

KANSAS FARMER

For the improvement  of the Farm and Home

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1912!

Over the Editor's Table

Just a Bit Personal By The Editor
For KANSAS FARMER Folks

Some time ago one of our subscribers ordered his paper stopped, and among the reasons he felt called upon to give was one that seemed to me a weak one—the paper carried too much advertising.

Of course, there are numerous other "stops" in the course of a year—just as there are even more new subscriptions and renewals. It is not a misdemeanor for a man to "stop" any paper he may be taking, for whatever reason he may or may not choose to assign.

But the particular case I am now referring to was one that set me thinking—and whatever sets us to serious thinking usually is something that we remember, whether we specially try to or not.

I found out by inquiry that this particular subscriber had quite a good knowledge of pure-bred live stock and poultry; he knows about all the latest farm machinery; about building materials; farm equipment; household furnishings; clothing (men's and women's); and even of the various foods and food products. The very things he told me convinced me beyond a doubt that he has been rather a persistent reader of advertising. He even admitted that if some force or power could take out of his knowledge the general information he had, and which could come only through reading advertisements, that his stock of useful knowledge would be sadly lessened.

This man kept pure-bred live stock—cows, hogs, and some horses. He had a manure spreader—had learned of its usefulness through the papers, and said the kind he had was the best one made. Yet he was the first one in his neighborhood who had bought that kind of a machine. Traced down to his first knowledge of it, he said he had read about it in the paper. The same thing was true of his silo; of his gasoline engine; of his litter-carrier system in his barn; of his power hay stacker; of his air pressure water system with bath room—hot and cold water and acetylene lighting plant; of the suits of clothes he always bought for himself and his boys; of many of the things he insisted on having served at his table. It would make quite a long list to set out all the things he admitted he liked, and of which his first conscious knowledge was due to having read about them in the papers.

He wouldn't say the advertising he had seen had anything to do with it; wouldn't even admit reading any advertising. But the case was clear against him. He had read advertising and had been influenced by it, too. As a result, he was enjoying things in his life, which in Queen Elizabeth's day were unknown and unattainable by the richest and most powerful potentates of the earth.

The world certainly has progressed since Columbus discovered America. And progress has been much more rapid in the last 50 years than ever before. With instantaneous dispatch of news via the telegraph, both wire and wireless—fast mail service—across the continent in less than four days—improved printing machinery—the dissemination of information has really marked the march of progress. A scientist in Germany discovers a specific that robs diphtheria of its terror, and a few weeks later the patient in a lonely farmhouse on the outskirts of civilization is given the benefit of the discovery. A man in France perfects an automobile and within a few days the world has full knowledge of it. A Wright makes an aeroplane, and shortly aviation becomes a new science. So I might fill this paper with incidents in the world's progress.

Advertising is making known what the world is doing—what civilization is and what it holds for him who wishes to set civilization's mark farther along than was possible for his forbears. Whether we admit it or not, there is more for every one of us in life because of advertising than ever would have been possible without.

As far as getting information is concerned (and that is an obligation resting upon every one) there is no practical

difference whether information is gleaned from paid advertisements or through pages of papers and books in which there is no advertising.

In these days, when advertisers have learned that the best advertisements are those which most clearly and nearly state only the truth, it happens that the advertising pages of a reputable paper may contain more reliable information on the things advertised than may appear over the signatures of editors or special contributing writers. This is so because a great deal of the advertising nowadays is written only after the most painstaking investigation by trained investigators, as to the merits of an article or its uses. Frequently the advertising writers—men of high ability and integrity—spend weeks and months in factories, work shops, and among homes of people where the use of goods to be advertised may be of special benefit. It stands to reason, then, that goods advertised after such thorough investigation are worth knowing about.

The product on the market today that looks simple, and can be easily utilized, was not always in that form. Human effort and thought have been necessary to bring it out, simple as it may be in use or appearance, or of whatever benefit it may be.

The man who has anything to sell ought to know more about it than anyone else. Especially if he be a manufacturer. As long as he is doing an honest business, and tells the truth about his goods and his advertising, he has a right to buy advertising space where he will. Not only that, no editor or set of editors in the country could give the public as full or as accurate information on the goods the market affords as do the advertisers who have the goods to sell. No one mind is big enough or flexible enough to comprehend fully and accurately the whole range of human activity and its needs.

Far from being a detriment to the value of any publication, good, clean, legitimate advertising is a benefit to the readers in more ways than one. First, the advertising itself gives needed information in respect to the goods advertised. Second, it makes possible publications that are of more practical benefit to the subscribers—for subscription rates far below what would have to be charged if no advertising were printed. Third, the public gets better goods for less money and with greater convenience. It is a co-operation in the true sense to advertise, to print advertising, and to read and believe advertising—all of it that rings true and is run for a legitimate purpose.

This issue contains the index to the matter that has been printed in KANSAS FARMER for the 52 weeks in 1911. I think that a study of this index will convince any reasonably minded person that this paper has been on "the job" during the past year to mighty good advantage. I can't help but feel that the good things KANSAS FARMER has carried to its subscribers in this time have made up a great, big dollar's worth, and then some.

In going over the many items of the index I am impressed by the fact that we are, after all, only the servants of our subscribers. I take it that we are commissioned to keep ourselves informed on all the world is doing toward better farming, (I don't mean more work for farmers, but I do mean more return for the work done), and winnow out the wheat from the chaff, and set forth what can be used to advantage by those who employ us at a fee of \$1.00 per year.

Let us greet the new year with a determined resolution that 1912 shall bring us a greater store of health, wealth and happiness. Of course, all of us know we are going to make some mistakes and be "short" in many places and ways, but we can take cheer that we are not going to make the same mistakes twice, if we can know what we are doing.

A. A. Brown

Full in Honor

Mayer Honorbilt School Shoes are strong, sturdy and lasting—they "wear like iron," give twice the wear of other shoes and cost no more. The school shoes with double leather toes—hard to wear out—soles and uppers made of extra tough, wear-resisting leather.



Mayer HONORBIT SCHOOL SHOES

FOR BOYS AND GIRLS

Are dressy, fit perfectly and are comfortable. All sizes and styles.

WARNING—Look for Mayer Trade Mark on sole—if your dealer cannot supply you write to us.


We make Mayer Honorbilt Shoes for men, women and children, including "Leading Lady" and "Special Merit" brands; also "Yerma Cushion" and "Martha Washington" Comfort Shoes.

Free Offer—Send name of dealer who does not handle Mayer Honorbilt School Shoes—we will send you free a handsome picture of George or Martha Washington, size 15x20.

F. Mayer Boot & Shoe Co. Milwaukee, Wis.

Trade Mark

Look for Trade Mark on the sole



APPLETON Manure Spreader

The frame is the foundation of a manure spreader—it must stay square and level or the machinery parts will soon stop working right. Appleton frame is made of solid oak and so braced and trussed by steel rods that it is always square and level.

The Appleton Spreader is easy to load and haul; spreads thinly or thickly and always evenly—has positive force feed; pulverizes thoroughly (doesn't bunch); has changeable feed, operated without stopping team—and is so easily operated that any boy who can drive a team can run it.

FREE CATALOG. Get the Appleton catalog today, showing eight styles to choose from and explaining the broad APPLETON GUARANTEE.

APPLETON MFG. CO., 219 Fargo Street, Batavia, Illinois.

SAWS ANY WOOD ON ANY GROUND

1 Man Folding Beats 2 Men with 6 to 8 cords daily in the usual average for one man.



Our 1912 Model Machine saws faster, runs easier and will last longer than ever. Adjusted in a minute to suit a 12-year-old boy or strongest man. Ask for catalog No. 450 and low price. First order gets agency.

Folding Sawing Mach. Co., 161 W. Harrison St., Chicago, Ill.

Winter Tours for the Summer Stay-at-Homes

Just because it was inconvenient for you to do any traveling last summer do not stay at home now. Many persons prefer to do their sight-seeing in winter.

Take your outing now. Why not visit

California, Arizona, New Mexico, Texas

or some of the many other desirable winter resorts?

Come in and let me tell you the whole story. Literature and information about fares and train service free.



T. L. KING
City Passenger Agent,
Topeka, Kansas

Fernald Quick-Shifts



Save your energy and your time. Stop that eternal shaft rattle. Get Fernald Quick-Shifts. Make pole and shafts instantly interchangeable. On and off without tools. Safe, strong, indispensable. \$50. a pair, all hardware, carriage and harness dealers, or \$80. from us.

Fernald Manufacturing Co., Inc., North East, Pa. Makers of Spittal Coppler and Anti-Rattler, Fernald Dash Rein Holders and Fernald Double Trace Holders.

1c Increases Your Corn Crop

Your simple request on a postal card, which costs you only 1c, brings you our great corn book by Professor A. D. Shamel of Illinois Experiment Station. The study of this book means bigger corn profits for you—sure. Is it worth one cent to get this book? With it, will come our big catalog of famous Emerson Feed-Lift Farm Implements. Mail postal now.


Emerson-Brantingham Co. 31 Iron St., Rockford, Ill.



ONLY \$10. CASH

Balance \$5 a month, buys this three-year GUARANTEED Buggy. Write today for our FREE CATALOGUE of Buggies, Surreys, Spring and Farm Wagons.

Century Mfg. Co., Dept. 993 East St. Louis, Ill.



BROWN FENCE

MOST durable fence made. Heaviest wires. Double galvanized. Stock strong. Chicken tight. 13 to 35c per rod. Sample free. We pay freight.

The Brown Fence & Wire Co. Dept. 29 Cleveland, O.

Farmers Sons Wanted

with knowledge of farm stock and fair education to work in an office \$300 a month with advancement, steady employment, must be honest and reliable. Branch offices of the association are being established in each state. Apply at once, giving full particulars. The Veterinary Science Association, Dept. 22, London, Canada.

SUBSCRIPTION PRICE
\$1.00 per year; \$1.50 for two years;
\$2.00 for three years. Special clubbing
rates furnished upon application.

ADVERTISING RATES
30 cents per agate line—14 lines to
the inch. No medical nor question-
ably worded advertising accepted.
Last forms are closed Monday noon.
Changes in advertising copy and stop
orders must be received by Thursday
noon the week preceding publication



KANSAS FARMER

With which is combined FARMER'S ADVOCATE, established 1877.

Published weekly at 625 Jackson St., Topeka, Kan., by THE KANSAS FARMER COMPANY.
ALBERT T. REID, President. J. R. MULVANE, Treasurer. S. H. FITCHER, Secretary.

T. A. BORMAN, Editor in Chief; I. D. GRAHAM, Live Stock Editor.

CHICAGO OFFICE—First National Bank Bldg., Geo. W. Herbert, Inc., Manager.
NEW YORK OFFICE—41 Park Row, Wallace C. Richardson, Inc., Manager.

Entered at the Topeka, Kansas, postoffice as second class matter.
GUARANTEED CIRCULATION OVER 60,000

OUR GUARANTEE

KANSAS FARMER aims to publish only the advertisements of reliable persons or firms, and we guarantee our subscribers against loss due to fraudulent misrepresentation in any advertisement appearing in this issue, provided, that mention was made of KANSAS FARMER when ordering. We do not, however, undertake to settle minor claims or disputes between a subscriber and advertiser, or be responsible in cases of honest bankruptcy of advertiser after advertisement appears



LYE AS HOG CONDITIONER.

Were it not for cholera and other diseases of swine the hog would be by far the most profitable farm animal—labor, feed, and all other things considered. The editor of KANSAS FARMER lived on a Kansas farm until 30 years of age, and during that time does not recall a single case of cholera in his father's swine herd or in his own. We believe the absence of cholera was due entirely to the employment of those measures which insured the best of health in the swine herd and which in reality were preventive measures against cholera, worms, etc. In keeping hogs healthy, clean feeding and sleeping places were provided, clean feed used, abundance of pasture afforded, and when pasture was not obtainable, green corn, sorghum or oats were substituted. With these wood ashes, charcoal, coal and salt were fed occasionally, but the use of lye—the concentrated lye found in every grocery store—was prayerfully and consistently used the year around in the slop. A can of this lye to the barrel of slop was the proportion. These precautions, along with the enforcement of a strict quarantine against neighbors' boars, and the avoidance of an exchange of swine for breeding purposes, were in our judgment the things which prevented the loss of a single dollar's worth of swine from the diseases mentioned.

During the past few months of the cholera ravages in Kansas the loss has been tremendous, and precaution, we are satisfied, would have greatly decreased this loss. The use of lye is urged by the manufacturers of that product, and we have obtained the names of a number of hog raisers who have used lye as a cholera preventative. We have written these users for a statement of their opinion regarding it as a conditioner and disease preventative, and hope soon to be able to print letters on the subject. Any subscriber who has used lye or other preventatives for cholera will confer a favor on farmers in general by writing KANSAS FARMER.

FARMERS' WEEK IN TOPEKA.

