd on a strictly purebred basis in the next few years. There are two acres on this place; the silage crop is Iowa Silvermine corn, and the yields are good as a rule. He also feeds alfalfa and sugar beet pulp.

It is not necessary for one to sell the milk to the condensery in every case. Some farmers with the smaller herds prefer to make butter and keep the milk at home. The large Williams Son dairy near Lamar has built up a profitable retail milk business in that town. One is assured of a profitable market no matter what method of selling he uses.

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One old subscriber and one new subscriber, if sent together, can get The Kansas Farmer and Mail and Breeze one year for \$1.50. A club of three year-subscriptions, if sent together, all for \$3.50 or one three-year subscription \$2.

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Biggest Hatches Strong Chicks

That's what you want and will get with a Champion Belle City Hatching Outfit. My big catalog "Hatching Facts" tells the whole story—gives newest ideas and quickest ways to make poultry pay with my

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Double Walls Fibre Board—Self-regulated—Hot-Water Copper Tank—Safety Lamp—Thermometer Holder—Egg Tester—Nursery. With my \$7.55 Hot Water Double-Walled 140-Chick Brooder—both only \$18.50

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I ship quick from Buffalo, Minneapolis, Kansas City or Racine. With this Guaranteed Hatching Outfit and my Guide Book for setting up and operating you can make a big income. You can also share in my

Special Offers They provide easy ways to earn extra money. Save time—order now, or write to-day for my Free Poultry Book "Hatching Facts" It tells every thing. Jim Rohan, Pres.

Belle City Incubator Co., Box 21 Racine, Wis.

4 HANDSOME LACE CURTAINS Given for selling only 40 packs Vegetable Seeds at 10c per large pack. Also 31 pc. dinner set given according to plan in our big free catalog. Our seeds sell easily. Write at once for big sample lot. **WE TRUST YOU** with seeds until sold. **AMERICAN SEED CO.**, Box 25 Lancaster, Pennsylvania.

Sell More High Priced Eggs

The day this ad was written folks were paying 65c a dozen for eggs in the local market. Think of it! Flood your farm with well hatched poultry this year through

Old Trasty Incubators and Brooders and have more high priced eggs and chickens to sell next fall and winter. Four sizes, with or without metal cover. We pay freight. Quick shipment from Clay Center, Neb.; St. Joseph, Mo., or Ottumwa, Iowa. Let me send you my

Poultry Raisers' Book—FREE 72 pages, also 6x12. Filled with helpful suggestions on how to turn poultry into money. **M. M. JOHNSON, "The Incubator Man."**

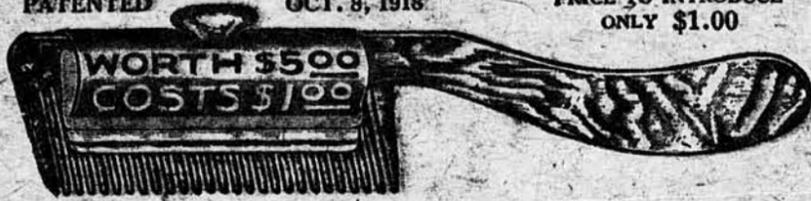
M.M. Johnson Co. Clay Center, Neb. **850,000 Satisfied Customers**

Poultry Book Latest and best yet! 146 pages, 215 beautiful pictures, hatching, rearing, feeding and disease information. Describes busy Poultry Farm handling 63 pure-bred varieties and BABY CHICKS. Tells how to choose fowls, eggs, incubators, sprouters. Mailed for 10 cents. **Berry's Poultry Farm, Box 37, Clarinda, Iowa**

62 BREEDS PROFITABLE Pure-Bred Chickens, Geese, Ducks, Turkeys, Hardy Fowls, Eggs and Incubators at lowest prices. **Pioneer Poultry Farm, F. A. NEUBERT, Box 302, Mankato, Minn.**

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You do not need any experience or practice to use the DUPLEX AUTOMATIC HAIR CUTTER. It comes to you ready for instant use, and five minutes after you receive it you can have your hair cut better than it was ever cut before.

The DUPLEX will cut as closely or trim as long as you wish it to. No clippers or scissors are needed with the DUPLEX; it finishes the work completely. It cuts the front hair long and the back hair short. Trims around the ears, etc.

Inside of a very short time you will have to pay \$2.00 for the DUPLEX. The price today is \$2.00, but while our present stock lasts we will accept this advertisement the same as \$1.00 Cash. Cut it out and send it with ONLY \$1.00 and we will send you the DUPLEX AUTOMATIC HAIR CUTTER ready for instant use, postage paid, to any address. SEND TODAY.

AGENTS WANTED: DUPLEX MFG. CO., Dept. 44, Detroit, Mich.

Boys! Boys! Girls, Too! Three Ponies Will Be Given Away



HAPPY CLUB MEMBER WRITES Following Letter—READ IT.

Dear Sir: Received your letter saying I have won a pony. The pony came November 4th. He is sure a dandy. I am going to call him Beauty. I am very proud of him, and was never so glad in my life as when I received your letter saying I had won the pony, for I had done so little. I am 11 years old. Thanking you ever so much, I am, yours truly.—ADA STORTS, O'Neill, Nebraska.

10 GRAND PRIZES

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| 1. \$200 Pony, Buggy and Harness. | 6. 7-Jewel Watch 20 year case. |
| 2. \$150 Pony and Saddle. | 7. 7-Jewel Watch 20 year case. |
| 3. \$100 Pony. | 8. 3 1/2 x 1 1/4 Folding Eastman Kodak. |
| 4. 17-Jewel Watch 20 year case. | 9. Ladies' or Gents' Fine Wrist Watch. |
| 5. 15-Jewel Watch 20 year case. | 10. \$5.00 in Gold. |

EVERY CLUB MEMBER REWARDED Send No Money—Just Coupon Below

We have given away a number of ponies. We are going to give away three more in addition to seven other grand prizes. The ponies are exceptionally pretty and as gentle as can be. Say to yourself, "One of those ponies can be mine, because it is going to be given to someone who sends in the coupon below."

All I ask you to do is fill out and send in the coupon and I will immediately send you four packages of beautiful, appropriate post cards to distribute on my wonderful special offer. Don't put this off. Everyone wants a package of these beautiful post cards. They are the newest line on the market—Holiday, Views, Birthday Greetings, Etc.,—wonderful.

As soon as you have distributed these cards you will then be an honorable member of the pony club and will receive an Allied Victory Ring, free and postpaid with the shield of the U. S. A. in beautiful colors, Red, White and Blue. Many do it in an hour's time. Mail the coupon at once—today.

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WHEN WRITING TO OUR ADVERTISERS MENTION KANSAS FARMER AND MAIL AND BREEZE.

The Business of Farming

Livestock and Machinery Require Large Capital

BY A. C. HARTENBOWER

FARMERS, as a class, most assuredly do not belong to the proletariat now-a-days. They are not commonplace nor is their business. Rather, their business is one of the biggest of big enterprises. And it is one of the most exacting of all, demanding as much sagacity, far-sightedness, and close application, as is demanded of any other big, successful business. It calls into play every ounce of physical and mental strength there is in a man if he makes his farm a success and it requires an amount of capital not realized by the average "city guy." And it isn't every farmer by any means who realizes the importance of the line of business he is following.

Count up the capital invested in the land and the operation of the average farm. Then compare that with the money used in running the average business in the average town. Yet we see many farmers who give every evidence that they do not feel theirs is a real business but rather think it a game that any "down and outer" can attempt to play. I only wish that more farmers would really hold their heads up high and show the world that they and their business are to be respected. Any man who is operating a farm successfully, and by that I mean profitably, has a head for business. He also is certainly not loafing on the job.

Large Investment Required

Forty thousand dollars does not go so very far today in buying a livestock farm of 160 acres of bottom land and the proper proportion of pasture land with the livestock and other equipment. Why, it's nothing at all to have an investment in land of \$30,000 or more. Then, how much would there be in livestock? It is necessary to have available at least \$15,000 on such a farm for equipment and operating expenses. How many business men in the average town appreciate the amount of money that his farmer friends have invested? Very few. And the reason for this is that it is largely the farmer's fault!

Again, estimate how much overhead expense there is on a farm such as I describe. Is it \$100 or \$3,000 that we must expend? Why, the amount of money used by the larger farmers in paying for insurance, rents, feed, labor, and the thousand and one other demands during each year would surprise any small town merchant. I know merchant after merchant in the town of about 5,000 where I do most of my buying who doesn't have one-third of the overhead expense that I have, and I am not operating a large farm either. It is meeting and reducing the overhead that requires the thought. Capital invested in livestock and other equipment can never give a proper return until that overhead expense is reduced to the absolute minimum consistent with the returns and it isn't a small man's job to accomplish that. But, I have been talking only of a going concern and I should have begun with the finding and stocking of a satisfactory farm. It is a business alone to accomplish that.

Not Enough Pasture Land

The experience which I have had has clearly shown me that, even with capital available, it is an extremely difficult proposition to obtain the desired conditions in a livestock farm. Most of the farms in Eastern and Central Kansas and Oklahoma are long on plow land and short on pasture land. I know many, many farmers who would greatly increase the number of cattle on their farms if they had the required pasture land. It is difficult for the small farmer to rent pasture land even if the

price is low and they are consequently continuing with grain farming almost entirely and only keeping on their farms the small amount of livestock for which they have pasture. It has been proved that fore-sightedness in the sections under consideration in maintaining a correct proportion between the plow land and the pasture land has paid well and while farmers were laughed at some years ago when they maintained that the time would come when pasture land would be at a premium, yet it is clearly evident today that the breaking out of land has gone entirely too far.

Where cattle and hogs are the principal income producers on a farm, I believe that there should be at least 48 acres of pasture land to every 160 acres of farm—with a greater proportion of pasture land, say, 100 acres more, if it is possible to obtain it. The value of pasture is not confined to the growing season. I am maintaining at this time a herd of 60 grade Hereford cows on a small amount of cotton seed cake and pasture grass in a pasture of 160 acres that was stocked very lightly during the past summer. The farmer who runs a herd of cattle most economically today uses his grass land all the year round—not only for the summer months.

Furthermore, it is difficult to buy a farm with the proper balance between the hay land, preferably alfalfa, and the land given over to strictly grain crops. For the livestock deal which I am operating I looked a long way to find a farm that had enough alfalfa to make it a safe proposition. There are few crops which will stand drouth as well as alfalfa. Even during the drier years good stands make good yields—seldom less than 2 tons an acre. And when it is in the stack a farmer can sit back and feel pretty safe for livestock feed no matter what the following winter may be. I feel that on every 160 acres of good land in the section we are considering there should be at least 35 acres of alfalfa. How few of even the best farms have such an acreage? Why is it that Kansas, Nebraska and Oklahoma farmers do not generally increase their acreages of alfalfa? Is it because of labor or some such condition or merely because they are overlooking one of their safe bets?

The Problem of Corn Land

Good corn land is safe when alfalfa but far from safe when in corn. Yet, I need some corn each year and take the gamble on a small acreage, knowing that I shall not lose a great deal even if I have a failure in grain production. I would not depend entirely upon corn even as a crop for the silo. Sweet sorghum is safer and a better yielder. Part of my capital, therefore, went into bottom land that grows sweet sorghum under almost any weather conditions. I do not think that it is a disgrace to grow that crop even on the best bottom land. "Safe first" as a motto in farming under such conditions alone can insure success.

After I discovered my farm, I found it very difficult to buy the livestock desired. Advertisements in papers, letters by the score, telephone calls, and telegrams were all used with little success. After spending some time and considerable money in that way, I decided that I could do best by going directly to reliable, well-known breeders and purchasing my breeding herds of cattle and hogs. I know that by proceeding "I got my money's worth." I know that my stuff has years of intelligent breeding behind it and that



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have foundation material that will live up to the reputation of the stock from which it came. I do not mean to say that there are not bargains to be had, but I do know that for the ordinary farmer they are difficult to find.

There is an excellent opportunity for a state service or even a national service for the exchange of livestock to be established for farmers. But, we'll never get it until we demand it. Until it comes well known reliable breeders will get what business I have.

Another thing that I had impressed on me in this business is: Do not be afraid to spend money on railroad fare. See the stuff offered for sale and see it quickly. There is no use to write because most breeders are getting tired of answering letters. The big ones get rid of their breeding stock without employing an office force.

Growing Wheat in Furrows

(Continued from Page 20.)

"I do not interpret these results to mean that we can seed winter oats and barley by this method in this latitude. I do think, however, that it shows very clearly what can be expected for all kinds of winter grain including winter wheat when we have severe winters. In fact, some of the older experiments at this station show clearly that winter wheat as well as winter oats and barley come thru the winter much better when sown in furrows than when sown in the usual way, but no exact figures are available. I also have one report from South Dakota in which it was found that winter wheat sown in furrows came thru 100 per cent, whereas when sown in the usual way it entirely killed out."

John J. Bayles, superintendent of the Colby Experiment station, who has done considerable experimental work with the new method makes this classification of its advantages:

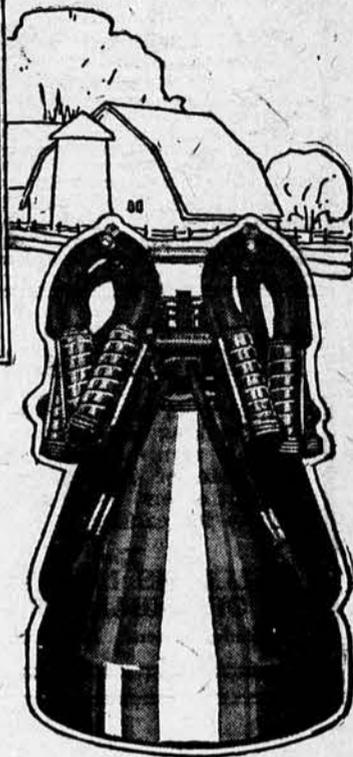
1. It gives greater protection from winter killing.
2. Tends to prevent soil blowing.
3. Insures better germination of the seed when the soil is dry near the surface but contains moisture lower down.
4. The crop withstands drouth better than when planted with the ordinary drill.
5. Furrows hold light snows on the field.

"I believe that the greatest difference in yields will be obtained in favor of the furrow drill when the crop is planted on fallow or following some other crop which has been given clean cultivation and where there is little volunteer wheat to grow up on the ridges," says Mr. Bayles. "Fields of this kind often suffer from a lack of winter protection and from soil blowing."

"The greater part of the work at Colby has been on fields of this character and I do not anticipate as favorable results in fields containing a large amount of stubble altho I believe the furrow drill will prove to be the better even then."

A special attachment must be made for a drill to plant wheat by the furrow method. In speaking of this, Professor Salmon said: "We are using a double disk drill which differs from the old double disk in having one disk in each pair set directly behind the other. The front disk cuts a small furrow, the rear disk following directly behind it and in the furrow made by it but throws the dirt out in the opposite direction. By this method we think we get all the advantages of the disk drill and reduce to a minimum the disadvantages of the lister drill formerly used. So far as I have been able to see, this new drill will cut thru trash much better than the old lister drill, pulls easier and does better work. It will work in any ground, so far as I am able to determine, where a common disk drill can be used."

Professor Salmon expects to have several of these attachments for drills made in the immediate future; it is necessary to get orders for this kind of work in early, because of the congestion in the manufacturing plants. The college desires to co-operate with farmers in Northwestern Kansas who would like to take up the new method. If you are interested in increasing your crop yields by this method why not write to Professor Salmon at Manhattan, get the co-operation of the college and arrange to have the attachment made for your drill?



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Kansas Leads in Products

More Sorghums Will be Grown in 1920

BY JOHN W. WILKINSON

GOOD weather prevailed most of the early part of the week and the condition of wheat in most of the state is regarded as fairly satisfactory. More snow, however, is needed to protect it from severe freezing weather that may come later. During the past 10 days wheat made noticeable improvement in Western Kansas according to S. D. Flora, U. S. Meteorologist at Topeka, Kan. There it is stooling nicely and has a healthy color, but in the central and eastern counties there is very little, if any, stooling, and wheat is just about holding its own and its condition is generally rated as fair. Quite a number of correspondents in the south-central and south-eastern counties report that wheat has suffered from a continued lack of moisture and not enough snow covering, and is turning brown. There is plenty of moisture in the ground elsewhere, despite the light fall of December.

Fields dried out so that farmers could get into them and the mild weather afforded an excellent chance to resume cribbing corn, which has made

good progress. In the northwestern counties, says Mr. Flora, threshing was resumed and some farmers are still sowing wheat.

Washington county and a few other counties report the presence of the Hessian fly. R. W. Shafer, the county agent in Washington county has sent out circulars to the farmers calling their attention to this fact. "The Hessian fly," says Mr. Shafer, "appears now in the flaxseed stage in which it can be found in nearly all early sown and volunteer wheat. The wheat plant infested with the Hessian fly has a peculiar dark green color, has no central growing shoot and the leaves stand very erect. Upon finding such plant, dig it up root and all, and strip off the outside leaves from the stalk to expose the flaxseed. The Hessian fly passes the winter in the flaxseed stage at the crown of the wheat plant. The infested plants will die. Learn to know the Hessian fly in all its stages, and it will help you to know how to control the pest." I believe it will pay farmers in all of the big wheat grow-

ing counties to confer with their county farm demonstration agents and determine whether the Hessian fly is present in the wheat, and get his advice as to any protective measures that can be undertaken.

Kansas farmers are showing an increased interest in growing sorghums. The wheat acreage has been reduced about one-third and a large part of this will be planted in sorghum crops. Despite the large acreage given to wheat in 1919 only two states showed a larger grain sorghum yield than Kansas. According to the U. S. Crop Reporter, Texas led in the production of grain sorghums with a yield of 59,334,000 bushels. Oklahoma came next with 33,120,000 bushels; and Kansas stood third with a production of 17,888,000 bushels. New Mexico yielded, 7,140,000 bushels; California, 4,386,000 bushels; Colorado, 2,160,000 bushels; and Arizona, 2,030,000 bushels. I would like to see the acreage for grain sorghums in Kansas increased until its production would be second to none. It is a safe, dependable crop and it should supplant a large part of the acreage usually given to corn.

Kansas a Big Producer

According to a late report of the U. S. Department of Agriculture on the aggregate crop value of the 13 leading crops including corn, wheat, oats, barley, rye, buckwheat, flaxseed, rice, sweet potatoes, tame hay, tobacco, Irish potatoes, and lint cotton, Kansas is one of the five leading states in the Union, and stands fourth in the "big five." The following values for the crops mentioned are reported in these states: Texas, \$882,454,000; Iowa, 783,818,000; Illinois, \$748,111,000; Kansas, \$555,970,000; and North Carolina, \$491,881,000. A recent report issued by J. C. Mohler, secretary of the state board of agriculture, shows that the value of the agricultural products of Kansas for 1919 amounted to \$746,109,192 while the value of the livestock amounted to \$340,499,177, making a total value of \$1,087,011,677 for both. The report also shows that there are 5,809,988 head of livestock distributed in the following way: Horses, 1,066,887; mules and asses, 241,307; milk cows, 768,737; other cattle, 2,220,718; sheep, 267,963; and swine, 1,304,376. It will thus be seen that the values of farm products in Kansas for 1919 exceeded those of 1918 by \$154,495,175. It is also interesting to note that Kansas this year produced more wheat than did the two states ranking second and third combined. The general Kansas communities in farming districts are prosperous and their liberal spending is helping to stimulate and promote all other lines of business.

Farmers are Buying Liberally

The Kansas farmer is buying liberally and intelligently. He is buying more automobiles, more tractors, more poultry, more blooded cattle, more farm implements and machinery, more gasoline engines and electric lighting plants for his dwelling house and buildings. He is paying cash mostly and also paying off what comparatively few mortgages remain. The number of farmers' co-operative organizations for co-operative marketing of their products and for purchases in large quantities is steadily increasing, and in the main they seem to be making good.

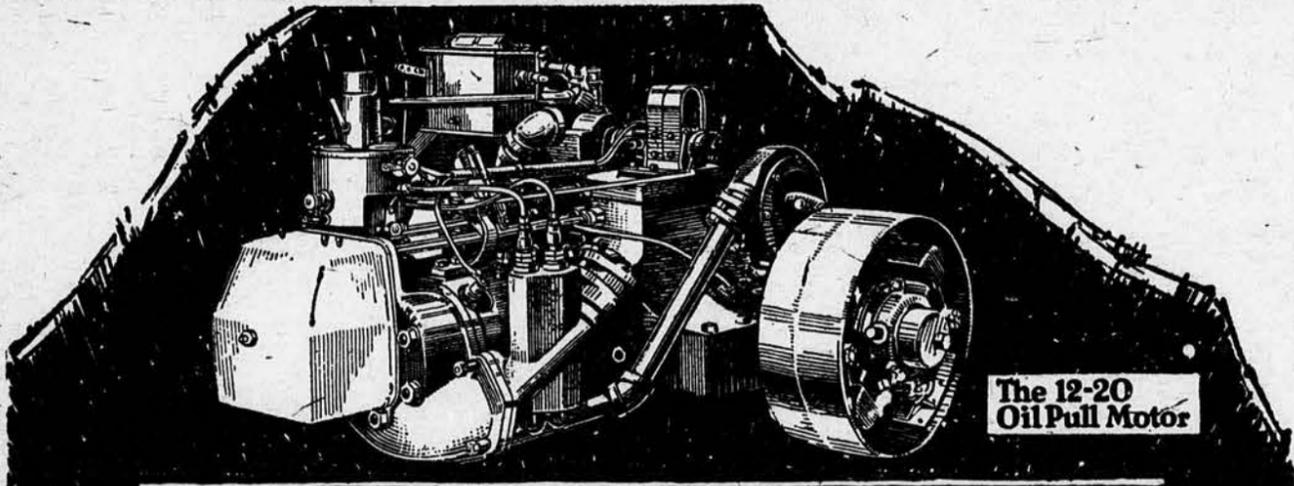
Among the vast numbers of retail dealers, there seems to be a confidence in the continuation, at least till another harvest, of the present great demand for commodities of all kinds.

Confidence in the future buying power of the farmer is expressed by the manufacturers of moderate priced automobiles and farm tractors. Every county dealer who can arrange for the necessary credit will have from 150 to 250 cars on hand for March delivery, and it may be said that so far the industry has always under-estimated rather than over-estimated the demand.

Local conditions in the state are shown in the following county crop reports:

Barber—Weather is pleasant, and livestock is wintering well. One and one-half inches of snow fell January 7, but it has melted. The Inter-Seas Corporation has two rigs up and will begin drilling for oil in February. Very little livestock is changing hands. Spring sale season has not opened. Sixty-pound wheat is \$2.75; corn \$1.69; alfalfa \$25; butterfat 66c; butter 60c; eggs 45c; wood \$4 a double bed full. Homer Hastings, Jan. 10.

Brown—Weather still is moderate. Snow is off the wheat, and farmers believe it has not been damaged. Very little spring plowing has been done. Livestock is in good



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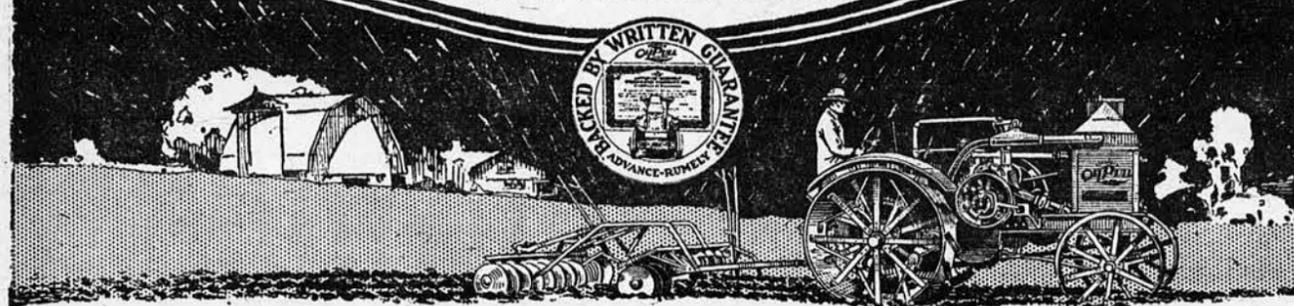
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condition, and there is plenty of feed. Farm implements and horses are selling for less at public sales than a year ago. Corn is \$1.35; wheat \$2.80; oats 85c; cream 67c; eggs 55c; hogs \$18.25.—A. C. Dannenberg, Jan. 9.

Cherokee—Two light snows have fallen since December 31, and the ground still is partly covered. Corn husking still is in progress, the nearly finished. Wheat is going to market as fast as elevators can handle it, and some is being dumped on ground. Feed is plentiful, and cattle are in satisfactory condition. Only one public sale has been held this month. No. 1 wheat sells for \$3.60 to \$3.70; corn \$1.25; barley \$1; flour \$7.40 a 40-lb.; butterfat 62c; eggs 55c; hogs \$14.—F. M. Hurlock, Jan. 10.

Clay—All livestock is healthy and doing well. Farmers are cutting and hauling wood. Good alfalfa hay is scarce and high. Eggs and cream are scarce, but poultry is plentiful. Fifty-eight test wheat is \$2.75; bran \$2.05, shorts \$2.55; alfalfa \$25; hay \$17.50 to \$20; hogs \$13.50; springs and hens 20c; turkey hens 28c; hides 20c; butterfat 60c; eggs 55c; butter 65c.—P. R. Forslund, Jan. 10.

Elk—A heavy snow is falling today. Farmers have shipped a good many cattle the past week. Much baled hay is awaiting shipment on account of shortage of cars. Bran is worth \$2.10; eggs 50c; corn \$1.67.—Charles Grant, Jan. 1.

Ellis—Weather is cold and about 2 inches of snow is on the ground. Livestock is doing well and we have plenty of roughness for feed. Wheat is in excellent condition, and there is sufficient moisture. We should have a good wheat crop next year. Much wheat is going to market at \$2.40 to \$2.85; new shelled corn \$1.60; flour \$6.60; shorts \$3.—C. F. Erbert, Jan. 8.

Ellsworth—The spring-like weather from December 15 to January 4 melted the snow and started wheat. This weather saved a great deal of feed and fuel. It now is cold and cloudy. Livestock is doing well, but feed will be gone by grass time. Corn is \$1.65.—W. L. Reed, Jan. 8.

Ford—Weather is cold again, and snow fell during the past week. Wheat is not providing much pasture, but livestock is doing well on straw and roughness. Land is selling at \$75 an acre. Threshing of sorghums is not completed. The discrimination in the distribution of cars for wheat shipment is worse than ever before.—John Zurbuchen, Jan. 9.

Geary—December was the coldest month we have had for years. January came in very pleasant with nearly an inch of snow on ground. Rough feed is plentiful, so livestock hasn't suffered. Fat cattle are scarce, and very little feeding has been done. Hogs also are scarce, and less brood sows are being kept than for 10 years. Wheat is satisfactory, and the acreage is small.—O. R. Strauss, Jan. 10.

Gray—Excellent winter weather prevails, and livestock is doing well. Kafir and milo threshing is almost finished, with very satisfactory yields. Our farmers' elevators received the first car they have had for a month, two days ago. About 40 or 50 per cent of the wheat still is in the farmers' hands. There also is considerable feed grain to be shipped but no cars can be obtained for it until the wheat is shipped. There are few hogs in county, and feeders have lost money on them.—A. E. Alexander, Jan. 10.

Harvey—We had a light snow January 8, but temperature was 3 degrees above zero. Livestock is doing well, and prices have advanced. Wolf huts are popular. Wheat is being rushed to market at \$2.75 to \$2.90; butter 60c; eggs 55c, sugar 16c, and difficult to get.—H. W. Prouty, Jan. 9.

Kingman—We are having pleasant weather. A light snow fell January 8, but has melted now. No farm sales have been held recently. Bonds for the road issue carried in south Reno county, except one township. The road will be built anyhow.—W. C. Craig, Jan. 9.

Leavenworth—Roads are satisfactory, and fuel and feed are being moved. Wheat is in fair condition. Some corn is being shipped in. Livestock is doing well, and feed is plentiful. Hens are not laying as well as usual. Some farm sales have been held. Not much land is changing hands.—George Marshall, Jan. 10.

Linn—Weather is cold and farmers are doing very little work except chores and cutting wood. Some farmers fear late wheat has been damaged by the recent snow. Very few sales have been held. Livestock is doing well, and very little disease has been reported. Shortage of cars is hindering shipment of hay. There are few home-grown apples in county. Hay is \$16 to \$18; corn \$1.30; oats 70c; eggs 50c; butter 40c; apples \$3.40.—J. W. Clinesmith, Jan. 9.

Logan—Weather is cold and we have had some snow this week. Livestock is doing well, and we have more feed than will be used. A great deal of threshing is yet to be done. Wheat is worth \$2.50; barley \$1; cane seed \$1; oats 90c; butterfat 64c; eggs 50c; hay \$15; milk cows \$75 to \$80; horses \$50 to \$100, hens \$12 a dozen.—T. J. Daw, Jan. 8.

Neosho—About 8 to 10 inches of snow fell January 7 and 8. Roads have been dragged since the snow. Livestock is doing well and there is plenty of shelter and feed. Many farms have been sold to renters. Boys and dogs are hunting rabbits. We can get a little coal now. Land is \$20 to \$25 higher. Baled hay is \$11 to \$20; corn \$1.50; oats 90c; wheat \$2.25; eggs 55c; butter 65c; shorts \$5.—A. Anderson, Jan. 10.

Osage—We have had light storms which benefited wheat, but did not make much stock water. Feed is plentiful, but would not be if we had cars to ship it away. There are enough cattle cars to ship all the cattle that are being marketed. Hogs will not be so plentiful next year. No public sales have been held recently on account of the cold weather, but they will begin again the latter part of February. Cream 65c; eggs from 50c to 60c.—H. L. Ferris, Jan. 9.

Pawnee—Weather is cloudy and cool, but no snow or rain has fallen. Wheat elevators are full, and we have no cars. Wheat is small, but growing a little. Roads are good. Mules are in demand, but there is no sale for horses. Eggs are worth 55c; butterfat 65c; corn \$1.50; hay \$25.—E. H. Gore, Jan. 9.

Rawlins—We have been having summer weather for three weeks, and frost is nearly out of the ground. Prospects look good for another large crop of wheat and rye this year. Livestock is coming thru the winter in good condition. Prices of butter, eggs and cream are coming down, and prices on everything the farmer has to buy are coming up.—A. Madsen, Jan. 7.

Republic—Weather has been very pleasant for past three weeks. Feed is plentiful, and livestock is wintering well. Wheat fields are bare, and plants look healthy. Wheat \$2.80; oats 75c; corn \$1.45 to \$1.50;

butterfat 68c; alfalfa \$18 to \$28.—E. L. Shepard, Jan. 10.

Rice—Weather has been warm but cloudy, and appeared as if it might snow. However it now is clear and temperature is 16 degrees above zero. Wheat is very small, but still looks good. Livestock is doing very well. The price of horses has advanced 10 per cent over six weeks ago. Wheat is selling for \$2.80; corn \$1.60; oats 90c.—George Buntz, Jan. 10.

Rooks—Cattle and horses are wintering well. Most farmers are putting up their year's supply of meat. Hogs are scarce and are worth 12c. Cattle 8c; hens 17c; turkeys 20c; corn \$1.50; shorts \$2.60; bran \$2.30; eggs 45c; butter 50c.—C. O. Thomas, Jan. 9.

Scott—Weather is pleasant. Farmers are threshing cane, milo and kafir, and some good yields of these crops have been reported. There are not many hogs in county. No public sales have been held. Livestock is in good condition. Buffalo grass is very poor this year, so more feed is required. Corn husking is finished. Prospects are good for a large wheat crop this summer.—J. M. Helfrick, Jan. 10.

Stevens—About 80 per cent of fall threshing has been completed. Maize yields from 20 to 50 bushels an acre, but sells very slowly on account of the scarcity of cars. We have had some cold weather, but no snow recently. Roads have been good all winter. Much grain is piled on the ground from threshing machines. There is a great demand for farms from renters. Livestock is doing very well, and the general health of the people is good.—Monroe Travers, Jan. 6.

Wabunsee—Wheat is thin but has a good color. Roads are better, and the snow is all gone. Farmers are putting up ice, cutting wood and feeding livestock. Livestock is in good condition but feed is scarce. Alfalfa hay is \$27 to \$30; corn \$1.50; eggs 60c.—F. E. Marsh, Jan. 8.

Wyandotte—Weather is excellent, and roads are wearing down. Wheat still is in good condition. Livestock is wintering satisfactorily, and there is plenty of feed and roughage in community. Alfalfa hay is \$20 to \$30; butter 65c; eggs 50c.—P. F. Bowser, Jan. 10.

New Stallion Licenses

With the breeding season of 1920 near at hand, stallion owners are urged to get their new stallion licenses for this year immediately. An application for license is sent in now the license will be issued promptly, but if the license is not applied for until just before March 1, there may be considerable delay in receiving the license, due to the great number of applications coming in at that time. Licenses will be issued by the Kansas State Live Stock Registry board in the order in which the applications are received.

This is the season of the year to begin advertising stallions for service. All advertisements, bills, and posters used must give the new license number and the breeding of the stallion. The stallion owner who gets his license now and starts advertising his stallion early will have a better season.

In order to collect service fees as provided for by the lien law a stallion license must be obtained. Before filling out the application blank for license, be sure to read carefully the instructions on the back of the blank. The registry board has mailed application blanks to the owners of stallions licensed last year. New owners can obtain blanks by addressing F. W. Bell, Secretary Kansas State Live Stock Registry Board, Manhattan, Kan.