The annual big week for farmers has again rolled around. This week brings hundreds of the most progressive farmers of Kansas to Topeka. The big meeting of the week is that of the Kansas State Board of Agriculture, and this year that board will hold its forty-first annual meeting. The first session will be held January 10 at 4 o'clock p. m., in Representative Hall, where each of the subsequent sessions will be held. See another column in this paper for complete program.

Other meetings of the week will be those of the Kansas Improved Stock Breeders' Association, which will hold its annual meeting January 8, 9 and 10, and in connection with which will be held the sessions of the Kansas Swine Breeders' Association, on the 8th. Other meetings are the Red Polled Cattle Club, on the 10th, and Association of County and District Fair Managers, on the 8th.

The New York Assembly has passed a law providing that registered pure-bred cattle so killed on account of tuberculosis or other contagious diseases may be appraised at not to exceed \$300 and other bovine animals at not more than \$100. Previously pure-bred cattle were allowed valuation at \$125 and grades at \$75. Such a law will cause breeders and owners to clean up their herds and advance the safety of the public health.

The Kansas State Fair here will be held at Topeka during the week of September 8 to 14 next fall, according to the announcement made by Secretary H. L. Cook. It will follow the Nebraska State Fair at Lincoln as usual, and will be followed by the Hutchinson fair the next week. This fair is a wonderful institution and our readers should now begin making their arrangements to attend.

PREMIUMS FOR MODEL SCHOOL.

The country school deserves all the encouragement possible to give it. It is the school in which the great mass of our young people get their education. Not one of our schools should be skimmed in support, but the country school should be the last to suffer—or rather the first to be well provided for. State Superintendent Fairchild is a country school champion. He says:

"At present the state has an appropriation to help the weak districts which are not able to hold a seven months' term without state aid. That is all right and as it should be, but I believe we ought to give premiums to the districts that are doing good things. I want to see the legislature appropriate \$100,000 to \$300,000 so that the department of public instruction may give premiums of from \$50 to \$100 a year each to such districts as have model schools, qualifying them to enter class A.

"I would require before a district can be declared a class A school, that four things be complied with: First, erect a modern, model district school; second, keep the grounds in proper condition; third, the school to be supplied with everything needful in the way of equipment; fourth, to have a good teacher with at least a second grade and perhaps a first grade certificate.

"And why shouldn't the state do that? Suppose the total appropriation amounted to \$600,000 for the district schools. The state last year appropriated \$2,500,000 for the 8,000 pupils in the three state educational institutions. Why not expend \$600,000 to help the 509,000 other pupils in the rural schools?"

The Anti-Horse Thief Association is to be admired for its versatility. Organized years ago to intercept horse thieves, it has every few years taken up the apprehension of other sorts of criminals, only now to tackle the job of ridding the country of hog cholera. The Mulvane, Kan., order has started a movement to help the officers of the law prosecute all offenders violating the Kansas state laws requiring the burying or burning of hog cholera carcasses within 48 hours. It is a well known fact that hog cholera is spread in the main from the careless way in which dead carcasses of infected animals are permitted to lay around, the disease being carried by cows and dogs from one herd to another. According to the views of members, a man had better steal his neighbor's horse than to infect a whole herd of high-priced hogs. It is the purpose to get all other sub-lodges to join in this movement and make the crusade statewide.

KEEP UP WITH THE MARCH.

For 10 years agricultural conditions have been changing, and changing rapidly. Within this time great progress has been made in every walk of human activity. The man at the head of commercial enterprises is the most progressive of our population. It is he who first whips into practical and workable shape the new things. His success depends upon keeping step with the march of progress. Competition forces him to do this.

On the other hand, the farmer is the last to take up with new methods and new ideas. The farmer does not feel the press of competition. It is too bad that he does not. If he did he would be striving to produce more than his neighbor and produce at less cost. He would be grasping for the new things in agriculture, and farming would be vastly different as compared with today and ideas regarding farming as a business would be manifestly changed.

The farmer must keep up with the march. He must keep step with drum.

The powerful gasoline tractors are now very much in the lime light. At every big fair they attract attention, especially if they have room to show off.

"ORIGINAL PACKAGE" OLEO LAW.

Congress will this year be asked to revise the present oleomargarine law. Dairy farmers are not particular what the oleo law of the future is, except that it must not permit the sale of oleo as butter. John Morley, of Owatonna, Minn., in a recent speech urged an "original package" law. In editorial comment the Dairy Record says:

"Original package" law in oleomargarine legislation, which means that all oleomargarine manufactured must be put on the market in original packages of certain standard sizes with a revenue stamp on each and every package, in the same manner as cigars and tobacco are now sold. This would mean abandoning the color distinction, better butter and oleomargarine to a certain extent, which is not just what the dairymen want. On the other hand, it would mean a law that the revenue department both could and would enforce, which certainly would be one feature in which the law would be ahead of the present one. A sale of oleomargarine in public eating places would be a matter for state authorities to deal with.

"Present prices of butter makes a market for legitimate substitutes, and the dairymen never have and never will have any objection to the sale of oleomargarine as long as it is not sold as butter. If new oleomargarine legislation is bound to come, and if this new legislation means an 'original package' law, the dairy organizations of the country may well heed Mr. Morley's suggestion and get in on the ground floor in the making of this law."

WHY AGRICULTURE IN SCHOOLS?

Now that some agriculture is being taught in our public schools and parents have become interested in its teaching, it is not unusual to receive letters from subscribers asking what public school teaching on this subject should include, and one such letter we have before us. Be it understood that now only a few fundamentals are being taught. We think it well that the beginning has thus been made. Our teachers must have the required training before they can teach more. When we get to teaching agriculture in fact, the study will pertain to farm crops, horticulture, farm animals, farm management, dairying, poultry, soils, rural engineering, rural economics and rural sociology, together with a practical demonstration of the facts and theories studied in the school.

Why agriculture as a vocational subject should be taught in our public schools is briefly set forth by E. L. Holton, professor of rural education, and who is in charge of extension of such work in connection with Kansas Agricultural College. He sets forth these reasons:

1. It will help to redirect our schools toward country life.
2. It will give our boys an insight into the possibilities of scientific farming as a life work.
3. It will result in bringing about a closer relation between the schools and community life.
4. It will result in increasing the yield and quality of farm, garden and orchard crops.
5. It will lead to the raising of pure-bred farm animals and poultry.
6. It will tend to stop the drain on the rural population.
7. It will help to lift to a higher level the farmer and the farm home.
8. It will add strength to our national life. Fundamentally the strength of our nation depends upon the health, vocation, social and moral level of the farmer.

Every man and woman employed as a teacher in Kansas should feel interested in the program outlined for the Farmers' State Institute, to begin at the Agricultural College December 26. Particular attention has been given to classes for high school teachers and common school teachers.

PURE-BRED LIVE STOCK.

Almost any farmer will admit that good farm animals which mature early and make profits quickly are vastly better than those of less capabilities, and yet there are still those who deprecate the work of the breeder and deprecate what they call "hot-house" animals, such as are prize winners in the show ring. This very admission on the part of such farmers is one of the highest compliments that could be paid to the breeder's art. Without this art our cattle and hogs would rapidly deteriorate and approach the form and characteristics of their wild ancestors. Such animals are now seen in the thin-fleshed, hard-feeding, semi-wild cattle of Arkansas and Mississippi which sometimes find their way to markets where they can only be classed as "canners" at the best. Such animals are also seen in the "hazel splitter" and "railback" hogs from the same regions.

It is not necessary or even desirable that farmers in general should breed only show animals, or that they become "fancy" breeders. They do not have the time nor the inclination to get into the show ring classes of breeders, even if they had the ability, but they do need good stock in order to make money, and they must depend upon the breeders for this. Good live stock costs no more to raise than poor stock, and in many cases not as much. The idea of "hot-house" live stock on the farm is all wrong, as good breeding stock requires no more care than any stock should have, while any serious attempt to give it "hot-house" treatment will result in injury to the stock.

Pure-bred animals produce good market animals, and this is the final test for all meat-producing animals. Scrubs will not do this, no matter how they are fed or cared for. Pure-bred animals will reproduce their good qualities, while the scrubs will reproduce their bad qualities. How often it is that the farmer finds it necessary to purchase a new herd boar in order not only to improve the quality of his herd, but to actually prevent its further deterioration. It is much easier for a herd to go backwards towards the form and character of the wild state than it is for it to go forward towards the perfection of the prize ring. The breeder's art is the only thing that has brought these farm animals up from their wild state into the modern money-making machines which they now are, and too much credit cannot be given the men who devote their lives to this work.

Utility should be the watchword on the farm, and utility animals should be the only kind that should be found there. Such animals do not need umbrellas or blankets or hot-house care, and they will be the worse off if they receive it. Such live stock does not mean extravagance. It means economy and profit, just as any good farm machine means economy and profit. Back of all successful work in raising farm animals and making a profit from them lies the breeder's art, and the nearer the farmer approaches the perfect type of the breed in his farm animals, the greater will be his success.

J. A. Miller, director of Kansas Agricultural College extension work, should be pleased with the success of the 180 odd farmers' institutes held in Kansas and which have just closed, these completing the fall circuit. The institutes have been well attended and the interest manifested indicates that the thought of the need of better farming is forcing itself upon our population. An encouraging feature of the farmers' institute everywhere is the attendance of and interest in the meetings shown by the business men. The man behind the counter in the country store can be a wonderful power for improved agriculture if he will learn something about the subject and talk it. His attendance at the institute indicates that he recognizes the necessity of laying hold of the opportunity.

THE DRAFT HORSE IN KANSAS

One of the Most Potent Influences in the Development of Kansas Agriculture

By I. D. GRAHAM

When Kansas was settled the pioneers who did not have oxen were compelled to depend upon the light, all-purpose horses with which they had transported their worldly goods to the new land, or upon the broncho of the plains for the heavy work of breaking out the prairies and building new homes. Right nobly did these wiry little horses do their work, and that history of Kansas is incomplete which does not pay to them a just tribute of praise.

Yet these pony horses, with their light weight and the necessarily light implements which were used with them, were one of the causes of the hardships endured by the pioneers. Unequaled for riding purposes and fairly good as buggy horses, they failed of best results when put to work on the farm from which these first families gained their livelihood and laid the foundations for the future greatness of the state. Small areas were covered with the plow or harrow, and light loads were necessary when market time came, yet these ponies paved the way for better things.

Kansas could never have made her record of advancement in so short a time but for the heavy horses and improved machinery which followed in the wake of the broncho, and Kansas could not have won her prominence as a draft horse state and the best buyer of draft horses in all the west but for her alfalfa and corn, which make a balanced ration. The modern draft horse was perfected in the rich pasture lands of northern Europe, and his importation to this country has been followed by improvement or deterioration according to the location of his new home. Perfection is attained in Kansas, where the luxuriant vegetable growth which supplies his feed is supplemented by abundance of pure water, pure air and sunshine, which the horse loves and thrives under.

While sentiment does not necessarily follow the dollar, it can easily be made to do so, and the farmer early learns to love the breed or class of live stock which is profitable to him. Finding himself possessed of large areas to cultivate, and learning that real economy lay in the draft horse as a farm motor, the farmer soon began to love the draft horse, and now there are but three states in the Union which exceed Kansas in membership in the Percheron Society of America, which is the largest horse record association, and each of these three states is twice the age of Kansas. Other breeds of horses are proportionately represented, but the Percheron is the most popular, and it is doubtful if France has ever produced better animals than are now raised amid her broad corn and alfalfa fields.

Something of this quality is shown in the official figures. Ten years ago, in 1901, Kansas had a total of 825,553 horses of all ages and kinds, and these were valued at \$47,056,521, or an average of \$57.00. Now, in 1911, Kansas has 1,063,998 horses, worth \$120,231,774, or an average of \$113 per head. This is an increase in numbers of 238,445 in ten years, and an increase in value of \$73,175,253. In other words, the horses of Kansas have increased nearly 25 per cent in numbers and nearly 100 per cent in value in the last ten years, and while some of this increased valuation is due to the general appreciation of horse values throughout the country, more of it is due to the use of good sires and good feed.

Comparing these figures for both years with those for the country at large, we find that the average valuation in 1900 was about the same for both state and nation, while that for 1911 shows strongly in favor of Kansas. Kansas horses are worth more per head than the average value of horses for the whole United States.

If the introduction of good sires of the draft breeds will add so appreciably to the horse valuation of the state, why will not the introduction of pure-bred mares prove equally profitable? The figures show that there was no great gain in horse values until within the last decade, and the facts show that it was only within that period when much attention was paid to the breeding of draft horses, and this was almost entirely confined to stallions. Seventy-three million dollars is a pretty fair profit from our investment in good stallions and the general rise in the price of horses. Both breeders and farmers are seeing the possibilities in owning



IN THIS AGE OF MODERN FARM MACHINERY, THE DRAFT HORSE IS THE FARM HORSE.

good horses, and more attention is now being paid to pure-bred mares. Public sales, as well as breeding and importing firms, are both including mares in their offerings in order to meet this increasingly growing demand. The pure-bred draft mare will do her share of work; will cost no more for feed and care, and will produce a colt that will sell more readily and for a much higher price than will one not registered, while the difference in her cost is so small that it could easily be offset by the satisfaction which the horse lover gets from her ownership.

The demand for high-class horses of draft breeding is only fairly started, and the present season will see a greater call for this class of stock than ever. Not only because of their greater economy in farm work and the higher appreciation in which they are held by all classes of people who need plenty of motive force, but because of their absolute necessity to the farmer. To meet the demands of modern agricultural methods the manufacturers have taxed their inventive and factory capacities to make machines and implements which are not only more nearly automatic, but which will do vastly more and better work than anything which has preceded them. They have accomplished wonders, and the machines now put out by these manufacturers leave little to be desired in the way of effectiveness. But such machines are of necessity much more complicated and consequently must be heavier, and each of these features demands more power.

The help problem has always been more or less acute on the farm, and, in these later years, seems to be increasingly so. The use of modern machinery has made each farm worker about six times as efficient as he was when Kansas became a state, and our agricultural products have increased each year in spite of the decrease in the number of farmers. The time has come, however, when our national powers of consumption have approached our powers of production, and the problem of farm help becomes more intense than ever. Moreover, the prices of farm lands have so increased that greater profits must be secured from our farms if we would "break even" and lay by a little something. This will be done by means of better farming methods, better live stock, better seeds, and greater economy in production.

A writer in a prominent eastern journal which, however, is not agricultural in any sense, states that "it is rather the fashion to eulogize the horse shows and racing interests for the enormous benefits they have worked to the American horses of all kinds, but when one looks back over the years wherein such exhibitions have been fashionable, and coldly reviews the facts and figures, complacent contemplation of our efforts receives a severe jolt—and we are obliged to confess that while demand has advanced the values of horses of every kind, and while we have awakened in the public of this and other countries a desire to possess our products, we have

not, in one single family or breed—the average—improved quality, character, physique, stamina, conformation or ability."

It is apparent that this writer is more familiar with race and trotting horses than with the draft breeds, and what he says about these light classes is undoubtedly true. Too much attention has been given to the creation of speed machines and not enough to those qualities which make for the improvement or permanence of the breeds.

But this is not true in regard to the draft breeds, at least in Kansas. It is easy to remember the time when almost any kind of a horse that was heavier than the common run and that had some kind of a pedigree, was considered good enough. Conformation was only a secondary matter, and but little effort was made to secure the proper type. With the education which came from the use of better horses came a knowledge that type is essential. Even the importers lacked this knowledge, and their importations suggested that the breeds represented had no fixed type in their home countries. Now this is changed, and importers are finding it had policy to bring over horses which lack in this particular, even though they are purchased cheaply and the profit is greater. If nothing else had been accomplished than to fix the type of each breed in the public mind and create a demand for it, an enormous good would have resulted. This great good is, however, only one of the many.

Another thing that has done much for the improvement of draft horses in Kansas, and in educating the public in a knowledge of what constitutes a good horse, is the work of the Live Stock Registry Board, which has published numerous fraudulent pedigrees and the names of fake pedigree associations designed to graft on the public. These fake associations have done immense damage. The money they take for their fake pedigrees is the least of the public loss, though that is considerable. The greater damage comes from their practice of issuing pedigrees to grade and cross-bred stallions, whose progeny, in some generation, is sure to cause a deterioration in the breed. It is difficult enough to have every colt even approach perfection when both parents are pure-bred, but the use of a scrub, grade, or cross-bred sire is the quickest way to insure deterioration among our horse population. This board is deserving of the earnest support of every farmer, breeder and importer of horses, as it is only through such means as it has adopted that the public can be protected.

There is no country in the world better adapted to growing draft horses than the prairies of the west. In all history the draft horse business has been confined exclusively to rich land. Big stock follows big grass and big grass grows only on rich land. Most favored of all grass lands is the limestone regions, as vegetation is better and the water of such a nature as to foster bone and muscle development. Kansas has all such advantages and abundant grains and alfalfa, besides. These plains regions can and do produce as good drafters as any country. Their capacity for horse production is unknown. Not only should they produce all the draft horses needed in this country and Canada, but a supply for other countries, as well. All we lack is a fixed type for an American draft horse, and this can only come through community breeding.

Prices of draft horses will vary again, as they have in the past, but it is unlikely that there will ever come another time of serious depression. Draft horses will be needed just as long as we have big cities, great factories and good farms. From the draft type of mares can be produced the big mules for which there already exists a world-wide demand, whole pure-bred draft mares will pay for their keep as work horses, while their foals will furnish the best of markets for hay and grain and prove the most valuable of farm animals when selling time comes. Horses can be grown on grass to a greater extent than any other class of animals. They need little grain except when at work, and the broad pastures of Kansas, growing on a limestone soil, afford opportunities for the horse raiser such as are not found in many regions or countries.

AN UNUSUAL CHANCE

American agriculture is but a transient thing, as we have already learned to our cost.

There can be no permanent system of agriculture without live stock.

There is a pronounced scarcity of meat-producing animals in this country, and it is nation-wide in its scope.

The dairy industry is in its infancy, and the nation is calling for its expansion.

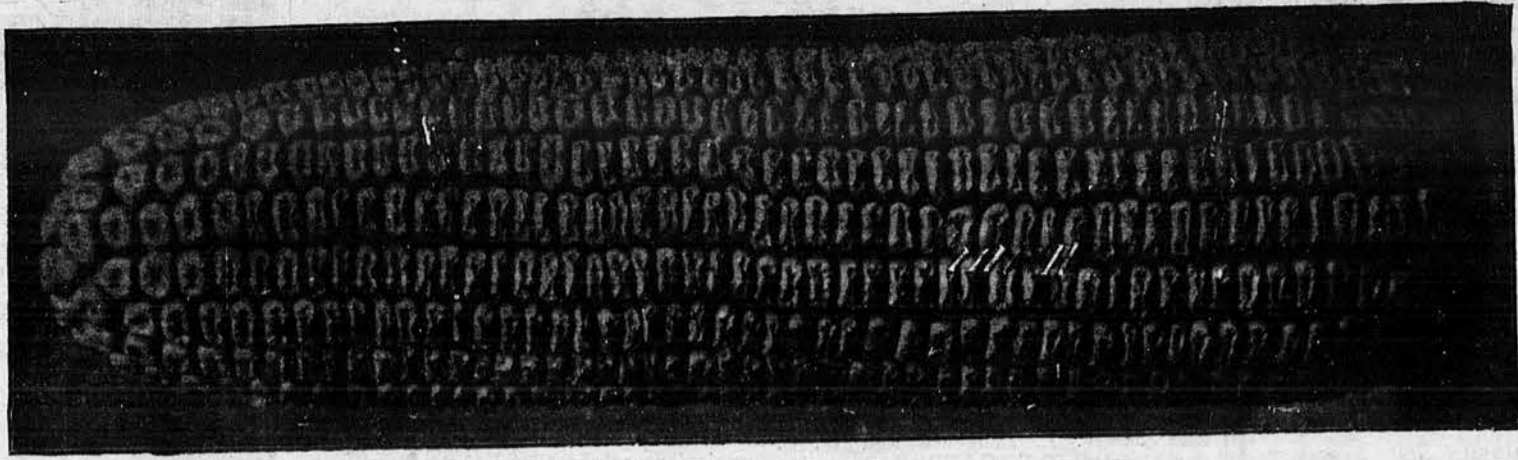
Not in years have the prices of breeding and market stock been so close together, and the demands of the future will exceed anything known in the past.

With land already at a high valuation and constantly increasing in price, there is no room for poor and unprofitable stock on American farms.

These and other conditions make sure that there never was a time in recent years when the opportunity to engage in the pure-bred live stock business was so good as right now.

Keep your eyes on the advertised sales of pure-bred stock, whether dairy, beef or pork, and get into the game by attending a sale or sending your bid.

It will be the best money you can invest.



NEAR A PERFECT EAR. THIS TYPE OF EAR GROWS IN EVERY FIELD AND IS THE TYPE TO SELECT.

THE CALL OF THE FIELD

*Better Seed, More Careful Planting
Better Cultivation, and Double Yield*

By T. A. BORMAN

I have, during the past few weeks, in the basement of my home been testing twenty-five ears of this year's corn. Throughout Kansas the corn crop was this year late in ripening, and in many sections a hard freeze came before corn had matured. Knowing these conditions and knowing that the disposition of many farmers is to plant seed selected from their own fields and with too little regard as to quality of seed, I have obtained here and there, in my travels, an ear of the best corn I could find, until a total of twenty-five ears was secured, and these are the ears I have tested. Each ear represents a different locality. The showing in a germination test is such that it would be disastrous for Kansas to plant this coming season corn of this kind. I know that under favorable conditions we plant poor seed corn, generally speaking, and if the coming season's seed is selected as we usually select it, I feel that the stand will be very poor and the plants will possess so little vitality that the chances will be good for another light corn crop. It is my own little ear test and my feeling as expressed which is the direct inspiration for this and subsequent articles which will appear on this page.

Statistics are uninteresting and meaningless, almost, to the average reader. It is not unusual for a writer to spend much time and use much space in figuring the total millions of dollars of loss to the state because of poor seed, and when all is done the result fails to strike home to the reader. We all know the result to each of us individually if it were possible to double the yield of each of our principal grain crops. If I could give you the recipe in these lines and you had the confidence in me to feel that the recipe would act as surely as a dose of castor oil on a boy, you would proclaim me a truly great man. I will give you that recipe, and it will, in a period of ten years, double the acre yield of corn in Kansas if you will follow the instructions. The same recipe will apply to oats, Kafir, wheat, and any other of our crops, but those named being our principal crops, they deserve our first consideration. Doubling the acre yield! Think what it means! Millions—and the farmer gets it all, and every farmer in proportion to his ability.

Of 24 states having a corn acreage in excess of a million acres, only five states have a lower acre yield than Kansas, and these are North and South Carolina, Alabama and Georgia, from which states nothing much is expected, and the other is Oklahoma. The remaining 18 states each outyield Kansas, Pennsylvania leading with an average of 41 bushels per acre in 1910, which year's figures are here used for each of the 24 states. Ohio grew in that year 36½ bushels, Indiana 39, Illinois 39, Michigan 32, Wisconsin 32, Minnesota 32, Iowa 36, Missouri 33, South Dakota 35, Nebraska 25, and Kansas 19. As a corn growing state, Kansas is at no disadvantage with either of the above named. It will be argued that one-third to one-half of Kansas is not adapted to corn culture. That is so, but that part of the state is adapted to Kafir and milo, each of which plants in the western section will grow an average acre yield for a ten-year period equal

to the corn acre yield for the remaining part of the state, so in so far as the farmer is concerned, the results will be the same. In each of the states named there is a large area of land not adapted to corn, and my information leads me to the belief that on this account Kansas or Kansas farmers are not to be excused. Our acre yield is low because we have a low standard in mind. We are pleased to let well enough alone—we have not kept pace with states immediately surrounding us in boosting the acre yield of corn. Minnesota and Iowa have for years been doing the things which will be recommended to you in these columns, and the improvement has been marked. All states named having a larger yield than Kansas have given more attention to better seed, more careful planting, etc., than has Kansas, and the results speak for themselves.

Now my little test tells me that there is very little corn in Kansas this year fit for seed. This means that large quantities of seed must be bought with which to plant our eight or nine million acres. Hence I say that next spring more good seed corn will be planted in Kansas than for many years past. I want now to advise farmers to buy only tested seed corn—get it on the ear so you can see the type of ear, the seed from which you plant. This matter will be further discussed as we get deeper into the subject. This good seed we buy must be properly planted—that is, the seed bed should be thoroughly prepared, and above all we must learn the lesson of more uniform planting and the securing of a better stand. The year will furnish as good opportunity as we have ever had for better methods of cultivation.

After the crop next year is grown will come the necessity of selecting seed corn, drying, etc., and the getting ready for another crop. If I could induce every farmer to prayerfully undertake the best methods of corn culture for just one year, the call of the field would be answered.

Kansas' acre yield can be more than doubled by the employment of the best known methods of corn culture. There are individual corn growers, here and there in the eastern half of the state, who this year, according to the news press, have grown 75 to 100 bushels per acre—as poor a year as this was. I have the names of a number of farmers who are reported as this year having done this. I have written them to ascertain the facts, and I hope to give some good information in these columns from home people. There are in almost every community farmers who exceed the average corn yield three, four or five times, just as there is an occasional dairyman who gets from his cows 300 pounds of butter-fat per year, while his neighbors are kept busy to get 75 or 100 pounds. There is skill in growing corn as well as in breeding large producing dairy cows. Before our very eyes men are doing these big things—we attribute their success to luck, but luck on the farm, in 99 of every 100 instances, is only knowing how.