HOW TO BE AUTO EXPERT

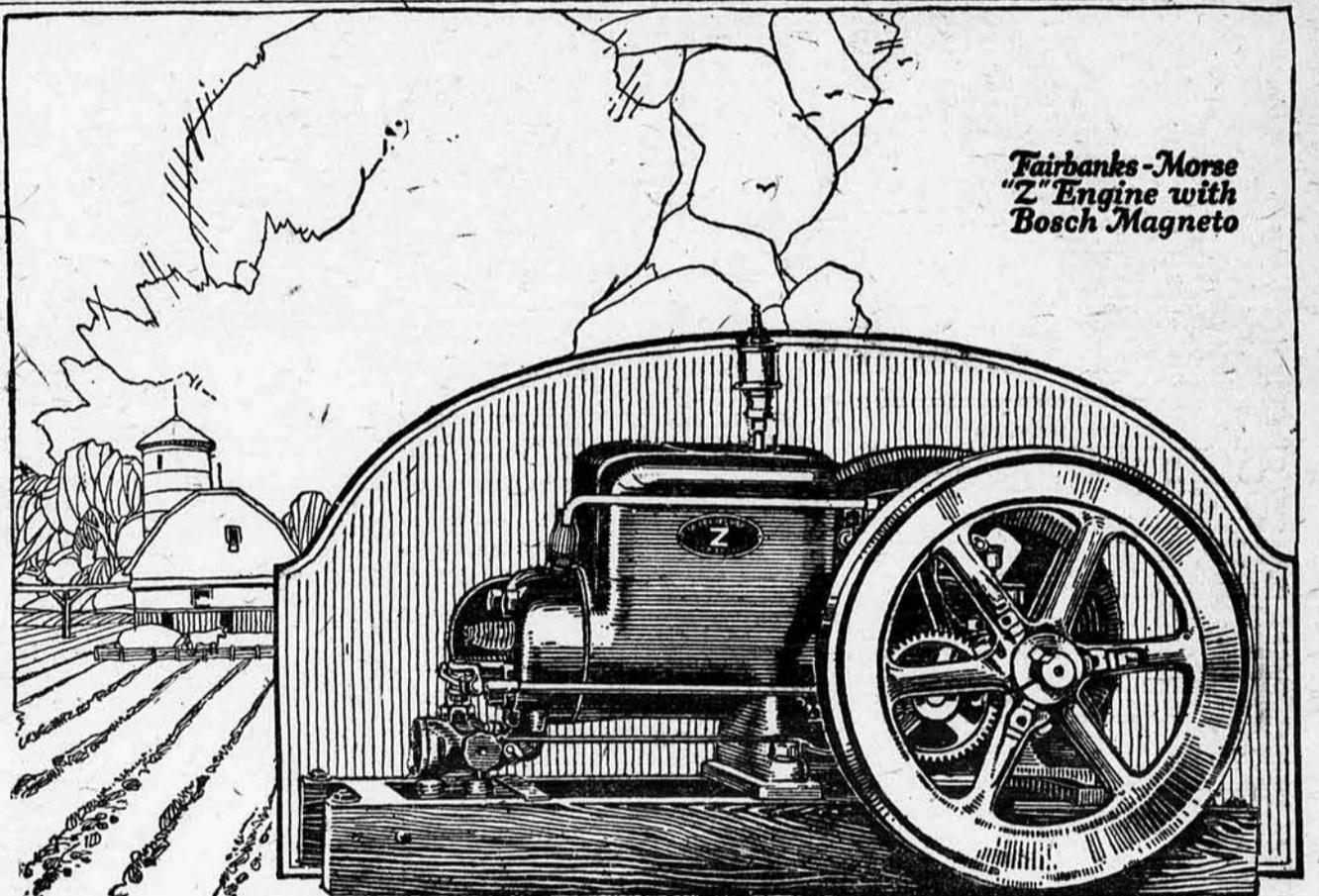
The demand for men who understand the operation and repair of automobiles and tractors at salaries of \$100 to \$400 monthly is so great that D. T. Bartlett, president of Bartlett's Wichita Automobile & Tractor School offers to send, without charge, to all who want to learn the business, a large illustrated book entitled "The Way to a Better Job." If you are interested just drop a card to Mr. Bartlett, 154 North Topeka Ave., Wichita, Kansas, and request a free copy.

Gold Plated Flag Pin Free

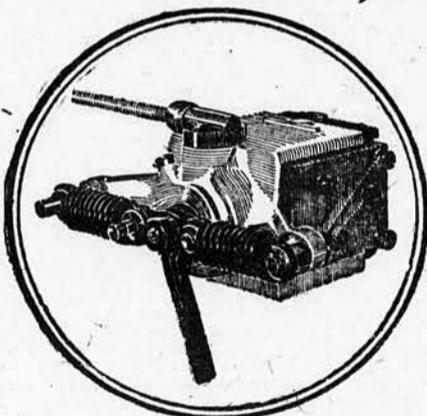
Flag Pins are now being worn by all patriotic American Citizens. Get in line and show your patriotism by wearing one of our Gold Plated, enameled pins which we send for only 10c to help pay advertising expenses. Jewelry House, 141 Eighth St., Topeka, Kas.

PUT UP A TILE SILO

Reports from four experiment stations show feed from one acre produced 290 lbs. gain; feed from one acre in silage produced 637 lbs. gain. Fire clay glazed silos and hard burned unglazed silos last forever, no depreciation, solid construction, can't burn down, assist fermentation, proven best and most economical. Write today for silo facts and figures and special offer. THE FARMERS SILO CO. Dept. 107 Kansas City, Mo.



Fairbanks-Morse "Z" Engine with Bosch Magneto



SINCE the "Z" was put on the market, over 250,000 farmer buyers have pronounced it the greatest farm engine value. We felt the same way about it. But following our policy to improve our product whenever possible, we are highly pleased to announce a new Fairbanks-Morse "Z" with Bosch Magneto—high tension ignition which adds the one possible betterment. Call on the "Z" dealer near you—see this world's greatest engine—understand the full meaning for you of the engine service which over 200 Bosch Service Stations give, in co-operation with every "Z" dealer, to every "Z" engine buyer. Prices—11-2 H. P. \$75.00—3 H. P. \$125.00—6 H. P. \$200.00—All F. O. B. Factory.

Fairbanks, Morse & Co. MANUFACTURERS CHICAGO

FARMERS' CLASSIFIED ADVERTISING

Rate: 12 cents a word, each insertion, on orders for less than four insertions; four or more consecutive insertions the rate is 10 cents a word. Count as a word each abbreviation, initial or number in advertisement and signature. No display type or illustrations admitted. Remittances must accompany orders. Real estate and livestock advertising have separate departments and are not accepted for this department.

Beginning with the issue of January 3, 1920, our Classified Advertising rates will advance to 12 cents a word for a single insertion, and 10 cents a word for each insertion when the order is for four or more consecutive times. Advertisers will now have the advantage of 125,000 readers.

The old rate of 8 cents a word will apply to December issues but 4-time orders will not be accepted at that rate.

TABLE OF RATES

Words	One time	Four times	One time	Four times	
10.....	\$1.20	\$4.00	26.....	\$3.12	\$10.40
11.....	1.32	4.40	27.....	3.24	10.80
12.....	1.44	4.80	28.....	3.36	11.20
13.....	1.56	5.20	29.....	3.48	11.60
14.....	1.68	5.60	30.....	3.60	12.00
15.....	1.80	6.00	31.....	3.72	12.40
16.....	1.92	6.40	32.....	3.84	12.80
17.....	2.04	6.80	33.....	3.96	13.20
18.....	2.16	7.20	34.....	4.08	13.60
19.....	2.28	7.60	35.....	4.20	14.00
20.....	2.40	8.00	36.....	4.32	14.40
21.....	2.52	8.40	37.....	4.44	14.80
22.....	2.64	8.80	38.....	4.56	15.20
23.....	2.76	9.20	39.....	4.68	15.60
24.....	2.88	9.60	40.....	4.80	16.00
25.....	3.00	10.00			

EMPLOYMENT

WANTED - CAPABLE MARRIED MAN for farm and ranch work. Cow and garden. Good wages. Box A, Sublette, Kan.

MEN, 18 UP, RAILWAY MAIL CLERKS. Commence \$1,300. Vacancy list free. Franklin Institute, Dept. 015, Rochester, N. Y.

WANTED-POSITION BY EXPERIENCED farm and dairy superintendent. Have grown son. References furnished. Phone 973 W. W. H. Ellison, Independence, Kan.

RAILWAY MAIL CLERKS NEEDED. \$1,300 to \$2,000. Work 15 days monthly. Paid full time. Travel free. Hotel allowance. No experience required. Write Ozment, 167 St. Louis, Mo.

COMPETENT FARM HELP WANTED- Married man, \$55 per month with house, fuel and milk furnished. Increased pay March 1 and every three months thereafter to men making good. The Pickering Farm, Belton, Mo.

WANTED-MAN WITH FAMILY TO TAKE charge of farm on partnership basis. Labor against land \$2,000 to \$5,000 required. Keep 20 brood sows, 100 to 200 cattle. Must be honest and a good worker. References exchanged. Would prefer a man to work for wages a while, to see if are agreeable. "Rancher," care Kansas Farmer and Mail and Breeze.

AGENTS WANTED

\$30 A DAY SELLING POWERBONE. EQUALS gasoline at 5c. The equivalent of 20 gallons express prepaid, \$1. Box 424A16, Santa Rosa, Calif.

WE PAY \$100 MONTHLY SALARY AND furnish rig and expenses to introduce guaranteed poultry and stock powders. Bigler Co., X 608, Springfield, Ill.

AGENTS MAKING \$200 WEEKLY; EVERY- one wants it. Formulas for 200 beverages to be made at home. Book form. Send \$1 for copy and territory proposition. Act quickly. Buyers' Export Agency, 487 Broadway, New York.

\$175 MONTHLY AND COMMISSION; year's contract to men with autos. We start you equipping cars with Ridezee, the better than air inner tire. A substance cheaper than tubes. The business of the future. Ridezee Co., Dept. 16, St. Paul, Minn.

AGENTS-\$100 WEEKLY POSSIBLE IN- troducing sensational new winter automobile fuel. Specially adapted to cold weather. Starts easy. Adds power, mileage and reduces operating expense. Endorsed by thousands. Territory going like wildfire. Act quickly. \$28 sample outfit free. L. Ballwey, Dept. 33, Louisville, Ky.

DON'T WASTE YOUR SPARE TIME-IT can be turned into money on our easy plan. We have a splendid offer for ambitious men or women who desire to add to their present income, and will give complete details on request. Simply say, "Tell me how to turn my spare time into dollars" and we will explain our plan completely. Address, Circulation Manager, Capper Publications, Topeka, Kan.

SERVICES OFFERED

PLEATINGS-MRS. M. J. MERCER, 800 Topeka Ave., Topeka, Kan.

AUCTIONEERS MAKE BIG MONEY; 67 paged annual free. Mo. Auction School, Kansas City, Mo.

FREE-OUR NEW EIGHTY PAGE STYLE book. Ideal Button and Pleating Co., Dept. 27, Brown Bldg., Omaha, Neb.

TOBACCO OR SNUFF HABIT CURED OR no pay. \$1 if cured. Remedy sent on trial. Superba Co., Sy. Baltimore, Md.

LET US TAN YOUR HIDE, COW, HORSE, or calf skins for coat or robe. Catalog on request. The Crosby Frisian Fur Co., Rochester, N. Y.

MATERNITY HOSPITAL AND HOME FOR unfortunate girls during confinement. Babies adopted free. The Veil, 15 West 31st, Kansas City, Mo.

BE AN EXPERT PENMAN, WONDERFUL device guides your hand. Corrects your writing in few days. Complete outline free. Write C. J. Ozment, 40 St. Louis.

FAIRMOUNT MATERNITY HOSPITAL for confinement; private, prices reasonable, may work for board, babies adopted. Write for booklet. Mrs. T. B. Long, 4911 East 27th St., Kansas City, Mo.

INVENTORS WRITE FOR OUR ILLU- strated book and evidence of conception blank. Send model or sketch for our opinion of its patentable nature. Highest references, prompt service. Reasonable terms. Victor J. Evans & Co., 825 Ninth, Washington, D. C.

SERVICES OFFERED

HIGH PRICES PAID FOR FARM AND dairy products by city people. A small classified advertisement in the Topeka Daily Capital will sell your apples, potatoes, pears, tomatoes and other surplus farm produce at small cost—only one cent a word each insertion. Try it.

SHIP YOUR LIVE STOCK TO US—COMPE- tent men in all departments. Twenty years on this market. Write us about your stock. Stockers and feeders bought on orders, market information free. Ryan Robinson Commission Co., 425 Live Stock Exchange, Kansas City Stock Yards.

BUSINESS CHANCES

HANDLE MORE BUSINESS? ARE YOU getting all the business you can handle? If not get big results at small cost by running a classified ad in Capper's Weekly. The Great News Weekly of the Great West with more than a million and a quarter readers. Sample copy free for the asking. Only 8c a word each week. Send in a trial ad now while you are thinking about it. Capper's Weekly, Topeka, Kan.

FOR SALE

NEW 160 EGG RADIO ROUND INCUBATOR, \$12. H. R. Eby, Newton, Kan.

WRITE FOR DELIVERED PRICES ON cedar posts. Pay after unloading. J. B. Overton, Sagle, Idaho.

WHOLESALE PRICES ON BALE TIES, lumber delivered to any town in the state. Hall-McKee, Emporia, Kan.

BUY THE OLD RELIABLE STAR SWEEP grinder at direct from factory prices. Fully guaranteed. Perry Mfg. Co., 14 Jeff St., New Lexington, O.

FIVE HUNDRED TONS SILAGE; PLENTY of first quality alfalfa hay. Will sell or take cattle to feed. A good feed lot. Bloomheart Bros., Beverly, Kan.

CORN-WRITE OR WIRE FOR PRICES when in the market for good shelled corn in car lots. Weights and grades guaranteed. Powell Higginbottom, Eads, Mo.

ENCLOSE 35c IN COIN OR STAMPS AND we will mail you a one-piece electric welded fire shovel that will last a life time. Osage Shovel Co., Osage City, Kan.

MACHINERY.

ALMOST NEW I. H. C. TITAN TRACTOR. Will trade. "Titan," Mail and Breeze.

FOR SALE-NEARLY NEW 18-36 AVERY tractor and a 22-36 Avery separator. Jacob Ehrhardt, Ramona, Kan.

TO TRADE FOR A FORD-ONE EIGHT horse Stover, mounted engine, one four-hole Cyclone sheller. Ernest Peters, Lorraine, Kan.

HEIDER 12-20 TRACTOR, THREE BOT- tom P. O. plow, \$850. Case 20-40 tractor, six bottom Case plow, \$1,500. Ira Emig, Abilene, Kan.

STOP AND READ-LITTLE "TWISTER" power transmitter for Ford and Dodge cars. 10 days free trial. Write for circular. Wm. Russell, Salina, Kan.

HEIDER TRACTOR, 12-20 H. P., 3 BOT- tom; cost \$1,654; used one season; first class shape. Price \$1,000. Am reducing farming operations. Wm. Cunningham, R. 4, Olathe, Kan.

ATTENTION FARMERS AND TRACTOR owners. For sale, oil tank trucks; one, two and three tons, equipped with 300 gallon, three compartment tanks, complete. National Refining Co., Kansas City, Mo.

SEEDS

SEED BARLEY, \$2 PER BUSHEL, SACKED. Herman Pautsch, Lincoln, Kan.

WHITE BLOSSOM SWEET CLOVER, hulled, 16 bushel. H. E. Davis, Norwich, Kan.

SWEET POTATO SEEDS. WRITE FOR prices and list of varieties. Johnson Bros., Wamego, Kan.

BEST WHITE BLOSSOM SWEET CLOVER seed, reasonable. John Lewis, Route 1, Madison, Kan.

HEGARI-200 BUSHELS FIRST CLASS seed at wholesale. Sample. Frank Berger, Stillwater, Okla.

FOR SALE-ALFALFA SEED, 95% PURE, good germination, \$13 per bushel my track. Geo. Bowman, Concordia, Kan.

IOWA GOLDMINE SEED CORN, DICKIN- son county grown, selected, shelled, graded, \$4 per bu. J. F. Felgley, Enterprise, Kan.

RED SEED OATS, TIMOTHY, DARSO AND cane seed. From producer. Ask for sample price. B. Anderson, Blue Mound, Kan.

SEED CORN - AMERICA'S CHOICEST quality, 90 to 130 bu. kind. Produces 2 1/2 pound ears. Must please or money back. Bushel, \$4. Wiltse, Rubo, Neb.

FREE-OUR NEW CATALOG OF "DE- pendable" field, flower and garden seeds, poultry supplies, etc., is yours for the asking. Andrews Seed & Grain Co., Sherman, Tex.

CANE SEED-RED AND BLACK AMBER, 1919 crop, \$3.60 per cwt. F. O. B. Oberlin, Kan. Sudan grass, 12c per pound. White and yellow pop corn, 8c per pound for 50 pounds and over. F. E. Eakins, Oberlin, Kan.

SEED SWEET POTATOES - SELECTED, disease free, kiln dried, 1/2 inch in diameter. Nancy Hall, Porto Rico or Key West, \$3 per bushel. F. O. B. Idabel, Okla. Cash with order. Order early and make sure of your seed. Indian Trail Potato Co., Box 541, Idabel, Okla.

SWEET CLOVER SEED-SIXTY BUSHELS hulled. Biennial White Blossom seed. Thirty-five cents per lb. No orders for less than one hundred pounds. Cash must accompany order. Include sacks at sixty-five cents. Five bushels, unhulled, at twenty-five cents. Charles Weede, Walton, Kan.

FOR THE TABLE.

CLEAR EXTRACTED HONEY-60-POUND can, 18c a pound. L. Gorsuch, Lazear, Colo.

HONEY OF SUPERIOR QUALITY. ALSO Green county's cheese. Price list free. E. N. Rosa, Monroe, Wis.

PURE BEE HONEY, EXTRACTED, WHITE, 60 pound can, \$12.50; two, \$24 here. Frank H. Drexel, Crawford, Colo.

FOR SALE-PECANS, 10 POUNDS FOR \$1.60; 25 pounds for \$3.75. F. O. B. Tulsa, Okla. Write for our seed catalog. Bindings-Stevens Seed Co.

OLD FASHION "CUBAN MOLASSES" SPE- cial price for a few weeks. Guaranteed to keep all summer. 60-gallon barrels, 25c a gal. Cash with order. Winston Grain Co., Winston, N. C.

"THE BESTO" ROCKY MOUNTAIN honey, light colored, thick, fine flavored. Per can, five pounds net, postpaid anywhere west of Ohio river, \$1.50. Send remittance with order. The Colorado Honey Producers' Association, Denver, Colo.

TOBACCO.

TOBACCO-NATURAL LEAF CHEWING, 60 cents per lb.; smoking, 50 cents per pound; postage prepaid. Chas. Goff, Tar- folk, Ky.

RED LEAF TOBACCO, HOMESPUN, AGED in bulk. Chewing or smoking, 6 pounds, \$3; 10 pounds, \$4.70. Grade 2, smoking, 10 pounds, \$4. Postpaid. Murphy Co., Martin, Tenn. Reference Peoples Bank.

WANTED

WANTED - HEDGE POSTS, CARLOAD lots. Nunn & Kilne, Box 466, Columbus, Kan.

SANDWICH HAY BALER OF LATE model in good condition. Col. Warren Russell, Winfield, Kan.

PLANTS

STRAWBERRY PLANTS, \$4 TO \$5 PER 1000. List free. J. Sterling, Judsonia, Ark.

SWEET POTATO SLIPS-NANCY HALL, Porto Rico or Key West. Disease free. From potatoes grown specially for seed. All treated for black rot. Ready April 1. Price \$3 per thousand. Cash with order. Indian Trail Potato Co., Box 541, Idabel, Okla.

PET STOCK.

MALE BULL PUPS MAKE BEST WATCH dogs, \$10. Baldwin, 131, Baxter Springs, Kan.

SINGING CANARIES, PARROTS, PUPS, supplies. Kansas City Bird Store, Kansas City, Mo.

WANTED-FAST HOUND THAT WILL catch any coyote. Must be guaranteed. Lock Box 8, Parker, Colo.

WANTED-100 WHITE ESQUIMO-SPITZ pups about six weeks old. Brockway Kennels, Baldwin, Kan.

FOX TERRIER PUPPIES. SEND ORDERS for February litter. Bitches, \$26.00; dogs, \$5. L. K. Poots, Lowmont, Kan.

ENGLISH SHEPHERD PUPPIES. THE best stock dog yet. Males, \$10; females, \$5. H. Chestnut, Kincaid, Kan.

WE WANT RELIABLE PEOPLE TO raise fur-bearing rabbits for us in their back yards, spare time. We furnish stock and pay \$3.50 to \$7.50 each for all you raise. Sunset Fur Co., 506-7-8 Lankershim Bldg., Los Angeles, Cal.

POULTRY

So many elements enter into the shipping of eggs by our advertisers and the hatching of same by our subscribers that the publishers of this paper cannot guarantee that eggs shipped shall reach the buyer unbroken, nor can they guarantee the hatching of eggs. Neither can we guarantee that fowls or baby chicks will reach destination alive, nor that they will be satisfactory because opinion varies as to value of poultry that is sold for more than market price. We shall continue to exercise the greatest care in allowing poultry and egg advertisers to use this paper, but our responsibility must end with that.

Sun City, Kan., Jan. 9.
Kansas Farmer and Mail and Breeze,
Topeka, Kan.

Gentlemen:-Please discontinue my ad the fourth insertion and refund me the difference. The three insertions have sold me out and now I am returning the people's money to them. I didn't anticipate such results, also would have run the ad a week at a time. When I have anything to sell, I'll sure advertise in Kansas Farmer and Mail and Breeze.- Yours truly, Maude E. Henry.

ANCONAS.

SINGLE COMB ANCONA COCKERELS, Sheppard strain, \$2 each. Some choice dark ones, range flock. Mrs. Jack Shehl, Westmoreland, Kan.

LINGERLONGER ANCONAS HAVE OFFI- cial trapnest records 198-244 eggs. Won ten ribbons, best display at state show. Cockerels, eggs for sale. Free catalog. Lingerlonger Farm, Weaubleau, Mo.

BRAHMAS.

LIGHT BRAHMA COCKERELS, \$3 EACH. Geneva Downs, Lyndon, Kan.

FINE LIGHT BRAHMA COCKERELS, \$2.50 each. Mrs. R. W. Dole, Almena, Kan.

LIGHT BRAHMA COCKERELS, SIZE AND quality, \$2 to \$5 each. C. S. Holtzinger, Ellis, Kan.

BRAHMAS

LIGHT BRAHMA COCKERELS AND PUL- lets, Feich strain, \$2.50 to \$5 each. In our business. Greenwood Poultry Farm, Parsons, Kan.

BABY CHICKS

BABY CHICKS, LEADING VARIETIES booking orders now for early hatch chicks. Eggs and stock for sale. Berry & Sennel, R. 27, Topeka, Kan.

DAY OLD CHICKS, BOOKING ORDERS now for February delivery Single Comb White Leghorns and other varieties. Myers Hatchery, Clay Center, Kan.

DUCKS

FAWN AND WHITE RUNNER DUCKS H. L. Boge, Harvard, Neb.

THOROBRED MAMMOTH PEKIN DRAKES Mrs. J. W. Henry, Hoxie, Kan.

PURE BRED WHITE MUSCOVY DRAKES good ones. Mrs. Leo Rhodes, Scottsville, Kan.

DOMESTICATED MALLARD DUCKS early layers, \$1.50. W. Luebke, Freeport, Kan.

EGGS

SINGLE COMB WHITE LEGHORN EGGS baby chicks, Barrow Smith strain, for sale by Mrs. M. L. Zimmerman, Route 3, Troy, Kan.

GEESE.

PURE BRED TOULOUSE GEESSE, \$4. Mrs. Everett Hardman, Erie, Kan.

GUINEAS.

WHITE AFRICAN GUINEAS, TRIO, \$3 Males, \$2; females, \$1.50. Mrs. Perry Myers, Fredonia, Kan.

LANGSHANS.

PURE BLACK LANGSHANS, MARY Mc- Caul, Elk City, Kan.

EXTRA LANGSHANS, CATALOG READY John Lovette, Mullinville, Kan.

PURE BRED BLACK LANGSHAN COCK- erels, \$3. Lizzie Munsell, Gilead, Neb.

PURE BRED WHITE LANGSHAN STOCK for sale. Mrs. Geo. McLain, Beagle, Kan.

PURE BRED WHITE LANGSHAN COCK- erels, \$2. Orlett Lovelace, Concordia, Kan.

WHITE LANGSHAN COCKERELS, \$3, taken soon. W. D. Patterson, Sheridan, Lake, Colo.

LEGHORNS.

PURE SINGLE COMB WHITE LEGHORN cockerels, \$1.25. Bishop, Paradise, Kan.

SINGLE COMB WHITE LEGHORN COCK- erels, \$1.50. Herman Pautsch, Lincoln, Kan.

SINGLE COMB WHITE LEGHORN COCK- erels, 3 for \$5. Mrs. C. C. Cole, Levant, Kan.

PURE ROSE COMB BROWN LEGHORN cockerels, \$1.50 each. Susie Line, Had- dam, Kan.

S. C. WHITE LEGHORN COCKERELS, \$1.50 each or 4 for \$5. Mrs. T. N. Becker, Linwood, Kan.

SINGLE COMB WHITE AND BROWN Leghorn cockerels, \$2 to \$5. H. N. Hold- man, Meade, Kan.

PURE SINGLE COMB WHITE LEGHORN cockerels, \$2 each. Elizabeth Green, Route 1, Concordia, Kan.

SINGLE COMB WHITE LEGHORN COCK- erels, large variety, \$2.50 to \$5. Lillian V. Orr, Coats, Kan.

LARGE BONED, YELLOW LEGGED Barred Rock cockerels, \$2 each. L. K. Poots, Lowmont, Kan.

PURE BRED SINGLE COMB WHITE LEG- horn cockerels, \$2 to \$4. Mrs. Della Van Horn, Nickerson, Kan.

PURE BRED ROSE COMB BROWN LEG- horn cockerels and hens, \$1.75. Mrs. A. Johnston, Concordia, Kan.

ROSE COMB BROWN LEGHORN COCK- erels, thoroughbred from prize stock, \$2.50. Mary Smith, Wilmore, Kan.

SINGLE COMB WHITE LEGHORN COCK- erels, Young's strain, \$2. Mrs. Walter Christopher, Route 1, Milford, Kan.

PURE BRED R. C. BROWN LEGHORN cockerels from heavy winter layers, \$3 each. Mrs. J. B. Wagner, Fowler, Kan.

SMITH STRAIN SINGLE COMB WHITE Leghorn cockerels, \$2.50 to \$5. Satisfac- tion guaranteed. Judson O'Neal, McPherson, Kan.

IMPORTED ENGLISH S. C. WHITE LEG- horns, averaged 288 eggs each, per year. Fine cockerels, hens, eggs, chicks. Geo. Patterson, Melvern, Kan.

ORIGINAL D. W. YOUNG S. C. WHITE Leghorn cockerels, kept strictly pure, \$3 to \$10 each. It's our business. Greenwood Poultry Farm, Parsons, Kan.

S. C. W. LEGHORN COCKERELS (D. W. YOUNG \$20 settings), \$3 and \$5. Get the best and see difference in egg basket next year. Elsie Thompson, Mankato, Kan.

HOME SOLD, MUST SELL QUICKLY. S. C. White Leghorn and White Rock cockerels from good-laying strain, \$5, \$10, \$15 and \$25. Miss Emma Rumrill, Box 577, Salina, Kan.

PURE BRED S. C. WHITE LEGHORN cockerels. These birds are bred from D. W. Young \$25 settings. Prices from \$2 to \$10 each. Also eggs in season. C. E. Knechtel, Larned, Kan.

DARK BROWN LEGHORN COCKERELS extra choice, heavy laying strain, \$3 and \$5. Booking orders for eggs, \$2.50 per 100, \$8 per 100. Always extra eggs. Plainview Poultry Farm, Lebo, Kan.

LEGHORNS

FOR SALE UNTIL JANUARY 1ST, 1920. Large, vigorous, snow white, low tailed... C. White Leghorn cockerels, \$3 to \$5 each.

ORPINGTONS

PURE BRED ORPINGTON COCKERELS, \$2.50 each. Mearl Watts, Sedgwick, Kan. COCKERELS, BUFF ORPINGTON, 8 LB., \$3; fancy, \$4. S. Peltier, Concordia, Kan.

PIGEONS

1000 COMMON PIGEONS WANTED. Address R. S. Elliott, 7500 Independence Ave., Kansas City, Mo.

PLYMOUTH ROCKS

PURE WHITE ROCK COCKERELS, \$1.75. Bishop, Paradise, Kan. PURE WHITE ROCK COCKERELS, \$2. W. H. Nelson, Minneapolis, Kan.

PLYMOUTH ROCKS

RINGLET AND BRADLEY BARRED ROCK COCKERELS from first prize stock, \$2.50 to \$10 each. Farm raised. Etta Pauley Kaessler, Junction City, Kan.

RHODE ISLAND REDS

PURE S. C. RED COCKERELS, \$3-\$5. Mrs. Finney, Ogden, Kan. SINGLE COMB RED COCKERELS, \$3 TO \$7. Mrs. Ira Amend, Stafford, Kan.

WYANDOTTES

THOROBRED WHITE WYANDOTTE COCKERELS, \$2.50 each. Mrs. John Howard, Clyde, Kan. PURE BRED SILVER WYANDOTTE COCKERELS, \$3 each. James Woodworth, Walnut, Kan.

TURKEYS

PURE BOURBON REDS, TOMS, \$7. E. V. Eller, Dunlap, Kan. WHITE HOLLAND TOMS, \$7; HENS, \$5. Jerry Brack, Havensville, Kan.

WYANDOTTES

WHITE WYANDOTTE COCKERELS, H. O. Collins, Fontana, Kan. SILVER WYANDOTTE COCKERELS, ROY Cameron, Herington, Kan.

Reliable Information on Tractors

Much has been said and written as to what the tractor can do, and should do, in farming operations. As yet, however, there is not enough reliable data at hand to permit the tractor user, or prospective purchaser to form an idea as to what can and what cannot be done with a tractor.

This kind of information can only be obtained from men that have owned and used tractors, and are, therefore, in position to answer from actual experience. A questionnaire to tractor owners is being prepared by the Kansas State Agricultural college, for immediate mailing, having in view a determination of the chief factors of tractor farming, such as relative size of tractor to size of farm and kinds of crops grown; relative decrease in number of work horses on motorized farms; cost data of operation by acreage, by day's work, better work, and increased yields; factors considered in figuring costs; number of days tractor can be, and now is, used yearly; different classes of work to which it is easily adaptable; repairs, lost time, and expert service; life of tractor, and other items are asked.

The value of a summary compiled from a large number of tractor owners, scarcely is to be estimated. Hints and suggestions provided by one man would serve as valuable educational matter to the next man, while many questions now in the minds of possible prospects would find very definite answers from the actual experience of men doing the very things they want answered.

Every tractor owner receiving such a questionnaire is urged to take time and answer as fully as he can every question pertaining to his own experience and mail it back to his local county agents. All co-operators will be supplied with a summary of the findings at an early date.

One of the chief objects of the college is to get into working touch with all tractor owners and act in as large a way as possible as a sort of clearing house on power farming machinery and its operation; to give up-to-the-minute instruction to all students attending short or special tractor courses and foster a spirit of high efficiency in operation and management.

There are not less than 7,000 tractors in the hands of the farmers of Kansas today. The college is in possession of the names and addresses of owners reporting tractors to the local county assessors on March 1, 1918. No list of owners buying machines within six months prior to that date, and since, is available.

There are doubtless many such that would be pleased to co-operate by answering such a questionnaire. The college will be very glad to send all such persons a questionnaire on receiving their names and addresses. Send your names to W. H. Sanders, Department of Farm Engineering, Kansas State Agricultural College, Manhattan, Kan.

SEVERAL VARIETIES

PURE BRED WHITE ROCK AND RHODE Island White cockerels, four and five dollars. Exceptionally fine birds. M. A. Jones, Scottsville, Kan.

POULTRY WANTED

TURKEYS, CAPONS, DUCKS, GEESE, guineas, chickens, all wanted. High prices, coops loaned free. The Copes, Topeka. POULTRY—WE ARE BUYERS FOR ALL kinds of poultry and eggs. Get our quotations before selling. Highest references furnished. Witchey Poultry and Egg Co., Topeka, Kan.

MARVELOUS NEW INVENTION increases your hatches and prevents chicks from dying in the shell. Particulars free. Robert C. Lewis, 1202 Dartmouth Ave., Minneapolis, Minn.

POULTRY SUPPLIES

MANDY LEE INCUBATOR, 200 EGG, GOOD condition, \$30. Buff Rock cockerels. Maggie Stevens, Humboldt, Kan. CLAY COUNTY POULTRY AND PET Stock association, all breeds and varieties. Directory free. Sec'y H. L. Bogs, Harvard, Neb.

THE STRAY LIST

TAKEN UP—BY BERT C. VERNON, whose residence is the same as the former one of J. F. Barr, being the northwest quarter to Sec. 16-2-28, Decatur county, Kansas, on the 13th day of December, 1919, one yearling heifer, weight about 600 lbs.; horns, color dark red, no marks or brands. Appraised value, \$35. Harry L. Heaton, county clerk.

Real Estate Market Place

Real estate advertisements on this page (in the small type, set solid and classified by states) cost 65 cents per line per issue. Send check, money order or draft with your advertisement. After studying the other advertisements you can write a good one and figure the cost. About six and a half words make an agate line. Count initials and numbers as words.

There are 7 Capper Publications totaling over a million and a quarter circulation and widely used in this advertising. Ask us about them.

Special Notice

All advertising copy discontinued or 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.

KANSAS

FOR LAND BARGAINS WRITE
C. E. Settle, Scott City, Kan.

SQUARE SECTION, half level, \$16,600.
Kendall Land Co., Colby, Thomas Co., Kan.

FARMS—I have them listed, located central states. Clyde Thuma, Lenora, Kan.

BEST FARM BARGAINS for sale in S. E. Kansas by G. W. Meyer, Fredonia, Kan.

317 ACRES, bottom land, highly improved, \$75 acre. W. J. Poire, Westphalia, Kan.

WRITE your wants to Bersie Agency, Eldorado, Kansas, for land bargains.

WELL IMPROVED FARMS, \$85 to \$125 per acre. I. N. Compton, Valley Falls, Kan.

203 ACRES, imp., 40 wheat goes, \$112.50 a. Terms. Bert W. Booth, Valley Falls, Kan.

BARGAINS in farms and ranches. Write for list. Klingberg & Skinner, Osage City, Kan.

BARGAINS. Bargains in wheat farms and stock ranches. Write for list. W. R. McAdams, Brewster, Kansas.

FOR SALE—Good farms from \$80 to \$125 per acre. Call on, or address, O. C. Paxson, Meriden, Kansas.

ELK COUNTY RANCH—1,000 acres, mostly meadow and pasture. A bargain. Greene, Longton, Kansas.

FOR SALE—1,000 acres, well improved wheat, alfalfa and stock ranch. A. C. Bailey, Kinsley, Kansas.

FINE HOME—160 near Emporia, all alfalfa, new buildings, near school; \$15,000. T. B. Godsey, Emporia, Kansas.