Aside from inferior seed, the weakest point in corn culture is our failure to get a good—even stand—every hill occupied by the right number of stalks and each stalk form a strong, vigorous, large ear. Under our present system we have too many blank hills and too many

barren stalks—although on each acre, as a rule, we grow too many stalks. These conditions can be improved with care, and it will be the object of these articles to give you the information. There are approximately 3,500 hills to the acre, if hills are 3½ feet apart each way. It will require only two ears to the hill, each ear weighing one pound, to yield 100 bushels to the acre. Think of it! Only two medium-sized ears per hill, if every hill is occupied, to make a 100-bushel-per-acre yield, and here we are a lot of us fiddling along year after year with an average of 25 bushels or less and entirely satisfied. Will it not be worth while to devote some time in studying the fundamentals of corn growing so that we may begin improvement next season?

The first step is that of seed selection. Many farmers have within the past two years obtained well bred seed corn of those varieties best adapted to Kansas. These farmers will want to plant seed selected from their own crop if the seed will grow. Many farmers have unknown varieties, but are satisfied with these varieties, and they, too, will want seed from their crops. So the matter of selecting suitable seed and testing it is the first step in preparation for next year's crop. Of course the good ears should have been selected before or at husking time, and in the selection other things than the shape and size of ear should have been taken into consideration. But the right time to select seed corn has passed, and now it is necessary to select it from the crib. But next year, determine to select the seed corn in the field. That is the place to get seed corn. This page will tell you why before that time another year rolls around.

Get into the crib and pick out good ears with as little delay as possible. See illustration on this page for the type of ear to select. This is very near a perfect ear. You will be fortunate if you can match it closely. Pick out about five times as many ears as will be required for planting—while on your knees in the crib you cannot afford to spend too much time in looking the ears over—so make a selection of the best ears and later select those the grains from which you will plant. How to sort—what to look for, etc.—will be discussed in the next page on this subject. After you have made the selection as above, see that the corn is thoroughly dried. If your residence has an attic, that will be a good place to dry the corn. The attic of the machinery shed or swinging shelves suspended from the rafters of other buildings having water-proof roofs will do. Spread the corn one ear deep only and hurry the drying. Seed corn will stand hard freezing weather if it's dry, but if the corn contains moisture, hard freezing greatly damages it. These instructions apply to the handling of this first selection, and preparatory only to your making the final selection, being guided, I hope, by what I will tell you in the next chapter. That chapter will contain cuts of proper methods of storing, cuts of germination boxes for testing, etc.

I am especially anxious that the boys
(Continued on page 20.)




The call of the fields—Kansas' broad and fertile acres—is for better farming. The call is not alone for better and deeper plowing, more thorough cultivation for weed destruction and moisture conservation, but for larger crops, a greater acre yield, a better quality of grain and withal, the maintenance of and, in too many instances, the building up of soil already robbed of its fertility by poor farming for past decades.

The call of the field is for good farming. Good farming involves all of the above, with a half dozen or more subdivisions of the several points mentioned. Good farming only—better than we have done—will permit a continued unprecedented prosperity in Kansas. Good farming only will feed our people, and it alone—not only in Kansas, but elsewhere—will enable our people to continue to the exalted position Americans today obtain.

This page in Kansas Farmer will be devoted to the better farming of our fields—seed selection, testing, planting, cultivation, etc., being taken up so far as possible in seasonal sequence. I am hopeful of being able to prepare the page for publication at least every other week during the next four or five months.

T. A. BORMAN.



Percheron Society Meeting

A GREAT MEETING HELD ANNUALLY BY THE PERCHERON SOCIETY OF AMERICA

The annual meeting of the Percheron Society of America was held at Exposition Hall, Chicago, on December 4, last.

There was an attendance of about 600 members, one of the largest in recent years. Routine business occupied a large share of the time, and H. G. McMillan, of Rock Island, Ia., was elected president for the tenth consecutive time, but declined to serve. Secretary Wayne Dinsmore was unanimously re-elected, and J. B. McLaughlin and C. M. Jones were elected to succeed themselves on the board of directors. E. B. White succeeds W. E. Pritchard and W. S. Corsa succeeds E. G. Wheeler on this board. In his report, Secretary Dinsmore thoroughly covered the work of his office, which is included under the heads:

1. The regular work involved in issuing certificates of pedigree.
2. The publication of studbooks.
3. The correspondence relating to the routine work of the office, and that involved in answering inquiries from all sources, on all conceivable phases of the draft horse industry.
4. Promotion of the breed by prizes at various shows and fairs.
5. Publicity of matters relating to the development of the breed.

The routine work of receiving applications and issuing certificates has been complicated somewhat by the taking over of the Percheron Registry Company, and the renumbering or rewriting of many of the animals recorded therein. Inasmuch as this involves substantially the same work as an original registration, these cases have been grouped with our regular registration. Seven thousand six hundred and eight animals have been recorded during the year ending October 31, 5,571 of which are American-bred, and 2,037 imported. American-bred mares number 3,287; American-bred stallions, 2,284; imported mares, 764; imported stallions, 1,273. These totals are for eleven months only, and show a slight gain over the preceding year, when 8,161 animals were recorded in twelve months. There has been a decrease in the number of imported animals, and an increase in the number of American-bred animals recorded.

The decrease in the number of imported animals recorded is in line with the decrease in number that were imported to this country, the records of importation at port of entry, where inspection is now maintained, showing

a decided decrease compared with a year ago.

Of the animals recorded during the past year a considerable number are Percherons that heretofore have been recorded in some of the minor associations. Such registrations involve a great deal of extra work and correspondence, and invariably are much delayed on account of the necessity of thorough investigation. A very large number of those offered for record from such minor associations, have been found ineligible, and it seems clear that practically all horses in such minor associations as are eligible have now been recorded in the Percheron Society. Tabulated, the figures are as follows:

	Registrations for 11 months ending Oct. 31, 1911.	for 12 months ending Nov. 28, 1910.
American-bred mares.....	3287	3313
American-bred stallions.....	2284	2490
Total American-bred.....	5571	5803
Imported mares.....	764	1063
Imported stallions.....	1273	1305
Total imported.....	2037	2358
Grand total.....	7608	8161

The correspondence devolving upon the secretary's office is very considerable. A complete record for the past year was not kept, as a memoranda of letters received and sent was not begun until January 23, 1911. Since that date 12,152 personally dictated letters have been mailed, and this excludes all form letters which were sent out to our entire membership. Inquiries are sent in on practically every conceivable subject in the draft horse industry, and as these inquiries come chiefly from present or prospective owners of Percherons, they are given as prompt and careful attention as possible.

All records for gain in membership have been broken during the past year. The actual gain in new members during the eleven months covered by the fiscal year 1911 was 1,079 individual breeders, none of whom had previously held membership in the Percheron Society. The total number of certificates of membership issued during the year was 1,212. Nine hundred and sixty-seven of these were for cash, two were donated, 183 were issued in exchange for Percheron registry certificates taken up and 60 were transferred shares. The Society now has outstanding 4,174 shares of stock in the hands of 3,979 individual breeders.



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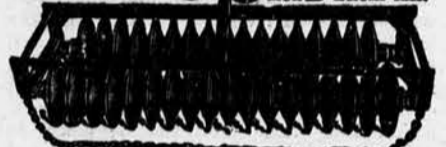


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CYCLONE FENCE Artistic, Practical, Durable. Gives your place a distinctively prosperous appearance and increased value. We also make tubular steel Farm Gates. Free books Cyclone Fence Co., Dept 20 Waukegan, Ill.

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1000 MEN WANTED to invent improvements on everything in daily use. Your invention may mean a fortune. Get it patented. Send for my free booklet, "Inventors' Guide." This booklet contains valuable information and it costs you absolutely nothing. Don't delay. Frederick G. Fischer, Pat. Atty., 307 Junction Bldg., Kansas City, Mo.

SPECIAL SILO NUMBER

JANUARY 27th 1912

THERE is great interest in Kansas in silos. Three years ago the state had less than 100 silos. Now there are over 1,600 of them.

What made this wonderful increase in the number of silos built in this state in time? What is ensilage? What are the real benefits to farmer in own-silo? What does cost, and what the investment? Does a farmer have to mortgage his profits for years to own a silo?



What does the silo mean to Kansas welfare? These and numerous other questions have been coming to KANSAS FARMER for some time. They will be answered by men who are specially qualified by experience to give their best answers, in the January 27th issue.

The value of this special silo number cannot be priced at its real worth to the farmers of Kansas and adjoining states. It will give in concise and authoritative articles, properly illustrated, the most down-to-the-minute information yet published. Thousands of farmers will find this one issue worth more to them than the cost of a whole lifetime's subscription at \$1.00 per year.

Grips Every Strand With An Iron Hand

The Square Deal lock is the secret of the success of Square Deal Fence. It double grips the one-piece stay wires to the strand wires so they can't possibly slip. The very strand wires keep

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tight and trim the whole year round. The one-piece stay wires prevent sagging, heaving and buckling—require fewer posts. Get square deal prices now—see the money you save. A postal brings them, also latest catalog and a high grade, four-section, 2 ft. folding rule—all FREE.

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600 Industrial Street Peoria, Illinois

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A beautiful and valuable novelty much used for making figs. Plant grows in bush form, liberally covered with fruit. The skin and flesh are a rich golden yellow, solid, thick-meated, with a pleasant flavor. When canned or dried in sugar, like figs, make excellent pies or tarts for winter use.

For Only Ten Cents

We will send basket Tomato Fig Seed and a Surprise Packet of other new seed in a 10c. rebate envelope, which when emptied, will be accepted as 10c. payment on any order for seeds in our 1912-3 color catalogue which is included FREE. Order today.

SMITH BROS. SEED CO., Box 637, Auburn, N.Y.

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MILLWORK

We make a specialty of Millwork for house patterns, special millwork, doors, windows, interior finish of all kinds. We can furnish anything in millwork from a quarter sawed oak bevel plate front door for \$11.41 to a 4-light barn sash for 53 cents.

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are the practical farm help. Send for catalog and prices.

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LEARN HOW TO BUILD WINDBREAKS. Get our 56 page Planter's Guide for 1912. We are evergreen Specialists, and we grow more evergreens than any other firm in the world, as well as shade trees, shrubs, flowers and hardy fruit trees. Our book and list of 50 Great Bargains are free to intending planters. Don't wait till spring—SEND NOW for them.

D. HILL NURSERY COMPANY, Evergreen Specialists, Norway Ave., Dundee, Illinois.

NO MORE SORE SHOULDERS. Here is a cotton-filled horse collar which cures galls and sores while your animal works. The

LANKFORD HORSE COLLAR is made of best duck, heavy leather trimmed. Filled with medicated absorbent cotton. Absorbs sweat, keeps shoulders healthy. Price, \$1.25. If your dealer doesn't handle the Lankford, send his name for free memorandum book and full description of collar.

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Always Successful BLIZZARD Ensilage Cutter

Cuts any feed dry or green and elevates any height. No waste power. Can't strain. Has the only knives adjustable while running. Self feed. Mounted or unmounted. Every machine tested and guaranteed. A labor-saver and money-maker. Ask for free book, "Why Silage Pays." JOS. DICK MFG. CO., 2600 W. Tuscarawas St., Canton, Ohio.

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FARM POWER

DEVOTED TO GASOLINE ENGINES, TRACTORS TRUCKS, AUTOMOBILES AND MOTORCYCLES

Gasoline Engine Great Labor Saver.

Our subscribers, Anderson Bros., Clay Center, Kan., write of the variety of uses to which they have put a small gasoline engine. They say:

"Last fall we purchased an International three-horsepower baling press, and during the winter we baled about 250 tons of hay and alfalfa. Besides that, we have used the engine for sawing wood, and later on we will use it for many other things. The little engine has run like a top and to perfect satisfaction. We highly recommend a gasoline engine to every farmer as a great labor and money saver, and the cheapest and most economical power on the farm."

Utility Motorcycle Proven.

Farmers and farmers' boys are finding the motorcycle a farm necessity almost. In the illustration the start for the depot is about to be made for the express office for the delivery of a pure-bred boar pig to go forward on next train. Some farmers carry five to eight gallons of cream to the cream station. They carry the children to school, make quick trips for repairs, and short runs after the day's work is over and all the horses tired. It permits the young man to have sufficient of the pleasures of the city at his command and to make the farm even more attractive.