HOUSE, Manhattan, Kan. Strictly modern, 8 rooms, convenient to college and stores. Owner, 910 Poyntz, Ave., Manhattan, Kan.

EASTERN KANSAS FARMS. Large list Lyon and Coffey counties, for sale by Ed. F. Milner, Hartford, Kan.

160 ACRES, Sedgwick county, southeast Derby, northeast Mulvane. Owner, O. E. Foulke, 147 Yale Ave., Wichita, Kan.

WANTED TO BUY quarter section of farm land in western Kansas. Want to hear from owner. Address, 538 W. Iron, Salina, Kan.

WE DON'T OWN THE WORLD, we sell it. Write for farm list and pictures. Kansas Land Company, Ottawa, Kansas.

FOR SALE—200 acre river bottom farm all under plow, well improved. Write, Hunt & Still, Manhattan, Kansas.

CARY & HOARD, Real Estate Exchange and Loan Agent. Ranches a specialty, sold on commission. Phone 13, Anthony, Kansas.

WE HAVE a good list of Kaw bottom and upland farms that are worth the money. Wilson & Clawson, Lawrence, Kansas.

FOR SALE—All kinds of farms, in N. E. Kan. Send for printed list. Silas D. Warner, 727 1/2 Commercial St., Atchison, Kan.

WRITE for our free list of eastern Kansas farms and ranches for sale. The Eastern Kansas Land Co., Quenemo, Kan.

HAMILTON AND STANTON county lands, \$8 up. Write me your wants. Tomson, Syracuse, Kansas.

160 ACRES, 4 miles from town, good house, 7 rooms, good barn, other outbuildings, 90 acres wheat, balance grass. Price \$85 per acre. LeRoy Realty Co., LeRoy, Kan.

240 ACRES, suburban home, fine improvements, rock macadam road on two sides, no waste land. Write for description. John F. Hess, Humboldt, Kansas.

FOR SALE—202 acres well improved bottom farm, 4 miles from Abilene. Write for description. Mrs. W. T. Reed, R. 1, Enterprise, Kan.

LEAVENWORTH CO. FARM—Well improved, 160 acres 4 miles to Potter; all in cultivation. Write owner. John Foedter, Lowmont, Kan.

96 ACRES, imp., 20 alfalfa bottom land, bal. timothy and plow land. Living water; some timber; 3 ml. town. Good buy. Box 54, Colony, Kansas.

FOR SALE—500 acres highly improved bottom farm. 1/2 hardware, balance on farm. Write for description. P. L. Lake Real Estate, Medicine Lodge, Kan.

FINE 320 ACRES, all smooth wheat land, 8 1/2 miles to county seat. Price \$15.00 per acre. Terms. D. F. Carter, Leoti, Wichita Co., Kan.

FOR SALE—Two good farms and a new blacksmith shop fully equipped and a money maker. C. E. Francis, Neosho Falls, Kansas.

WE HAVE some splendid 40's, 80's, 160's close Ottawa, well improved, good corn, wheat land. Priced worth the money, at your service. Write us. Bridwell-Gilley, Ottawa, Kansas.

OLD RELIABLE MARSHALL COUNTY 160 a., 4 1/2 miles Marysville, good soil, all tillable; 6 room house, plenty other buildings; 70 a. wheat, \$135 per a. Terms. Joseph Ellenbicker, Marysville, Kan.

KANSAS

40 ACRES, 2 miles good Franklin County town, all tillable, main road, no rocks, good improvements, must be sold. Price \$150 per acre. Write, W. T. Porter, of Kansas Land Company, Ottawa, Kansas.

280 ACRE FARM, 3 miles Dennis, Labette county, 140 acres cultivation, 80 pasture, 60 hay, 6 room house, barn and silo, 2 wells and creek, 60 acres wheat, \$65 acre, 1/2 cash. J. K. Beatty, Coffeyville, Kansas.

80 ACRES, good improvements, all Kaw valley bottom land; 30 acres alfalfa, 18 acres wheat; 1/2 goes; balance for corn. Near St. Marys. Price \$250 per acre. Write J. M. Conlan, St. Marys, Kan.

152 A. IMPROVED STOCK FARM on Blue Valley, Riley Co., 3 ml. town; 55 a. plow land, 30 a. alfalfa, balance pasture and hay meadow, \$100 per acre for a quick sale. Owner, Carl F. Smith, Riley, Kansas.

GOOD SOUTHEASTERN KANSAS FARMS For sale on payments of \$1,000 to \$2,000 down. Also to exchange for clear city property. Address The Allen County Investment Co., Iola, Kan.

A WHEAT FARM BARGAIN—160 acres all under cultivation, close to market, only \$4000. Also 600 acre farm, 150 acres under cultivation. \$25 an acre. Write Jas. H. Little, La Crosse, Kansas.

I WOULD rather invest in Wallace county, Kansas, land right now than anywhere I know of. Come and see for yourselves. Live agents bring your men. I show good stuff. A. H. Wilson, Sharon Springs, Kan.

53 ACRE DAIRY FARM for sale by owner, 1/2 in alfalfa, 1/2 mile Simpson, a good town with fine high school. Good improvements, with silo, plenty of water. Price \$200 per acre. W. S. Clark, Simpson, Kansas.

240 ACRES, Osage Co., Kan., 4 1/2 miles town, 115 acres fine valley land in cultivation, 15 acres alfalfa, balance bluegrass pasture, 8 room house, big barn, never failing water, close school. Price \$100 per acre. Terms. The Eastern Kansas Land Co., Quenemo, Kan.

WE HAVE well improved, highly productive farm land, laying nicely, and in thickly settled neighborhood, at \$50 to \$75 per acre. Also some good ranches. Write us what you are interested in. Couch Land Company, Anthony, Harper County, Kansas.

160 ACRES, 5 miles from good town, on gravel road, 75 a. cultivated, 18 a. meadow, bal. pasture. Limestone soil, 40 a. good alfalfa land. Well watered, good bldgs. Price till February 1, \$70 per a. Other good farms. J. B. Wilson, Fredonia, Kansas.

80 ACRES, Anderson county, Kan., all fine creek bottom, 10 acres alfalfa, 10 acres meadow, 20 acres pasture, balance farm land, 6 room house, barn, plenty water. Price \$10,000. Terms. T. E. Eastern Kansas Land Co., Quenemo, Kan.

WE HAVE several choice Kaw valley alfalfa and potato farms. Some fine upland farms, good black rich soil, well improved. Close to Lawrence and university. Write Wilson & Clevenger, Merchants Bank Bldg., Lawrence, Kan.

FOR SALE—160 a. good upland, 80 a. cult., 50 pasture, bal. hay land. Good orchard. Fair improvements, 14 miles of Topeka, 3 ml. of high school and 1 1/2 ml. of grade school. W. E. Kansas Farmer and Mail and Breeze, Topeka, Kansas.

FOR SALE—160 acres of land; 35 acres fenced and watered pasture and hay; balance in fine crop of wheat; two miles from Lipsday, Ottawa Co., Kansas, four miles from Minneapolis, county seat. For price and terms address, M. E. Richard, Gettysburg, Pa.

122 ACRES, 1 mile town, large improvements, some alfalfa, all creek bottom land, 25 acres wheat, 25 acres blue grass pasture, balance for spring crops, fine water, big bargain. Price \$150 per acre. Write W. T. Porter, of Kansas Land Co., Ottawa, Kan.

1,120 ACRES, all smooth, rich black soil, 1 mile town, 140 acres wheat, 110 acres spring crops, balance native grass, fair improvements, fine sheet water. For quick sale, \$25 per acre. Write for list, literature and Kansas map. Mansfield Investment & Realty Co., Healy, Lane Co., Kan.

NEAR TOPEKA Best bargain in N. E. Kansas; 240 acre farm; commodious improvements; under a high state of cultivation, only \$34,000. Half cash. Can fit you out in any size farm desired. J. E. Thompson (The Farmer Land Man), Route 15, Tecumseh, Kansas.

155 ACRES, 4 1/2 miles Ottawa. Smooth land. Good improvements. 100 acres fenced hog tight, 60 blue grass pasture; 25 wheat; remainder tame grass. Close school. Special price for 30 days. 80 acres, 2 1/2 miles town; well improved. Smooth land, \$9,000. Bargain. 240 acres, 7 miles Ottawa. Large improvements. Silos. Nicely divided as to crop conditions. 75 acres wheat. Beautiful home. Price \$125 per acre. Write for list and free booklet. Mansfield Land & Loan Co., Ottawa, Kan.

KANSAS

160 ACRE FARM BARGAIN 7 room house, good barn 36x50; 80 acres in cult., 30 acres choice meadow, 50 acres excellent pasture, rich soil, all tillable, near school and church, 4 miles good town. Snap at \$85 per acre. Come and see this. M. T. Spong, Fredonia, Kansas.

A BARGAIN Half section, 200 acres of farm land, 70 acres in cultivation. This land is rolling, but cannot be beat for corn land. Will take part in trade, 1 1/2 miles from town. Write for particulars. \$25 per acre. Roy D. Slagle, Wheeler, Kan.

NESS COUNTY, KANSAS, LANDS Good wheat, alfalfa and ranch lands at bargain prices. Several excellent ranches. Write for price list, county map and literature.

FLOYD & FLOYD, Ness City, Kan.

FOR RENT—Improved stock and grain farm of 1,760 acres, 6 miles from town, Sherman county, Kansas. Prefer to rent to good farmers with plenty of help and sufficient funds to furnish half of stock necessary, lease on share basis. E. A. Miner, Grand Island, Neb.

GOOD GRAIN AND STOCK FARM 720 acres, 6 miles from town, 220 acres in cultivation, 160 acres fine wheat, balance splendid pasture. Well improved. Price only forty dollars per acre, with good terms. Write for new land list. Justin T. Avery, Traer, Decatur County, Kan.

FOR SALE—330 acres, 4 1/2 miles of Franklin county town, 12 miles Ottawa, 250 acres in cultivation, balance pasture and mow land, spring water, 3 room house, fair barn, silo and other buildings. Price for quick sale, \$100 per acre, or might take smaller farm 80 to 100 acres. Write R. R. Tucker, of Kansas Land Company, Ottawa, Kansas.

FOR SALE—80 acres, improved, 5 miles Ottawa; price, \$8,000, \$2,000 down, long time on balance. 320 acres, 7 miles Franklin Co. town, all good bottom, good improvements. Price \$100 per a. Inc., \$14,000, 4 yrs. 6%. If you have anything to exchange write, J. T. Priny, with Kansas Land Company, Ottawa, Kan.

BANNER CORN COUNTY OF KANSAS. Norton County, Kansas, corn making 40 to 65 bushels to the acre. Good farm land selling at \$40 to \$65 per acre. Special bargain in 240 acre farm, improved, 4 miles out at \$30 per acre. Write today for bargain land list. E. E. Jeter, Land Merchant, Lenora, Kan.

FOR SALE OR TRADE close to Catholic school and church, 520 acres combination farm; 200 acres for spring crop, balance pasture, small improvements, price \$35 per acre, my equity \$9,200. Will trade for unimproved land of equal value. Possession March first. Address owner. Box 129, Attica, Kansas.

KANSAS BARGAIN—480 acres, 160 in cultivation, balance fenced for pasture, shallow water, improvements poor; mostly all will grow alfalfa or sweet clover. A snap at \$20 an acre, excellent terms. Choice section, all fenced and good well, over 3/4 smooth; 4 ml. of market, only \$23.50 per acre. C. N. Owen, Dighton, Kansas.

RIVER BOTTOM FARM With \$225 per month oil royalty income, 233 acres (practically all tillable), 9 room house, barns, etc., plenty good water, some timber, 45 acres of wheat in; some alfalfa. Oil lease royalty will probably double within a year (still drilling). Price only \$175 per acre. For full information write, Henry Carey, Route 3, Osawatimie, Kansas.

BEST BUY IN JEFFERSON COUNTY 320 acres, 8 room modern house, large barn, garage, double granary, etc. 140 acres clover and bluegrass, 12 acres alfalfa, 40 acres in corn, balance in small grain. Watered by springs, 4 miles from town on R. F. D. 40 miles from Kansas City. Price is only \$150 per acre. If you want to buy a farm of any size come and see me. Benj. J. Griffin, Valley Falls, Kan. Phone 34.

BARGAINS IN RANCHES 800 acres in Jewell county, 500 in pasture. Good improvements. Price \$52.50 per acre. Will take a small trade. 840 acre ranch in Osborne county. This ranch is highly improved, electric lights; one mile from station. Will take a small trade. Price \$47.50 per acre. A. J. Moravek, Land Man, Ebon, Kansas.

172 ACRES, 7 miles Lawrence, 1 1/2 miles concrete road, 150 acres smooth tillable, 45 acres pasture, 10 acres alfalfa, 12 acres prairie meadow, balance spring crop. 7 room house, barn 20x80, combination granary, machine shed and work shop 40x40. Plenty water piped into feed lots. Possession March 1. Price \$125.00 per acre. Hosford Investment & Mortgage Co., Lawrence, Kansas.

CREEK AND RIVER FARM—200 acres, 4 1/2 miles from here, 4 miles from Strawn, good 8 room house, basement under it all. Barn and sheds and fine chicken house. Young orchard, 20 acres alfalfa, 130 acres fine alfalfa land, 25 a. in wheat, 40 acres native prairie pasture, plenty of timber on creek. This is as good a farm as you can find anywhere. Price only \$150 per acre till February 1, 1920. R. R. Johnson, Hartford, Kan.

4,500 ACRE RANCH, Harper and Barber Co. Six miles of Tunning water, 100 never failing springs, good grass, never been overstocked, owner's house, 3 farm houses, granaries; barns, sheds, garage shop, windmills, fenced, hog lots and houses, corrals, etc. A bargain at \$30 per acre. 1,440 acres Comanche county, 7 1/2 miles from Sun City, 900 acres in cultivation, two sets of good improvements, fenced, heavy black loam soil. Windmills, tanks, etc. Price only \$50 per acre. John Ferriter, Wichita, Kan.

KANSAS

320 ACRES of land 2 miles from Olpe, Kan., large house, good double crib and large barn, improvements in good condition. 145 acres in cultivation, 100 acres of which is sowed to Kanred wheat, balance of farm in pasture. Price \$80 per acre including wheat if sold within 30 days.

A good 160 acre farm, 5 miles from Olpe, Kan., 90 acres in cultivation partly in wheat. Balance in pasture. This is as good a small farm as there is in the country. Price \$65 per acre. Bradford & Hathaway, Olpe, Kansas.

SOUTHWEST KANSAS is developing fast. Farmers are making good profits on small investments. It is the best place today for the man of moderate means. You can get 160 acres for \$200 to \$300 down, and no further payment on principal for two years, then balance one-eighth of purchase price annually, interest only 6%—price \$12.50 to \$20 an acre. Write for our book of letters from farmers who are making good there now, also illustrated folder with particulars of our easy purchase contract. Address W. T. Cliver, Santa Fe Land Improvement Company, 404 Santa Fe Bldg., Topeka, Kansas.

320 ACRES, 1 1/2 miles good town, new rural high school, fine improvements, 3 room house, large barn, silo, etc. Plenty good water. Land lays well, 160 acres grass, balance plow. About 100 acres wheat goes, \$127.50. 480 acres, Anderson county; 6 miles to two good towns; 10 room house, full basement, good barn. Good water, land all lays well, no breaks, rock nor gravel. 300 acres good grass, balance in plow, about 50 acres wheat. Sacrifice price for quick sale \$75 acre. Possession at once. School at corner of farm. Write today for list of other good farms. Dickey Land Co., Ottawa, Kan.

LYON and CHASE CO. is the place to buy farms. The best land for the money to be had anywhere. Farms from 80 to 1,440 acres. Plenty of creek and spring water, and bluestem grass. Alfalfa, wheat and corn land. Will Albin, Saffordville, Kan.

Special Bargains 160 acres, 3/4 mile from high school, good improvements, 65 acres pasture, balance farm land. Price \$75 per acre. 160 acres, 2 miles from high school, extra good improvements, 80 acres pasture and meadow, bal farm land. Price \$85 per acre. STAATS & HEDRICK, EMPORIA, KANSAS.

The Bargain Counter Right here at Winona is the high spot in value and the low spot in price. Come and see. Improved farms and ranches, grain, alfalfa and grass lands. We own or control our bargains. THE BROOKS LAND & TRUST COMPANY, Winona, Kansas.

FINE RANCH HOME 1,360 acres, 4 miles Healy, Lane county, Kansas. 3 miles creek bottom, never failing water, modern house, nice shade, other good improvements, all in good grass, about 200 acres hay land. Price \$25 acre for quick sale. Write for list of wheat farms and ranches. Kansas map and lists mailed free. Mansfield Investment & Realty Company, Healy, Lane County, Kansas.

Choice Alfalfa Farm 160 acres, 7 miles west Oklahoma City. Almost level creek bottom, 50 acres growing wheat. All in cultivation. No overflow. No waste. Perpetual running water. Good roads to city. \$125 acre. Half cash. Balance long time 6%.

G. W. Colliver & Company 109 1/2 West Grand Ave. Phone Walnut 7834. Oklahoma City, Oklahoma.

80 Fine Acre Farm 3 miles Ottawa, Kan., 56 miles Kansas City, all fine tillable land; 15 acres blue grass; 25 acres wheat; 7 room house; natural gas; good barn; never failing water; County Highway; R. F. D. telephone. Possession at once. Good terms if wanted.

80 acre farm 4 miles Princeton, Kansas, 12 miles Ottawa. Brand new improvements; all fine land; price \$125 per acre; \$2500 or more cash, remainder good terms, if wanted. CASIDA & CLARK LAND CO., Ottawa, Kansas.

FARM BARGAINS No. 1—160 a. 4 ml. of good town in Greenwood Co., Kan., fair improvements, 75 a. cult., 35 meadow, 50 pasture, a good stock and grain farm, price \$5,000. \$2,200 cash, bal. 3 yrs., 6%. Possession. No. 2—152 a. 6 mi. of Cherryvale, Kan., 2 good barns, fair house, cistern, cave, large henry, all tillable land, 50 a. wheat, spring plowing mostly done, on good road, price \$75 per acre. Possession. No. 3—160 a. 3 1/2 ml. Moundvalley and 8 ml. Cherryvale, Kansas, well improved stock and grain farm, close to school, price \$8,000. Terms. Possession. Oakleaf & Hill, Cherryvale, Kansas.

ARKANSAS WRITE TOM TETER, SHERIDAN, ARK., for bargains in good farms.

DOWELL LAND CO., Walnut Ridge, Ark. Fine corn lands, easy terms, plenty rainfall.

WRITE TOM BLODGETT, Pine Bluff, Ark., for land bargains that will double in value.

OZARK Cream-Stock Farms, Fruit Farms, Berry and Vegetable Tracts. Hunsaker, Decatur, Ark.

N. W. ARK.—Bargains in fruit, stock and grain farms; good soil, water and climate. Fredricks Realty Co., Springdale, Ark.

BUY A FARM in the great fruit and farming country of northwest Arkansas where land is cheap and terms are reasonable. For free literature and list of farms, write J. M. Doyel, Mountalnburg, Ark.

PAYING BUSINESS FOR SALE

Want to change locations and will sell my farm and half ton ice plant, moving picture show (the only one in town), \$5,000 stock general mdse., small equity in well located real estate, equity in some pasture leases, etc.; also my real estate and insurance business. For quick sale of whole business, will take 70% of actual value. Come see me.

M. W. PETERSON, JETMORE, KANSAS

ARKANSAS

CHEAP LAND—Come to Arkansas for cheap land. Free list. Write, Fryor & Conard, Agents, Green Forest, Ark.

FOSTER REAL ESTATE COMPANY, Gravette, Arkansas. Leaders in farm and town property.

TOWN TWO Improved farms, 160 and 120 near town, good roads, mail route, all smooth and tillable, \$30 and \$40 per acre. J. Oswalt, Gravette, Ark.

SOUTHWEST ARKANSAS—Unusual bargains in low priced farms with comfortable buildings for \$10 to \$50 per acre on good farms. Send at once for copy of our large farm bulletin with complete descriptions of farm bargains. Stuart Land Co., DeQueen, Ark.

COLORADO

EASTERN COLORADO farms and ranches, all sizes. For further information, write, J. W. Triplett & Son, Yuma, Colo.

IN THE RAIN BELT, Southern Colorado. Deeded land, \$5 to \$15 per acre. Write, J. D. Donnelly, Flues, Colorado.

BEST FARM BARGAINS in S. E. Colorado. Write or come now. Joe Habiger, Real Estate, Granada, Colo.

10 IMPROVED eastern Colorado farms for sale at bargain prices; terms; information and literature on request. Frank Sutton, Akron, Colo.

EASTERN COLORADO. Irrigated farms. Any size, ranches and plant farms. Write for list. C. A. Quimby, Granada, Colorado.

NEW CHOICE FARMS AND RANCHES for sale where you deal with owner and save commission. Write or call at residence. E. B. Farrow, Holyoke, Colo.

IRRIGATED small tracts and farms produce sure and paying crops. We have them at Rocky Ford, Colo. Write, Wm. C. Steele, Rocky Ford, Colorado.

20 ACRES, imp., 120 cult., bal. pasture. Plenty good water; 14 miles from town. 22 a., \$1,000 cash, \$2,000 March 1st, balance 3 years at 6%. Lamb Realty Co., Vona, Colo.

EASTERN COLORADO and Western Kansas land. Farms, ranches and investments. Tracts of 160 to 2500 acres. Our prices from \$12.50 to \$30 per acre. Barnes & Doty, Towner, Colo.

WASHINGTON COUNTY, eastern Colorado, crop producing lands, \$40 to \$80 per acre, one better, ideal climate, good water. Write us for particulars, or see us. The Co-Operative Investment Co., Otis, Colo.

FOR SALE—S. E. 1/4 Sec. 16, T. 2, R. 66, Adams county, Colorado; 160 acres at \$35 per acre. Terms. Unbroken land 13 miles E. of Denver. In An Fero irrigation district, but not bonded. Apply to owner, Jas. J. Dunn, 1328 Inca St., Denver, Colo.

HASWELL DISTRICT of eastern Colorado, the garden spot of the state. We own our own land and guarantee delivery. If you have never seen this district, which is largely shallow water, by all means look it over before buying elsewhere. Write us. CHARLTON-HOPEWELL LAND CO., Haswell, Colorado.

IN THE RAIN BELT, near Denver, Colorado Springs and Pueblo, three good markets. 1000 acres from the famous Bijou Ranch, Albert Co., the banner county, lands are surrounded by imp. farms, near towns. Buy direct from the owners on long time at 6%. Come now and get the best location. The Bijou Ranch Co., Simla, Colo.

FARMERS ATTENTION—Do you own land that is your farm too small and hindering your operations? If so, write for information regarding fine farm land which I own in the Bijou Valley, 50 miles east of Denver and will sell in sections and half sections at bargain prices and give liberal terms. Write the owner, John W. Baughman, Liberal, Kansas.

LANDS ARE rapidly advancing here. No other district has such a future ahead of it. A farm bought now, will be worth double in a few years. Let us show you what we do for those who buy from us. Let us show you the experience of those who have been here a few years. We sell our own lands, and can offer good farms with or without growing wheat. For further particulars write, Wagner Realty Co., Akron, Colo.

FIVE THOUSAND ACRES fine farm land, 10 miles east of Denver in Bijou Valley for sale in sections and half sections. Prices right and good terms. I will be represented by stock show in Denver by E. D. Cooper at Kenmark hotel, January 19, 20 and 21. John W. Baughman, Owner, Liberal, Kan.

FOR SALE—N. W. 1/4 Sec. 26, T. 11, R. 49, Logan county, Colorado; 167 acres at one hundred dollars per acre. All fenced and irrigated, 25 acres in cultivation. Three miles north of town of Crook, Colorado, on P. railroad. All under ditch and water rights in North Sterling Irrigation District. Land in full. Very fine piece of land and bargain. Title from U. S. government. Apply to owner. Jas. J. Dunn, 1328 Inca St., Denver, Colo.

Best Lands

The best closest priced lands in Kiowa and Cheyenne counties, Colo. 160 to 5,000 acre tracts, raw and improved, \$17 to \$35 per acre. Best climate, soil. Do not pay more or four commissions to be brought home. Own most of what I offer. Write or call now. R. T. Cline & Sons, Brandon, Colo.

Special for Immediate Acceptance

10,000 acres dead land, living water, 300 acres irrigated, 12,000 acres state lease, all good grazing land, offered for a short time for a minimum price, easy terms; 11 miles from good town in south central Colorado. WOLF LAND COMPANY, Yuma, Colorado. Offices at Burlington and Stratton.

COLORADO

NORTHEASTERN COLORADO farms and ranches, all sizes in a fine level country near Haxtum, Colo., good water and healthy climate where crops have not failed for the last ten years. Henry Korgan, Hastings, Neb.

A BIG BARGAIN—Looking for land? Then get busy and write me about my 160-acre Colorado farm. All in cultivation, 80 acres in wheat, 25 acres alfalfa, produced 1 1/2 tons acre first cutting 1919, balance spring crop. Land level as floor. Irrigation ditch runs thru farm, can all be watered. Price if sold at once, \$50 acre. Other farms. Write, S. D. Burton, Byers, Colo.

IDAHO

SOUTHERN IDAHO irrigated farms, government project, cheap water, deep soil, no alkali. Martin & Son, Rupert, Idaho.

MISSISSIPPI

WRITE for free Mississippi map and land list. Land Market, Box 843, Meridian, Miss.

MISSOURI

OUR BIG new list for the asking. Amoret Realty Co., Amoret, Mo.

ALL SIZED FARMS, fruit farms and timber land. Noll, Mt. View, Missouri.

VALLEY FARMS—Fruit and berry farms. Write, Chambliss & Son, Anderson, Mo.

FARMS—If interested in N. Central Mo. farms write, Wm. Faraley, Brookfield, Mo.

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FOR BIG FARM LIST, just out, write, Baker Investment Co., Mountain Grove, Mo.

DO YOU WANT a home in South Mo.? Write Stephens & Ferry, Mountain Grove, Mo.

160 ACRES, 5 miles R. R. town, dark fertile loam, lays complete, well imp., \$75 per a. Don Kennedy, Schell City, Vernon Co., Mo.

POOR MAN'S Chance—\$5 down, \$5 monthly, buys 40 acres productive land, near town, some timber, healthy location. Price \$200. Other bargains. Box 425-O, Carthage, Mo.

LISTEN, dandy level 210 acres, \$60; well imp. 120, \$4,000. McGrath, Mtn. View, Mo.

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REAL BARGAINS in Mo. farms; write for illustrated booklet and list. R. L. Presson, Bolivar, Mo.

ATTENTION FARMERS—Improved farms in southwest Missouri, \$25 to \$50 per acre. Write, Frank M. Hamel, Marshfield, Mo.

FREE—All about the Ozark country, map and list of cheap lands. Durnell Land Company, Cabool, Mo.

IF YOU WANT a large or small prairie or timber farm, pure spring water, no crop failures, write J. E. Loy, Flemington, Mo.

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80 ACRES, house, barn, watered, 20 bottom, close to town; price \$2,500, \$600 down; 40 acres, \$600, \$300 down. Tom King, Weaubleau, Mo.

FOR SALE—232 acre north Missouri farm, black land, lays good, good buildings, good water, close to town, Charlton county. Price right. Box 72, Colony, Kansas.

304 ACRES 2 1/2 MI OF R. R. town; Vernon Co., Mo. Three sets of improvements, 35 acres creek bottom; no overflow. Terms to suit. \$48 per acre. W. H. Hunt, Schell City, Missouri.

400 ACRES valley farm; 51 yearlings, horses, hogs, implements. All \$14,000. Terms. South Mo. Good houses, new barn. Many other farms and ranches. W. E. Minton, St. Louis, Missouri.

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HITCHCOCK COUNTY, Nebraska, lands are the best buy in the United States today. Ask A. R. Smith, the Land Man, of Culbertson, Nebraska, about them.

SIX SECTION RANCH—Lincoln county, Nebraska, nine miles from Sutherland, for sale, good terms. I will be represented during stock show in Denver by E. D. Cooper at Kenmark hotel, January 19, 20 and 21. John W. Baughman, Owner, Liberal, Kan.

FOR SALE—200 a. Central Neb., 1/2 mi. to shipping station, school on place, 160 in cultivation, 20 pasture, 20 timber, good orchard. Small spring-fed stream, two wells. Six-room house, barn, granary, shop scales, etc., all good. An ideal feeding plant, \$100 per acre. M. E. Whisenand, Harvard, Nebraska.

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GOOD GRAIN, COTTON AND STOCK FARMS \$50 acre up. Eastern Oklahoma. New country, rapid development. Ask us. Malone & Ryan, Allen, Oklahoma.

120 ACRES, 2 1/2 miles from R. R. town, this county, 1,500. All dry black bottom, 105 a. cult., bal. timber. Fair imp. Paid \$650 nuts last year. \$42.50 per a. Terms. Southern Realty Co., McAlester, Okla.

IMPROVED FARMS \$50 TO \$100 Raw land less, 35 inch rainfall belt of Southeastern Oklahoma. Government book free. Dollins & Rorex, Henryetta, Oklahoma.

IMPROVED QUARTER—Easy terms, 1 1/2 mi. south Guymon, Okla., 4 room house, barn, cave, windmill; 140 cult.; 90 acres wheat, 1/2 goes. Price \$8,000, \$3,000 cash, balance easy terms. Griffith & Baughman, Liberal, Kansas.

160 ACRES 6 miles out, on state road, R. F. D., 1/2 mile of school, 120 acres in cult., 100 acres to wheat, 40 acres prairie pasture, rich dark soil, grows best of wheat and corn, lies well, all fenced, 3 room house, barn, granary and other buildings, pure soft water. Price \$8000, half cash. Free list and map of Oklahoma. De Ford & Cronkhite, Watonga, Oklahoma.

Get This

100% profit in 5 years. The cash value of Oklahoma's five leading crops is \$553,765,000 on 14,000,000 acres only. Land values average \$50 per acre, 1,000 farms. Priced from \$20 to \$150 per acre. Oklahoma, Texas and Arkansas. Crops and increase of land sure. Buy now.

Bonded Securities Company 702 Oil Exchange Building Oklahoma City, Oklahoma.

SOUTH DAKOTA

SOUTH DAKOTA backs its farmers with state loans at low interest. Lands near market, school and church can thus be bought with state investment. For state bulletins of production and values write Department of Immigration, Chas. McCaffree, Commissioner, Capitol Q-77, Pierre, S. D.

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LIFETIME OPPORTUNITY, get your money working. Panhandle bargains. Bumper crops, and recent oil possibilities are all great. Write today. J. N. Johnson Land Co., Dalhart, Texas.

IRRIGATED LANDS in the famous Rio Grande valley. We grow 3 crops a year. Now planting cabbages, onions and many other things. Coming citrus fruit country of the United States. No winter, no drought, no richer soil. We reserve 3-7 of oil rights on our tract. Write us now for full particulars. C. A. Christensen & Sons, Box 200, Donna, Texas.

VIRGINIA

Virginia Farms and Homes FREE CATALOG OF SPLENDID BARGAINS R. B. CHAFFIN & CO., Inc., Richmond, Va.

SALE OR EXCHANGE

WANT TO HEAR from party having farm for sale. Give particulars and lowest price. John J. Black, Copper St., Chippewa Falls, Wis.

FOR SALE AND EXCHANGE Northwest Missouri farms, the greatest corn belt in the United States. Also western ranches. Advise what you have. M. E. Noble & Co., St. Joseph, Mo.

FOR SALE OR TRADE—12 a. small poultry and dairy farm, 1/2 mile north of Cameron, Mo. All in grass except vegetable garden. Good house, barn, granary, chicken houses. Address owner. George W. Lohman, Osborn, Mo., R. 3.

REAL ESTATE WANTED

YOUR FARM—I can sell it. List now. Clyde Thuma, Lenora, Kansas.

MISCELLANEOUS

EASTERN COLORADO and western Kansas land. Buy direct. Prices from \$10 to \$30 on easy terms. Agents wanted. Write for my confidential proposition. F. L. Hammett, Towner, Colo.

PRODUCTIVE LANDS—Crop payment on easy terms. Along the Northern Pac. Ry. in Minnesota, North Dakota, Montana, Idaho, Washington, Oregon. Free literature. Say what states interest you. L. J. Bricker, 81 Northern Pacific Ry., St. Paul, Minn.

HANDLE MORE BUSINESS? Are you getting all the business you can handle? If not get big results at small cost by running a classified ad in Capper's Weekly. The Great News Weekly of the Great West with more than a million and a quarter readers. Sample copy free for the asking. Only 8c a word each week. Send in a trial ad now while you are thinking about it. Capper's Weekly, Topeka, Kan.

Farm & Ranch Loans

Kansas and Oklahoma Lowest Current Rate Quick Service. Liberal Option. Interest Annual or Semi-Annual. THE PIONEER MORTGAGE CO., TOPEKA, KANSAS.

Cattle Have Red Dysentery

A disease of cattle known as "red dysentery" is apparently becoming quite prevalent over Kansas. Numerous letters have come to the State Agricultural college during the last few weeks and from various parts of the state, reporting cases of the disease. In many instances cattle are dying. Almost invariably the owners stated that the disease commences with severe intestinal discharges of a watery nature which soon becomes bloody. In young animals this bloody diarrhea is in a large percentage of cases followed by death, tho mature animals are more resistant and many of them recover, according to the reports being made. The veterinary staff of the Kansas State Agricultural college has investigated several of the affected herds and post mortem examinations have been held. These were not sufficient to identify the disease positively; therefore some of the tissues of the dead animals were brought to the laboratory for examination, which disclosed the presence of a large number of microscopic organisms in the tissues of the intestines. The disease has finally been diagnosed as "red dysentery of cattle."

"As soon as the animal is discovered with the foregoing symptoms," says Dr. R. R. Dykstra, dean of the veterinary division of the college, "it should be promptly isolated from the remainder of the herd, or better still the healthy animals should be changed to pastures or lots that have not been occupied by cattle for several weeks previous. A complete change of feed is always a good plan."

"Since the organisms causing the disease are in the intestinal discharges of the animals, they should be disinfected as promptly as possible by covering with unslaked lime or a 3 per cent solution of hog dip. Be sure that the feed of healthy animals is not contaminated by the intestinal discharges of the diseased animals. "Prevention of the disease is far more practicable than its cure. The person caring for the sick animal should wear a pair of rubber overshoes and remove them before going to the quarters of well animals. By being very careful the disease can be isolated and kept from the other cattle. "Medicines to be administered in controlling the disease differ somewhat, depending upon the severity of the attack and the size and strength of the animal. Therefore it is best to consult a competent graduate veterinarian if you should have animals showing symptoms of this disease. In a general way it may be stated that intestinal disinfectants and diarrhea controlling remedies should be given. In some instances it is a good plan to inject substances of a comparatively non-irritating character into the rectum to control the bleeding, because when death results it is usually due to loss of blood."

Sudan Grass Has Won

Sudan grass has made an important place for itself in Kansas. This is true in all sections; probably the greatest interest is in the Western half of the state. It is grown very generally, especially for horse feed, and there will be a great increase in the acreage in the next three years. The price of seed is low enough so it can be planted without too great an expense. An important thing to remember in planting Sudan grass is to delay the seeding date later than ordinarily for the sorghums; perhaps two weeks. This crop came from a warm section and is even more backward than other varieties of sorghums.

MISCELLANEOUS

SELL YOUR PROPERTY quickly for cash, no matter where located, particulars free. Real Estate Salesman Co., 515 Brownell, Lincoln, Nebraska.

I HAVE cash buyers for salable farms. Will deal with owners only. Give description, location and cash price. James P. White, New Franklin, Mo.

Aged Widow Sell 275 Acres, \$4,500, with 3 Horses and 2 colts, 6 cows, complete farm implements, on improved road, 1/2 mile town, 100 acres tillage, balance pasture, wood, timber, fruit. 8-room house, 100 ft. barn, etc. \$4,500 gets all, easy terms. Details page 22 Strout's Catalog Farm Bargains 23 States; copy free. E. A. STROUT FARM AGENCY, 831E New York Life Bldg., Kansas City, Mo.

SHORTHORN DISPERSAL SALE

Comprising The Entire Herd of W. O. Rule & Son.

Ottawa, Kansas, Saturday, January 24

At the W. O. Rule Farm, one mile east of Ottawa. This farm having been sold, the auction of farm equipment will be held in forenoon, and at one o'clock will be started the sale of registered Shorthorns, consisting of

35 Head—30 Cows and Heifers and 5 Bulls

One-third of these cattle have straight Scotch pedigrees. The offering includes the Scotch bull, Bermuda Searchlight, 8 Scotch cows and heifers and 3 Scotch bull calves. The cows in this sale are bred to such good bulls as Second Fair Acres Sultan, Bermuda Searchlight, Sultan Monarch and a son of Newton Sort. A number of Scotch topped cows are extra heavy milkers. Write for the catalog.

W. O. Rule & Son, Ottawa, Kan.

Auctioneers—Homer T. Rule, H. L. Burgess.

STEERS FOR SALE

May 15 Delivery, F. O. B. Pueblo, Colo.

2,000 2-year-old steers at \$65. 1,000 3-year-old steers at \$75. These cattle are the best 3,000 steers we know of in one bunch. They will run ninety per cent white faces and are rugged, big-boned, loose-hided mountain cattle. Write or wire.

THE ROAN CREEK CATTLE COMPANY

823 17th Street, P. O. Box 266, Denver, Colorado

SHORTHORN CATTLE.

Shorthorn Dispersion Private Sale

My entire herd of registered Shorthorns will be closed out at private sale. Write for descriptive private sale catalog just out.

TWO HERD BULLS—Brilliant Type, bred by Cumberland Type, and The Cardinal by Lancaster Lad.

17 YOUNG COWS—Bred to my herd bulls or with calves at foot. **13 BULL CALVES**, 8 to 10 months old. I will be pleased to show you these cattle. Parties will be met at train when notified.

WARREN WATTS, Clay Center, Kan.

SHORTHORN CATTLE.

Amcoats Shorthorns

Scotch and Scotch Tops. Some choice females to sell. Bulls ready for service: Six, two pure Scotch, four Scotch topped.

S. B. Amcoats, Clay Center, Kan.
Visitors met at Rock Island or Union Pacific Depots.

Choice Milking Shorthorn Heifers for Sale

Bred to very high class bull. They show their breeding as the product of a herd bred for many years for milk and beef. A splendid opportunity to start with purebreds adapted to and profitable under average farm conditions. Few extra good bulls sired by Villager Magnet 468996. Considering quality prices are reasonable. Come and see them. **Fred Abildgaard, E. 6, Winfield, Kansas.** Farm located 9 miles east on state road.

SHORTHORN HERD FOR SALE

I must reduce my herd and will sell worth the money: 25 cows and heifers, 30 calves, 6 one and two year old bulls, 1 Scotch herd bull. Special price on entire herd. **FRANK H. YEAGER, BAZAAR, KAN.**

SCOTCH and SCOTCH TOPS

Five yearling bulls, three pure Scotch, two Scotch topped.

Six spring bull calves, pure Scotch and Scotch topped.

Reds, whites, roans. Write for full descriptions and prices.

E. P. FLANAGAN, CHAPMAN, KANSAS
Dickinson County

Bulls Bulls Bulls

8 two-year-old bulls, by Secret's Sultan and Master Butterfly 5th. 12 yearling bulls. Reds and roans.

Can ship over Mo. P., U. P., Rock Island.

W. F. BLEAM & SONS, Bloomington, Kan.

PEARL SHORTHORNS

Bulls, Scotch and Scotch topped, six to 18 months, for sale. Reds and roans. Can ship over Rock Island, Santa Fe, Missouri Pacific and Union Pacific.

C. W. TAYLOR, ABILENE, KANSAS
DICKINSON COUNTY.

New Buttergask Shorthorns

For sale—Bulls, Scotch and Scotch topped, ready for service. Also bred cows.

MEALL BROS., CAWKER CITY, KANSAS
Mitchell County

GROSNIK FARM SHORTHORNS
Good husky bull at a low price. Herd headed by Color Bearer, grandson of Avondale. **O. E. R. Schulz, Ellsworth, Kansas.**

Park Place Shorthorns

SHORTHORN BULLS, herd header prospects and rugged young fellows for the farmer. SHORTHORN FEMALES, foundation stock for the breeder and others suited to the farmer's needs. If you want cows, heifers or bulls, one to a carload, we can please you. Every animal guaranteed a breeder. Health certificates furnished. Write me when you will call.



Park E. Salter, Wichita, Kansas
Fourth National Bank Bldg.

SHORTHORN Bulls for Sale

4—Scotch Bulls—4

Some herd bull material here. A few good Scotch topped bulls. All good individuals. Bred right and priced right.

C. H. White, Burlington, Kansas.

SUNFLOWER SHORTHORNS

Herd headed by Golden Laddie. Some extra good young bulls and a few females for sale. No Sunday Business.

J. A. PRINGLE, ESKRIDGE, KAN.

R. R. Sta., Harveyville, 25 mi. S. W. Topeka.

Saline Valley Shorthorns For Sale

Registered bulls, all reds, 6 to 20 months old. For descriptions and prices write O. O. Runyan, Ogallah, Kan.

Corn Movement Held Back

Cottonseed and Linseed Feeds are Easier

BY SANDERS SOSLAND

BUT the corn is not coming! One of the largest crops of merchantable corn ever produced in the United States has been gathered by farmers, but the grain is scarcely more than dribbling into markets after more than three months of waiting. Were a Rip Van Winkle to awake now, he probably would manifest concern over the extreme crop shortage. Because of the disappointing movement of corn to market thus far, a strong tone, rather unusual for this period of the year, is evident in the trade, and doubtless will continue until the offerings of the leading coarse grain on markets reflect the enormity of the crop.

The light movement is attributed by some members of the trade to the unwillingness of producers to part with their yields at current price levels. Of course, such a feeling may prevail in many districts, but it is very doubtful whether this attitude on the part of growers can be so general as to check the loading of grain for market to the extent already witnessed at terminal points. Car shortage is the outstanding factor in the light movement. Country elevators in Illinois, Iowa, Nebraska and other large producing states are reported loaded with corn and operators forced to turn down additional offerings of farmers. Only a very small number of cars are available in the corn belt, and, the numerous promises and efforts have been made by railroad officials to relieve the situation, little improvement has been witnessed. It is not unusual to hear reports of cars loaded with corn four to six weeks ago still in transit, being delayed by congestion of transportation or lack of motive power.

Many Shipments Delayed

The latter half of January normally witnesses a heavy movement of corn to market, with the peak usually reached in February or possibly in March. Continued delay in making shipments is strengthening the belief in some quarters that a heavy movement will not materialize this year, but this is "manufactured bullish talk." The country may expect a movement, and probably soon, for carriers generally are diverting their cars to the corn area. The more delay in starting the movement on the large scale, the heavier the receipts will be when shipments are finally under way.

Bullish sentiment ruled in the corn market the past week, and further gains in prices occurred, both the options and the carlot prices rising. White corn sold around a top of \$1.56 a bushel, with the range of prices

from \$1.40 to \$1.56, or 4 to 10 cents higher than a week ago. A moderate demand for carlots prevails from Kansas and other Southwestern feeders, but meat animal producers largely are holding off in anticipation of a sharp decline with a free movement. In the speculative market, gains of about 6 cents a bushel occurred on the January option, which closed around \$1.44, and gains of about 3 cents on the more distant deliveries. Inquiry for corn is coming from the South, but no sales of importance have thus far been in that territory.

Wheat Premium is 88 Cents

Stocks of corn are being accumulated in elevators in Kansas City, a gain of about 18,000 bushels having been made the past week. But the total holdings still are light, around 112,750 bushels, compared with 225,000 bushels a year ago. In connection with the present stocks of corn in Kansas City, as well as at other markets, all of which report light holdings, it is significant to note that the extensive elevator operators usually accumulate corn on a large scale when the market is following a declining course. The present accumulation of corn is not particularly for merchandising, but to be applied on outstanding contracts in either the speculative or carlot market. When the corn movement becomes heavy, elevators force prices down and usually buy the grain at the low level. And, after they have accumulated large amounts and begin to merchandise the grain, prices normally follow an upward tendency, the irregular, of course. This is the principal reason for the expectation in the trade for a sharply declining market before the close of January. But feeders should not delay their purchases too long, as values are expected to turn up after breaking.

Wheat continues to advance, and, as forecasted in these columns in the preceding week, sales are being made well above the \$3-mark for the better grades. A top of \$3.08 was reached early in the week on fancy dark hard wheat, 88 cents over the government guaranteed basis. Net gains in prices during the week amounted to as much as 17 cents a bushel on the cheaper grades, and about 7 to 10 cents on the better quality offerings. At one time the market was more than 20 cents a bushel higher, but nervousness on the part of millers caused a setback. With prices on such an extraordinary basis as now prevail, occasional reactions in prices may be expected in the trade, but it is significant to note that the

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of the Capper Farm Press

Founded on four great papers, each excelling in prestige with the farmers and stockmen of its territory, the four covering, respectively, the states of Kansas, Nebraska, Missouri and Oklahoma and adjacent sections of adjoining states.

FOR BUYERS: When livestock of any kind is wanted, look thru our advertisements and write those breeders who seem likely to have what you want, always mentioning this paper. Write this department direct at any time, describing the livestock desired and we will be glad to help you locate it.

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It is a good idea to keep in touch with your territory manager as much as possible. His judgment, experience and constant travel and observation always will prove valuable to you. Inquiries and instructions to headquarters can be addressed:

Livestock Service of the Capper Farm Press, Topeka, Kan.

T. W. MORSE, DIRECTOR AND LIVESTOCK EDITOR

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H. P. Steele, Iowa and N. E. Neb., 203 Farnam Bldg., Omaha, Neb.

advances are usually greater than the extent of the setbacks. The undertone of the market continues strong, and inquiry from mills is broad. Red winter wheat advanced about 10 to 14 cents a bushel, with sales at a top of \$2.73, or 56 cents above the guaranteed minimum price. It is probable that a top of \$3 will yet be witnessed on red winter wheat, the offerings of this variety diminishing more sharply than hard winter grades. Cans are comparatively free in the wheat belt supplying Kansas City, and some market interests express the belief that moderate offerings may continue for some weeks, if not for some months. Wheat in Minneapolis reached a top of \$3.50 a bushel, a record level for the crop.

Oats Reach 90 Cents

Feeding grades of oats sold up to 90 cents a bushel in Kansas City, the highest figure paid thus far on the crop. Arrivals of the grain from day to day are extremely light, and offerings are not sufficient to supply the demand, stocks here having been reduced more than 55,000 bushels last week. Carlots advanced 2 to 4 cents a bushel. Red seed oats also advanced, with sales of the better grades around 90 cents. Additional stocks of oats were worked for export, and inquiry from foreign buyers was active. The speculative market failed to share in the advance, owing to active profit-taking on the part of operators who have followed the rise. This action is brought about to a great extent by prospects for a decline in corn, which would sympathetically influence the minor coarse grain. A loss may occur in oats, but the market doubtless will advance further in the season.

Cottonseed and linseed cake and meal are easier, and prospects are favorable to a lower level of prices. Cottonseed meal of 43 per cent protein content sold in Kansas City last week around \$79.50, but there was a marked absence of demand at this level. Feeders and rangers are taking little of the high concentrate, and except for heavy buying of the off-grade meal by fertilizer manufacturers, the market would ease off. Linseed feed is holding around \$82 a ton, in Minneapolis for prompt shipment, but, indicative of the bearish position of the trade, millers are willing to sell for deferred shipment around \$76 to \$78 a ton.

Bran is \$41 a Ton

Bran and shorts have surprised the trade. Expected declines have not materialized; in fact, upturns have occurred. Bran is quoted around \$41 a ton, sacked, basis Kansas City, for prompt or February shipment, while \$47 to \$48 is asked for gray shorts. Colder weather in surrounding territory and the bullish display of strength in corn have both stimulated demand for the offal feed and caused millers to hold back offerings. But the market does not appear strong, and recessions in corn would bring about a downturn, it is generally felt in the trade.

Gains of about \$2 to \$3 a ton in prairie was an unexpected turn in the hay market. With a considerable falling off in the movement of the wild hay, buyers have been forced to compete for offerings. In addition to buying by stock yards, city feed dealers and feeders in the Middle and Central states, a strong demand has developed for prairie from the Northwest, which territory suffered from drouth earlier in the year. Alfalfa maintains a firm tone, with sales at an extreme range of \$24.50 to \$38, while tame hay is selling around \$23 to \$29 a ton in Kansas City. Strength is expected to continue in the forage trade.

Another Record Price Bull

High Point Cavalier, a 2-year-old Guernsey bull was recently sold by C. D. Cleveland, Eatontown, N. J., to W. H. Grativick of Buffalo, N. Y. for the reported price of \$16,400. This price has been exceeded among Guernseys but once at private sale and once at public sale. Mr. Cleveland reserved the right, at the time of sale, to retain him for service for six months following the date of sale.

Short Course Enrolls 300

The short courses in agricultural and engineering subjects which opened at the Agricultural college the first

Five Prize Winning Scotch Shorthorns

We sell them in The Kansas National Purple Ribbon Shorthorn Sale at
Wichita, Kan., Thursday, January 29, 1920

Our herd is headed by Pleasant Acres Sultan 538900. He by Fair Acres Sultan. Dam, Lavender Beauty 7th. She sold for \$2600 at H. C. Lookabaugh's record breaking sale.

Our consignment includes the following:
Lavender Princess 7th, a Cruickshank Lavender and a Prize Winner at Four State Fairs in 1919. Sired by Blythe Baron, her heifer calf by Parkdale Baron, a blood sister to Bellows Bros. \$10,000 King Baron. Lavender Princess 7th is bred to Pleasant Acres Sultan 538900.

Buttercup 3rd, a Cruickshank Buttercup sired by the Bellows Bros. Supreme Goods by Star Goods, a full brother to The International Grand Champion Diamond Goods. She sells bred to Pleasant Acres Sultan 538900.

Crimson's Lad, a Cruickshank Victoria sired by the Grand Champion Watonga Searchlight. Dam, by a son of The International Grand Champion Avondale. This fellow was a prize winner at Four State Fairs in 1919. He was a third prize Jr. Yearling in the \$10,000 Shorthorn Show at Dallas, Tex.

Lavender Hampton, a white Cruickshank, a prize winner at Four State Fairs in 1919. In the three top sires, he combines the blood of Whitehall Sultan, Imp. Merry Hampton and Imp. Choice Goods. He sells a proven sire, with the concentration of these three most important strains of the breed, makes him a sire equaled by few.

Roan Geraldine, eight of her dams were bred by A. Cruickshank, she was a prize winner, as a heifer calf, in our show herd in 1919. Sired by Rosewood Sultan 2nd, he by Maxwalton Sultan, a full brother to Avondale, dam by Imp. Collynie.

If you are in the market for high-class Scotch cattle do not fail to see these cattle at the Kansas National.

Our Consignment to the Shorthorn Breeders' Sale on the same day consists of the following:

Roan Valentine and Silverine Countess are blood sisters. They are by Silvermine 319087. He is sired by H. M. Hill's Rosewood 187224. Mr. S. C. Hanna bred Rosewood. Their sires all down the line carry the breeding of prominent Shorthorn breeders. Roan Valentine has a very promising bull calf at foot by Lavender Hampton and Silverine Countess is due to calve before spring to the service of the same bull. Both these cows are young, either carrying their second calf, or second calf at foot. Both are good milkers.

King Buttercup, red, by King Avondale, by Lord Avondale, by Avondale, by Whitehall Sultan. The get of Lord Avondale averaged a little over \$1500 in M. J. C. Andrew's sale. King Buttercup's dam is by Supreme Goods by Good Choice by Imp. Choice Goods. Supreme Goods is bred by Bellows Bros. King Buttercup is a pure Scotch and will do well in the herd he is placed. He has a real high-class pedigree.

Royal Airdrie is by Imp. Doune Royalist, and out of Silvermine Airdrie. He has been in our show herd this fall. His dam is an exceptional good milker.

I will be there with the cattle and pleased to show them to visitors at any time during the show and sales.

H. B. GAEDDERT, BUHLER, KANSAS

RED POLLED CATTLE.

FORT LARNED RANCH

200 HEAD OF REGISTERED RED POLL CATTLE

A number of choice one and two-year-old bulls and heifers from one to three years old.
E. E. FRIZELL & SONS, FRIZELL, KAN.

Milk-Butter-Beef RED POLLED

We can now furnish a few young bulls from large, thick-fleshed cows, yielding 9,000 to 13,000 pounds of milk per year. One of our bulls will increase the production of your herd.
20th Century Stock Farm, Quinter, Kansas

Red Polled Cattle

U. S. accredited herd. Bulls from 8 to 15 months old; big, lusty fellows that will make top sires. Best of quality, type and breeding.
W. F. SCHWAB, FULTON, MISSOURI

RED POLLS. Choice young bulls and heifers. Write for prices and descriptions.
Chas. Morrison & Son, Phillipsburg, Kansas.

FOSTER'S RED POLLED CATTLE
Choice young bulls, priced reasonable.
C. E. Foster, R. 4, Eldorado, Kansas

JERSEY CATTLE.

TESSORO PLACE JERSEYS

R. of M. Interest-Finance-Owl blood, noted for PRODUCTION, TYPE and CONSTITUTION. Our tested cows average 500 lbs. butter, records made under 5 years old. We offer bulls 2 mos. to yearlings. Cows, bred heifers and heifer calves. Herd in Accredited List, which means 100 per cent clean of T. B. Correspondence and inspection invited.
R. A. Gilliland, Mayetta, Kan.

Hillcroft Farms Jerseys headed by Queen's Fairy Boy, pronounced the best bred Jersey bull in Missouri, a Register of Meritson of Raleigh's Fairy Boy, the greatest bull ever imported, 64 tested daughters, 88 tested granddaughters and 34 producing sons. Choice bull calves for sale. Reference Bradstreet.
M. L. GOLLADAY, PROPR., HOLDEN, MO.

REGISTERED JERSEYS FOR SALE
"Hood Farm Breeding." My herd bull Royal Missel's Torino, also three choice bulls by him, ready for service, and few females. Have rented my farm and want to sell.
S. S. SMITH, CLAY CENTER, KANSAS

REGISTERED JERSEY BULL CALVES,
sired by Oakland's Sultan 2nd, \$50.
PERCY LILL, MT. HOPE, KANSAS.

Monday in the year enrolled 300 students. More than a third took farm subjects. There were 120 men enrolled in agriculture. Engineering students numbered 180.

Most of these new students are Kansas men who have come to get intensive training in many lines of agricultural and engineering work in a period of eight weeks.

The Biggest Shorthorn Event of the Year



The Third National Shorthorn Congress Show and Sale will occur at Chicago, Ill., in the International Livestock Building, Stock Yards, Feb. 17, 18, 19. \$5,000 will be offered in prizes and all of the 250 show cattle will be sold in the sale. It is the great opportunity to obtain high class herd sires and foundation females.

Extensive and interesting programs have been arranged with prominent speakers. Don't miss it. Come and bring your neighbors.

Catalogs on application. Address Secretary F. W. Harding.

American Shorthorn Breeders' Association

13 Dexter Park Ave., Chicago, Ill.

1886—Tomson Shorthorns—1920

Headquarters for Herd Bulls

We offer a large number of extra good bulls that are ready for service. They are some of the champion Village Marshal by Cumberland Marshal; Beaver Creek Sultan, a grandson of Whitehall Sultan; Gregg's Villager, one of the great sons of Villager; Imp. Newton Champion, Imp. Lawton Tommy and Diamond Baron.

They are of the most fashionable strains out of imported and home bred dams of the Augusts, Marigold, Jilt, Victoria, Roan Lady, Lavender, Orange Blossom, Duchess of Gloster, Sunnyblink and other very select tribes. They are nearly all roans and of extra good individuality. Come and see them.

TOMSON BROS.

Carbondale, Kansas or Dover, Kansas
R. R. Station Wakarusa on Main line of Santa Fe R. R. Station Willard on Main line of Rock Island

HUNT BROS.' SHORTHORNS

We have some good young bulls for sale, from 6 to 20 months old. Also some cows, heifers and calves. Write your wants.
HUNT BROS., BLUE RAPIDS, KANSAS

Shorthorn Cattle

For Sale—Five young Scotch bulls and ten head of females, bred or calves at foot.
H. H. HOLMES, R. F. D. 28, Topeka, Kan.

PROSPECT PARK SHORTHORNS
1 red Shorthorn bull 29 months old; 1 white, 2 roan and 4 red Shorthorn bulls 10 to 16 months old.
J. H. TAYLOR & SONS, CHAPMAN, KAN.

PLEASANT VIEW STOCK FARM SHORTHORNS
A pure Scotch bull, 12 mo. old, by Orange Cumberland. Dark red. Also a few Scotch topped cows and heifers. M. R. Peterson, Troy, Kan., Doniphan Co.

CEDAR HEIGHTS SHORTHORNS

Five bulls for sale, pure Scotch, splendid individuals. Ages 12 to 20 months. Farm joins Topeka on the west. HARRY T. FORBES, R. 8, Topeka, Kan.

One Polled Shorthorn Bull

Roan, choice individual, 14 months old; deep in Whitehall Sultan blood. Price reasonable.
C. E. SHOEMAKER, NARKA, KANSAS

POLLED SHORTHORNS.

10 Polled SHORTHORN Bulls

Big husky reds and roans 12 to 20 mos. old. Priced to sell. Can spare a few females.
C. M. HOWARD, HAMMOND, KANSAS.

The Quality Guaranty Holstein Sale

consisting of 60 purebred Holsteins of unusual merit will be held
At the Forum, Wichita, Kan., Jan. 30th

QUALITY

The Kansas National Livestock Show will be held during the week of January 26 to 31. There will be on exhibition 250 of the greatest individuals of the Holstein breed. Sixty of the show animals will be selected from the show to sell, thereby assuring a sale of the very highest type of cattle.

Among the attractions are—

A 30-lb. cow; a 24-lb. cow; a 23-lb. cow; a 22-lb. cow; 2 20-lb. cows; an 18-lb. 3-year-old; an 18-lb. 4-year-old; 2 18-lb. cows; a 16-lb. cow; 6 14-lb. 2-year-olds; a 13-lb. yearling; a junior 3-year-old that milked 70-lbs. per day; 5 cows and heifers bred to King Korndyke Saddle Vale the 36-pound sire; 4 cows and heifers bred to King Mutual Katy a 42-lb. bull; cows and heifers bred to a son of The King Of The Pontiacs; a 24-lb. cow and a 22-lb. 4-year-old, records made in Kansas; 6 bulls from high record dams, every one a show animal, 2 are sons of Canary Butter Boy King, one from 25-lb. granddaughter of De Kol 2nd's Butter Boy 3rd and one from 28-lb. daughter of his sire (carries 75 per cent of the blood of the old bull); a bull from the state record cow, dam has 30.54-lbs. butter and 568.9 lbs. milk; a bull from a 26½-lb. 3-year-old; a bull from a son of Duke Johanna Beets from a 21½-lb. show cow.

When you have read carefully the above lists you will note that a large number of the best herds in the state are represented in this sale. When we tell you these consignors are selecting cattle among the best they own to consign to this sale you will be convinced that it is a quality sale in reality as well as name. It will offer more cows with A. R. O. records than any previous sale in the state; more cows and heifers bred to 30-lb. bulls than any sale to date in Kansas. No greater offering of outstanding individuals ever offered in any sale, no matter where it has been held.

The Guarantee: Every animal sold with the privilege of tuberculin retest in 60 days. We invite you to attend the show and sale. The Holstein show on January 29, Prof. Kildee of the Iowa State Agricultural College judging. The sale will be held the following day, January 30. Write today for the catalog, mentioning this paper, to

W. H. MOTT, SALES MANAGER, HERINGTON, KANSAS.

Consignors to the sale—

C. L. Goodin, Derby, Kan.;
Victor F. Stuewe, Alma, Kan.;
R. E. Stuewe, Alma, Kan.;
W. F. Phelps, Aurora, Mo.;
T. E. McClure, Aurora, Mo.;
Robinson & Shultz, Independence, Kan.;
G. Regier, Whitewater, Kan.;
Geo. B. Appleman, Mulvane, Kan.;
B. R. Gosney, Mulvane, Kan.;
Harry W. Mollhagen, Bushton, Kan.;
Beyler & Stark, Harper, Kan.;
Z. C. Thompson, Jr., Harper, Kan.;
Geo. E. Starks, Harper, Kan.;
Axtell & Hershey, Newton, Kan.;
Mott Bros. & Branch, Herington, Kan.;
A. N. Jones, Manhattan, Kan.;
Fred R. Waples, Wichita, Kan.;
Vernon Walling, Wichita, Kan.;
F. H. Bock, Wichita, Kan.;
Stubbs Farm Co., Mulvane, Kan.;
W. R. Crow, Hutchinson, Kan.;
Coleman & Sons, Denison, Kan.;
Wilkie & Swinehart, Derby, Kan.;
Sam Carpenter, Jr., Oswego, Kan.

Why Not Plant More Alfalfa?

(Continued from Page 3.)

and more than justify the trouble and expense.

The upland soil in the Eastern half of Kansas may be roughly grouped into two classes. First, soils carried in and deposited by wind, water and ice. These soils are found chiefly in the Northeastern and the Central parts of the state. Second, those formed by the weathering down of shale, sandstone and limestone rock. The upland of Southeastern Kansas is made up entirely of soils of this class and these soils are found extensively in Central and to some extent in Northeastern Kansas. They are shallow and upon the whole require greater care in establishing alfalfa upon them than the other soils. The wind, water and ice formed soils all grow alfalfa well where the land is properly prepared and fertilized. They seldom require drainage or lime and not often inoculation.

Soils formed from the breaking down of rock in places usually require special care in preparing them for alfalfa. Upon the limestone soils, no difficulty usually is encountered in starting it wherever the soil is fertile and deep enough to grow the crop and where a proper seedbed has been prepared and the soil inoculated with nitrogen gathering bacteria. Upon the sandstone soils more trouble is experienced. Some are not deep enough for alfalfa. Many must be limed before alfalfa can be grown and nearly all require manuring or careful fertilizing before the crop can be successfully started.

Shale Soils

Upon the shale soils, however, the greatest difficulty in starting alfalfa is experienced. These soils are drained poorly, are sour or acid naturally and are often deficient in organic matter and easily available plant food. If a successful stand of alfalfa is to be obtained on this type of soil, it must be thoroly drained, sufficient lime added to correct the soil acidity and barnyard manure or commercial fertilizer applied. Considering the trouble and expense involved in starting alfalfa on the shale soils of Southeastern Kansas, it is doubtful whether it is practicable to attempt to seed a large acreage of land to this crop, especially in any one year. Every farmer, however, should strive to secure a few acres, which undoubtedly will prove to be a valuable asset. Land that is slightly rolling, the soil of which is inclined to be loamy, should be selected.

Too much care cannot be taken in the preparation of the seedbed for alfalfa on upland soil. Many of these soils are filled with weed seed and are in a low state of fertility. Under these conditions, the best of preparation is needed. It is not safe to seed the crop in the spring. It will be choked out by weeds. On fairly fertile land, a seedbed can be prepared after harvesting a crop of small grain, such as wheat or oats. The grain can be harvested and removed from the field promptly and a seedbed prepared by shallow plowing. It should then be thoroly worked to kill weeds and volunteer grain, and if not thoroly packed by beating rains, it may be rolled before seeding. The seed should be sown by the middle of August, if possible, and not often later than the first week of September. The seed should be sown after a good rain. If the rain does not come in time for alfalfa the ground can be sown to wheat and the alfalfa seeding delayed for a year.

Early Plowing

If the soil is in a low state of fertility it is better not to try to grow a crop the year that alfalfa is sown. The seedbed should be prepared by plowing the ground in May or early June after the first growth of weeds starts. It may be worked frequently enough after plowing to keep weeds well under control and to prepare a good firm seedbed by seeding time in August. Plant food will be liberated in land handled in this way and alfalfa started where it is impossible to start it in any other way.

It usually is useless to attempt to start alfalfa on thin upland soil without first manuring or fertilizing the land. The best plan is to apply manure to the small grain crop that precedes alfalfa. If the ground is worked for a season before seeding, the manure

The Neale Registered Holstein Dispersion

In which the entire herd bred, developed and selected with the utmost care, and consisting of 150 head of females, will be sold without reserve, will be held at

Manhattan, Kansas, February 5 and 6, 1920

Included in the lot are

60 wonderful cows in milk; 20 2-year-olds, some of these are fresh and many are due soon to the service of one of our great bulls; 20 splendid yearling heifers, from good bulls and heavy producing cows, ready to breed; 50 excellent calves from A. R. O. cows and bulls of the most popular lines of breeding;

40 A. R. O. cows with 7-day records as high as 35.28 pounds of butter, and with milk records over 20,000 pounds in a year, some of these hold state records;

6 daughters of 30-pound cows; 3 daughters of 35-pound cows; 2 full sisters of 32-pound

cows; 2 daughters of 20,000-pound cows; 2 daughters of the state record junior 3-year-old; 35 granddaughters of King Segis; a dozen granddaughters of Aaggie Cornucopia Johanna Lad; 12 granddaughters of Aaggie 3rd's Wayne's Paul De Kol; granddaughters of King of Pontiacs.

Daughters of a bull whose dam's record is 27,688 pounds milk and 1,157 pounds of butter in a year; a long list of daughters of 30-pound bulls;

Sons and daughters of our great senior sire Lakeside King Segis Alban De Kol; a large number of females in calf to him.

This will be, in fact, the greatest offering of Holstein cattle ever made in the Middle West. Do not fail to get the illustrated circular describing the herd more fully and also get the catalog of the sale. Write, today, mentioning this paper, to

A. S. NEALE, OWNER, MANHATTAN, KANSAS

NEED A BULL?

(Holstein of Course)

We have a splendid lot of young bulls that we want to move quickly and are pricing accordingly. They run in age from a few weeks to over 1 year; are splendid individuals, most of them light in color. Their dams have A. R. O. records of from 16 pounds, as 2-year-olds, up to over 30 pounds as mature cows. Some of them are sired by the great CANARY PAUL FOBES HOMESTEAD—the greatest bull in Kansas. Write us just what you need in the bull line. We have it.

STUBBS FARM CO., Mark Abildgaard, Mgr.
Mulvane, Kansas

Nemaha Valley Stock Farm

Registered Holstein-Friesians. One of the first government accredited herds in Kansas and one of the largest in the list. Young bulls for sale by Pontiac Beauty de Kol Segis 139642. His dam, as a 3 year old, made nearly 30 lbs. in 7 days and 114.63 lbs. butter and 257.9 lbs. milk in one month. His grand-sires are King Segis and King of the Pontiacs. Address H. D. Burger, Proprietor, Seneca, Kansas

30 GRADE HOLSTEIN COWS FOR SALE

Mostly young and right in every way; some fresh; 15 will freshen in Jan. and Feb. One bull 2 years old, registered, Mercedes and King Segis breeding. Reason for selling—have sold my farm. Have raised and milked Holsteins for 34 years. If you want cows of quality better come to the farm as they are going to be sold at about your own price. F. D. WIGGINS, LAWRENCE, KAN. Farm ½ mile north, 1 mile west of Country Club.

Persistence In Production

Is one of the most desirable qualities a dairy animal can have. Vanderkamp Segis Pontiac is our herd sire. His dam is one of less than 20 cows in the world to produce over 30 pounds of butter in 4 consecutive lactation periods. Twenty-three of his nearest dams average over 27 pounds of butter in 7 days. We have several young bulls to offer sired by this remarkable bull. Prices \$100 and up.

COLLINS FARM CO., SABBETHA, KANSAS.

HOLSTEINS

22 grade Holstein cows, all young, some fresh, balance in 30 to 60 days. Will sell the bunch at \$130 each. 30 open heifers, well bred and well marked at \$75 each. JOHN V. FRITZEL, Lawrence, Kansas.

Grade Holstein Heifer Calves

Sired by purebred sires and out of good producing dams. These calves are nicely marked and will make good cows. \$25 each, crated. Can sell one or a carload. Write me your wants.

A. L. Rasche, Lake Mills, Wis.
Also registered bull calves, \$50 and up.

Registered Holstein Bull Calves

one to six months old.

G. E. BERRY, GARNETT, KANSAS

For Holstein and Guernsey Calves

or older stock write Burr Oak Farm, Whitewater Wis.