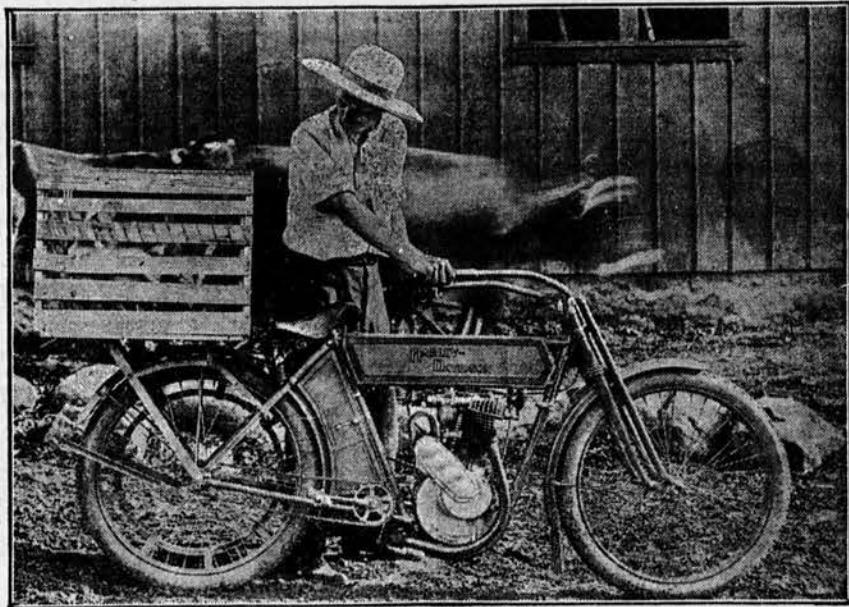
The speed at which motorcycles can

the things which should be on every farm is a light hoist, costing \$2 or possibly a little more, the cost depending on the lifting capacity. A hoist of 2,000 to 4,000 pounds capacity is the most satisfactory size for general farm work.

With a good hoist you can do all the heavy lifting without calling your neighbor or interrupting the hired man in his work. It is surprising the great number of jobs on which a hoist can be used, at a great saving of time and labor. A hoist will lift stones, logs, sacks of grain to loft, pull stumps and small trees, lift pump pipe from wells, bind loads of hay, pull autos or wagons out of mud holes, lift windmills, change wagon boxes, etc.

A hoist hung up in the wagon shed will pull the hay rack or wagon box up out of the way when not in use. Drive into the shed, attach the hoist to the hay rack, put it up, and drive out from under it, and when again wanted on the wagon, back the wagon under the rack and let it down onto the gear. A hoist can be used to good advantage when butchering, for lifting the carcass. It enables the man to swing up a 300-pound hog where it would otherwise take two or three men on a dead lift.

These hoists are advertised in KANSAS FARMER from time to time, and it will pay readers to write for literature.



be operated in safety over good roads is almost unbelievable. Many riders have maintained a speed of nearly a mile a minute for a distance of 20 miles. This would be impossible with an automobile, as there would be a great inclination for them to jump the road. The writer believes that this is largely due to the small fly wheels in the crank case revolving at from 1,800 to 2,500 revolutions per minute. This, with the high speed of the wheels, seems to form a gyroscopic action which makes it almost impossible to upset the machine. The motorcycle can pick the road and travel in a narrow track. The motorcycle can be handled on rougher roads with comfort than could an automobile.

All standard makes of machines today can be equipped with luggage carriers or an extra seat which permits the carrying of about 200 pounds of freight, or an extra passenger. Hundreds of cases are on record showing machines operated at a cost of one-tenth of a cent per mile.

Motor Trucks in Postal Service.

A special automobile delivery mail service was inaugurated in Washington, D. C., November 15, which, it is expected, will be extended to other cities in the country. Letter carriers were taken in motor cars from the postoffice to the various routes loaded with mail, and thus were enabled to deliver the mail several hours earlier. The collection of mail by the carriers was similarly expedited.

Farm Hoists.

There is a lot of heavy lifting about farm work, and no one knows better that this is so than KANSAS FARMER editor. There are, however, many little inexpensive contrivances, some of which it is necessary to buy and others of which can be home made, which will save a great deal of very hard labor. One of

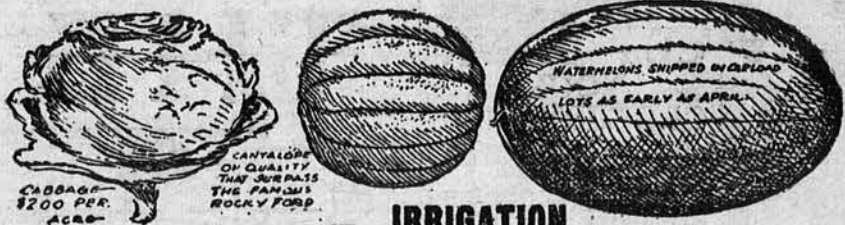
Gas Tractor Schools.

The gas traction engine business is supervised by a lot of live fellows, but the tractor business is no different from other commercial lines. The one thing which now characterizes the tractor business is the establishment of engineering schools by Hart-Parr. This company is establishing schools in the west at Lincoln, Neb.; Denver, Colo.; Wichita, Kan., and Des Moines, Iowa.

Many a farmer would buy a tractor if he was convinced that he could operate it successfully. This school simplifies the matter. He can sit in his own home during the slack times in winter and thoroughly acquaint himself with every function and operation. When he gets through with the written lessons, fourteen practice schools are open to him without extra charge. Here he will apply practically what he has studied on paper; here he can handle and operate the actual tractor under the direction of experts.

This school also fits young men for well-paid positions as operators of gas tractors—similar to the well-paid chauffeur. Every man who farms 200 acres and over ought to write to the Hart-Parr Company, 212 Lawler street, Charles City, Iowa, and get detailed synopsis and prospectus.

The cold storage system of the country has been charged with many of the existing evils of the present time, and it is interesting to note the American Warehouse Association in its annual report recommends government supervision of cold storages. The report ends with a declaration against the establishment of a time limit, claiming that no need for such a provision ever has been established.



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making men rich at Mission in the Lower Rio Grande Valley of Texas.

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Western Farmers and Automobiles.
"There is nothing to alarm the average American citizen in the news that has gone forth that there will be 225,000 automobiles manufactured in the United States in 1912. Of course the people will pay out something like six or seven hundred million dollars for these vehicles. No doubt more than half the number manufactured will be disposed of in what is known as the "corn belt" country," says the Motorist. "This means more than three hundred million dollars will be paid out by western people for motor cars. The west can well afford it. The automobile is fast making the western farmer a greater producer, a greater student in applied economics. During 1911 western farmers produced more than two-thirds of the 2,776,300,000 bushels of corn, which is valued at the farm at more than \$1,805,080,660. Western

DON'T BE COLD ON WINTER DRIVES
You can be warm and comfortable with a Clark Heater in your auto, wagon or sleigh. These Heaters are made in twenty styles, from 90 cents to \$10.00 each. Write for complete catalog to Chicago Flexible Shaft Co., 206 Ontario St., Chicago. farmers have grown three-fourths of all the wheat, the oats and the other cereals valued at a billion dollars more, not to mention the few billion dollars worth of live stock, butter, eggs and farm produce in general. The few hundred million western farmers will invest in automobiles will be well invested, and their individual bank accounts will continue to grow larger. The intelligent farmer of the west knows better than the average statistician the value of the automobile, and how he can most advantageously invest his money."

THE FARM



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FREE—Booklet on "Feeds and Manures"

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If the farm equipment does not already include a manure spreader, you should buy now. Get into the habit of hauling the manure direct from the barn to the field. This gives the soil the greatest benefit from the manure, and saves a great deal of the labor expended the old way. With a spreader you will haul manure, a few loads at a time, out of the lots all winter, and the big job of hauling next spring will be considerably shorter. With a spreader the boys may not be inclined to shy at the job as formerly.

On the farm, as well as in every other business, there is ample opportunity to make good resolutions the first of each year. Resolutions might be along these lines: Deeper plowing; early plowing for wheat; fall and winter plowing; better seed of all kinds; more thorough cultivation; the farming of only such land as can be well taken care of; a few head of pure-bred live stock with which to begin the year, etc. A good resolution, though broken, is better than no resolution made.

The news press has reported the merger of some ten or twelve of Kansas' large mills, and the reasons assigned for the merger look reasonable to us. Kansas mills, when running full time, make much more flour than they can sell advantageously. The result is that the mills run a while, make up a lot of flour, and shut down until the flour is sold. When the wheels are not turning, the owner is losing money. Large north-western mills buy much Kansas wheat, make it into flour, advertise their product widely, and sell that flour in territory which could be best served by Kansas mills. The Kansas merger is to advertise Kansas flour and establish a market for that flour—the best in the world. Here is hoping for the success of the plan. One lesson is this: That no manufacturing enterprise can succeed unless its product is well sold. The other lesson: That no manufacturer can afford to be idle one-half, or even less, of his time. What does this teach the farmer? The production of the best of everything at the lowest cost and its sale at the best price and the turning of his labor to some good account every day in the year except Sunday.

A good many complain about the work on the farm. Crop farming is laborious, and there is only one way of getting away from it. That is to grow feed and get into live stock farming. This is most profitable and most satisfactory from every viewpoint. The farmer cultivates the fields and grows as much feed as his help will permit. He immediately gets on that farming basis to which every man should look forward, viz., just what he and his family can do comfortably and well. The remaining part of the land is seeded to pasture and cattle, horses and sheep do the harvesting. These furnish plenty of choring for the winter months, and this time of the year is turned into money. The live stock grows—increases in value—every day and night and Sunday.

"The Water Supply of the Modern Farm House" is the title of a pamphlet which Dr. J. D. Walters, head of the department of architecture and drawing of Kansas Agricultural College, is writing. This bulletin will be published by the college extension department. One on the "Heating of the Farm Home" also is being prepared. An intelligent discussion of and a practical solution of these two subjects will do much to complete the sum total of farm comfort.

There will be many days between this and planting time next spring during which some important things can be done around the farm. On most farms gullies have been washed by dashing rains, and these gullies are becoming deeper each year, and in just the proportion that the depth increases, the surrounding land is, by the washing, being robbed of its surface soil. Soil erosion can be controlled, and the effort is worth while. Begin now. This method is from the Kansas Agricultural College: "Place brush in

the gully with the tops upstream and it will catch and hold the material washed down. Be certain that you place enough brush in the ditch so that the spring rains will not wash it away. It would be well, also, to throw some hay on the brush, to aid in catching the finer material. And, if you prefer, the woven-wire dam also may be used. Place a stake on each side of the gully in the ground three feet from the bank and fasten a piece of woven wire to them. Be sure that they are firmly in the ground. Put straw, old hay or fine brush above this dam, and it will catch most of the material washed down by the water. As the gully fills up add another strand of woven wire and repeat the process."

The solution of these problems, including that of hired help, must rest in the volume of power that can be made use of. Future farming will be power farming, and it is vastly better to have this power in plenty and with a reserve. The draft horse solves this question. He is a most efficient all-round motor for the average farm, as well as for the average farmer. He can do practically anything that can be done by the lighter horse, and vastly more. His great strength and weight of body makes of him an engine of concentrated effectiveness, while his gentle disposition and large intelligence makes him easy to break and handle. He is not only necessary to modern farm operations, but he is profitable in other ways. His progeny is easily sold, even in hard times, and the prestige he gives to the owner has a cash value, while his manure is money.

The idea of the all-purpose horse has faded, and in our modern economy the draft horse is pre-eminently the farm horse. Lighter horses will always have their uses and their admirers, but on the farm, where power is needed, the vast strength, the firm, heavy bone, the great weight, and the mild disposition of the draft horse makes of him the prince of all farm horses.

A letter from a man who will on March 1 begin operations under a five-year lease on a quarter section farm asks if he can afford to buy a silo and erect it on the farm, since he has no assurance that he can again lease it at the expiration of his present contract. Yes, this renter can well afford to buy such silo. A 100-ton silo will pay for itself in one year if its user has sufficient stock to consume 100 tons of silage. If our correspondent buys a good stave silo he can move it with little or no damage, and he will be out labor only. We suggest he endeavor to get his landlord to buy the silo upon expiration of the lease. If the landlord is wise he will in five years see the advantage of having a tenant who will use a silo and will make the silo a part of his farm equipment.

Landlords who encourage, or even require, the growing of grains for market, on a crop sharing basis, are in our judgment making a big mistake. They are, with every load of grain produced, delivering to its purchaser a part of the farm in the form of the soil's fertility. Under the cropping system the farm is every year getting poorer, and, worst of all, the tenant, who cannot afford to fool his time away, is making no money much by the sale of corn and wheat. We think the land owner should require live stock farming, and provide buildings, including silo, and fences suitable, rent for cash, and make not less than a five years' lease. When a good tenant is found, keep him as long as he will lease. By this method the landlord may not realize more in cash per year than under the cropping system, but his land is in much better condition and the tenant can and will do a better job of farming and will make more money. The most miserable and inexcusable farm condition in Kansas, in so far as this editor knows, exists in the Kaw Valley, a large part of the farms of which are owned by people who rent them on a crop basis. The land is valuable—worth \$125 to \$150 per acre—but the owners say it is producing less corn now than ten years

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Axles, cold-rolled steel—three times the strength of common steel. Special wheels of great strength—wood or steel.

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Seven sets of roller bearings—others have two. Every main working part is fitted with roller bearings. Success roller bearings are made of cold-rolled steel—others use cast or malleable iron for the cages. Success roller bearings are true—they insure all the shafting running in perfect line.

THE LIGHTEST DRAFT MANURE SPREADER MADE AND MOST DURABLE

Patented Steel Brace from Cylinder to Main Axle.

Others brace to the spreader box. All driving parts compensating. Pressure of the load is against the cylinder, while the drive chain pulls forward, forcing the gears together. No lost motion—no getting out of mesh. The Success is the only spreader having these valuable features.

The Success spreader uses a steel pinned drive chain. It withstands the strain of frozen manure and obstructions in the load.

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Easily produced by the New Farm Cushman—the high-powered, light-weight, fuel-saving engine for general farm work. Advanced 4-cycle type. 4 H.P. rating, but will actually develop over 5 horsepower.

Automatic throttle governor, with high grade Schebler carburetor, measures out just enough gasoline to do the work required, whether it be a 1 H.P. or a 5 H.P. load. Uses less than **One Pint of Gasoline Per Hour**

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ago. On thousands of acres no effort has been made to improve the soil by manuring, by plowing under green crops, by crop rotation, or any other method. Much of the soil is sick through lack of humus. On many of these fine lands the buildings are as scanty and poor as those of the homesteader—simply because the owner is taking everything from the farm and giving back nothing—not even comfortable buildings for his tenant. Then the landlord wonders why the tenant does not stick, or why he is not a good farmer. The system is wrong.

Silage and Dry Roughage.

Answering several inquiries from Kansas farmers asking if it is necessary that other roughage be fed with silage: We think it wise to feed some dry roughage with silage. The stock will crave something dry. With 30 to 35 pounds of silage fed per day to grown animals they will eat four or six pounds of hay, alfalfa, sorghum, etc.

Spoiled Silage.

An Ottawa subscriber says he has mouldy silage two or three inches around the entire inside of silo, and wants to know why this spoiled. Our opinion is that the silage was not well tamped on the edge of silo while filling. Keep the silage as nearly level as possible while filling, and tamp well the entire surface.

Silage for Hogs.

Answering our Hope, Kan., subscriber: Silage is a feed for hogs to about the same extent that pasture is. It is a good conditioner and a valuable part of the hog's winter ration. The hog has a small stomach, and silage is a bulky feed. He can not consume enough silage to give him the nutriment required for fattening.

Listing for Corn.

Our subscriber, F. W. Schindler, Valley Falls, Kan., states good listing practice in the following: "I have had better success in double listing than in plowing and top planting, as it will stand the dry weather better. In listing the first time, list deep. In planting, list very shallow. When listing deep the corn is planted down on hard and poor soil, and when not listed too deep it comes on good soil and grows faster. That is my experience, and I have tried both ways and find this better."

Value Farm Products for 1911.

The final estimates of the United States Department of Agriculture on the production and value of the principal farm crops of the United States for 1911 are as follows:

Crop—	Production, Bushels.	Value.
Corn.....	2,531,488,000	\$1,565,258,000
Winter wheat ..	430,656,000	379,151,000
Spring wheat ..	190,682,000	162,912,000
All wheat	621,338,000	542,063,000
Oats.....	922,298,000	414,643,000
Barley.....	160,240,000	139,182,000
Rye.....	33,119,000	27,557,000
Buckwheat.....	17,549,000	12,735,000
Flaxseed.....	19,376,000	35,272,000
Rice.....	22,934,000	18,274,000
Potatoes.....	292,737,000	233,778,000
Hay (tons).....	47,444,000	645,570,000
Tobacco (lbs.)...	905,109,000	85,210,000

Saving Manure Results in Big Yields.

Twenty tons of corn silage per acre was the crop harvested this fall by George L. Hyslop, Henry County, Ohio, and while this would not be a big tonnage for Kansas' best land, it is extraordinary in that section of Ohio. But the most interesting thing about this big

yield of silage is that it is the result of the proper utilization of barnyard manure. The manure shed has an important place on his farm, and care is taken to prevent loss of plant food. Mr. Hyslop has only recently finished a new \$6,000 barn which is designed to facilitate the care of manure as well as shelter the stock. This barn is 90 by 92 feet and has long feeding sheds on two sides with foundations walls and floors of concrete, allowing for the accumulation of 2½ feet of manure. The cattle are allowed to run over this manure, and keep it well tramped down. The barn has a capacity of 128 head of cattle, 40 hogs, and 7 horses. There are four big silos, of 160-ton capacity each, in the center of the building.

On Buying a Farm.

"I tell you this to show that it pays to look carefully before you buy. Often you can tell when an agent is telling you the truth, and often by dropping back to the place alone and talking to the neighbors you can get a sackful of valuable information—the ins and outs of the family that own, why and how much they wish to sell, at what price the adjacent property is selling, what sort of land it is and how it can be worked up, whether it is worn out or rested or not yet worked out, and—oh, well, you understand you have to look into the matter of buying a country place just like anything else; investigate and get the opinion of persons who know and don't just jump in at a chance."

Printed Letterheads for Farmer.

W. C. Palmer, our North Dakota farm correspondent, says that "printed letterheads and envelopes are traveling advertisers. When a letter comes it makes a big difference if it has a printed letterhead and envelope. It looks like business, and it is business of the best kind." He says further:

"The farmer needs such printed letterheads. There should be something for sale on every farm, and the letterhead can be made to advertise it very cheaply. It will also be found that the printed letterhead will have quite an influence on the person himself. The more he sees it the more pride will be taken in keeping up the quality of the articles for sale.

"It is not accident that business men in all lines use the printed letterhead. They have found that it is a good business proposition. Those farmers who have tried it have found it both profitable and a source of pride. The cost will not be so much more than for plain paper. It may seem a little large, but then one wants to remember that he is getting a good many sheets and envelopes at one time."

Facts About Cold Storage.

The result of an investigation into cold storage operations by the United States Department of Agriculture are given, from which it appears that the period of storage is less than seven months for 99 per cent of fresh beef, fresh mutton and fresh pork, 96 per cent for poultry, 88 per cent for butter, and 75 per cent for eggs. Only an insignificant quantity of any of these products remains in cold storage for a year, and in most cases it is due to lawsuits or other noncommercial reasons.

Cold storage has equalized the prices of butter and eggs through the year, making them higher in the season of

natural plenty and lower in the period of natural scarcity. On the whole the average annual price level has been raised.

It is estimated that there is put into cold storage annually 13½ per cent of the total production of eggs, 3 per cent of the beef, 4 per cent of the sheep, 11½ per cent of the fresh pork and 25 per cent of the creamery production of butter.

Nutritive Substances in Forage.

The nutritive substances in forage is divided into two classes—flesh formers and fuel or energy producing substances. When the proper amount of these two classes of substances is fed the ration is said to be balanced. If an unbalanced ration is fed, as one containing more fuel or energy producing substances than are needed and less flesh-forming material, the ration is partially wasted, and such unwise feeding will not bring as good results as the feeding of the same amount of a balanced ration. Each class of substances has different offices to perform in the body. If not enough flesh-forming substance is fed, the body suffers, because it is absolutely necessary to keep the body in good condition. Thousands of animals are fed all they can eat, yet are poorly nourished because the food contains little except fuel substances.

The flesh-forming substances are used to replace the waste that goes on in all living tissue. Energy-producing substances are used to furnish the energy required for the nervous and muscular activities of the body, and when fed in excess they may to a certain extent be stored up in the form of fat for use later, when needed for either energy or heat.

One of the most important substances in any food stuff is protein. All nutritive substances which contain nitrogen are classed under the general term of protein. Protein is the substance which builds up the body. The muscles, tendons, ligaments, connective tissues, skin, hair, hoofs, part of the bone, and in fact every part of the body but fat are made up of protein, together with mineral matter and water.

The next important class of substances is the carbohydrates, which contain carbon, hydrogen, and oxygen, but no nitrogen, sulphur, or phosphorus; they include starch, sugars, etc. These are used for practically the same purpose for which coal or wood is used in the steam engine, namely, to furnish energy and heat.

The third important constituent of hay is its oils. Small quantities of oil are present in all kinds of hay. These oils serve the same purpose as the carbohydrates. A pound of these, however, will furnish two and one-fourth times as much energy or heat as the same quantity of carbohydrates.

Kansas Horse Breeders Meet.

The Kansas Horse Breeders' Association will meet at the Kansas State Agricultural College, Manhattan, Kan., on Wednesday, December 27, with the following program: Morning Session—Navel Infection and Contagious Abortion. Dr. F. S. Schoenleber; Diseases of the Horse Caused by Corn Smut, Moulds, etc. H. P. Haslam; Uniform Classification of Horses at Our County Fairs, T. G. Paterson; Review of the Work of the Stallion Registry Board, Dr. C. W. McCampbell; Future of Our Horse Registry Association—Demonstrations of Unsoundness of the Horse, Dr. C. W. McCampbell; Shoeing and Care of the Foot, Dr. K. W. Stouder; Special Work in the Study of Types and Breeds, Dr. C. W. McCampbell. Evening Session—Banquet. Report of Horse Feeding Experiment at Ft. Riley, Dr. C. W. McCampbell; business session.

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With a Cut Clear Through the Outer Casing, or a Blowout or Bad Puncture!

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This illustration shows the difference in root growth resulting from deep or shallow plowing. Deep plowing makes more food and moisture available for the growing plant. The machine in the illustration is a deep tilling machine—it's a disc plow. Deeper plowing is necessary—regardless of what kind of machine does it.

Buy the One Plow That Will Serve Every Purpose

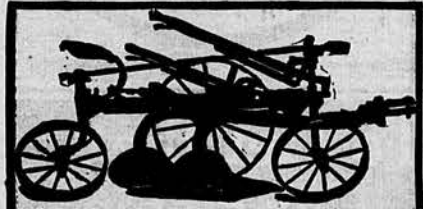
Why spend your good money for a plow that only answers one purpose, when for about the same price you can get a real, ALL-PURPOSE plow? An implement that will do perfect work in any field on your farm.

What a vast saving and convenience it is to be able to plow (at any depth up to 8 inches) Tame Sod, Heavy Clay, Sandy Loam, Mixed Soil, Stubble Fields, Old Corn Fields, etc.—all with the same plow. The Rock Island Universal Plow does all those "stunts," a fact to which thousands of farmers gladly testify. Besides, this remarkable plow turns over each slice flat and smooth. Leaves no holes—no air spaces between top soil and subsoil that keep the precious moisture from coming up when needed. Even though hot, dry weather sets in, your crop goes right on growing, because the top soil lying flat on the subsoil allows moisture to be taken up from below, just like a lamp wick takes kerosene out of the bowl of a lamp. Farmers tell us, too, that land plowed with a Rock Island "Universal" needs less harrowing, because this plow will pulverize the soil more as it turns the furrow. The

Rock Island (C. T. X.) Universal Plow

has been in actual, general use for three years. Under the most difficult tests ever given a plow, it has proven its right to the title, "The World's Only Universal Plow." Take for instance:

Down at Pickering, Missouri, fifty-five farmers gathered on a neighbor's farm to see the new plow perform. Fifty-five pairs of eyes watched it keenly as their neighbor put it through the "paces." They rendered the following unanimous verdict:



Note the peculiar corkscrew, auger-like twist of the moldboard. A slice of any thickness spreads out evenly over the surface without crimping and turns completely over, burying all trash completely. No spilling over into the furrow or slopping forward onto the land. Lightest draft and easiest on the horses of any plow made. We own the patents on these moldboards and they cannot be had on any other make of plow. Large pictures of this gang plow and of our Universal Sulky Plow are shown in our free books, together with complete description and large plowing scenes. (50)

"We, the undersigned, have today witnessed a demonstration with the Rock Island Gang Plow on Mr. Swinford's farm, and express our unqualified approval of its light draft and perfect work in difficult condition of soil; turning a smooth, flat furrow and covering all trash. It handles sod as perfect as a breaking plow, and fully deserves the title of a 'Universal' plow. The C. T. X. Bottom is a wonder."

Signed by Fifty-Five Farmers. The names and addresses of these fifty-five men can be had for the asking.

Write!