HOLSTEIN AND GUERNSEY CALVES
31-32ds pure, 7 weeks old, beautifully marked, \$25 each, crated for shipment anywhere. Bonds accepted.
Edgewood Farms, Whitewater, Wisconsin

Honest Butcher

A butcher one day put 'up a sign reading: "Purveyor to His Majesty." Wishing to improve upon this, he added "God Save the King."

should be applied in the spring after the ground is plowed. It should always be applied long enough in advance of seeding to permit the weed seed to germinate after it has been worked into the soil and to kill the young weeds before the alfalfa is sown. When barnyard manure cannot be obtained the ground should be more thoroly prepared and a commercial fertilizer supplying phosphorus applied at the time the alfalfa is sown. Soils which are poor and deficient in organic matter and which cannot be manured should be seeded to Sweet clover before alfalfa. The Sweet clover should be grown for two seasons and plowed under in the fall of the second year. Alfalfa can then be sown the next fall after clean cultivation thru the summer.

After alfalfa is established it will need a steady supply of plant food. We think of alfalfa being a soil improving crop. It is, because it secures nitrogen from the air, prevents washing and adds organic matter to the soil. At the same time, it must have for growth large quantities of mineral plant food which it takes from the soil. A 4-ton crop of alfalfa will use three times as much phosphorus, five times as much potassium and 35 times as much calcium as a 20-bushel crop of wheat. This large supply of plant food must come from the soil. Most of the upland soil of eastern Kansas does not contain sufficient phosphorus to meet this demand. Without it the crop does not grow so thriftily as it should. When barnyard manure is available it can be used but better results will be obtained if 20 to 30 pounds of acid phosphate is applied with every ton of manure. If manure is not available, acid phosphate can be applied alone. Two hundred pounds an acre annually usually will pay in Eastern Kansas.

Trouble From Weeds

Upland alfalfa needs care not only in supplying the plant food required for growth, but also in harvesting and utilizing the crop. Weeds are more troublesome than on bottom fields. Weeds indicate a lack of vigor on the part of the alfalfa. If the crop does not get the plant food it needs, weeds will replace it. Also too frequent cutting or improper pasturing will weaken a stand and enable weeds to start. Alfalfa should be allowed on upland fields to reach full bloom before cutting in order that a reserve supply of food will be stored in the root for a later growth of the crop. Don't cut upland alfalfa too frequently. When the season is dry and growth stops, it should not be heavily pastured. Good stands are often destroyed in this way. It also is advisable to leave a good growth of alfalfa on upland fields in the fall. It will catch snow and furnish protection for the plants. Winter-killing is more common on upland than on bottom fields.

After alfalfa has been grown a few years it begins to decline in yield. New fields should be seeded and the old fields plowed up and used for other crops. In this way, alfalfa should be used in rotation with other crops on the farm. A crop for the silo, like sorghum, usually should be planted the first season after alfalfa because alfalfa leaves the ground dry and there is often not sufficient moisture to mature a crop of grain.

To Eliminate the Scrubs

The United States Department of Agriculture has started something big and worth while in its nation-wide campaign to promote the general use of purebred sires and to eliminate the scrub sire. The measure of success that attends these efforts in this direction will be indicated pretty accurately the measure of improvement that may be expected in the livestock herds of the country. All forces interested should, and doubtless will, unite in this great campaign for betterment. The purchase and breeding of inferior stock is a waste of time for farmers and stockmen as well as a risk of capital invested; and the supremacy of purebred animals as to dependable profits is firmly established. So why hesitate to make the change?

In its campaign the department will keep records of the agricultural counties according to the predominating breeds of livestock. Experience has demonstrated that it is desirable for a community to concentrate on the pro-

Holsteins Are Making the West a Dairy Country And Cashing Farm Feeds for the Highest Dollar

Sunflower Herd Holsteins

The better class of females headed by a great sire. Stock for sale at all times. Write your wants and I will send particulars. F. J. Searle, Oskatoosa, Kan.

Harry Mollhagen, Bushton, Kan.

In our herd are 13 cows with an average of 22.77 pounds butter in seven days. Bull calves from dams with records from 22 to 28 pounds. Health of herd under federal control.

Ben Schneider, Nortonville, Kansas

Six Holstein bulls, 6 months old to yearlings; 1 from 25-pound, 1 from 21-pound cow; 1 from 17-pound 2 year old. Priced to sell. Duroc gilts priced right.

Chas. V. Sass, 409 Minn. Av., Kansas City, Ks.

10 registered cows and helpers, also 20 grade cows and helpers. 10 registered bulls, three months to three years old. Registered cows \$175 per head up. Grade bred heifers \$125 up. Bull calves \$100 and up.

Windmoor Farm Holsteins

For sale—Bull calves sired by 30-lb. son of Johaung McKinley Segis and out of good dams; \$50 and up. For particulars write CHAS. C. WILSON, MANAGER, EDNA, KANSAS.

David Coleman & Sons, Denison, Kan.

We have bull calves for sale from cows with semi-official yearly records.

Axtell & Hershey, Newton, Kan.

For sale—A beautiful, straight, almost white bull, whose dam gave 110.8 lbs. of milk in a day, and 739 lbs. of milk in seven days.

P. W. Enns & Son, Newton, Kan.

As we will keep purebreds only in future our high grade cows and 3 heifers will sell to first applicant. Dams of these grades made from 13,000 to 16,000 pounds milk.

R. E. Stuewe, Alma, Kan.

For sale—10 cows with A. R. O. records. Five bulls 10 mo. old, five two-year-old heifers and five yearlings.

Victor F. Stuewe, Alma, Kansas

Watch for later announcement! Herd sire Oak De Kol Ollie Homestead Fobes 99930, a brother to noted grand champion bull at National Dairy Show '16 and '17. He carries the most popular and best producing blood of the day.

W. J. O'Brien, Tonganoxie, Kansas

An experienced auctioneer, specializing in Holstein sales, and breeder of registered cattle.

Chas. H. Seifert, Leavenworth, R.D. 4

Sunnyside Dairy Farm For sale—Bull calf out of 26 pound dam and sired by my herd bull, Prince Wayne Skylark De Kol.

J. A. Jamison & Sons, R.D. 2 Leavenworth, Kan.

Southside Holstein Farm. Herd sire: King Korndyke Akkrummer Ormsby 31,111 lb., 7 day record. Has full sister with 39.67 lb. Few of his calves for sale.

W. E. Zoll & Son, R. D. 6, Leavenworth, Kan.

Two very well marked registered bulls for sale. Ready for light service. Priced right.

C. A. Treff, Bonner Springs, Kan.

I offer for sale my 30 pound herd bull, King Peter 18. He is nearly white, five years old and sold fully guaranteed. Write at once.

Dr. L. E. Shay, Atchison, Kansas

For Sale: Registered Holstein yearling heifers and 2 royally bred bulls from A. R. O. dams, and old enough for service.

Advertisers in this Department are Members of the Holstein-Friesian Association of Kansas.

G. B. APPLEMAN, Pres., Mulvane, Kan.

P. W. ENNS, Vice-Pres., Newton, Kan.

A. S. NEALE, Sec'y-Treas., Manhattan, Kan.

W. H. MOTT, Sale Mgr., Herington, Kan.

Annual meeting and two days' association sale, Topeka's big, modern sale pavilion, Topeka, Kan., March 25-26.

SAND SPRINGS FARM

Specialize in long time test—persistence means profit. Several young males from record cows. No grades. Herd sire Prince Ormsby Pontiac Mercedes from 32-lb. daughter of Sir Pieterje Ormsby Mercedes. E. S. ENGLE & SON, ABILENE, KAN.

G. Regier, Whitewater, Kansas

Bulls ready for service by a 30 pound bull and out of A. R. O. dams. Correspondence cheerfully answered, inspection invited.

Geo. L. Allgire, Clay Center, Kan., R. D. 8

Farm near town. Individual production rather than numbers. Something to offer later on.

J. P. Mast, Scranton, Kansas

Ten cows and helpers, some just fresh; three bulls ready for light service; 32 to 35-pound breeding.

Dr. W. E. Bentley, Manhattan, Ks.

For sale—Seven cows and some heifers due to freshen this fall. Five cows (grades) to freshen this fall and winter. Two registered bulls old enough for service. Selling grades to make room for purebreds.

Ross' Holsteins

Bull calves by Hamilton Prilly 5th whose dam made a record of 26.49 lbs. butter in 7 days, 105.6 lbs. in 30 days. Pictures sent on application. S. E. ROSS, R. 4, IOLA, KANSAS

Hillcrest Farm

A few young bulls out of A. R. O. dams ready for service this fall. Inspection invited. FITZGERALD, PETERSON & WEDDLE, Jamestown, Kansas

Geo. Lenhart, Abilene, Kansas

It is poor grade judgment to use a grade bull when you can "swap" him for a purebred ready for service by December.

PERSISTENCY IN PRODUCTION

The dam of Vanderkamp Segis Pontiac, our herd sire, is one of only 19 cows in the world to make 30-pound records for 4 consecutive lactations. Young bulls for sale by this sire \$100 and up. Collins Farm Company, Sabetia, Kansas

A. S. Neale, Mahattan, Kan.

Write immediately for the catalog of my big dispersion sale. 150 head of females. The big book tells all about the offering. Address as above.

C. A. Branch, Marion, Kansas

Clear Creek Holsteins—Have a number of open and bred registered heifers to sell. Some young bull calves. Buy a good bull calf and raise your own sire.

Braeburn Holsteins

Bulls and bull calves: One sire has a world-record dam and sire's dam; the other averages 648-32.62 for dam and sire's dam. H. B. COWLES, 608 Kan. Ave., TOPEKA, KAN.

BULLS

We have 6 head now ready for service, purebred and registered, out of high testing dams. Prices \$100 to \$150.

LILAC FARM DAIRY, R. 2, TOPEKA, KANSAS

SHUNGA VALLEY HOLSTEINS

All our grades for sale. Under 3 1/2 yrs. are grand-daughters of King Segis Pontiac; bred to top King Segis Pontiac Korndyke. Cows milk up to 75 lbs. a day; heifers up to 50. Few reg. heifers any age. Extra good bulls ready for service. Ira Romig & Sons, Sta. B, Topeka, Kansas

Four Bulls for Sale

Two are young calves; others 7 months and 2 1/2 years; the older ones by a 40-pound sire and the oldest out of a 22-pound dam. All registered. W. B. Van Horn & Sons, R. 1, Topeka, Kansas

T. M. Ewing, Independence, Ks.

King Segis Pontiac breeding. A few young cows for sale and bull calves ready for service this fall.

Albechar Holstein Farm

For Sale: A few good purebred heifers, mostly bred to our great herd sire, King Korndyke Daisy Sadie. Robinson & Shultz, Independence, Kansas

Mott Bros. & Branch, Herington, Kan.

No females for sale. Choice 10-month bull by Duke Johanna Beets out of one of our best cows; straight top, nicely marked, wonderful individual; first \$150 buys him. He must please you or money returned.

SOME GOOD BULL CALVES NOW

Will make attractive prices if taken while young; P. O., Erie, Kan. Roy Johnston, South Mound, Kan.

BULLS

We have some splendid bulls for sale at very reasonable prices; from a few weeks to 1 year old; dams' records from 16 lbs. (2-yr.-old) to over 30 lbs. Write us just what you need in bulls.

Mark Abildgaard, Mgr., Mulvane, Kansas

Appleman Bros., Mulvane, Ks.

Young cows due to freshen soon all sold. Still have 2 or 3 young bulls old enough for service, out of A. R. O. cows and 30-pound bull.

B. R. Gosney, Mulvane, Kan.

Coming 2-year-old heifer, heavy in calf to King Pontiac Beuchler; 5-month-old heifer calf, double cross of the Pontiacs breeding.

Al. Howard, Mulvane, Ks.

Bulls ready for service this fall. Write for descriptions and prices.

Wilkie & Swinehart, Derby, Kan.

Bull calf, evenly marked, out of the great show bull Johanna Bonheur Champion 2nd. Price \$100 F. O. B.

Bull Calves by Our Herd Sire

Dam has 28.65-784—in 7 days; has 1000 lb. sister, one 34, one 30 and 11 above 20. A few services for sale to approved cows. We have all A. R. O. Cows. GOODIN STOCK FARM, C. L. GOODIN, PROPRIETOR, DERBY, KANSAS.

Chas. P. High, Derby, Kansas

High's Highest quality Holsteins. Bull calves from A. R. O. dams. Always glad to see you.

D. E. Flower, Mulvane, Kansas

For sale—A few very choice A. R. O. cows and heifers to freshen in October and November. Also bulls of serviceable ages.

YOUR NEIGHBOR BREEDER

If he breeds Holsteins he needs the association's help. See to it he joins. Send his name and check for \$5 to Secretary A. S. Neale, Manhattan, Kan.

AYRSHIRE CATTLE

Linndale Farm Ayrshires

We have for sale seven grade Ayrshire heifers bred to freshest next fall. Also three grade heifer calves.

Our bull calf offerings are the best we have ever had, they are all out of A. R. O. cows or cows now on test and are sired by one of our herd bulls who are both sons of World record cows. Write for prices and descriptions. JOHN LINN & SON, MANHATTAN, KANSAS

CAMPBELL'S AYRSHIRES

Young Ayrshires, both sex, bulls ready for service, heifers bred or open. Finlayston and Armour strains. ROBERT P. CAMPBELL, ATTICA, KAN.

HAMPSHIRE HOGS

MESSINGER BOY HAMPSHIRE

200 registered and immuned hogs. Write WALTER SHAW, R. 6, WICHITA, KANSAS

Hampshires—Spotted Polands

Bears of both breeds, ready for service, \$30 to \$50. Also bred sows and gilts of both breeds. C. W. WEISENBAUM, ALTAMONT, KAN.

WILKIE-SWINEHART CONSIGNS 5 HOLSTEINS

To the Holstein Sale—Kansas National Livestock Sale Wichita, Kan., Friday, January 30

4 cows and 1 bull calf: Beatitude Wayne De Kol, a grand champion cow formerly owned by Chestnut & Son, Denison, Kan.; a two-year-old heifer fresh and tested by sale day; a six-year-old cow with 18-lb. record at two years old, fresh and tested by sale day; a four-year-old, just fresh and starting in test; bull calf by Cornucopia Korndyke Pontiac (Abbot & Clark's bull) out of an 18-lb two-year-old heifer. This will be a good consignment and you will like these Holsteins. Look for Wilkie-Swinehart consignment when you go to the sale. Will be pleased to answer inquiries. Write WILKIE-SWINEHART, DERBY, KANSAS

Registered Holstein Bull For Sale by 101 Ranch

We are offering Segis Perfection Colantha, H. B. 208490; born Sept. 26, 1916; splendidly marked; son of Bairdland King Segis Perfection who is from a 24-lb. 4-year-old dam and by a son of the great King Segis (10 30-lb. daughters). The latter is the only sire to have three 40-lb. world's champion granddaughters. His dam is a granddaughter of Sir Korndyke Hengerveid De Kol who has 4 40-lb. daughters, 3 30-lb. granddaughters and is a son of the first century sire, Hengerveid De Kol (10 30-lb. daughters).

We offer this bull at the remarkably low price of \$500. If you want the best bull in the entire Southwest this is the one for you to buy.

Miller Brothers', 101 Ranch, Bliss, Okla.

Visit our Ranch and see our \$25,000 Dairy Barn

High Grade Holstein Heifers

Special prices for 30 days on 15 cows and heifers; large, good colored Holstein grades none over 3 years old; most will freshen before spring to service of our registered bull. L. H. PAUL & SON, Mildred, Kansas.

CHOICE HIGHLY-BRED HOLSTEINS

Calves; 12 heifers and 3 bulls, 6 to 8 weeks old, nicely marked, from heavy producing dams. \$25 each. Safe delivery guaranteed. Fernwood Farms, Wauwatosa, Wis.

HEREFORD CATTLE

**Discriminating Hereford Buyers
We Offer NOW**

12 coming yearling bulls, Columbus, Anxiety strains. Bred by countenances, character and proper conformation. Un-pampered but in better than pasture condition. 7 registered, 5 unregistered for bred. All high class farm bulls.

We WILL Offer

At the Breeders' Sale, Kansas National, Wichita, Kan., Jan. 26-31, 4 bulls, 5 females: 1 magnificent herd bull, 3 senior yearlings, and 5 cows and heifers. Superior specimens. Look for my consignment at this sale. Meanwhile, if you want one or more of the 12 yearling bulls write now to

W. C. Cummings, Hesston, Kansas

Blue Ribbon Stock Farm**HEREFORDS**

200 cows, heifers and bulls—200 Chief herd sire, Don Balboa 14th 596021 by Don Carlos, a bull with over 40 Gudgeon & Simpson crosses. Mated with 60 two-year-old heifers sired by Sir Dare 417529 by Pangson 12th. We have what you want and the prices are in line.

Lee Bros., Harveyville, Kan.
Wabaunsee County

**Young Herefords
For Sale**

Yearling heifers. Perfect, Bocaldo, Fairfax blood. Extra good bulls ready for service. If it is good bone, size and quality you want we have it. Write us today.

FRANK BROWN, BYRON, OKLAHOMA

PLEASANT VIEW STOCK FARM**Herefords, Percherons, Durocs**

For sale. Five bulls from 10 to 12 months old, by Domino by Domino. A nice string bull calves and six bred cows. A nice young stallion. Address,

Mora E. Gideon, Emmett, Kan.
(Pottawatomie county)

**The Bull Is Half
the Herd**

Good, young Hereford bulls for sale.

STULKEN'S RANCH,
Riverside, Ness Co., Kansas.

**Anxiety and Fairfax
HEREFORDS**

Females bred to sons of Bright Stanway and Perfection Fairfax. Herd header bulls ready for service. Open heifers. Write today to

J. E. GOODMAN, WHITE CITY, KAN.

**HEREFORD COW
BARGAINS**

Twenty 5-year-old bred cows at \$200 per head. A few young bulls at \$85 to \$125 per head. All registered. Prices for immediate sale.

Fred O. Peterson, R. 5, Lawrence, Kan.

GALLOWAY CATTLE

**Jno. P. Reilly & Sons
Quality Galloways**

For sale—10 bulls, coming two years old, 15 bull calves, six to eight months, 60 females to select from, 6 months old heifers to young cows. Address

Jno. P. Reilly & Sons, Emmett, Kan.
7 miles north of St. Marys, main line U. P.

REGISTERED GALLOWAYS. Bulls, cows or heifers. Fashion Plate, Silver Lake, Kan.

ABERDEEN ANGUS CATTLE

Aberdeen Angus

For sale—40 two-year-old bulls and 30 yearlings, 25 two and three-year-old, bred heifers.

SUTTON FARM, R. 6, LAWRENCE, KAN.

Angus Cattle—Duroc Hogs
For immediate sale. Car load of pure bred heifers. Young bulls of serviceable ages.
Johnson Workman, Russell, Kan.

Aberdeen Angus Cattle

Cows, heifers and calves; good strains, priced for quick sale. Write H. L. Knitely & Son, Talmage, Kansas.

A Stock Show for Farmers**Wichita Exhibition Grows Thru Appeal to Producers**

BY T. W. MORSE

THE latest official figures show that the Southwest is astonishingly short of livestock. The Kansas board of agriculture's recent statement puts the supply on the farms of Kansas for one important class as lower than it has been for 37 years. In 1910 there were 660 cattle in Kansas for each 1,000 persons, as compared with the ratio of 30 years before which was 1,200 cattle for each 1,000 persons in the state. But in the last nine years the cattle supply has shrunk while population gained, until now Kansas has but 350 cattle to each 1,000 persons. In 1918 the last year for which we have complete figures, the pig crop of Kansas was 35 per cent less than 1910, and the pig crop in Oklahoma was 42 per cent less than in 1910.

This is a condition, not a theory. What is being done to remedy it?

Inspired by the food administration of war times, many institutions declared it as their main mission to bring relief. But what policies are they enforcing which actually (and profitably) will put more meat producing animals on the general farms?

Will it help some to exhibit and distribute in one week, under one roof, at one convenient center, nearly 1,000 pedigreed farm animals, representing all desirable classes of a dozen leading breeds, and selling at prices which will meet the needs and conditions of all sorts of farmers?

Shows Better Managed

A few years ago the continued uncertainty as to the status and future of the stock show at Kansas City forced attention to the opportunity which this situation made for some other great distributing center of the Southwest. How Frank S. Kirk, a veteran builder of stock shows, came to Wichita and convinced some of the leading business pushers that the opportunity was theirs, has been told thru these columns before and is well known to thousands. But only those who know the "grief" and expense of a big stock show, and what it must accomplish to justify the real money its backers have to put up, will appreciate what it was that the Wichita business interests had to be "shown", and the problems their exposition has had to solve.

That the Wichita business interests were shown, and that the Kansas National Livestock exposition is solving its problems, can be taken as granted. Last year's show (up to specifications and according to schedule) was held in Wichita's "Forum", the largest and most modern municipal livestock exposition building in America. In this event, the third annual since the show's establishment, one big start was made on the main problem the management had set itself to solve, viz: interesting more farmers and new breeders in pedigreed livestock improvement. Kansas livestock organizations and national pedigree record associations became convinced of the soundness of its policies and agreed to aid and officially sponsor the departments devoted to their respective breed interests. In this year's show, occupying the week of January 26 to 31 inclusive, every important department will have for its officials in charge, officers of the state or national breed associations. Among such officers are the following breed superintendents: Ellis McFarland, Assistant Secretary Percheron Society of America; Dr. W. H. Mott, sales manager of the Holstein-Friesian Association of Kansas; E. L. Barrier, Secretary Kansas Aberdeen Angus association; E. D. George, Secretary Kansas Hereford Breeders' association and G. A. Laude, Secretary Kansas Shorthorn Breeders' association. This condition indicates how aptly applicable is the name, "Kansas National" and the broad support which Wichita has won to her plan of a stock show to interest the farmer, instead of merely affording a test of strength among professional exhibitors.

How fully the exhibiting breeders are subscribing to this idea is revealed by their entries, both as to shows and sales, the number being about double those of last year's successful meet. A part of this gain is in response to an

evident hearty desire to advance the cause of better livestock even where official dignity and precedent might indicate only a passive recognition. Every piece of printed matter Manager Kirk sends out carries an argument for more farm animals where they are most needed. His preliminary premium list, his rules and regulations, even his formal letterheads, radiate the idea. Every separate sale announcement and every separate show department heading carries something to advance the purebred cause in the mind of the reader—as for instance this rule:

"Judges will be required to give reasons for decisions rendered. One object of this show is to assist in education as to what constitutes a good animal, and why."

The preliminary premium list (a book of 60 pages of which enough were printed to put one in the mail box of

every farmer within 15 miles of Wichita) is almost a compendium of arguments in favor of purebred farm animals; not abstract statements, but with the names, dates, pictures and prices to fix each point made, in the reader's mind. Any writer of livestock advertising will do well to obtain and study this book.

But in the public sales themselves is the most complete working out of the policy for which the Kansas National claims individuality. In the fullest sense (and with modern improvements) is the original idea of the old country fairs exemplified; that of contests and market places combined. To keep at a proper level the excellent standard of each breed, the "Purple Ribbon Sales" are provided. To these auction sales are admitted only properly fitted animals with prize records, or with prize winning ancestry. But the popularizing of purebreds is by no means left to this agency. Such sales do not "let down the bars" low enough for pioneering purposes, so, in several of the leading breeds, second sales are arranged for, to follow the "Purple Ribbon Sales." These sales provide larger offerings of registered animals, presented in plain working condition.

Active Demand for Mares**Response on Hogs More Encouraging to Producers**

BY SANDERS SOSLAND

FARM mares are displaying unusual activity in the horse market at Kansas City for this season. Normally, March and April are the most active months in the trade in farm mares. This year, however, Oklahoma and Texas have become such active buyers that the trade is enjoying an unusual demand. The Texas and Oklahoma buying is attributed to the prosperity which has come to these states as a result of sensational prices for cotton. The Texas and Oklahoma farmers are able to purchase more horses, and are taking a much larger number of mares. Quality is at a sharp premium, with the better grades ruling from \$140 to \$225 a head.

Iowa is the principal source of supplies for the Kansas City horse market. The fact that Iowa leads in this respect, whereas the state sent few horses to Kansas City a few years ago, indicates that the demand from the Southwest for mares is of a character which makes shipments away from the Chicago market desirable. Chicago normally receives many farm mares which are now moving to Kansas City from Iowa. Offerings from Kansas are reported as moderate.

Less Demand for Draft Types

The fact that farm mares are selling better than draft horses for teaming purposes does not augur well for a further upturn in the prices of the former. The range on draft horses at Kansas City is between \$150 and \$200 in most instances, with exceptional animals somewhat higher to meet occasional special orders. Chunks are ruling between \$125 and \$175, these prices being for animals weighing 1,200 to 1,400 pounds. Southern horses are still strong, the better grades bringing \$100 to \$165. These must be good drivers weighing 900 to 1,100 pounds. Plain Southerners are quoted at \$60 to \$100 and common horses of this class down to \$25.

With the strength which the South is imparting to the market for horses and mules because of its great purchasing power arising from high-priced cotton, the trade is in a far better condition than many dealers expected. A year ago there was discouragement over the market. The government had just started at this time in 1919 the sale of thousands of surplus army horses and mules. Temporary declines were recorded in prices, but today mules are sharply higher than a year ago, while horses are bringing figures which average moderately better than in the first month of 1919. Mules continue the sensational sellers on livestock markets, choice cotton animals being quoted at \$250 to \$375. These prices are for mules standing 15.1 to 15.3 hands and weighing 1,000 to 1,300 pounds. Cotton mules 14.2 to 15 hands high are going to buyers of the South at \$140 to \$185 in Kansas City. Mules

14 to 14.2 hands high bring \$85 to \$140. Farm mules are quoted at \$200 to \$325, and dealers expect to obtain \$400 a head from farmers for extremely choice animals. The popular farm mule for Kansas buyers stands 15.2 to 16.1 hands and weighs 1,050 to 1,300 pounds. The strength of mules continues to help horses. Mules in thin flesh sell at sharp discounts. The army is a buyer of cavalry horses today instead of a seller of all classes of army animals, as a year ago.

Fewer Calls From Cities

Demand for horses for work in cities is light. The great cities of the East are taking only a fractional percentage of the number which they absorbed before the use of motor trucks became popular. There is hope that the Horse Publicity association, a new organization, will increase the use of horses in cities, but it is too early to forecast what success it will achieve. With a decrease of about 12 million acres in the area in winter wheat, there will be that much more ground to be sown in spring crops this year, and this may serve to increase the demand for horses.

Altho receipts of cattle showed a sharp decrease last week as compared with a year ago, the market did not develop important strength. It gave evidence of developing an easier tendency on an increased run. Medium grades of short-fed cattle predominated in the receipts at Kansas City and on other markets, and there are indications that the leading Western markets as a whole will have liberal supplies of this class for the next month and probably thru February. The number of choice fed cattle coming is light, but feeders assert that they cannot afford to put on an excellent finish at current costs and market returns. An indication of the character of the quality is the fact that the top price in Kansas City on steers last week was only \$15.50. Prices closed unchanged to 50 cents higher in Kansas City last week on the cattle market as a whole, with the best tone on steers. Steers of good quality brought only \$14 to \$15. Short-feds weighing 1,100 to 1,200 pounds sold largely at \$12 to \$13.50, with medium grades at \$11 to \$12. Common Oklahoma steers went to packers as low as \$9.25 to \$10. Stockers and feeders ruled between \$7 and \$11.50, with stockers between \$7 and \$10.50. Stock calves were quoted at \$8 to \$9.50. While choice cows sold up to \$12, the bulk of the good offerings were quoted at \$8.50 to \$10.50, with medium grades at \$7 to \$8. Heifers were quoted at \$7 to \$12, bulls at \$8 to \$9.50, canner cows at \$5 to \$5.25 and calves up to \$15.50.

Hogs have thus far performed on markets better than expected in January. That this will be the low month of the next six or seven months in the trade is still maintained by a large

number of trade observers. Receipts last week increased, but the peak of the winter movement has not yet been reached. Lack of cars is reported in the big states. Another week or two of heavy runs should test the market thoroly. In the face of heavier receipts last week, prices in Kansas City closed about 25 to 35 cents higher, with a top of \$15.10.

While the top on cattle in Kansas City last week was \$2.25 lower than a year ago and the top on hogs \$2.60 under that for the same time in 1919, the market for lambs scored a top of \$18.75, being \$1.80 higher than a year ago. As previously indicated, further advances are probable in the sheep and lamb market. But prices have been climbing so rapidly that a temporary halt or a small reaction may be witnessed. However, the outlook is still bright for \$20 lambs within the next few months.

Girl's Club Calf Makes \$242.90

Frank D. Tomson, editor of Short-horns in America, writes:

I send you herewith a letter that you will appreciate and that your readers will enjoy. It was forwarded to me by Secretary Harding of the American Shorthorn Breeders' association. It is a concise response to a communication from him. The signature is that of Clara Ray of Mellott, Ind., whose achievement has brought her much into the limelight, especially since the International Livestock Exposition.

Clara Ray wrote: "Your letter inclosing check for \$50 has been received for which I am thankful to the American Shorthorn Breeders' association. It gives me much pleasure to know that they appreciated my achievement in winning the championship on a Shorthorn calf at our county fair and then when exhibited at the International, winning in class and the grand championship in the Boys' and Girls' Club Show.

"I will give you a brief statement of my expenses and receipts: Original cost, \$105; cost of feed for nine months, \$100; drayage, \$55; interest on investment, \$5.40; receipts, selling price, \$368.30; International prize, \$50; American Shorthorn Breeders' association, \$50; other prizes, \$40."

Send for Free Catalog

Members of the Capper Pig and Poultry clubs recently issued their annual catalog for 1919. The offering is of unusually good quality and quantity, more than 1,000 pigs and 3,500 chickens being included. When the boys and girls began work, contest sows and settings of eggs were chosen from the best herds and flocks of Kansas and adjoining states. The utmost care was used by the contestants to make their entries prize winners. Now these quality pigs and chickens are offered for sale at reasonable prices. This is an opportunity to buy stock that is decidedly high class, but priced for the average purchaser.

The beautifully illustrated catalog containing the offerings of these boys and girls may be obtained free of charge by addressing a request to Earle H. Whitman, Capper Bldg., Topeka, Kan.

Holstein Breeders Save February 4

The Holstein breeders of Kansas should mark February 4 on their calendars for on that day will be held the meeting of the state dairy association at Manhattan, Kan., as one of the big weeks of agricultural and livestock meetings. And more especially will Holstein breeders wish to plan their affairs so as to be in Manhattan on this day because on the night of February 4, the Holstein-Friesian association of Kansas holds a meeting and banquet at Manhattan. Among the speakers of note at the banquet will be President Aitken of the Holstein-Friesian Association of America.

Serum From Horses

One of the most important contributions to the United States Government hospitals was made this year by 46 immunized horses at Princeton, N. J., in the form of serums for the treatment of meningitis, pneumonia and dysentery, according to the report on war activities of the Rockefeller Institute for Medical Research made public by Dr.

70 Thrifty, Hardy Herefords

carefully selected from the W. I. Bowman & Co. herd of more than 800 head for their greatest sale to be held at

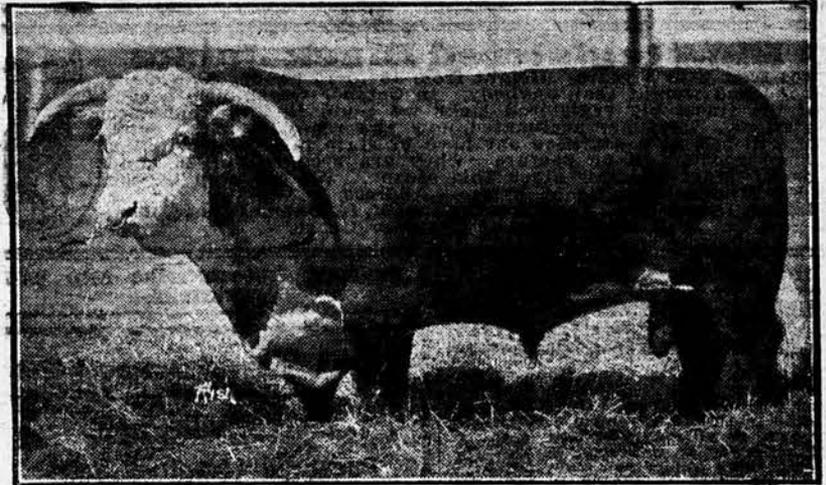
Hutchinson, Kan., Saturday, Feb. 7

Sale at the State Fair Grounds

30 HEIFERS

25 COWS

15 BULLS



Generous 5th is adding a chapter on improvement to Hereford History.

25 Thick-fleshed, Heavy-boned cows, a number with calves at foot and rebred. They represent such sires as Generous 5th, Theodore, Ardmore (the \$31,000 grand champion), Perfection Fairfax and other bulls of strong Anxiety breeding. These cows are safe in calf to Generous 5th, Imported Shucknall Monarch and Lawrence Fairfax.

Attractions Worth While

Chief in the above number are a daughter of the noted \$31,000 International grand champion Ardmore and a daughter of the epoch making Perfection Fairfax. Each has calf at foot and is rebred to Imported Shucknall Monarch, first prize winner at the Bath and West and second at the English Royal Show in 1915. This bull carries the blood of Lord Wilton, Grove 3rd, Rudolph Longhorns and other history making bulls. Shucknall Monarch is now making Hereford history at the Bowman ranch.

26 hand-picked Generous 5th and Lawrence Fairfax Heifers of unusual size, extreme quality and great finish. All have been raised in the open on the Bowman Ranch. Decidedly the best lot of heifers ever offered by this company. They are all safe in calf to Imported Shucknall Monarch and Lawrence Fairfax. 4 Coming two-year-old heifers sired by and bred to these same bulls.

15 Rugged, Hardy, Useful Bulls. Remember this is the best lot of cattle ever sold in Kansas all bred by one firm. Positively the last chance to secure Generous 5th cows and heifers. The catalogs tell the whole story. Write at once, mentioning this paper, to

W. I. Bowman & Co., Ness City, Kan.

Auctioneers—Reppert and others. J. T. Hunter represents Kansas Farmer and Mail and Breeze.

Simon Flexner, director of laboratories.

At the time of the signing of the armistice the report says serum production for the treatment of the diseases named was at its height. The number of doses supplied increased from 3,000 in 1917 to 25,000 in 1918, and it was estimated that the output for the first three months of this year far exceeded the entire output for 1918.

The total of 2,035 bottles of serum was sent during the year to the army and naval medical schools, Washington; to United States Army camps, naval stations and camps, American expeditionary force, hygienic laboratory, United States Public Health Service and the Royal Naval College in London.