Don't tie up your money in several plows. There's no use in it when you can get one plow that does the work of three or four, and at reasonable cost. Send for the complete story of the "Universal" and letters from men who use "Universals" on their farms. We gladly send you this information free. Merely say on a postal, "Tell me more about the new plow." Then put your name and address below and send postal to **ROCK ISLAND PLOW CO.** 244 Second Ave., Rock Island, Ill. (50)

LIVE STOCK



"I always find that I get the best results by cross-breeding the Poland China with the Duroc Jersey," said a farmer who raised hogs for market. "I use pure-bred boars and high-grade sows, the higher the grade the better." "How about the second generation? Would you use them for breeding purposes?" The first cross of this kind will often produce a good market hog, but such breeding operations is a first step downward and the further it is continued the worse the herd becomes. Deterioration comes from crossing animals of different types within a breed, but much more rapidly when different breeds are crossed. Keep inside your chosen breed limits if you would build up the herd.

Kansas farmers are, as a rule, better equipped for carrying their hogs through the winter at low cost than are those of most other states. With our alfalfa and Kafir or milo we have advantages not possessed elsewhere, and the hogs fed on these will come through in the finest possible shape and ready to go onto alfalfa pasture. Of course the alfalfa hay is worth a lot of money, but it is worth very much more when fed on the farm than when sold as a money crop. Alfalfa enriches the soil all right, but only when it has been manufactured into beef, pork, poultry or milk. You don't believe that? Then why does an alfalfa field "run out" and need manuring?

A. H. T. A. and Hog Cholera.
The Kansas division of the Anti-Horse Thief Association will go after those who violate the laws in regard to the burning or burying of dead cholera hogs. Also those who haul dead or sick cholera hogs along the public highway. This disease is most readily transmitted by contact, next through drinking water, and third by wind-blown dust which contains the germs.

As the A. H. T. A. now numbers about 40,000 members in Kansas, and as these members have the reputation of getting what they go after, it may be expected that their powerful aid will materially assist the officers of the law in the detection and punishment of those who violate this law.

It is never the purpose or practice of the A. H. T. A. to execute the laws, but to aid the civil officers in their duty and in the protection of society in general and their own membership in particular against violators of the laws against the person or property.

Pink Eye in Cattle.

"I would like to have the following questions answered through the columns of KANSAS FARMER. In what manner is pink eye contagious? Has it been known to attack other animals than cattle? Is there any known way of curing this disease or of lessening its bad effects?"—I. N. FARR, Bellaire, Kan.

Pink eye is a horse disease which is called catarrhal conjunctivitis by the veterinarians. It is a sort of influenza which attacks the transparent covering of the eyeball, but which affects the whole system. It is contagious by contact either with the animal or something he has infected.

Veterinarians are uncertain as to whether pink eye in cattle is identical with the horse disease bearing the same name, but they are inclined to believe it is. In some cases it is not contagious, though it may be classed as pink eye. This disease usually attacks horses in the spring, and is thought to be more severe on cattle that pasture on low, wet land.

If more than one animal is affected it is best to call a veterinarian, as this will prove that the disease is contagious.

If you undertake to handle the case yourself, first separate the animal from all others and then disinfect the premises with a good dip such as is advertised in KANSAS FARMER. Then remove the constipation by giving a dose of salts and place the animal in a very dark stall. Bathe the eyes three times a day in hot water for about 15 or 20 minutes, and then drop into each eye a drop of the saturated solution of boric acid after each bathing.

Report progress to this department.

Can Farmers Use the Serum?

"I think it would be a good thing if the farmer could get the anti-hog cholera serum and use it on his hogs himself. He can then do the work when it ought to be done, and he will be clean about it, as he can take time to wash the place where he makes the injection and will not have so many abscesses as do some veterinarians when they do the work. If a farmer is competent to understand directions and use the hypodermic syringe, he can do the work. If this is against the law, then the law should be changed."—W. J. DEWITT, Jewell, Kan.

There is nothing in the law to prevent the farmer from administering the anti-hog cholera serum to his own hogs. In fact, this is just what he can do at a very small expense for a hypodermic set, provided he can get the serum.

Of the commercial serums I know nothing, and the serum made at the State Agricultural College will be plentiful enough in the future, it is believed. Extra efforts are being made by the college authorities to have on hand enough of the serum to meet any emergencies.

In the matter of administering the double treatment, or "serum-simultaneous" method, the law steps in. As this double treatment requires the administration of diseased blood at the same time that the serum is injected, and as there is very great danger of spreading the disease through the careless or ignorant handling of this diseased blood,

Serum Control by U. S.

In his annual report Secretary James Wilson, of the United States Department of Agriculture, says:

"It is especially desirable that the secretary of agriculture should have power to control and supervise the manufacture and importation of vaccines, serums and like substances for treatment of animals so as to insure their purity and potency. Such preparations, when contaminated, have in the past been responsible for the introduction of contagious diseases into the country. The great cost of eradicating these outbreaks should alone be a sufficient reason for granting the authority required."

Hold On to Your Breeding Stock.

Live stock conditions are unusual, and the farmer who holds to his breeding stock during the coming winter is sure to be well paid for so doing. The cattle shortage, which is nation-wide and which has resulted in southwestern feeders going clear to Chicago for feeding stock, will be sharply felt by spring, while the shortage of farrow in some states has been intensified by the ravages of cholera and the shipment of breeding stock because of the cholera scare until the prospects indicate an enormous demand for breeding hogs in the spring. If necessary, strain a point, but keep the "seed" over until spring. As a famous auctioneer expressed it, "the man who has a good lot of breeding sows next spring can wear diamonds on his coat tails."

Banza of Kansas.

The Twelfth International Live Stock Exposition recently held at Chicago was peculiar in that it contained no exhibits of breeding animals from west of the Missouri River, and but few were in the fat stock classes. The Kansas Agricultural College gave an excellent account of itself with its herd of steers of different breeds, and won the Gallopway championship, as reported in these columns.

The Hereford heifer, Banza, which was champion at Topeka, Hutchinson and Kansas City, and which sold in the Royal sale for \$1,050, was bred, raised and fitted on a Kansas farm. She won second in class at the International. This remarkable heifer was bred by Robert H. Hazlett, of Hazford Place, Eldorado, Kan., who owns one of the largest and best herds of the breed in America. She was sired by Beau Beauty by Beau Brummel, a bull that was, in my judgment, one of the best ever produced on Mr. Hazlett's farm, and this is saying much, as this farm is noted for quality. This heifer, with her brothers and sisters, is the embodiment of the highest possible compliment to Kansas alfalfa.

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The value of a Hart-Parr Gas Tractor lies in its adaptability to all kinds of farm work. Compared with the old steam tractor, it is a comparatively light machine, of enormous power.

The average farmer has not given sufficient thought to the wide range of work that may be accomplished with this "Modern Farm Horse." Wherever tractive or stationary power is required, the Gas Tractor is the embodiment of economy. It will do the work of 22 to 25 horses, using the cheapest kerosene for fuel. The money it actually saves in hired help and feed bills will soon pay for it.

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\$10⁰⁰

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The best silo that can be built. Write for prices for 1912.

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Manhattan, Kansas

LIVE STOCK INSURANCE—Cheap and reliable. Write for our plan. Geo. Withers, Clay Center, Kan.

DAIRY



It will be a long time before the farmers of Missouri, Kansas, Iowa and Nebraska are ready and willing to forget about the dual-purpose cow. In each of these states a good deal of farm dairying is done—that is, the cows of the farm are milked and the cream sold. The cows are not bred for dairy purposes, and are not fed especially for milk. Practically all of the so-called dairying done in these states is with the farmer a side issue—the principal excuse the farmer has for keeping cows being that of growing calves which eventually find their way to the slaughter house. For the present this seems to be what he wants, and consequently a cow that will give milk enough to allow the women folks to get a little cream check each day and a cow whose calf will sell advantageously to a feeder is sought.

It is my idea—and my opinion is based on about 15 years of experience—that a farmer should keep one of two kinds of cows—either a dairy-bred cow and feed and milk her for all she is worth, or keep the best of beef-bred cows and make or break in the beef business. I believe in the farmer being a specialist—a thing I have already urged elsewhere in KANSAS FARMER. The farmer who does real dairying will have some beef to sell—he will not go out of the calf business. His dairy-bred calves, well cared for, will sell for as much money as some poorly-reared calves of today which are said to be of beef breeding. The beef man, too, will have some milk to sell, and will get a milk check. But I do not believe that milk and beef are so combined in one animal but that for one or the other the animal is a failure. I know that this question will be argued in Kansas for a good many years yet, but the time will come when our farmers will follow one or the other of the two paths.

To me one of the most interesting exhibits at the International Live Stock Show was a herd of dairy Shorthorns, from Granville Center, Pa. The first thing I asked the herdsman was whether or not he had records of his cows. Sure enough he had, and gave me a pamphlet containing these records. It is only a few years ago that a number of eastern breeders were advertising "dairy" or "milking" Shorthorns, and upon my inquiry I was able to obtain no records, and only rarely was I able to get a breeder to say that he was doing any dairying. So, you see, there has been some progress made among this class of breeders. The herdsman with whom I talked was a dairyman. He knew about feeding a dairy ration and otherwise talked like a fellow who was handling a herd of milch cows. I am convinced, that an honest effort is being made to develop the dual-purpose cow. The Brown Swiss is making a bid for dual purpose recognition, but that breed leans most to milk production and does not please from the beef viewpoint.

The Granville Center cows looked the dual-purpose part. They were beautiful cows and weighed 1,400 to 1,650 pounds. They possessed the dairy temperament and conformation to a greater extent than any cows I had ever seen of their breeding. Two or three aged bulls in breeding condition were said to weigh 2,400 pounds. These cattle were red and white, the latter color predominating.

From the herdsman I learned that all cows in the herd had milk records of 8,000 pounds or better. That sort of a statement does not amount to much, because no doubt both young and mature cows make up the showing. For a herd of mature cows the showing is not attractive from a dairy farmer's standpoint. From the catalog the herdsman gave me I find that Rose of Glenside in one year produced 18,075 pounds of milk, and for an average of seven years gave 9,417 pounds. Minnie Clay 2nd averaged 10,640 pounds for five years. These are the two highest averages of 66 cows' records printed. Other records run around 8,500 pounds for an average of from three to five years. The claim was made verbally, not claimed in the catalog, that this is the greatest herd

of milking Shorthorns in this country. It is the greatest showing of milk records by Shorthorns known to me.

If this herdsman continued breeding and feeding for dairy usefulness he will after a while develop a dairy animal—as much so as is the Jersey or Holstein of today—but if that is what he gets at last, what is the use of all the trouble? As he breeds and feeds dairy performance into the cows he will breed beef out, so if that is the final result, why pursue further? Better begin with a dairy herd—already far ahead of his present showing—and improve that.

One of the best farm dairy herds I have known was a herd of Red Polls which for 20 years had been bred and fed for milk. The herd was originally the ideal beef type of that breed. When the bottom fell out of the beef business and bull calves for a few years would not sell at a long figure, the owner began milking. He fed for milk, selected for milk, and milked until those cows had lost the beef conformation. The herd, when I knew it, was producing 10,000 to 11,000 pounds of milk per year. Continued handling along this line would have increased milk production and reduced the value as beef animals.

Now 10,000 pounds of milk per year is far from milk enough per cow per year for a herd of dairy-bred animals, but a good many dairy-bred herds are not yielding more. The chances are that a dairy-bred cow is producing 10,000 pounds of milk per year at less cost than the same quantity produced by the beef and milk cow. The comparative ease of production of the two kinds of animal must be taken into consideration in the final figures. As a rule the more flesh a cow carries, the more her milk costs—this because the flesh must be supported, and that costs feed. This is the point on which the special purpose advocate makes his strongest argument against dual purpose.

The Kansas farmer has not yet reached the point where he can afford to totally disregard the value of the calf. Then, too, the calf for meat is sure to become more valuable for beef as the years pass, because the beef of the future will be grown on the farm—on the quarter section. The farmer who desires to milk a few cows as a side issue can get all he is looking for in the best milkers of the Shorthorn breed, but the man who wants to dairy—who must make the most of every cow he keeps—cannot afford to stop short of the best of the dairy breeds, keeping in mind that it is the individual, not the breed, that fills the milk pail.

The Tuberculin Test.

Buyers of breeding stock should observe this caution given by the Holstein-Friesian Register: "Attention has been called to the fact that the commonly-used term, 'tuberculin-tested,' does not necessarily mean that the animals to which it is applied have passed the test; and that its use opens the way for deception and fraud. We do not wish to hand out the inference that any of our Holstein breeders would send out tuberculous stock under a guaranty of this nature, accompanied by papers which certify nothing; but it is nevertheless up to the buyer to see that he gets a definite guaranty, 'tested and passed,' and a bona fide certificate of health with his animals whenever and wherever purchased."

Kansas Jersey Record.