The report emphasizes the success attending the method of treating infected surgical wounds which Doctors Carel and Dakin perfected. During the year, it says, instructions were given to 908 medical officers and enlisted men of the United States Army and Navy, to civilian surgeons and to nurses of the Red Cross and civilian hospitals. A special appropriation of \$55,000 has been made, it is said, to enable the war demonstration hospital to continue in active operation until April 1, 1920.

Save first; then invest—For this, War Savings Stamps are best.

Spring Creek Hereford Cattle Sale

53 Anxiety-Columbus Herefords

A choice lot of Herefords sold in good breeding condition with no surplus flesh.

Sale in Erdman & Gallins' barn Smith Center, Kan., Monday, Feb. 2nd

20 cows, seven with calves at foot. 6 two-year-old heifers, 3 yearling heifers. 17 bulls ranging in ages from 7 months old to two years, herd headers, range bulls, good farm bulls at bargain-counter prices.

We can ship over Rock Island or Missouri Pacific. We especially invite Hereford breeders and farmers of north central Kansas to our sale. Catalogs ready to mail. Address either

Seever & Adkins or Seever & Sons, Smith Center, Kan.

Auctioneers: Frank Gettle, Goodland, Kan., Hester & Brown, Smith Center. J. W. Johnson, Fieldman, Capper Farm Press.

HORSES AND JACK STOCK.

HORSES AND JACK STOCK.

Bargains In DRAFT STALLIONS

Our horse barns have been torn down to make way for city residences. We have a few high-class Belgian, Percheron and Shire stallions for sale right. We offer special inducements to dealers who can handle them all. Now is the time to push the draft stallion business. Horses were never so scarce.

Woods Bros. Co., Lincoln, Neb.

A. P. Coon, Manager

20 Big, Registered Black Jacks

Ages from 2 to 8 years. Height from 15 to 16 hands. Can show more bone and weight than anybody. In October we shipped a carload of the finest big registered Jacks we could find in Tennessee to our farms. They are acclimated now and ready to make good. We will sell at a sacrifice our herd of state fair prize winning Jennets on account of no pasture. They are bred to our 16 hand show Jack. Must sell this stock this season. We can ship on the Santa Fe, Missouri Pacific or Frisco. Address, J. P. Malone, Lyons, Kan., (new location) or M. H. Malone, Chase, Kan. Will meet trains at Lyons or Chase.



HORSES AND JACK STOCK.

Purchase Percherons

NOW is the time to begin thinking seriously about the stallion that will nick best with your mares. If you have an outstanding mare and haven't a suitable sire of your own, it will pay you well to send her away to a first-class sire. Let nothing hinder you from breeding this mare to the horse that you think she will nick with best. Service fee is of no consideration if you are breeding your mare to the right kind of a stallion. If you can afford it, own a sire of your own, but get the best that money can buy. Free booklets will be sent if you give acreage farmed and number of horses kept. Address:

Percheron Society of America
WAYNE DINSMORE, Secretary,
Exchange Ave., Union Stock Yards, Chicago.

BELGIANS

From the Home of Farcour, the undefeated grand champion. A choice selection of stallions from rising 2 to 5 years old. A few good mares safe in foal to Farcour. Youngsters of both sexes by the grand champion. Our community has more good Belgians than any other like area in the world. Make us a visit.
C. G. GOOD, OGDEN, IOWA

Jacks and Jennets

15 large mammoth black Jacks for sale, ages from 2 to 6 years; large, heavy boned. Special prices for early sales. Twenty good Jennets for sale. Come and see me.
Phil Walker, Moline, Elk County, Kansas

Mammoth Jacks, Percheron Stallions and Mares

A lot of big boned Jacks, 3 to 5 years old, weight up to 1200 pounds, 15 to 16 hands. Also a fine lot of Percheron stallions, blacks and greys, weight up to 2400 pounds. A lot of large mares, 3 and 4 year olds, showy colts. Will sell one or a carload. All stock guaranteed.
Al. E. Smith, R. 1, Lawrence, Kansas.
40 miles west of Kansas City.

22 Good Young Jacks

from yearlings to 4-year-olds. Will sell the bunch or any one of them at astonishingly low prices. They are the good kind—Missouri Jacks.
Oakland Stock Farm, Chillicothe, Missouri

Percherons—Belgians—Shires

State Fair prize-winning stallions and registered mares bred to Champion stallion for sale. Also extra heavy black Mammoth Jacks.
Fred Chandler, Rt. 7, Chariton, Ia.

JACK AND PERCHERON

For sale or trade. Might exchange for young mules. Reg. Mo. Jack, black, white points, heavy bone, extra good individual. Purebred Percheron stallion, extra black, 8 years old, 1850 lbs., an extra good one.
W. S. HOAG, IONIA, KANSAS

PERCHERONS

Stallions and mares for sale by members of the Illinois Percheron Breeders' Association. For up-to-date sales list address the secretary.
J. L. EDMONDS, URBANA, ILLINOIS

Percheron Fillies for Sale

Nancy 190531, foaled May 17, 1915; safe in foal to top stallion. Helen 152046, foaled April 3, 1918. Both blacks and good individuals. Write for particulars.
HERMAN G. JANSSEN, LORRAINE, KAN.

Pleasant View Stock Farm

2 good big Jacks that get good mules and my French Draft stallion. Investigate if you want profitable Jacks and stallions.
M. R. Peterson, Troy, Kan., Doniphan Co.

TWO REGISTERED PERCHERON stallions broke to work; for sale or trade.
Bert Donley, Oxford, Kansas

REGISTERED PERCHERON MARE for sale, bred, priced right. Omer Pureault, Clyde, Kan.

GALLOWAY CATTLE.

REGISTERED GALLOWAY BULLS for sale. Walter Hill, Hope, Kansas.

LIVESTOCK AUCTIONEERS AND SALE MANAGERS.

Guy Zimmerman

Morrowville, Kan.
Purebred Livestock Sales a Specialty.

P. M. GROSS

Auctioneer
Roosevelt Hotel, Kansas City, Mo.

W.B. Carpenter

Real Estate Auctioneer
President of largest auction school in world. Special four weeks term opens soon. Auctioneers are making big money everywhere. Write today for 67-page annual. It's free. Address: 818 Walnut Street, Kansas City, Missouri.

JOHN D. SNYDER

HUTCHINSON, KANSAS
Experienced auctioneer. Pedigreed livestock and big sales of all kinds.

FRANK GETTLE

Purebred livestock auctioneer. Reference furnished on request. GOODLAND, KAN.

WILL MYERS, Beloit, Kan.

Secure your dates early. Address as above.

FRED L. PERDUE, DENVER, COLO.

REAL ESTATE AUCTIONEER
OFFICE: 320 DENHAM BUILDING, DENVER, COLO.

Homer Rule, Ottawa, Kan.

Specializing in purebred sales. Secure your date early. Address as above.

Jas. T. McCulloch, Clay Center, Kan.

My reputation is built upon the service you receive. Write, phone or wire.

O. I. C. HOGS.

Breed The Best

THE WORLD NEEDS LARGE FAT HOGS

Why lose money breeding and feeding scrub hogs? Two of our O. I. C. Hogs Weighed 2806 Pounds. We are the most extensive breeders and shippers of pure bred hogs in the world. Write today for the true story of the real O. I. C. Hogs. All foreign shipments U. S. Government Inspected

We have bred the O. I. C. Hogs since 1863 and have never lost a hog with cholera or any other contagious disease.

WRITE TODAY FOR FREE BOOK "The Hog from Birth to Sale" THE L. B. SILVER CO. R. 606 SALEM, OHIO

40 O. I. C. PIGS, BOARS AND SOWS

HARRY W. HAYNES, GRANTVILLE, KAN.

O.I.C. Six Registered Boars

2 gilts for sale. John Tutecher, Parsons, Kan.

JULY O. I. C.'S EITHER SEX Verg Curtis, Larned, Kansas

O. I. C. BRED AND OPEN GILTS, priced to sell. E. S. Robertson, Republic, Missouri.

WHEN WRITING TO ADVERTISERS MENTION KANSAS FARMER AND MAIL AND BREEZE.

Public Sales of Livestock

Holsteins.

Jan. 27—Henry Glessman, Omaha, Neb.
Jan. 30—Kansas National Livestock Exposition Sale, Wichita, Kan. F. S. Kirk, Mgr.
Feb. 5—A. S. Neale, Manhattan, Kan.
Feb. 12—J. W. Meyer, Nortonville, Kan.
Feb. 17-18—Iowa, Nebraska, Kansas combination sale, Dwight Williams, Mgr., Omaha, Neb.
Feb. 24—Edw. L. Hutchins & Sons, Salina, Kan.
Mch. 25-26—Annual sale Holstein-Friesian Association of Kansas at Topeka. W. H. Mott, Sales Mgr., Herington, Kan.

Hereford Cattle.

Jan. 28—Purple Ribbon Sale, Wichita, Kan. F. S. Kirk, Mgr.
Jan. 29—Kansas National Livestock Exposition Sale, Wichita, Kan. F. S. Kirk, Mgr.
Feb. 2—S. D. Seever, Smith Center, Kan.
Feb. 3—Seever & Sons, Smith Center, Kan.
Feb. 7—W. I. Bowman, Ness City, Kan.

Shorthorn Cattle.

Jan. 24—W. O. Rule & Son, Ottawa, Kan.
Jan. 29—Purple Ribbon Sale, Wichita, Kan. F. S. Kirk, Mgr.
Jan. 29—Kansas National Livestock Exposition Sale, Wichita, Kan. F. S. Kirk, Mgr.
Feb. 30—Lyon County Shorthorn Breeders' Ass'n. I. T. Richardson, Sec'y, Emporia, Kan.
Mar. 16—Edw. F. Gehley, Orleans, Neb.
Mch. 31-Apr. 1—Central Shorthorn Breeders' Ass'n. Sale at Kansas City, Mo.
Apr. 28—Northwest Kansas Shorthorn Breeders' Ass'n.; Sale at Concordia. E. A. Corey, Sales Mgr., Talmo, Kan.

Polled Shorthorn Cattle.

Feb. 24—T. M. Willson, Lebanon, Kan.

Angus.

Jan. 30—Kansas National Livestock Exposition Sale, Wichita, Kan. F. S. Kirk, Mgr.

Red Polled Cattle.

Jan. 24—Adolph Anderson, Davenport, Neb.

Percheron.

Jan. 31—Kansas National Livestock Exposition Sale, Wichita, Kan. F. S. Kirk, Mgr.
Feb. 17—M. H. Roller, Circleville, Kan.
Feb. 23—D. E. Gill, Attica, Kan.

Jacks.

Jan. 30—Kansas National Livestock Exposition Sale, Wichita, Kan. F. S. Kirk, Mgr.
Feb. 16—G. C. Roan, La Plata, Mo.
Feb. 17—M. H. Roller, Circleville, Kan.
Feb. 24—D. E. Gill, Attica, Kan.

Poland China Hogs.

Jan. 20—Fred B. Caldwell, Topeka, Kan.
Jan. 22—George Morton, Oxford, Kansas.
Jan. 23—H. R. Wenrich, Oxford, Kansas.
Jan. 23—C. J. Cooper & Son, DeWitt, Neb.
Jan. 24—Ezra Warren, Clearwater, Kan.
Jan. 31—Jones Bros., Hiawatha, Kan.
Jan. 31—Kansas National Livestock Exposition Sale, Wichita, Kan. F. S. Kirk, Mgr.
Feb. 3—E. J. Dolan, Plattie City, Mo.
Feb. 4—C. E. Wade, Rising City, Neb. Sale at David City.
Feb. 4—Clarence Dean, Weston, Mo., at Dearborn, Mo.
Feb. 4—Wm. McCurdy, Tobias, Neb.
Feb. 5—Thomas F. Walker & Son, Alexandria, Neb.
Feb. 5—Frank J. Rist, Humboldt, Neb.
Feb. 5—Adams & Mason, Gypsum, Kan.
Feb. 6—Willis & Blough, Emporia, Kan.
Feb. 6—Peter J. Tisserat, York, Neb.
Feb. 7—Geo. Seitzmann, Kingsley, Iowa.
Feb. 7—H. E. Myers, Gardner, Kan.
Feb. 8—A. J. Ehrhart & Sons, Oregon, Mo.
Feb. 11—Ross & Vincent, Sterling, Kan.
Feb. 14—C. S. Nevius & Sons, Chiles, Kan.
Feb. 14—R. B. Donham, Talmo, at Concordia, Kan.
Feb. 17—Otto Gioe, Martel, Neb.
Feb. 18—Henry Koch, Edina, Mo.
Feb. 21—W. A. Prewett, Asherville, Kan.
Feb. 24—T. M. Willson, Lebanon, Kan.
Feb. 25—Harry Wales, Peculiar, Mo.
Feb. 27—C. B. Schrader, Clifton, Kan.

Spotted Poland China Hogs.

Mch. 3—Kincaid Poland China Breeders' Ass'n. Sale at Kincaid, Kan.
Mch. 5—Willis & Blough, Emporia, Kan.
Apr. 28—Fred G. Laptad, Lawrence, Kan.

Duroc Jersey Hogs.

Jan. 19—B. F. Preston, Lincoln, Neb.
Jan. 22—Sisco & Doerschlag, H. A. Johnson and Searle; sale at Topeka, Kan.
Jan. 24—Adolph Anderson, Davenport, Neb.
Jan. 27—H. C. Holt & Sons, Kearney, Neb.
Jan. 28—Smith & Swartsley, Kearney, Neb.
Jan. 28—McClelland Bros., Bondurant, Ia.
Jan. 28—H. E. Labert, Overton, Neb.
Jan. 28—Milton Poland, Sabetha, Kan.
Jan. 28—H. D. Geiken, Cozad, Neb. Night sale.
Jan. 29—C. T. White, Lexington, Neb. Night sale.
Jan. 29—A. C. French, Lexington, Neb.
Jan. 30—R. E. Tyler, Lexington, Neb.
Jan. 30—L. B. Benson, Lexington, Neb. Night sale.
Jan. 30—Kansas National Livestock Exposition Sale, Wichita, Kan. F. S. Kirk, Mgr.
Jan. 31—L. B. Benson, Lexington, Neb.
Feb. 4—Col. Jesse Howell, Herkimer, Kan.
Feb. 4—A. J. Turinsky, Barnes, Kan.
Feb. 5—Pola C. Brownlee, Holden, Mo.
Feb. 5—John W. Jones, Minneapolis, Kan., at Salina, Kan.
Feb. 6—Kansas Breeders' Association, Manhattan, Kan.
Feb. 7—O. E. Harmon, Fairmont, Neb.
Feb. 9—J. R. Breed, Hydro, Okla.
Feb. 9—A. A. Russell, Geneva, Neb.
Feb. 10—R. C. Smith, Sedgwick, Kan.
Feb. 11—A. L. Breeding, Home, Kan.
Feb. 11—John Petford, Saffordville, Kan.
Feb. 11—W. A. Dugan, Coln, Ia.
Feb. 12—W. T. McBride, Parker, Kan.
Feb. 12—W. W. Oley, Winfield, Kan.
Feb. 13—Theison Bros., Osmond, Neb.
Feb. 13—Zink Stock Farm, Turon, Kan.
Feb. 14—G. M. Shepherd, Lyons, Kansas.
Feb. 16—John C. Simon, Humboldt, Neb.
Feb. 18—Fern J. Moser, Sabetha, Kan.
Feb. 19—Gwin Bros., Morrowville, Kan., at Corning, Kan.
Feb. 20—Isaac F. Tyson, Harrisonville, Mo.
Feb. 20—B. W. Conyers, Marion, Kan.
Feb. 21—B. R. Anderson, McPherson, Kan.
Feb. 21—W. L. Fogo, Burr Oak, Kan.
Feb. 23—John Loomis, Emporia, Kan.
Feb. 24—Gordon & Hamilton, Horton, Kan.
Feb. 25—Kempin Bros. and W. Hilbert, Corning, Kan.
Feb. 25—J. R. Grover, Sentinel, Okla.
Feb. 26—John W. Jones, Minneapolis, Kan., at Concordia, Kan.
Feb. 26—Adolph Anderson, Davenport, Neb.
Feb. 28—C. W. Johnston, Red Cloud, Neb.
Apr. 17—Rule & Woodlief, Ottawa, Kan.
Apr. 28—Fred G. Laptad, Lawrence, Kan.

Chester White Hogs.

Jan. 19—Henry Murr, Tonganoxie, Kan.
Jan. 20—Arthur Mosse, Leavenworth, Kan.

Hampshire Hogs.

Mch. 2—Whitaker & Darby, Miami, Mo. Sale at Marshall, Mo.

Sheep.

Jan. 27—Kansas National Livestock Exposition Sale, Wichita, Kan. F. S. Kirk, Mgr.
Feb. 7—O. E. Harmon, Fairmont, Neb.

Sale Reports

Mousel Herefords Average \$2,612.

Unofficial reports on the average of 172 Herefords sold by Mousel Bros., Cambridge, Neb., January 6 and 7, give the average as \$2,612. The 60 head sold the first day made an average of \$4,411. The 50 high priced lots for the two days sale averaged \$5,218. F. J. Sullivan, Wray, Colo., paid \$22,000, the top price for Superior Mischief. John McConnell, Holbrook, Neb., took the top female the first day for \$8,000.

Theobold's Duroc Sale.

J. C. Theobold, Ohlawa, Neb., sold 44 head of Durocs at around an \$80 average. The local support was very poor. The large part of the offering went to Waldo Bros., De Witt, Neb. Guy Brown, of Geneva, was one of the heavy purchasers. The sale was conducted by Col. H. S. Allen in a most capable manner. Following is a partial list of sales: Lot No.

3—Guy Brown, Geneva, Neb.	\$100
4—C. F. Waldo, De Witt, Neb.	85
8—R. B. Murray, Elwood, Neb.	80
9—F. H. Allen, Tobias, Neb.	90
11—H. O. Waldon, De Witt, Neb.	75
13—Miles Hurley, Ohlawa, Neb.	69
14—Geo. Briggs, Clay Center, Neb.	150
15—R. B. Murray, Elwood, Neb.	85
16—F. B. Chinnock, De Witt, Neb.	85
17—Harry Theobold, Ong, Neb.	160
18—J. W. Soroboda, Ohlawa, Neb.	70
19—C. F. Waldo, De Witt, Neb.	70
20—H. Theobold, Ong, Neb.	70
21—Proett Bros., Alexandria, Neb.	70

Day's Duroc Sale.

Carl Day, Nora, Neb., sold 50 head of very choice Duroc sows in his recent sale. Buyers seemed eager to get these good females bred to High Sensation. Very few of the offering remained near home. A representative list of sales follows: Lot No.

1—Gwinn Bros., Morrowville, Kan.	\$200
3—Bert Hart Longmont, Colo.	125
4—J. R. Shafer, Nelson, Neb.	90
5—Lawrence Wilson, Nelson, Neb.	95
6—W. F. Wilson, Nelson, Neb.	105
10—Gwinn Bros., Morrowville, Kan.	180
11—J. C. Forney, Beaver City, Neb.	115
12—Dave Bindernagel, Beatrice, Neb.	90
13—Griffith Bros., Mound City, Mo.	130
14—Art Moore, Beatrice, Neb.	225
16—Warren Moore & Son, Loomis, Neb.	180
17—W. A. Williams, Marlow, Okla.	150
18—O. E. Easton, Alma, Neb.	130
19—J. C. Forney, Beaver City, Neb.	100
21—Geo. Briggs, Clay Center, Neb.	80
24—W. M. Putman & Son, Tecumseh, Neb.	310
25—E. Nuestrom, Upland, Neb.	120
26—Guy Zimmerman, Morrowville, Kan.	135
27—C. T. White, Lexington, Neb.	80
28—H. C. Holt & Son, Kearney, Neb.	80
30—Frank Westfall, Smithfield, Neb.	80

Bindernagel's Duroc Sale.

Dave Bindernagel's Duroc sale at Beatrice, Neb., was the last sale of the week but made the high average for the circuit. The offering was good and sold at satisfactory prices to Mr. Bindernagel. Jack's Orlon, a yearling sow of great size and conformation and bred to Demonstrator, went to Ortel Linniger, Fairfax, Mo., for \$800. Other breeders who were right around the top mark on this top sow were H. C. Holt, Kearney, Neb.; C. T. White, Lexington, Neb., and Putman & Sons, Tecumseh, Neb. Representative sales follow: Lot No.

5—Hepperly Farm, Norfolk, Neb.	\$175.00
7—Stanton Allen, Lincoln.	125.00
2—C. T. White & Son, Lexington.	190.00
3—Bert Chevet, Beatrice.	100.00
17—C. T. White & Son.	230.00
18—Lake Brindenthal, Wymore.	275.00
36—Extra, Frank Stroberg, North Platte.	90.00
19—B. F. Hendricks, Diller.	102.50
20—B. F. Hendricks.	200.00
24—John Larson, Beatrice.	92.50
13—Frank Meyer, Beatrice.	87.50
6—Hugh East, Beatrice.	85.00
15—Emil Schwab, Wilber.	120.00
31—H. O. Waldo, De Witt.	90.00

Field Notes

BY JOHN W. JOHNSON
C. E. Shoemaker, Narka, Kan., has a choice Polled Shorthorn roan 14-month-old bull priced very reasonably.—Advertisement.

J. H. Taylor & Sons, Chapman, Kan., are offering some good young Shorthorn bulls for sale. Look up their ad in this issue.—Advertisement.

T. Crowl, Barnard, Kan., Lincoln county, is starting his Poland China advertisement again in this issue of the Kansas Farmer and Mail and Breeze. He offers bred sows and gilts and at attractive prices. He does not offer anything for breeding purposes that is not first class and his prices will be found very low, considering quality. Write him for prices at once.—Advertisement.

Ralph P. Wells, Formoso, Kan., Jewell county, is advertising Duroc Jersey bred sows and gilts. These sows are strong in the blood of Orion Cherry King and are bred to good boars. If you want to buy choice breeding and individuals at private sale write Mr. Wells. You will get good ones at fair prices and I am sure you will be pleased with the treatment you receive.—Advertisement.

Fred Crowl, Barnard, Kan., Lincoln county, starts his Duroc Jersey advertisement again in this issue of the Kansas Farmer and Mail and Breeze. He offers bred sows and gilts and they are only first class stock as he does not offer any other kind for breeding purposes. His prices are very reasonable and you better write him at once if you want bred sows or gilts at private sale. Look up his advertisement in this issue of the Kansas Farmer and Mail and Breeze.—Advertisement.

In the last issue of the Kansas Farmer and Mail and Breeze, Blue Mound was given as the home of Roy Johnson, Mr. Johnson lives at South Mound and gets his mail at Erie, Kan. Mr. Johnson carries a regular card in the Kansas Holstein association sec-

Don. He has some mighty good bull calves for sale at this time and is making attractive prices on them to move them at once. Don't forget he gets his mail at Erie, Kan., but his closest town is South Mound, Kan.—Advertisement.

H. H. Holmes, Route 28, Topeka, sold three head of Scotch females last week to Geo. J. Casperson, Junction City, Kan., thru his card now in this paper. Please look up Mr. Holmes' advertisement and if you need a good Scotch bull or a few choice cows or heifers you can find them at the Holmes farm near Topeka.—Advertisement.

Lest You Forget.

Next Monday and Tuesday, January 19 and 20, are important dates to Chester White hog breeders. These are the dates of Henry Murr's and Arthur Mosse's annual bred sow sales which are to be held at Tonganoxie, Kan., and Leavenworth, Kan. Ask your railroad agent to route you. It is important that you go if you want Chester White bred sows that are the best to be had anywhere.—Advertisement.

Royal Herd Duroc Circular Ready.

R. R. Anderson, McPherson, Kan., has recently issued a very attractive circular about Royal herd farm Duroc Jerseys. It is nicely illustrated and concerning his bred sow sale, February 21, he has this to say: "I cannot help commenting on the quality of our offering that is to constitute our annual bred sow sale. It is with much regret we announce the death of Royal Grand Wonder but it is very fortunate that we are able to announce that eighty per cent of our bred sow offering are sows by this great sire." In a short time we will start the advertisement of this big annual bred sow sale which will be held in McPherson, as usual. You can ask Mr. Anderson to book you for the catalog any time.—Advertisement.

Duroc Sale at Topeka Fair Grounds.

The advertisement of the big Topeka Duroc Jersey sale, which will be held in the big modern heated sale pavilion at the fair grounds, Thursday, January 22, appears in this issue of the Kansas Farmer and Mail and Breeze. There will be 50 bred sows and gilts in this sale, the tops from three herds. Sisco & Doerschlag, of Topeka, are the heaviest consignors and H. A. Johnson, Perry, Kan., and Searle & Searle, Tecumseh, Kan., contribute the rest of the offering. This will be a great offering from these herds. These breeders have already held one or two sales and expect to hold two sales each year. This is the regular annual bred sow sale and they are the good ones. The sale is next Thursday at the fair grounds.—Advertisement.

Shorthorns For Sale.

Harry T. Forbes, Rural Route 8, Topeka, Kan., starts his Shorthorn card in the Shorthorn section of the Kansas Farmer and Mail and Breeze in this issue. He offers five bulls from 12 to 20 months old. These bulls are pure Scotch and splendid individuals in nice condition. It is a real pleasure to recommend an offering of bulls like these to Kansas Shorthorn breeders. Mr. Forbes does not have a large herd but it is one of the very best in Scotch breeding and individuals to be found anywhere. These bulls are a grand lot of Scotch bulls that you must see before you buy your herd bull. Farm joins town on the west. Shorthorns have been raised on it for 40 years. Write Harry T. Forbes, Rural Route 8, Topeka, Kan., for prices and descriptions.—Advertisement.

Rules to Hold Shorthorn Dispersion.

W. O. Rule & Son, Ottawa, Kan., have sold their farm one mile east of that place and have announced the dispersal of their herd of Shorthorns. This will be of interest to every breeder of Shorthorns who wants to secure some choice straight Scotch breeding. There will be 35 lots in the sale, consisting of 30 cows and heifers and five bulls. One-third of the offering is pure Scotch breeding. The sale will be held at the farm one mile east of Ottawa, Kan., next Saturday, January 24. Good connections can be made at Lawrence for Ottawa both the evening before and the morning of the sale. It is a great opportunity to buy a nice little foundation herd of the best in Shorthorns at auction. The selling of the farm prompted the sale. If you write today you have plenty of time to secure the catalog before the sale.—Advertisement.

Last Call for Caldwell Polands.

Tuesday, January 20 (next Tuesday), is Fred B. Caldwell's big Poland China bred sow sale at Topeka, Kan. The advertisement appeared in the last two issues of Kansas Farmer and Mail and Breeze. The sale numbers 50 head and consists of 10 tried sows, 10 spring yearlings, 10 fall yearlings and 20 spring gilts. Of this number are by the world's champion, Caldwell's Big Bob, and bred, as is most of the offering, to The Jayhawkers, The National Hotel, Topeka, is headquarters. Street car service to the farm and a splendid hard road (West 10th street) to the farm. It is the big Poland China event of the winter. Sale in a modern heated sale pavilion on the farm. Farm just north of Gage Park. Plenty of catalogues after you get there, if you have not written yet for yours.—Advertisement.

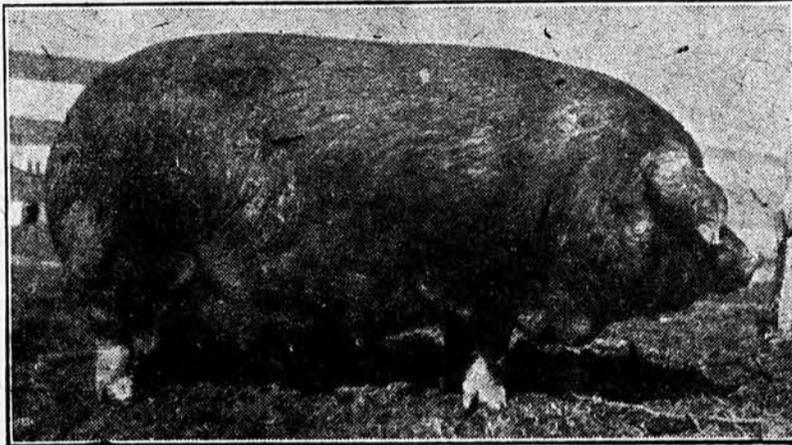
Holsteins at the Kansas National.

Holsteins, 250 strong, will be a big attraction at the great Kansas National Livestock show in the forum, Wichita, Kan., all of the week commencing Monday, January 26. Of the 250 splendid Holstein-Friesians, 60 head will be sold at auction. As an attraction to exhibitors \$1,500 in cash premiums will be awarded to Holstein-Friesian breeders. W. H. Mott, Herlington, Kan., is in charge of Holstein affairs and that the 60 head in the sale is an offering of great merit, goes without saying. The catalog can be had by addressing W. H. Mott, Herlington, Kan., and the quicker you write the better. You will get a real catalog. You never had an opportunity to buy more for your money than you will have in this sale. You want to attend this big Holstein show and sale, if you are interested in Holsteins. Both the show and sale will be held in the big forum and you will be nice and comfortable all week.—Advertisement.

An Important Duroc Event.

Attention of Duroc admirers is directed to the advertisement in this issue of Col. J. A. Howell's big dispersion to be held February 3, 1920, on the Tootle Ranch, at Berkimer, Kan. This sale should interest those that are looking for Durocs of the higher quality, for it will be remembered that this herd has gained its popularity thru the high class Durocs that have been

"Every One A Good One" is the Key Note
in the announcement of the 45 choice big type Poland females to be sold at Auction at
Platte City, Mo., Tuesday, February 3rd, 1920



Big Lady is typical of this offering of great females by such boars as F's Big Jones, Black Wonder, Gerstdale Jones, Big Joe, Big Bob and Long Jumbo 2nd.

NOTE—2 litters of July farrow good sows and sired by Sergeant Gerstdale Jones at \$50 each if taken at once.

E. L. DOLAN, PLATTE CITY, MISSOURI

Tried Sows, Fall Yearlings and Spring Gilts bred to a quartette of great boars.

Timm's Hercules (by Fessy's Timm), Giant Liberator (by Liberator and out of the great sow Mary Pickford), Elevator (by The Giant), and Sergeant Gerstdale Jones (by Gerstdale Jones).

Among the attractions are: Mary D' by Giant Joe and out of King Lady Wonder; Halvor's Hutch by Moore's Halvor; Miss Wonder by Black Wonder; Dolan's Choice by Big Joe; Orange Lady by Black Wonder; Orange Maid 3rd by Long Jumbo 2nd; and Hicrest Jumbo Wonder 4th by Long Jumbo 2nd. Such combinations of the best blood of the breed are bound to produce big-type, easy-feeding individuals profitable for either breeder or farmer.

N. L. Farmer will consign 7 head—3 tried sows and 4 spring gilts. All will be bred to Evolution by Fessy's Timm.

Attend this sale and buy from one of the season's best offerings. Parties coming from Kansas City or St. Joe stop at Farrelview on the electric line. Cars every hour; we meet all cars. The sale will be at the farm, 7 miles from Farrelview or Platte City. Send for the catalog now, mentioning this paper. J. P. Bennett will represent The Capper Farm Press.

SPOTTED POLAND CHINA HOGS.

Big Boned Spotted Poland Chinas
THE HOG OF THE HOUR

Bred and raised by a breeder of 35 years experience. A strong line of gilts, either bred or open, especially selected from my large herd. They are beauties, registered and ready to ship to you at attractive prices. Address WM. HUNT, OSAWATOMIE, KANSAS

Spotted Poland Bred Sows

8 bred sows, a number of bred and open gilts. Also one extra good 2-year-old herd boar. For sale at farmers prices. STUMBO & SONS, GREENFIELD, MO.

OLD ORIGINAL SPOTTED POLANDS

Sows bred and proved. Ready to ship. Young stock of all ages priced to sell. Write your wants to CEDAR ROW STOCK FARM, A. S. Alexander, Prop., Burlington, Kansas.

SPOTTED POLAND CHINA SOWS.

Bred to my big boars. Also choice September and October boar pigs priced right. Carl F. Smith, Riley, Kansas.

SPOTTED POLAND CHINA GILTS

Registered, large, good flesh and bone. Earl J. Matthews, Clearwater, Kansas.

SPOTTED POLAND BOARS

Ready for service, \$25; September pigs, \$15. T. L. Curtis, Dunlap, Kansas

POLAND CHINA HOGS.

DEMING RANCH POLANDS

For the next thirty days we will make special prices on extra good spring boars. The first check for \$75 will buy the best of the lot, or \$50 will buy a good April pig. Deming Ranch, Oswego, Kan. H. O. Sheldon, Herd Manager

POLAND CHINA SOWS AND GILTS

of Excellent Emblem, Big Bone Jumbo, Orphan Bob, Long Prospect, Giant King, Maple Grove Big Bob, Nebraska Wonder and other popular bloodlines. Poland Chinas of both sexes for sale at all times. Our bred sow sale is February 9. Write us your wants. P. H. & Harry Holcomb, Shelby, Neb.

Choice Young Boars

out of sows by Fessy's Timm and Arkell's Big Timm. These boars are by a good son of Eclipse Model and A. King Again, a 1,200 pound hog. All immune. Jas. Arkell, R. D. 4, Junction City, Kansas

Big Type Polands

Have some very choice young boars for sale. Can also spare a few more gilts. Most of the pigs are by Captain Bob. Frank L. Downie, R. 4, Hutchinson, Kansas

Prolific Big Type Polands

Big type spring gilts bred to Swingle's Big Jones for March and April farrow. A few choice August and Sept. boars and gilts. Prices very reasonable. A. J. SWINGLE, LEONARDVILLE, KAN.

75 Big Type Poland China Fall Pigs

Can furnish pairs or trios not aKiln. The best of breeding. A few tried sows and gilts. Some good boars. Immune and guaranteed in every way. ED SHEEHY, HUME, MISSOURI.

Big Black Polands

Spring boars that are heavy boned and have plenty of length \$35 to \$40. Good, growthy fall boars that are ready to ship \$20. All stock registered. E. M. WAYDE, R. 2, BURLINGTON, KAN.

POLAND CHINA BRED SOWS

One tried sow, two fall yearlings, some top gilts, all safe with pig to farrow in March. Priced to sell. T. CROWL, BARNARD, KANSAS

Jones Bros.' Sale of Immuned Bred Sows and Gilts

An offering of 40 Head Including 10 Tried Sows, 20 Fall Yearlings and 10 Spring Gilts. Sell in Scott & Dickinson's Sale Barn

Hiawatha, Kan., Saturday, Jan. 31

The tried sows include many of our choice herd sows. The spring gilts are the tops of the early farrowed ones; the fall gilts are big, roomy daughters of Jones' Jones, Buster Over and Walter's Jumbo Timm.

The offering is bred for early farrow to JONES' JONES by Gerstdale Jones, JONES' COL. JACK by Col. Jack, JONES' BUSTER by Buster's Model by Buster's Giant by Giant Buster, LONG ENOUGH by Walter's Jumbo Timm, dam by Big Bob Wonder, BUSTER THE GREAT by A Buster by Disher's Giant.

The Kind that are Made for the Farmer and Breeder

The best lot we have ever sold and bred to good boars. Every lot showing well to the service given. Send for the catalogue. Kindly mention The Kansas Farmer and Mail and Breeze.

JONES BROS., HIAWATHA, KAN.

Col. R. E. Miller, Auctioneer. O. Wayne Devine will represent this paper at sale.

W. E. Willey, Steele City, Neb.

41 Bred Poland China Sows
February 6, 1920

7 tried sows, 15 fall yearling and 19 top spring gilts, every animal immune. The only sale on earth in which you can buy a daughter, a litter sister or a granddaughter of the 1919 grand champion sow Miss Bob Wonder. They will be mated to some of the breed's most popularly bred sires such as Bob's Son by Big Bob; Victory Jones by Big Jones and 2' outstanding sons of Big Bone Ox by Long Big Bone and out of Miss Bob Wonder. Catalogs ready. Please mention this paper. W. E. WILLEY, Owner.

HILL'S BIG TYPE BRED GILTS

Poland China spring gilts sired by our new 1,000 pound herd boar, King Joe 2d and from big, well bred sows, safe in pig for March and April farrow, to Hill's Col. Jack a wonderful prospect by the \$10,200 Col. Jack and from a \$575 Big Tim sow. High kind at low prices; good gilts at \$65; choice at \$80. Immuned and guaranteed to please. W. H. HILL, MILO, KANSAS

POLAND CHINA BRED SOWS AND GILTS

also fall pigs. We won 49 premiums at the state and county fairs on our 1919 show herd. We show our breeding hogs and breed our show hogs. Satisfaction or money back. PLAINVIEW HOG AND SEED FARM, Frank J. Rist, Prop., Humboldt, Neb.

Boars for Sale at Private Treaty

Choice grandsons of Caldwell's Big Bob (grand champion of world) sired by Black Bob Wonder and by King Bob. Pigned in March, April and May. Immunized. W. C. HALL, COFFEYVILLE, KANSAS

Profitable Poland Gilts

at Public Auction in Sale Pavilion

Le Mars, Iowa

Saturday, Feb. 7

40 Head of Good Useful Gilts

sired by good boars and bred to two promising young boars, one a son of Omaha, Henry Dorr's noted boar, and the other by a son of Big Timm and out of a daughter of The Guardsman, and he is a litter brother to the noted Clansman. The gilts are all good business gilts and will make money for the man who buys them. Write for catalog to

Geo. Sitzman, Kingsley, Ia.

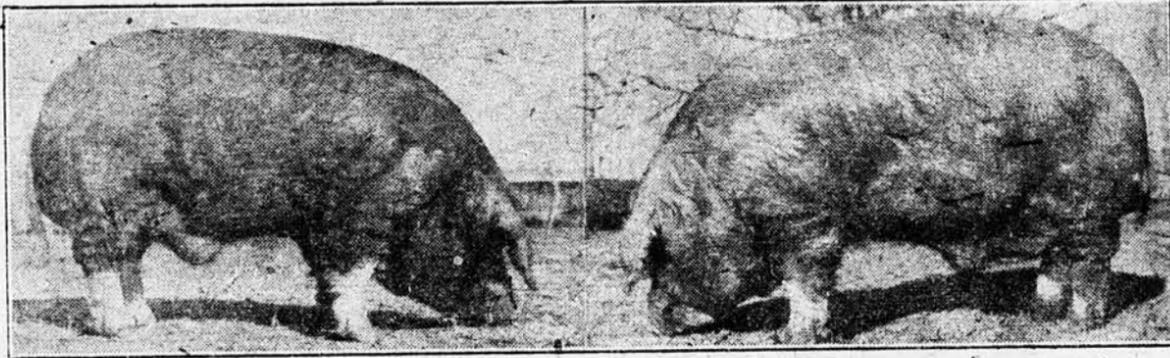
H. P. Steele will represent the Kansas Farmer and Mail and Breeze.

Big, Growthy Poland Gilts

bred in the 1200-pound A Longfellow and A Wonder Hercules. JAMES NELSON, R. 1, Jamestown, Kan.

"QUALITY PLUS SIZE" IS OUR SLOGAN

It will be exemplified by the 40 head in our sale to be held at
David City, Neb., Wednesday, (Day Sale) February 4
 40 Big Type Poland Females Sired By or Bred to



LONG PROSPECT

WADE'S PROSPECT

Long Prospect is by Giant Prospect and out of Mary Nelson. He is a mammoth boar and a proven sire. The greater part of the offering is bred to him. Wade's Prospect is by Long Prospect and out of Choice Lady. Eight of the choice sows are bred to him. Two gilts by Long Prospect out of Jumbo Lady are bred to W. S. Timm by Big Timm out of Big Mable. A number of sows sired by Nebraska Emblem (first prize aged boar at the 1918 Nebraska state fair) sell bred to Long Prospect. He has also been mated to 4 spring gilts sired by Wonder Jumbo. Long Prospect gilts out of a Big Bob dam sell bred to Wade's Prospect. Remember the sale is at David City. For your catalog write, mentioning this paper.

O. E. Wade, Rising City, Neb. Col. A. W. Thompson, Auctioneer
 J. C. Lamb will represent the Capper Farm Press

Dean's Greatest Offering

Is the opinion of all who have seen the Polands I have selected for my annual bred sow sale at
DEARBORN, MISSOURI, WEDNESDAY, FEBRUARY 4

50 Tried Sows and Gilts sell bred to three great herd boars

Dean's Big Timm by Big Timm and out of an A Wonder dam
Dean's Big Model by Dean's Big Timm and out of a Long Big Bone dam.
Black Orange by Mouw's Black Chief and out of an Orange Boy dam.

8 Tried Sows—12 Fall Gilts—30 Spring Gilts

Among the real attractions are one sow by Korver's Big Jumbo, a litter mate to the grand champion boar at the 1917 Missouri State fair; several large spring gilts by Dean's Big Timm and out of dams by Big Bob and Black Jumbo; and four choice gilts by Dean's Big Jones, bred for early March litters to Black Orange.

I am selling some real foundation material and it will be to your interest to investigate. Write for any information desired. Don't forget the date, Wednesday, February 4. Plan to attend. The sale is in town. Electric cars every hour from Kansas City or St. Joe. Send for a catalog today, mentioning this paper.

Clarence Dean, Weston, Missouri

J. P. Bennett will represent the Capper Farm Press. Send him your buying orders if you cannot attend.

Myersdale Farm Poland China Sale

In heated sale pavilion in town at
Gardner, Kan., Saturday, February 7

50 head of tried sows and fall yearling gilts bred to my herd boars for early March litters. Liberty King by Liberty Bond, Giant Joe and Giant Buster.

A few of the outstanding attractions bred to Liberty King: No. 1, M's Lady Buster 2nd, by Gerstdale Jones, dam is Matchless Lady by Giant Buster, the dam of the Winn & Moore 1919 show litter. No. 2, Helen Clark by W's Giant; this sow raised two litters this year and is one of the best sows on the farm. Nos. 3, 4, 5 are litter sisters to H. B. Walter's Buster King herd boar; they are extra good and should prove valuable sows in any herd. No. 6 is yearling sow by Wonder Buster. Three other good sows by Just Buster, he by Giant Buster. No. 10, two-year-old sow by Williams' Wonder, one two-year-old sow by Giant Joe; one two-year-old sow by Model Big Bob, one by Big Joe and one by Mammoth Boy. All the above are bred for early March litters to Liberty King. 25 spring and fall gilts by Giant Joe and Big Jones, bred to Big Giant, a son of Liberator. Please send for catalog, mentioning this paper to

H. E. Myers, Gardner, Kansas

Auct.: J. C. Price. Send bids to O. W. Devine, representing Kansas Farmer and Mail and Breeze.

bred and sold from the herd. This together with the business policies pursued has gained an enviable reputation for this firm. As this is a complete dispersion nothing will be reserved. Five herd boars sell, including the first prize and reserve grand champion, Elk Colonel, and three of his sons. Fifty bred sows and gilts make up the female offering, many of them winners and dams of winners, including the great 800 pound senior yearling show sow. This sow is regarded by many as one of the breed's best sows. She is a high class producer. Gay Dora, many times a winner; Violet's Prize, the dam of several state fair winners; May Girl, dam of Royal Colonel, second at Kansas fair. This grand array of sows with others, that by virtue of their producing ability have been kept in the herd, will be at your disposal and we would urge that you don't fail to attend this sale. The illustrated catalog is ready for mailing, it gives full particulars and can be had for the asking, just write, mentioning this paper. Advertisement.

Inquiries in Large Numbers.

A. S. Neale, one of the biggest Holstein breeders of the West, who will hold his dispersion sale at Manhattan, February 5 and 6, writes that inquiries for catalog are coming in large numbers and that there is every evidence of a great interest in the breed. It is a very fortunate arrangement that Mr. Neale's sale is dated to follow immediately the meeting of the state dairy association and the meeting and banquet of the Holstein Friesian Association of Kansas which will be held at Manhattan the evening of February 4. This will enable everybody interested in Holsteins to take in the three important events at a minimum cost and with the fewest possible days away from home. Not only will nearly all Holstein breeders of Kansas be present but there will be many in attendance from outside the state. As an opportunity for broadening one's acquaintances among men interested in dairy work and particularly in Holstein Friesians few men can afford to miss being at this sale and the meeting preceding it.—Advertisement.

Draft Sale of Herefords.

Seever & Adkins and Seever & Son, Smith Center, Kan., are two Hereford firms that breed high class Herefords in that section who have decided upon a draft sale of Herefords to be held in Smith Center, Kan., Monday, February 2. They will sell 53 head in all. Twenty of them are cows and seven have calves at foot. There are six two-year-old heifers and three three-year-olds. There is a nice string of 17 bulls, ranging in ages from seven months up to 24 months old. Among them is real herd leader material and good farm and range bulls. Everything will be sold in just ordinary flesh, not fat but in the best of breeding condition. The Seevers are real Hereford breeders and have bred Herefords in Smith Center for years. S. D. Seever, the senior member of the firm, is well known in Kansas as a Hereford breeder that takes an active interest in Hereford development and in a better class of Herefords. The catalog is ready to mail and you can have one by addressing either Seever & Adkins or Seever & Son at Smith Center. Get the catalog right away.—Advertisement.

Notable Duroc Event.

The Kansas Duroc Jersey Breeders' association is a going concern with a large membership. The annual meeting and sale will be held at the agricultural college in the big commodious judging pavilion, Friday, February 6. This is home-coming week at the college and there will be plenty of entertainment for everybody interested in better livestock and better farming. In the sale 50 head of bred sows and gilts will be sold, consigned by 20 of the well known breeders of the state. It is a great opportunity to buy a variety of breeding of the very best and individuals that can't be bought anywhere in the west. The sale is being managed by Roy E. Gwin, Morrowville, Kan., and he has certainly lined up a grand offering. The tops of the 20 herds are almost invariably consigned as the members are anxious to make a good showing for the herd. The day before the sale a competent judge will place them in the show ring and they will be sold as placed by the judge. Prices are not liable to range high but it is sure to be an offering worthy of the attention of any breeder. Write at once and get the catalog. Address, Roy E. Gwin, sale manager, Morrowville, Kan. Look for the advertisement in this issue.—Advertisement.

Great Holstein Dispersion.

A. S. Neale, Manhattan, Kan., is closing out his great herd of Holstein-Friesians in a big two days' public sale, at his barn adjoining Manhattan, Kan., Thursday and Friday, February 5 and 6. In this big dispersion sale 150 females will be sold. There is no question about this sale being the most important sale of high class Holsteins ever made in Kansas. The dispersal is made necessary because of eastern business connections that will demand Mr. Neale's attention for awhile. Those interested in high class Holsteins know of Mr. Neale's operations during the past year and a half. He has bought by him and brought west to his Manhattan barns and the real tops retained and the rest sold. Until his recent decision to close them out he had planned on some pretty big things for the future of the Holstein game. His decision to sell his herd at auction on these dates affords a splendid opportunity to secure real high production cows and heifers at prices that will be low compared with the great quality of the offering. You should write for catalog at once and you will find it well reading. Mr. Neale came west to take position with the dairy department at Agricultural college and his work there pretty well known. He has since been active in Holstein affairs of the state and secretary of the big Kansas Holstein Breeders' association. It is to be hoped that the great string of 150 head of Holsteins and heifers remain in Kansas and undoubtedly a majority of them will. Write once for the catalog.—Advertisement.

John W. Jones Sells Durocs.

Duroc Jersey breeders are respectfully requested to turn to the advertisement of John W. Jones' Duroc Jersey bred sow to be held in Sallina, Kan., Thursday, February 5. The advertisement will give a pretty good idea of what the offering is like but you want the catalog if you are interested in Duroc Jerseys. One of the very best bred offerings to be auctioned where this winter is the John W. Jones offering on this date. As individuals, simply can't beat this offering of selected fall and spring gilts and the few tried that go in the sale as attractions. Fair

DUROC JERSEY HOGS

Woody's Durocs

Bred Gilts of March and April farrow sired by Pathfinders, Orions and Creators. Bred to Climax Sensation for March farrow. Extra good ones at \$50 and \$60. A few fall yearlings and sired sows at \$70. July pigs at \$20, all immune. Extra good.

WOODDELL'S DUROCS

21 spring boars, 1 searling boar, nearly all of them sired by Chief's Wonder, the boar that is breeding champions. These are good type boars, and am pricing them at farmer's prices in order to make room for my fall pigs. Write, wire or come for prices. G. B. WOODDELL, WINFIELD, KANSAS.

Boars of Size and Quality

Large March and April boars, real herd boars prospects. Sired by Cherry King Orion, Reeds Gano, Potatoes Orion; dams by Pathfinders King the Col. and Crimson Wonder. Priced to sell.

Fulks' Large Type Durocs

Sired by Uneeda High Orion and Nebraska Col. Chief. Boars and gilts of March and April farrow. Immature and guaranteed to please. Some real herd boar prospects. Bred sows after January 1.

Choice March Boars \$40 to \$50

Choice March gilts, bred and safe in pig, \$65 each. 150 Sept. pigs, pairs and trios not akin, \$30 each. All stock gus.anted immune.

McComas Durocs

Spring Boars All Sold. Have some fine fall boars by sons of Sensation and Pathfinder, out of sows sired by champions. Herd boar prospects. The rugged kind for farmers. All immune.

DUROC JERSEY BRED SOWS

Three tried sows, some toppy gilts and all bred to two of the leading boars of the state for March farrow. Priced to sell. FRED CROWL, Barnard, Kan.

Replogle's Durocs

Spring boars; registered and immunized; Orion, II-illustrator and Colonel bloodlines. Gilts and fall pigs same breeding satisfaction guaranteed.

Registered Duroc Boar For Sale

2-year-old in March, papers furnished, well bred and selected; weight between 325 and 400 pounds. Papers paid within state; outside, O. D. Price \$75.

Duroc Gilts at Private Sale

These are choice gilts, in pig to my great herd boar, Pathfinder Orion. Address

BRED DUROC SOWS

of Orion breeding and bred to high class boars. Prices reasonable.

Pleasant View Stock Farm

Duroc Jerseys. Bred sows and gilts at private sale. Mostly by a splendid grandson of Orion Cherry King.

DUROC BOARS AND GILTS

The great boar Lenhart's Colonel, noted for extreme size and bone. Pigs weigh 75 and 80 pounds. Price guaranteed.

WALLEY SPRING DUROCS

Choice fall and spring boars and sows, all immune, registered, \$15 to \$25 each, a few bred sows and gilts, cheap.

DUROC PIGS AND BOAR

Small pigs \$15 to \$20; one big boar \$75; all immune.

DUROC JERSEY bred gilts.

Bred for March and April farrow, to Joe Orion Cherry King and First Quality, boars with size and quality.

CHESTER WHITE HOGS.

Raise Chester Whites

Like This the original big producers

Illustration of a pig

I HAVE started thousands of breeders on the road to success. I can help you. I want to place one hog from my great herd in every community where I am not already represented by these fine early developers—ready for market at six months old. Write for my plan—More Money from Hogs.

Arthur Mosse, Jan. 20

Kansas herd Chester Whites, 40 sows and gilts. Swine show and state fair winners of 122 ribbons in 1919. Big free catalog. Address

Arthur Mosse, Leavenworth, Kan.

MONDAY, JAN. 19, 1920, WILL BE A PRIZE TIP TOP DAY IN TONGANOXIE

will sell 40 head of toppy sows and gilts including prize, Champions and Grand Champions bred to Great Champion boars, a real tip top offering. Catalog free. A few boars for sale.

CHESTER WHITES

Choice fall boar pigs, and a few bred

CHESTER WHITE BOARS AND GILTS

For sale. Sired by Bob Tip Top. Best of breeding.

Orion Cherry King, owned jointly by Mr. Jones and Ross M. Peck, Gypsum, Kan., (Mr. Peck securing the half interest by the payment of \$1,500 in cash) certainly sired a great crop of 1918 fall gilts for these breeders and the 1919 spring crop is every bit as good. The tops from these lots of fall and spring gilts and the tried sows listed comprise one of the strongest offerings ever made in the west, at least. I want to urge every breeder, to send an order to Mr. Jones for his catalog. You will be agreeably surprised to find the fancy and popular blood lines contained in it. Fairview Illustrator, one of the best boars in the country and owned by Mr. Jones is truly a wonderful sire. Most of the offering is bred to this great boar. Some are bred to Fairview Orion Cherry King. Others to a great youngster, Lady's Col. Orion, one of the tallest, longest and best footed boars I have seen in a long time. Now take it from me this catalog is chock full of the richest kind of up-to-date and fashionable breeding. The individuals are all good and better than just good. But write right now for the catalog. You will be interested in it.—Advertisement.

BY J. T. HUNTER

Miller Brothers 101 Ranch, Bliss, Okla., are offering a great Holstein bull priced worth the money. He is the right age to go into hard service in your herd. He would make money for you at a long price but you can afford to buy him regardless of how small your herd. Look up their advertisement in this issue.—Advertisement.

Morton-Wenrich-Warren Poland Circuit.

This is the last call for the above named Poland sale circuit. Geo. Morton, Oxford, Kan., sells Thursday, January 22; H. R. Wenrich, Oxford, Kan., Friday, January 23, and E. T. Warren, Clearwater, Kan., Saturday, January 24. Advertisements and readers in the Kansas Farmer and Mail and Breeze issues of January 3 and 10 should be read again to refresh your memory. It is sufficient to say at this time that, without a shadow of a doubt, they are men, each having a son of Disher's Giant as herd boar, who have the blood of the biggest in Poland. It will be worth your while to attend their sales.—Advertisement.

Fulks' Consignment to Wichita Duroc Sale.

W. H. Fulks, Turon, Kan., is consigning a choice bunch of Duroc bred sows and gilts to the Duroc sale to be held in connection with the Kansas National Livestock Show at Wichita, Kan., January 30. These are bred to Fulks' great herd boar, I Am A Great Wonder Giant, a grandson of Great Wonder I Am and the mighty Pathfinder. He is 63 inches long, 34 inches high and stands on 8 1/2 inch bone. This boar as well as the dams of the gilts to be sold will be at the show, giving you a chance not only to see the sale animals but to see what is behind them. This offering is guaranteed to be with pig, a rebreeding privilege being given should they prove not to be. Look up the ad on this consignment.—Advertisement.

Enterprise That Wins.

The Holstein-Friesian Association of Kansas has grasped the opportunity opened to it by the big show and sales at Wichita and will make this event the year's greatest stroke in putting over the Holstein in Kansas to an even greater prominence than the breed ever before has enjoyed. Nearly all the state livestock associations have cooperated freely with the management of the Wichita show but it appears that for prompt, vigorous and concerted action the Holstein breeders of Kansas have rather taken the lead. That at least is the view of Sales Manager W. H. Mott, who expresses the belief that the Holstein show of the Kansas National Exposition will be the best, both in quality and numbers, ever held in this territory.—Advertisement.

Registered Sheep at Auction.

The farmers of Kansas and Oklahoma are fast learning of the many advantages of keeping a few good sheep on the farm. Sheep not only live and do well on the weeds, that other animals refuse to eat, but they help to clean the pastures and fields of the undesirable weeds, so that the pasture will furnish more grass for the stock and the fields will produce larger and better crops. If you are going to grow sheep it will pay you to grow the best of registered stock. Of all the sheep grown in the United States less than two per cent are purebred, so you can easily see that there will be a strong demand for good seed stock, which is just as necessary as good seed for agricultural crops. The sheep at the Kansas National will be judged on Monday, the opening day, the banquet for sheep breeders will be held that evening, and the sale of 100 bred Shropshire ewes and ten rams will be held Tuesday, January 27. We feel safe in saying that this sale contains more high class Shropshires than were ever offered at auction in one sale. Every animal is consigned from a flock that exhibited and won prizes at the leading state fairs in 1919.—Advertisement.

The Morton-Wenrich-Warren Poland Circuit.

This sale circuit Thursday, Friday, Saturday, January 22, 23 and 24. (Geo. Morton, Oxford, Kan., January 22; H. R. Wenrich, Oxford, Kan., January 23; and E. T. Warren, Clearwater, Kan., January 24) affords a real opportunity for farmers and breeders to visit these sales and see that "blood" really tells in hog raising.—About two years ago Geo. Morton sent to the home of the 1,000-pound Disher's Giant and bought a pig from his owner by Disher's Giant and out of the great brood sow, Lady Lunger. This pig is Morton's Giant, now a half-ton boar, and it takes some boar to tip the scales at 1,000 pounds. Some time afterward H. R. Wenrich, also of Oxford, sent back to same farm and bought a full brother to Morton's Giant but eight months younger. This boar, Giant Lunger, is fully as worthy as his older brother. He is up around 900 pounds and still growing too. Some miles away at Clearwater, Kan., E. T. Warren owns a litter mate to Morton's Giant and he maintains the reputation of his family by being a big boar also. Mr. Warren did not buy this boar when he was a pig. He was pretty well grown up when Mr. Warren got him and he had to pay a good long price for him when he did get him. Blood certainly tells in these three boars in that they are hereditarily large and good breeders because their ancestry for generations back was "hand picked" from the biggest sires and dams of proven breeding qualities. The accumulated prepotency in this respect is manifested not only in the boars themselves but also in the size, quality and breeding that these sires are putting into their offsprings when mated to good sows. Other sires and the dams are discussed at some length in the display advertisement

DUROC BRED SOWS

selected from three great herds for the big sale at Topeka, Kansas, January 22 In heated building at Free Fair Grounds

Sisco & Doerschlag, H. A. Johnson and Searle & Searle Sell 50 Selected Females Safe in pig for March and April Farrow

Sisco & Doerschlag, R. 2, Topeka, Kan.,

consign 32 head, bred to Pals Orion Cherry King 280561, and Pathfinder Creator 329753. Good growthy gilts that will make good.

H. A. Johnson, R. 2, Perry, Kan.,

consigns 10 Tattarax-Critic gilts bred to a Golden Model boar. These are a carefully selected lot and sure to please.

Searle & Searle, R. 15, Tecumseh, Kan.,

consign 8 of their best gilts sired by Searle's Illustrator 299661, and bred to Bonnie Orion, 322955.

The entire offering is immune and guaranteed safe in pig. Here is one of the best chances you will have this season to get ready for the hog shortage. Write today for catalog to

Ralph H. Searle, Box 275, Topeka, Kansas

Auctioneers, C. M. Crews and Homer Rule. If you can't come, mail your bids to John W. Johnson, who will represent this paper.

HOLTS' HERDSMAN

presents the bred sows and gilts from the Long Island Stock Farm Duroc herd which will be sold at

Kearney, Neb., Tuesday, January 27th

40 Tops From A Herd of Over 250. The short, small or poor type ones go to the packers. 11 Tried Sows, 14 Junior Yearlings; 15 Spring Gilts.

A number of the better sows are bred to the great young boar

Great Orion Jr.

Included in the offering are a 2-year-old sow by Top Sensation; a 2-year-old by Deet's Illustrator 2nd; 2 Joe Orion 5th sows; 5 junior yearlings from one litter by Real Sensation are real clippers; 10 junior yearlings from Real Sensation; and 2 by The King. The spring gilts are by Real Sensation, Great Orion Col. and The King.

Every Duroc breeder and almost every farmer knows the value of the great sires represented in this offering. You need their blood on your farm. Write for your catalog now. Cols. Putman and Shaver will sell. J. C. Lamb will represent The Capper Farm Press.



Master Holt—The Herdsman

H. C. Holt & Sons, Kearney, Neb.

Platte Valley Bred Duroc Sows and Gilts

from a herd strong in the blood of the Sensations and Orion Cherry Kings, in the new sale pavilion at

Lexington, Neb., Wednesday, (Day Sale) January 28

50 HEAD—Tried Sows; Yearlings; Spring and Fall Gilts

The offering includes: 12 tried sows that have proven money makers for me; they are the big, high-up kind yet have the smoothness and quality so necessary to profitable pork production. 15 Spring Yearlings by Golden Wonder Cherry King Orion and Fancy Wonder 3rd. 10 extra good ones by King Sensation. Others by Joe Orion 5th, Grand Model's King, Great Wonder, The King, Big Sensation and Deet's Illustrator. 8 Spring Gilts sired by King Sensation, The King, Big Sensation, Ideal Pathfinder and Great Model I Am.

The greater part of the offering is bred to King Sensation Lad, a product of the Platte Valley Herd. He is a real boar sired by King Sensation and out of a King of the Col. dam. He is big, long and tall for his age measuring 58 inches long, 34 inches high and stands on 8-inch bone. He is bred right; he is right; his get from these great females will be right.

Write for the catalog of this offering that will make money for the farmer or the breeder. (Please mention this paper.)



The Kind We Produce—Big, Smooth, Vigorous Producers

H. E. LABART, OVERTON, NEBRASKA

Cols. Putman and Shaver, Auctioneers. J. C. Lamb represents The Capper Farm Press.

"Model" Bred Duroc Bred Sows and Gilts

are the type that are in demand. You will have the opportunity to secure some at

Cozad, Neb., Wednesday, (Night Sale) January 28

50 HEAD

10 Tried Sows—30 Fall Gilts
10 Spring Gilts



"Model" Type, the Kind for Farmer or Breeder.

Cols. Putman and Shaver, Auctioneers. J. C. Lamb will represent The Capper Farm Press.

The 10 tried sows are proven sows from our own herd. They are sired by King Sensation, The King, Great Orion and Model Wonder.

26 Fall Gilts by Grand Model I Am, the \$3500 boar.

4 Fall Gilts by Mammoth Sensation, 10 Spring Gilts by Nebraska Model, Pathfinder 2nd, Giant Perfection, King Sensation and Pathfinder's Likeness (the O. S. Larson boar.)

The most of these females sell bred to Nebraska Model 2nd prize senior boar at Nebraska state fair in 1918. Write for catalog at once so that you may thoroughly post yourself on this splendid offering. Please mention this paper.

H. D. GEIKEN, Cozad, Nebraska

Duroc Bred Sows

As we will not hold a public sale this winter, will sell a choice lot of bred sows and gilts at private treaty. Tried sows, \$70 to \$80; early spring gilts at \$60 to \$70 each. Write for descriptions and breeding.

A. L. Wylie & Son, Clay Center, Kansas

200 Big Bred Duroc Gilts

Buy bone and breed big. Get the gilts, pay for them afterwards. Pedigrees recorded. Written guarantee they are immune and in farrow.

F. C. Crocker, Box B, Filley, Neb.



Big Type Boars

Pathfinders, Colonels, Orion Cherry Kings And other popular Big Type strains from big mature sows. Immuned. Priced to sell.

G. M. SHEPHERD, LYONS, KANSAS

TIMBER HILL STOCK FARM

Big, smooth Duroc bred gilts and fall pigs. Gilts by Valley King the Col. (actual weight 900 pounds) and Pathfinder Enuff by Pathfinder Chief 2nd; bred to Orion's King and Pal's Orion. These are the big, stretchy kind. Write for illustrated circular. Breeders of Durocs for 25 years.

Lant Bros., Dennis, Kansas

THE HOME OF UNEEDA HIGH ORION

Top Boar in The World's Record Litter of 1918; sire, High Orion; dam, Golden Uneeda. He was grand champion at Topeka 1919. Largest boar in Kansas of his age. Some real herd boar prospects sired by him. The highest priced boar going out of Kansas was sired by him. We guarantee to please.

ZINK STOCK FARMS, TURON, KANSAS

WOOD'S DUROCS

Spring pigs, both sexes. Great Wonder strain; registered; immuned, double treatment; satisfaction guaranteed.

W. A. WOOD, ELMDALE, KANSAS

FULKS' DUROC BRED SOWS AND GILTS

will be sold at auction at the Kansas National Livestock Show

Wichita, Kan., Jan. 30, 9:30 A. M.

They are bred to I AM A GREAT WONDER GIANT. He is a grandson of Great Wonder I Am and the mighty Pathfinder. You can see him at the show. The dams of the bred gilts will also be there. They are of Critic and Illustrator breeding; some by the grand champion Uneeda High Orion. The sale animals are guaranteed to be with pig and are sold with breeding guarantee. Write F. S. Kirk, Wichita, Kan., for catalog.

W. H. FULKS, TURON, KANSAS

Bred Durocs

We will sell 50 head of popularly bred Duroc sows and gilts on February 29. Send your name now to be put on our mailing list for catalog. Please mention this paper.

B. W. CONYERS, R. 7, MARION, KAN.

DUROC HOGS

For sale or trade for Guernsey or Jersey bull or heifers, fine cherry red, Pathfinder, October 29. Bred sows, and Green's Pathfinder herd boar.

GREENWOOD FARMS, PARSONS, KAN.

that these men have in this and the previous issue of the Kansas Farmer and Mail and Breeze. Whether you are greatly or mildly interested in Poland Chinas it will pay you to get catalogs from all three of these men and look the catalogs over and see what blood will do. Please mention the Kansas Farmer and Mail and Breeze when you send for the catalogs.—Advertisement.

Unusual Sale of Big Type Polands.

F. S. Kirk, the manager of the Kansas National Livestock Show at Wichita, has filled the Kansas National Poland sale with hogs strong in the blood of grand champions. Practically every animal in the sale is sired by, or bred to a grand champion. S. F. Harvey consigns seven gilts, sired by the world's champion, Caldwell's Big Bob. They are bred to Elkhurst Timm, a boar sired to be the best one ever sired by the world's grand champion, A. Big Timm. Look out for Elkhurst Timm in the show at Wichita. It will take some boar to beat him. J. A. Williams, Oswego, has consigned twenty bred gilts sired by the grand champion, Big Bob Jumbo. The Deming Ranch has won more prizes in the show ring on the get of Big Bob Jumbo than have been won on the get of any boar owned in the Central West. R. L. Barnes heads his consignment with Wonder Price, the largest, smoothest and best yearling boar ever offered at auction in Kansas. At seventeen months the boar weighed 900 pounds, standing 39 inches high on a 10 1/2 inch bone. He will show as a junior yearling at the Kansas National, and will come to the show weighing right at 1,000 pounds. Mr. Barnes sells four spring gilts bred to Wonder Price, also gilts sired by Wonder Price bred to Elkhurst Timm. Zelma Knox is a litter mate to Caldwell's junior yearling sow of 1918. Her first litter of pigs sold for \$1,500 before they were months old. One of her boars recently sold for \$1,000. She sells bred to Wonder Price. Send for catalog of this sale to Frank S. Kirk, at Wichita, and mention this paper.—Advertisement.

W. I. Bowman & Company Hereford Sale

W. I. Bowman & Co., of Ness City, Kan., will sell 70 registered Herefords at the Hutchinson State Fair Grounds, Saturday, Feb. 7. This offering will include 26 two-year-old heifers, by Imp. Shucknall Monarch and Lawrence Fairfax, bred to Generous 5th and Lawrence Fairfax, 4 coming two-year-old heifers; 25 cows, a number with calves at side. The breeding of the cows is Generous 5th, the \$31,000 grand champion Admore and other strongly bred Anxiety and Fairfax bulls. The calves are by Imp. Shucknall Monarch, Lawrence Fairfax and Generous 5th. Some of the features of the sale will be the Generous 5th heifers that have all been bred and raised on the Bowman ranch. There will be an Ardmore heifer with heifer calf at side by Lawrence Fairfax, a daughter of Perfection Fairfax with bull calf at side and two unusually fine bull calves by Imp. Shucknall Monarch. This will be the best offering that Bowman & Co. have ever sold at public sale and will likely be the last of the direct Generous 5th blood they will offer. The Bowman herd comprises over 800 head and the males selected for this sale are good ones and "good ones" from the Bowman herd means good ones anywhere. The herd by Generous 5th proved to be a great breeding bull so much so that the name, "Generous Herefords" is a particularly desirable name among Hereford breeders. Three years ago Bowman & Co. bought Imp. Shucknall Monarch to use on their Generous 5th and Fairfax heifers. The old herd sire that he made an enviable name for the Bowman Co. Herefords is now gradually receding into the background and is being supplanted by Imp. Shucknall Monarch that has proved himself fully capable to go ahead and produce Herefords that are at least as good as produced by the senior herd sire and perhaps better as is indicated by his very attractive sons and daughters. Fifteen registered bulls sell at this sale also. Bowman & Co. are going to have some unusually good Herefords to sell and it will pay you to see one of the catalogs so send at once for one mentioning, if you please, the Kansas Farmer and Mail and Breeze. Address W. I. Bowman & Co., Ness City, Kan.—Advertisement.

A Wonderful Percheron Sale.

For the past three years the Percheron sales held in connection with the Kansas National Livestock Show have been acknowledged as the best Percheron sales in the United States. Not that horses higher than elsewhere, but more grand champion blood and more prize winning animals are sold in these sales than elsewhere. The greatest sire of champions that ever lived is the \$40,000 grand champion Carnot, owned by W. S. Cora, Wheeling, Ill. More Carnot blood will be sold at the Kansas National sale, January 31, and will be offered in any sale during the season. The sale includes 10 sons and grandsons, daughters and granddaughters and 12 mares bred to Carnot and sons of Carnot. More than 100 stallions of all ages, both American bred and imported, were shown at the 1919 Illinois state fair. The grand champion was the yearling stallion Carnot, bred out of the imported mare Inn, a grandson of Besigue, and her dam Besigue. Mr. Cora has consigned Imp. Inn to the Kansas National sale. She is safe in foal to Carnot. The highest bid that any sire can win is first prize on a crop of colts sired by Carnot. Since the crop of colts sired by Carnot have been undefeated first prize winners in the class of sire at the International. A show unapproachable by any other sire living dead. As a special attraction for the Kansas National sale, Mr. Cora has consigned to the sale, probably the best bred stallion living. We do not know of any other sire that has so many grand champions shown in the pedigree of Iocarpus. He is sired by an International winner, and the \$40,000 International grand champion mare, Iolanthe, (she by the International grand champion, Calypso, who ranks second to Carnot as the greatest sire of International prize winners); the dam of Iocarpus, Empress, produced three International winners, including one grand champion American bred mare, an own sister to Empress. The sire of Empress was the world's fair champion, Casino, has sired more grand champions than any stallion owned west of the Mississippi. Truly that is a wonderful pedigree, and cross sparkles with the blood of a first prize winner, and he certainly will sell a lot of prize winning colts. The sale contains numerous other prize winning lions and mares including the grand champion, Imported Hector. It will take a sale catalog to tell you the whole story. Write to F. S. Kirk, Manager, Wichita.

mentioning this paper for free Percheron sale catalog.—Advertisement.

BY J. COOK LAMB

Tyler's Reds at Auction.

Mr. and Mrs. R. E. Tyler, of Lexington, Neb., owners of the Duroc herd known as Tyler's Reds, are making preparations for a great sale January 30 in the \$5,000 sale pavilion at Lexington. The offering consists of 45 head, 20 tried sows, eight fall gilts and 17 spring gilts, all of which are strong in individual merit and of attractive breeding. Their herd boar, Real Sensation Jr., to which this offering is bred, promises to be a real producer as the fall pigs that he sired are strictly high class. Send your name early for catalog and plan to be on hand sale day. In your correspondence, please mention this paper.—Advertisement.

Durocs and Shropshires at Fairmont, Neb.

An opportunity to secure both Shropshires and Durocs in one sale will be presented by O. E. Harmon, Fairmont, Neb., on February 7. The 40 ewes to be sold are all young, thrifty individuals bred to a son of the grand champion buck of Nebraska 1917. The 40 Durocs will include 20 head of Harmon's best producing sows representing such sires as King Cherry King, Improved Pathfinder, King's Colonel and Colonel Oneeda and bred to his trio of herd boars, Joe Orion and a son of Joe Orion 2d; Wonder Cherry King, by King Cherry King, and Chief's Colonel by Primrose Colonel. Full particulars about both offerings can be found in the catalog, which is ready to mail. Send your name early and please don't forget to mention this paper.—Advertisement.

Top Duroc Sale at Lexington.

L. B. Benson, Lexington, Neb., is holding a sale of top Durocs, January 31, 1920, in the new pavilion at that place. The offering comprises 52 head of choice Durocs, 18 tried sows sired by King the Colonel, King Sensation, Critic Orion Cherry King and Illustrater; eight fall gilts by Illustrater and 26 spring gilts by Orion, Model Wonder and Illustrater. They are all bred either to Big Pathfinder, one of the good yearling sons of the mighty Pathfinder, or to Orion Sensation's Masterpiece, a son of Great Orion Sensation, a litter brother to Great Orion Sensation (grand champion at the National Swine show). These two boars are highly bred and their get should be in great demand. A catalog giving complete information may be had on application to Mr. Benson, mentioning this paper.—Advertisement.

Duroc Sale at Cozad, Neb.

H. D. Gelken, Cozad, Neb., is offering a strong lot of Durocs for sale, January 28. This offering is a well grown lot of sows and gilts. The tried sows are sired by King Sensation, The King, Great Orion and Model Wonder. The 30 fall gilts are the heavy boned, high back type, sired by the \$3,500 boar, Grand Model I Am, and by Mammoth Sensation. Ten spring gilts are by Nebraska Model Pathfinder 2d, Giant Perfection and King Sensation. Here will be an opportunity to secure the blood lines and the type so much in demand by Duroc breeders. This is a night sale and can be attended the same day as H. E. Labart's sale at Lexington. Write Mr. Gelken for catalog and investigate this great offering, mentioning this paper.—Advertisement.

H. E. Labart's Quality Durocs.

Strong in the blood of Sensation and Orion Cherry King will be the offering of 50 head of select Durocs to be sold by H. E. Labart, January 28, in the new sale pavilion at Lexington, Neb. The blood of Joe Orion 5th, Golden Wonder, Great Wonder, Deet's Illustrater, Ideal Pathfinder, Grand Model I Am and King the Colonel will be represented also. A large per cent of the offering will be bred to King Sensation Lad by King Sensation and out of a King the Colonel dam. This young boar promises to be an unusual sire and it should be a good investment to get a sow bred to him. For further information about the offering look up display ad in this issue and write for the catalog giving detailed information. Please don't forget to mention this journal when writing.—Advertisement.

French's Bred Sow Offering.

A. C. French's bred sow sale will be held at Lexington, Neb., January 29, and the offering will consist of 51 head, five tried sows, 11 fall gilts and 35 spring gilts. The tried sows are by Top Sensation Jr., Crimson Illustrater 2d and Golden Rod's Model. The fall gilts are by Top Sensation, Chief Invincible, Pathfinder Prince, Grand Model Defender, A Pathfinder, The King, Crimson Illustrater and Grand Model I Am. The spring gilts represent such sires as Inventor, King's Wonder, Pathfinder's Likeness, The King, Model King E., King Orion Cherry Jr., Nebraska Model, Masterpiece, Great Orion King, Orion Sensation, Crimson Illustrater 2d and Orion E. The entire offering has been mated to Sensation Great Orion. Mr. French has picked a choice lot from his herd to put into this sale and breeders should come expecting to buy choice stuff. Mention this journal when writing for your catalog.—Advertisement.

Durocs and Shropshires.

In their night sale, Lexington, Neb., on January 29, C. T. White & Son, will sell 45 head of their famous Duroc bred sows and a head of bred Shropshire ewes. The greater part of the sows and gilts will be bred to Premier Pathfinder, by the mighty Pathfinder and out of an Illustrater sow. Some will be bred to High Orion Jr. and some to Chief. Especially attractive are following: A yearling Orion Cherry sow bred to Royal Pathfinder, a High Orion sow, four Top Sensation Jr. sows, two King the Colonel sows, a Big Sensation sow, a Crimson Illustrater sow and Columbia Gano sow all bred to Pioneer Pathfinder. The catalog will tell you about the numerous other attractions listed, also about their 20 head of bred Shropshire sheep. Send your name today for your catalog, mentioning this journal.—Advertisement.

Wade's Good Poland Offering.

E. Wade, Rising City, Neb., is selling 40 head of Poland chickens, on February 4, 40 head of very choice individuals. A large per cent of the offering is bred to or sired by either of these two great boars, Long Prospect by Prospect and out of a Mary Nelson dam, or Wade's Prospect by Prospect out of a Choice Lady dam. Eight head are bred to W. S. Timm by Big Timm out of Big Timm, two of which are outstanding gilts sired by Long Prospect and out of Jumbo Prospect. There are a number of great sows bred to Nebraska Emblem, first prize aged boar of the Nebraska state fair 1918, bred to Long Prospect; four spring gilts are by Wonder Jumbo and bred to Long Prospect

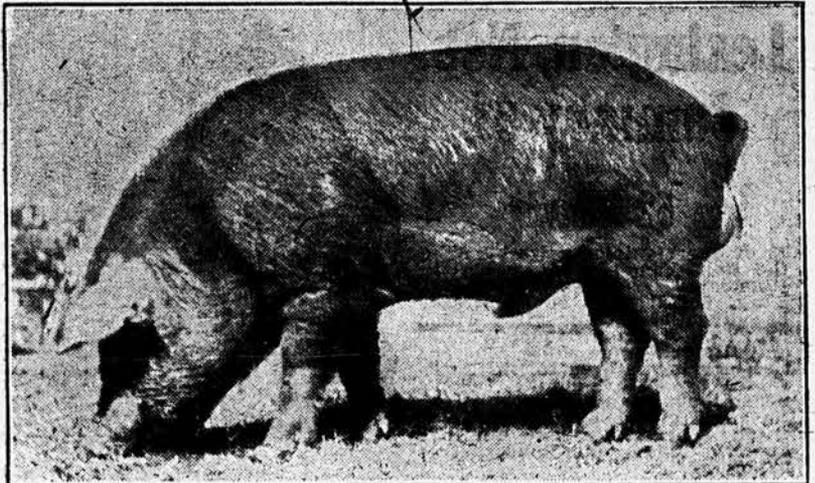
SENSATION GREAT ORION

has been mated to the entire offering of Duroc females to be sold at Lexington, Neb., (Day Sale) Thursday, Jan. 29th

51 Head

**5 Tried Sows. 11 Fall Gilts
35 Spring Gilts**

A grand offering of Quality Durocs with lots of growth and the strongest bloodlines. The tried sows are by Top Sensation Jr., Crimson Illustrater 2nd, and Golden Rod's Model. The fall gilts by Top Sensation, Chief Invincible, Pathfinder Prince, Grand Model Defender, A Pathfinder, The King, Crimson Illustrater and Grand Model I Am. The spring gilts are by Inventor, King's Wonder, Pathfinder's Likeness, The King, Model King E., King Orion Cherry Jr., Nebraska Model, Masterpiece, Great Orion King, Orion Sensation, Crimson Illustrater 2nd, and Orion E.



Sensation Great Orion by Great Orion Sensation.

This strong offering of the best of the breed should command your attention. For your catalog address, mentioning this paper,

Cols. Shaver and Putman, Auctioneers, J. C. A. C. FRENCH, LEXINGTON, NEBRASKA
Lamb represents The Capper Farm Press.

White & Son's Combination Night Sale

will include both bred Duroc Sows and bred Shropshire ewes
Lexington, Nebraska, Thursday, January 29, 1920

45 Duroc Sows and Gilts bred to a great son of the mighty Pathfinder, Premier Pathfinder

As a special attraction we will include a yearling Orion Cherry King sow bred to Royal Pathfinder. She is one of the great sows to sell this year.

The sale includes a Great Wonder I Am sow; one by High Orion, four by Top Sensation Jr.; two by King the Col.; a Pathfinder fall yearling and many others that are outstanding individuals and carry popular bloodlines.

20 bred Shropshire Ewes, all young and bred to a good buck. They are well covered with wool on head and legs; are typy, hardy, vigorous individuals. Please mention this paper when you write for the catalog.

White & Son, Lexington, Nebraska

Cols. Putman and Shaver, Auctioneers.

J. C. Lamb represents The Capper Farm Press.

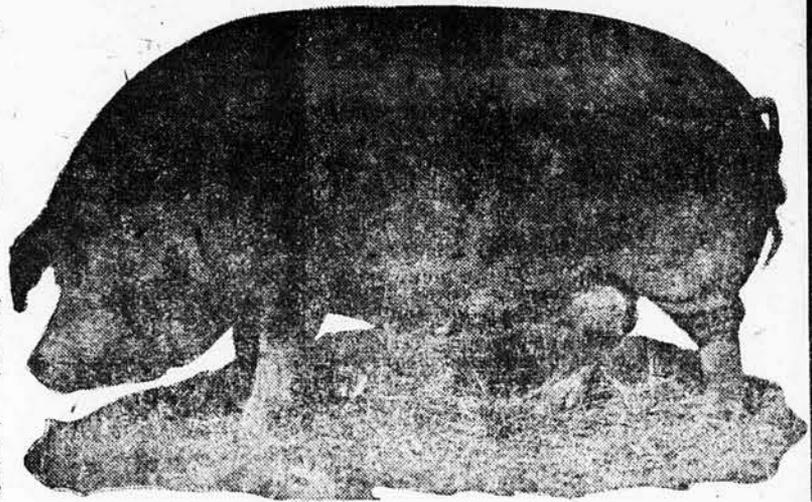
"Tyler's Reds"—Bred Sows and Gilts

Some splendid Durocs to be sold in the Dawson County Livestock Pavilion at

**Lexington, Neb.
Friday, January 30
45 Real Durocs**

20 Tried Sows representing the blood of Critic D., Deet's Illustrater, The King, Grand Model 8th and Crimson Illustrater. 8 Fall and 17 Spring Gilts by Top Sensation and Kern's Sensation.

The entire offering is bred to Real Sensation Jr. Do not miss this opportunity to get some of the blood that will work an improvement in your herd. For the catalog of the sale address, mentioning this paper please.



Big, Roomy Sows That Make Real Mothers

Mr. and Mrs. R. E. Tyler, Lexington, Nebraska

Cols. Putman and Shaver, Auctioneers, J. C. Lamb represents The Capper Farm Press

Benson's "Big Pathfinder" Bred Sow Sale

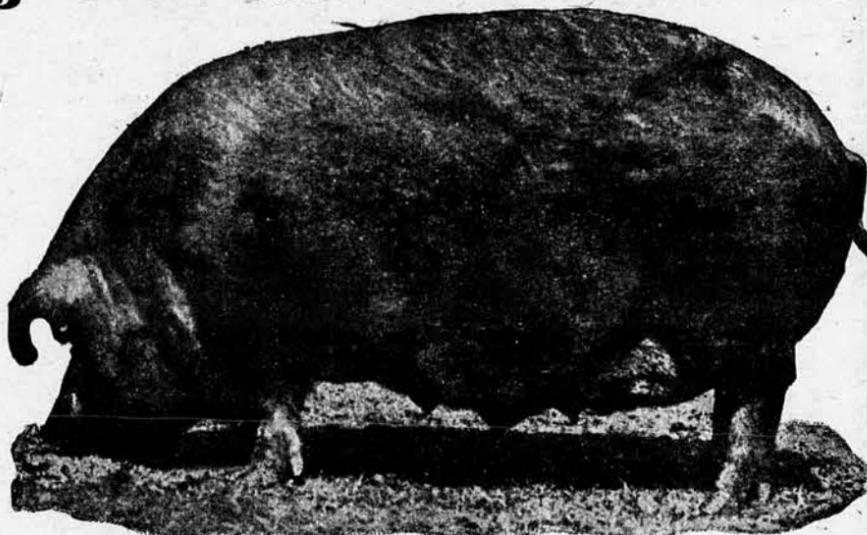
featuring Durocs bred to this great sire, will be held in the pavilion at

Lexington, Neb.

January 31

52 Head

18 of our big tried sows by King the Col., King Sensation, Critic, Illustrator and Orion Cherry King; 6 fall gilts of Illustrator breeding; 26 spring gilts which are Tops of Orion, Model Wonder and Illustrator breeding. The entire offering is bred to Big Pathfinder by Pathfinder or Orion's Sensation's Masterpiece by the National grand champion Great Orion Sensation. Send for the catalog today, mentioning this paper, to



The Type of the 52 Top Duroc Females to be Sold.

L. B. Benson, Lexington, Nebraska

Cols. Putman and Shaver, Auctioneers. J. C. Lamb will represent The Capper Farm Press.

Howell's Big Duroc Dispersion

Herkimer, Kan., Tuesday, February 3

70 Head 5 Herd Boars, 50 Bred Sows and Gilts 15 Fall Pigs

THE SENSATIONAL CHAMPION ELK COLONEL AND THREE OF HIS ILLUSTRIOUS SOWS. SHOW ME JR. A DOUBLE COL. WONDER BOAR.

50 bred sows and gilts. Rare of individuality, and rich in pedigree. Including the mammoth 800-lb. senior yearling, King's Girl that stood second at both Topeka and Hutchinson, defeated only by the 5 time grand champion sow, Gay Dora, a many times prize winner; May Girl, the dam of Liberty Girl, second at Kansas state fair; Violet's Pride, a producer of several prize winners, and many other valuable sows. These sows are bred to farrow in March and April, and will be presented in the pink of breeding condition.

Sale will be held at the farm 4 mi. north, 1 mi. east of Herkimer, on G. L., 5 mi. west Marietta, Kan., on U. P., 10 mi. northwest Marysville, Kan.

Free lunch at noon. Write for catalog at once. For the catalog address

J. A. HOWELL, HERKIMER, KANSAS

Auctioneers: Col. Geo. Drybread, Nowata, Okla., and others. Clerk, A. Mayhew, Marysville, Kan. J. W. Johnson will represent the Capper Farm Press.

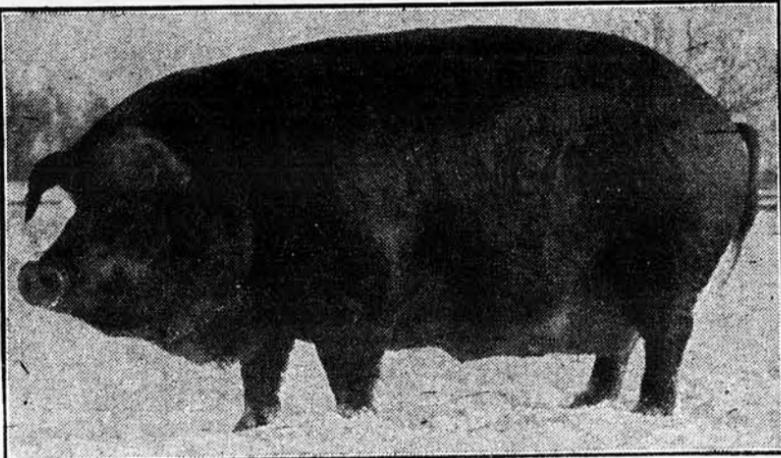
Durocs and Shropshires

A well rounded offering of each to sell at my farm

Fairmont, Neb., Feb. 7

40 Bred Duroc Sows

including 20 of my top producing sows and 20 fall and spring gilts. These represent King Cherry King, Improved Pathfinder, King's Col., Col. Uneeda and Kern's Sensation. The offering is bred to the three great herd boars Joe Orion Jr. by Joe Orion 2nd; Wonder Cherry King by King Cherry King; and Chief Colonel by Primrose Colonel. Feature sows to be included are Red Princess by Chief Crimson, Golden Model Lady 2nd by Joe Orion, Barne's Belle by Col. Uneeda and Sensation Model by Russel's Model Jr. and out of Sensation Pride.



40 Shropshire Bred Ewes

These are good individuals and bred to a son of the 1917 grand champion buck of Nebraska. This sale offers an unusual opportunity to the farmer and stockman. Every farm needs both sheep and hogs but seldom is the opportunity given to secure both in a single sale. For the catalog of the combined offering write (mentioning this paper)

O. E. Harmon, Fairmont, Nebraska

Col. Mark Carraher, Auct. J. C. Lamb represents The Capper Farm Press.

and some spring gilts are by Long Prospect out of a Big Bob dam and are bred to Wade's Prospect. If you want to buy good Polands, the kind with quality and individuality, attend this sale. Get full descriptions from O. E. Wade, Rising City, Neb., telling him where you saw his ad.—Advertisement.

Walker's Outstanding Poland China Offering

One of the year's greatest sales made from a Poland China herd which possibly had been longer under the same ownership and management than any other big type herd in the West will be held at Alexandria, Neb., February 5. The sale will be made by Thos. F. Walker & Sons, of Alexandria, Neb., whose herd of big type Poland China was established 35 years ago. Never in the history of this herd has its owner varied from the idea of producing a big profitable feeding hog for the farmer and no herd had had the continuous patronage of pork raising farmers from a larger area. As the offering to be sold February 5 is a large one in addition to representing an exceptional high standard, it commands attention from far and near. A great many sales will make higher averages than this one but very, very few will present as good representatives of the most sought after blood lines as will this one. The catalog is the very best possible preliminary information and should be applied for at once. Address Thos. F. Walker & Sons, Alexandria, Neb., and mention this paper.—Advertisement.

Real Sensation Bred Sows

Long Island Stock Farm will hold its annual Duroc bred sow sale in the heated pavilion at Kearney, Neb., January 27. The 40 head selected for the sale are strictly high class sows. The spring and fall gilts are mostly sired by Real Sensation, a boar from the standpoints of both quality and breeding. They have a March boar sired by Joe Orion 5th to which a number of these are bred. He is an unusually good one; is extra large, high back, best of feet and legs, with quality from top to bottom. The balance of the offering is bred to Great Orion Col., by Great Orion out of a Real Top Col. dam, or Real Sensation by Real Sensation. Among the sows are several by Deet's Illustrator 2d, one Top Sensation sow, two by Joe Orion 5th and two by King. There is a large herd at the Long Island Stock Farm and they sell only choice individuals as breeding stock, the remainder being shipped to the packers. This is the first sale of the North Platte circuit. There will be seven sales in the circuit all with select offerings. All the sales are from large herds and they are offering a class of hogs that will look good anywhere. They are the type that have been profitable to their breeders and they will prove assets to their purchasers. Write H. C. Holt & Sons, Kearney, Neb., for this catalog and mention the Capper Publications.—Advertisement.

BY O. WAYNE DEVINE

One of the oldest and best thought Berkshire herds in the country will make its regular public sale on February 26. This is the herd of T. A. Harris & Sons, Lamin, Mo. Advertising of this sale will appear due time. The offering is strong and the prize winning history back of it makes it additionally desirable. For that reason of readers interested in Berkshire hogs want to have the catalog early. Address T. A. Harris & Sons, as above and mention this paper.—Advertisement.

H. E. Myers, Gardner, Kan., has cataloged 50 head of the best and most fashionable bred Poland China sows that has ever been sold from the Myersdale farm and probably as good an offering as will go thru any bred sow sale. And a number of them will be bred and safe to Liberty King, one of the best breeding sows of Liberty Bond, and Giant Joe and Giant Buster boars that have made good as breeders. The catalogs are now ready to mail out, giving complete information of the Myersdale herd and farm. Please mention this paper when you write.—Advertisement.

Poland China Breeders Who Progress

Among the younger class of Poland China breeders who have made rapid advancement in the past two years and justly deserve success are the Jones Bros., of Hiawatha, Kan. They hold their annual bred sow sale January 31. The reputation of their herd, headed by boars of the most popular breeding, should interest breeders over a wide territory. The sows and bred gilts which will be cataloged for this sale will feature the good sires, Jones's Jones by Gerstale Jones, Jumbo Bob 2d by the famous Bob Wonder and Jones Col. Jack by Bob Jack. This sale offering promises to be a surprise to most breeders. In fact the Jones Bros. claim this to be the best lot they have ever sold. Several extra large Poland China sows safe for spring litters are included in this offering and admirers of the large type should be greatly pleased when they study the size and quality of the Jones Bre Polands. Farmers and feeders can make no mistake in placing this kind of stock on their farms. Catalogs are now in print and may be had for the asking. They are full of valuable information of the offering and herd. Please send for one today and kindly mention this paper.—Advertisement.

BY J. PARK BENNETT

Every One a Good One.

A recent visit to the herd of E. L. Dolan, Platte City, Mo., found the herd in third condition and the offering of 40 sows and gilts being prepared for the February 3 sale in excellent shape and many of them beginning to show for early litters. The offering is by such boars as F's Big Joe, Big Bob, Big Joe, Long Jumbo 2nd and great Gerstale Jones and are bred to Timm's Hercules, by Fessy's Timm; Giant Liberator, by Liberator, and out of Pickford; Elevator, by The Giant, and great Gerstale Jones. The entire offering is immune and worthy of your consideration. Send for catalog and investigate the offering. The high priced land in the belt makes it imperative for the farmer to use the most efficient means of handling grain crops. Get in on the ground with a few purebred sows and gilts and we will pay you.—Advertisement.

E. L. Dolan Poland China Sale

Among the young Poland China breeders who have made rapid advancement in the last two years and justly deserves success is E. L. Dolan of Platte City, Mo. The reputation of this herd is rapidly gaining popularity among farmers and breeders. Dolan has announced February 3 for his next annual bred sow sale and on this day he will sell 45 head of sows and gilts.

January 17, 1920.

promise to be the equal of any offering that will be sold in any sale this spring sale season. The offering will be bred to Sergeant Gerstale Jones by the Gerstale Jones and Giant-Liberator by Liberator and out of the 1800 brood sow, Mary Pickford. This young pig is a very promising herd boar prospect and sows bred to him should be in demand. The herd boars used are Timm Hercules, by Pessy's Timm, also being used in the herd. Catalogs of this sale are now in the printer's hands and will be ready to mail out. They give complete and valuable information of the herd. Those wishing this information should write at once to E. L. Dolan, Platte City, Mo., and kindly mention this paper.—Advertisement.

BY S. T. MORSE

See Lant Bros. advertisement in this issue. If you want a good Duroc sow or gilt bred to one of the great boars of the herd, you can get it of Lant Bros. and buy it worth the money.—Advertisement.

The Deming Ranch, Oswego, Kan., are pricing some mighty good Poland China boars and pricing them mighty cheap, quality considered. See their advertisement. These pigs are bargains. Don't hesitate to buy if you need a boar.—Advertisement.

Shorthorn Bull Bargains.

C. H. White, of Burlington, Kan., is advertising a few choice yearling bulls for sale. These bulls are sired by Castellor by Snow Bank by Snow Flake, dam by Victor Sultan by White Mail Sultan. The calves are of the Violet, Butterfly, Campbell Bloom and Brawaith Bud families. Some good Scotch topped bulls at farmer's prices. These bulls are big, husky, thick fleshed fellows and ready for service; reds, white and roans. Write C. H. White, Burlington, Kan., for prices and descriptions. When writing or visiting the herd, say you saw the advertisement in Kansas Farmer and Mail and Breeze.—Advertisement.

BY H. P. STEELE

Polands For Sale.

On February 7, Geo. Sitzman, of Kingsley, Ia., will offer 40 head of spring gilts for sale that will be profitable for anyone to own. They are bred right, carrying some of the best blood of the breed and they are also built right and fed right. When you get the combination of good breeding, good individuality and good feeding you can be sure they are money makers. Mr. Sitzman has been raising Polands for a number of years and has built up a fine herd that in turn has made him money. He has mated his gilts this year to two splendid young boars, one a son of Omaha, the other by a son of Big Timm and out of a daughter of Guardsman. He will sell also, three sisters to the Big Timm boar. Here is the opportunity to get the blood of Guardsman, a better brother to Clansman. The gilts are bred to a son of Omaha. See his ad in this paper and write for catalog.—Advertisement.

BY T. W. MORSE

The Duroc Sale at Topeka.

Three of the leading Duroc Jersey firms near Topeka have joined in a public sale of bred sows and gilts to be held January 22 at the Free Fair grounds adjoining the city limits. The firms contributing to this sale are Sisco & Doerschlag, Route 2, Topeka, Kan.; H. A. Johnson, Route 15, Tecumseh, Kan.; and Searle & Searle, Route 15, Tecumseh, Kan. The last named is perhaps the oldest in Duroc breeding in the state and one of the very first firms west of the Mississippi river to develop Durocs of show-yard quality and exhibit them in the big shows. The big end of the sale offering will be consigned by Sisco & Doerschlag, who put 32 head in the sale. Examination of the advertisement in this issue and consulting the catalog will show that the joint offering brings together a more than usually desirable collection of up-to-date breeding Orion blood will predominate but several equally noteworthy strains which have shown the best results in crossing on an Orion foundation are included. For catalogs write immediately to Ralph H. Searle, Box 275, Topeka, Kan. Make it a point to see at the sale as the event is well worth the time and attention and being an early sale, the purchase of bargains is almost certain. Remember, the sale will be held at the Free Fair grounds, adjoining the city limits of Topeka and in a heated building so that the best accommodations and shipping facilities are assured.—Advertisement.

BY E. S. HUMPHREY

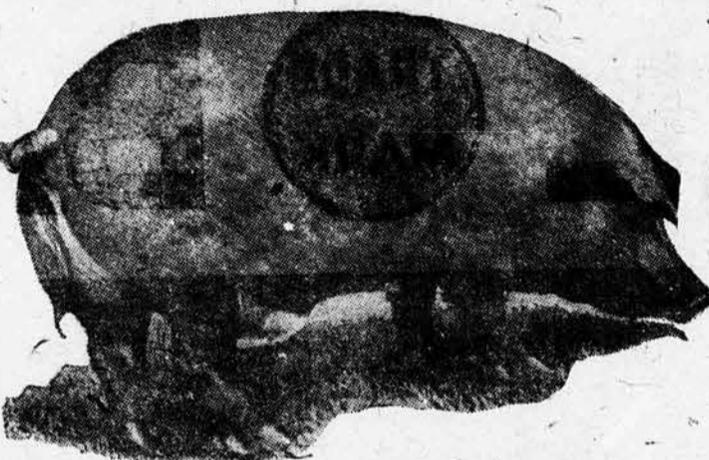
Illinois Percheron Breeders' Association.

There seems to be some misunderstanding among readers of the Kansas Farmer and Mail and Breeze regarding the Illinois Percheron Breeders' association. That association is not an association for the recording of Percherons. It is an association of breeders raising Percheron horses. The members of the association own some of the best Percherons in the world today, including the grand champion Percheron stallion at the last International and several other grand champions of past years. All of their stock is recorded with the Percheron Society of America. Their organization enables them to use better sires; to own better mares and to market their crop collectively, so they are able to give more Percheron horse for a given amount of money than can be secured from the average breeder. The association has published a very interesting catalog of the sires in use by their members. This catalog is, in itself, a valuable chapter of Percheron history. It can be secured by writing to the secretary of the association, J. L. Edmonds, Urbana, Ill.—Advertisement.

Outlook Bright for Percherons.

The Percheron Society of America give as one of their chief reasons for the belief that the horse business has bright years ahead the fact that in the three years ending August 31, 1919, 4,831 farmers, not yet members of the Percheron Society, purchased Percheron mares. When the men in the country—the men who are using horses and who know the horse supply in their own counties—have faith in the future and back that faith with real money, it is a reliable sign that real drafters are not plentiful nor easy to buy. As further evidence the Percheron Society reviews the facts that at the recent International Livestock Exposition higher prices were paid, and higher prices offered but refused, for Percherons, than were ever known before. Within the past two months two Percheron mares were sold at unheard-of prices, yet the purchasers have since been offered \$1,000 profit. Draft horses have a bright future. The time to buy is now that you may be prepared for the demand that will be ripe by the time this year's colts are of marketable age.—Advertisement.

Come, "Let's Go!" to Jno. W. Jones' Bred Sow Sale



The Great Breeding Boar, FAIRVIEW ILLUSTRATOR

129-131 S. 5th St.,
Salina, Kan., February 5

The largest, smoothest and best DUROC JERSEY SOWS we ever sold at auction—

Fairview Orion Cherry King, Fairview Illustrator, Pathfinder, King the Col., John's Col. Orion, Potentate and other great boars. Have mingled their blood to produce this great lot of grand sows.

12 large, tried brood sows; the "size with quality kind." 16 big, fancy, smooth summer gilts, carried over for this sale; 22 fine, growthy, smooth spring gilts; they are dandies.

GREAT SOWS IN ABUNDANCE.

Special Attractions

YEARLING AND SPRING GILTS GALORE.

Bred to Good Boars

To Fairview Orion Cherry King the \$3,000 boar, the great breeding boar, Fairview Illustrator, Lady's Col. Orion, the massive grandson of Joe Orion II, a young boar of great promise, Orion Golden King, Illustrator's Winner, a chip off the old block, a dandy.

Come to this sale. Don't miss it. Write for catalog.

HEADQUARTERS PLANTER'S HOTEL

AUCTIONEERS Col. Jas. T. McCulloch Col. L. S. Ruggels & Son

Fieldman Capper Farm Press John W. Johnson

JNO. W. JONES (Address all Mail Bids to Auctioneers or Fieldman in our care) Minneapolis, Kan. at Salina, after Jan. 30.

Kansas Duroc Jersey Breeders Association Sale

will be held in the afternoon; the annual meeting of the association will be held in the evening for which a fine program will be arranged

Sale in Livestock Judging Pavilion
Manhattan, Kan., Friday, February 6

50 selections and tops from 20 herds all members of the big state association
Offering is one of great merit, representing the best herds in the state. The animal husbandry department furnishes a competent judge to place the offering in the show ring the day before.

THESE WELL KNOWN BREEDERS TOPPING THEIR HERDS.

J. W. Petford, Saffordville,
Wm. G. Moxley, Nortonville,
Harry P. Gustafson, Leonardville,
B. R. Anderson, McPherson,
R. C. Smith, Sedgwick,
Gordon & Hamilton, Horton,

Gwin Bros., Morrowville,
W. W. Jones, Beloit,
T. F. Danner, Winfield,
G. M. Shepard, Lyons,
Lester Coad, Glen Elder,
W. R. Crow, Hutchinson,
M. R. Peterson, Troy,

H. A. Johnson, Perry,
A. J. Hanna, Burlingame,
Glen Priddy, Elmont,
W. W. Otey, Winfield,
Glen F. Keesecker, Washington,
G. B. Wooddell, Winfield,
Searle & Searle, Topeka.

Many of the best known Duroc Jersey breeders in the west are consignors to this sale. All are members of the big Kansas Duroc Jersey Breeders' association organized by these breeders to promote the interests of the breed and each consignor feels it incumbent upon himself to put in this sale sows or gilts that will prove valuable investments and I believe this has been done in this sale to a greater extent than usual. This is also the date of the annual meeting and a nice program will be arranged. It is also home coming week at the college. Every Kansas Duroc Jersey breeder should be at this sale.—J. W. Johnson, fieldman, Capper Farm Press.

The catalog is ready to mail. Address Association Sales Manager,

ROY E. GWIN, MORROWVILLE, KANSAS

Auctioneers: Jas. T. McCulloch, Clay Center, L. R. Brady, Manhattan.

Orders to buy should be sent to J. W. Johnson, fieldman Capper Farm Press, care Animal Husbandry Department, Manhattan, Kan.

NOTE—Advertisers like to know where you saw their advertisement. Mention the Kansas Farmer and Mail and Breeze when you write for the catalog.

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A fancy lot of spring boars and gilts for sale. Sired by Uneda King's Col and from splendid dams. Priced to sell.

GEO. W. MUELLER, R. 4, ST. JOHN, KAN.

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Will Sell in the Livestock Pavilion at Sabetha, Kansas, Wednesday, January 28

15 Tried Sows; 8 Fall Yearlings; 6 spring Gilts. Herd boars: Poland's Col. by King the Col.; Pathfinder Prince by Long Wonder Prince; Great Wonder I'll Be by Great Wonder I Am. Kansas Queen, a winner in the national futurity as a gilt, will sell. Catalog now ready. Please mention this paper.

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