Kansas has a number of dairy cattle breeders who are going after authenticated records for their herds. One of the active among these is R. J. Linscott, Holton, Kan., breeder of Jerseys. His cow, Sultan's Beauty, 231914, began her year's test December 10, 1910, and finished December 9, 1911, during which time she produced 7,541 pounds, 1 1/2 ounces of milk, containing 435 pounds 13 1/2 ounces of butter-fat equal to 512 pounds 12 1/2 ounces of butter. The last part of the test she carried a calf. She was one year and eleven months old at the beginning of the test, and at its close weighed 740 pounds. The cow was



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Power And The Plow

By L. W. Ellis & E. A. Rumely

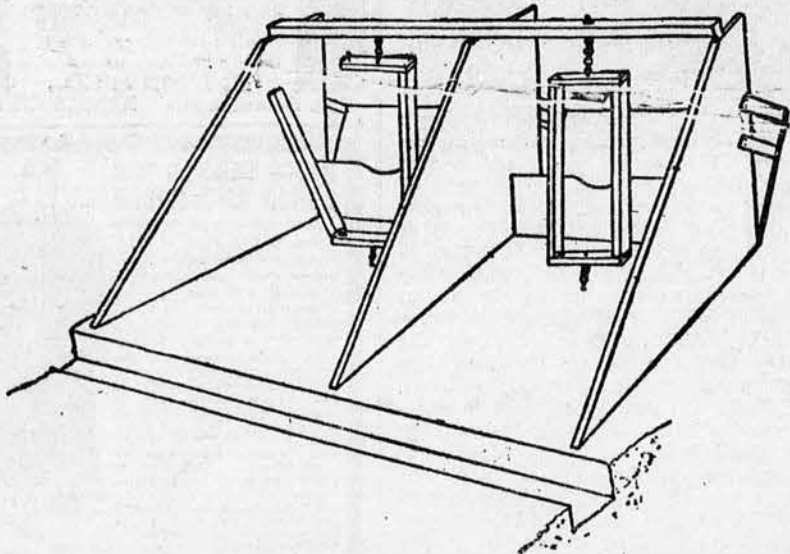
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doing splendidly until the excessively hot weather of the past summer came, when she could not hold up against dry pasture and no silage nor green feed of any kind. Of the 900 cows of all ages that have qualified for the Register of Merit so far, she exceeds the average. She was imported from the Island of Jersey, and is a daughter of Mr. Linscott's herd bull.

Secretary George F. Woodworth of the Standard Poland China Record Association at Maryville, Mo., announces the next annual meeting for Wednesday, January 3, 1912, at the Exchange Building, South St. Joseph, at 9 o'clock a. m. The meeting will be preceded by a breeders' banquet at the Transit House on Tuesday evening. A president, one vice-president from each state represented, and seven directors are to be elected.

Cow Stalls and Stanchions



The above illustrates a comfortable cow tie and stall. The floor is concrete or plank. The gutter should be of concrete, but may be of wood. A stanchion of different style may be used—either home-made or of some of the patented type. A good stall will remove the unpleasantness of milking.

Oklahoma Farm Letter

KAFIR, BERMUDA AND DAIRY COWS THE SALVATION OF OKLAHOMA

There is food for thought in this letter from Farmer F. A. Mitchell of Chandler, Okla. It is worth almost as much to Kansas readers as to Oklahoma readers. Note what he says about the value of Kafir in dry years, the desirability of the dairy cow and the worth of the hen. Note, also, what he says about doing only what you can do well:

"Last spring we predicted a good season and bountiful crops, but we were mistaken. For 1912 we predict a bad season but some pretty good crops. The lessons taught us during the past three exceedingly trying years will never be forgotten.

"We have all been conducting an experimental station without an appropriation from state or federal government. Our results are a sack of cotton, a bundle of Kafir and a carpet of Bermuda.

"Next year we are going to plant as much cotton as we can take care of ourselves, and we are going to raise more cotton than we did this year. We undertook too much this year and have in many ways lost. We have already saved a goodly supply of the very best cotton seed. Now we are going to fall plow all of our cotton ground and plow it two inches deeper than the land was ever plowed before. We will every day thoroughly harrow all the land we plow and keep harrowing it until planting time, then harrow it some more just before planting. Will practice shallow, rapid and prolonged cultivation and if we have even as good a season as this has been we will have cotton.

"Our Kafir crop this poor season was an eye opener. When the wheat and oats failed we drilled in Kafir, cultivated it a couple of times and gathered 30 bushels of seed per acre, besides the fodder. We will stick to cotton and Kafir, too.

"We are going to set a lot of Bermuda next spring. No use to think about how we can get enough of it. We better think how we can get more of it, for 'it's the stuff.' Last summer when the native pastures were brown and bare, the Bermuda pastures were feeding our else starving cattle and putting up a desperate fight for life. Then when the rains did come, how it grew and how the stock grazing upon it grew. Next year we are going to plant a good garden upon the best land we have, plow it this fall after we have hauled out all the manure we have and spread

upon it. We will plant several times as much as we think we shall need, so if the season is not good still we will have plenty. We want to quit living out of paper bags and tin cans. We want to raise what we need and live at home.

"Our chickens furnish so much of our living, both in meat and 'hen fruit.' A nice chicken or even an old hen is better any time than a piece of side meat from Kansas City. A couple of eggs upon a nice slice of home cured ham fits a man for a good day's work in the field.

"We are not going to sell any more of our heifer calves. We are going to keep them until we have a dairy of 10 cows. Ten cows pasturing upon Bermuda grass and wintering upon cane or Kafir. We will buy a separator and sell cream. We will fix up our homes a little and make the work easier for our wives. When we stand together in the doorway watching all of our children carrying their dinner pails as they start for school, we will be proud, and then when they come home at evening and pitch in and help do the milking and the chores, we will be happy.

"There is a better day dawning for Oklahoma farmers, as we have been taught how to farm in bad years, which gives us all the better results in our good ones.

"We want everyone who reads this to write us a letter telling of their experiences in the past and their plans for the future."

Value of Good Cow.

Our subscriber, Walter Jensen, Vesper, Kan., asks what he can afford to pay for a good cow. We have handy some figures given by H. D. Gurler, the veteran Illinois dairyman, which will answer the question. Four of Mr. Gurler's best cows average 477 pounds fat per year, while his four poorest last year averaged 166 pounds fat each. When the cow that produces 166 pounds of butter-fat per year at a food cost of \$39, which was the case, and a labor cost of \$12.50, is worth \$35, the cow that produces 400 pounds is worth \$400, and the owner can make net \$16 more from her after paying the interest on his \$400 than he can from the \$35 cow. There is, of course, a difference in the feed cost, for a cow cannot as a rule produce 400 pounds on the same minimum feed that another cow only produces 166 pounds, but Mr. Gurler figures that this will be

DE LAVAL CREAM SEPARATOR

Now Is the Time to Buy and Start the New Year Right

There is no good reason to defer the purchase of a DE LAVAL cream separator until Spring. On the contrary you may buy one now and save half its cost meanwhile. Moreover, if you can't conveniently pay cash you can buy a DE LAVAL machine on such liberal terms that it will actually pay for itself.

As to YOUR need of a centrifugal separator, if you have the milk of even a single cow to cream you are wasting quantity and quality of product every day you go without one. This waste is usually greatest with cold weather and cows old in lactation, and it counts most, of course, when butter prices are high. Then there is always the sweet skim milk and saving of time and labor in addition.

When it comes to a choice of separators DE LAVAL superiority is now universally recognized. Those who "know" buy the DE LAVAL to begin with. Those who don't replace their other separator with a DE LAVAL later—thousands of users do that every year. If YOU already have some other machine the sooner YOU exchange it for a DE LAVAL the better.

Why not start 1912 right in dairying? TRY A DE LAVAL machine for your own satisfaction if nothing else. See the nearest DE LAVAL agent or write us direct and we'll do the rest.

THE DE LAVAL SEPARATOR CO.

NEW YORK CHICAGO SAN FRANCISCO SEATTLE

offset by the increased production of skim milk.

Since Mr. Gurler has given the value of 166-pound cow and 400-pound cow, the Pacific Dairy Review ventures to give the intervening values as follows:

166-pound cow	.....\$ 35
200-pound cow	..... 60
250-pound cow	..... 100
300-pound cow	..... 150
350-pound cow	..... 250
400-pound cow	..... 400

In these figures no allowance is made for calves, which would allow for a still wider range of values, but we started to deal in values only so far as their individual production at the pail is concerned.

Winter Wheat Acreage Decreased.

Winter wheat was sown on a smaller acreage in the United States this fall than last year, according to the United States Department of Agriculture. The condition of the crop December 1 was 4.1 per cent better than a year ago, but 3.3 per cent less than the 10-year average for that date.

A total of 32,213,000 acres, 435,000 fewer than last year, was planted.

Following is the acreage sown this fall and the condition December 1, with the 10-year average on that date for the central west winter wheat states:

	Acreage.	1911.	Ten-year
			Average.
Kansas	.....6,538,000	88	90
Nebraska	.....3,191,000	92	95
Missouri	.....2,513,000	85	90
Oklahoma	.....1,700,000	78	87

Rock Phosphate Fertilizer.

Here is a brief lesson in the use of phosphate fertilizer. Be it first understood that phosphoric acid is the most essential fertilizing ingredient in the production of fruit or grain. Natural fine ground rock phosphate furnishes phosphoric acid at the least cost. The application of \$1.25 worth of it per acre is safe to increase the yield of all grain crops from 25 to 75 per cent, and to increase the yield of hay crops, both grass and clover, from 50 to 150 per cent.

Applied to a ton of manure, 16 to 20 cents' worth increases the productive capacity of that ton of manure from 50 to 100 per cent when applied to grain and hay crops.

Fifty cents' worth of fine ground phosphate thoroughly mixed through a ton of animal manure, which is then allowed to lie in case a short time before using, is safe to increase the productive capacity of that ton of manure from 40 to 75 per cent when applied to vegetable crops.

The figures above are applicable to soil deficient in phosphoric acid.

Paint Without Oil

Remarkable Discovery That Cuts Down the Cost of Paint Seventy-Five Per Cent.

A Free Trial Package Is Mailed to Everyone Who Writes.

A. L. Rice, a prominent manufacturer of Adams, N. Y., has discovered a process of making a new kind of paint without the use of oil. He calls it Powderpaint. It comes in the form of a dry powder and all that is required is cold water to make a paint weather proof, fire proof and as durable as oil paint. It adheres to any surface, wood, stone, or brick, spreads and looks like oil paint and costs about one-fourth as much.

Write to Mr. A. L. Rice, Manufr., 108 North St., Adams, N. Y., and he will send you a free trial package, also color card and full information showing you how you can save a good many dollars. Write today.

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WINCHESTER

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Grind Your "BULL DOG" Feed on the "TEN DAYS FREE" You can grind 80 bu. grain to table meal with one gal. of gasoline. 1 set of rollers will grind 5000 bu. of cob and corn. "Bull Dog" grinding rollers are only three inches in diameter which accounts for light running. Get our FREE Catalogue and Samples. Address LETZ MFG. COMPANY, 250 E. ROAD, CROWN POINT, IND.

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Means Quality

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Funeral Director and Licensed Embalmer

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50 Concord Grapes \$1 Hardy - Vigorous Stock Guaranteed. 10 Budded Cherrys \$1 Buy from a house that has a reputation for low prices and square dealing. Send for our Free Catalogue and 50 One Bill. FAIRBURY WAREHOUSES, Box 7 Fairbury, Neb.

Let Me Send You Proof

There is nothing like being sure. I will prove that my famous incubator—price only \$7.55, freight prepaid, sold on 1, 2, or 3 months home test—will out-hatch any machine made, no matter what kind or price. Don't you want to be sure? Why pay more than my price for any machine defeated by my

World's Champion 140-Egg Belle City \$7.55 Incubator

which is easiest to operate, surest of results. Let me send you proof in my big portfolio, "Hatching Facts"—it carries all the evidence—tells you how to start in the poultry business on a profit-making basis at a small outlay. Has double walls and door—and dead air space all over, copper tank, hot water heater, self-regulator, "Ty-cos" thermometer, egg-tester, safety lamp, nursery high legs. My 140-chick brooder double wall, hot water, top heat \$4.85 Guaranteed best brooder made. \$11.50 gets complete outfit when ordered together, freight prepaid. My portfolio proves all. If in a hurry order right from this ad on Home Test Plan—thousands do. I guarantee satisfaction or return money. JIM ROHAN, President Belle City Incubator Company Box 18 Racine, Wis.



Making Good

and satisfying all buyers. All money is returned if the

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does not fulfill all the claims I make for it. The high-class hatcher that is sold at a reasonable price. Why pay more? Get my free Poultry Guide and Catalog and see my plan. I pay freight and guarantee 10 years. Address WICKSTRUM, Queen Incubator Man, Box 28, Lincoln, Nebraska

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GOOD TO VIEW

Best All-Purpose Fowls in Existence.
White P. Rocks hold the record for egg laying over all other breeds. 289 eggs each in a year for eight pullets is the record, which has never been approached by any other variety. I have bred W. P. Rocks exclusively for 20 years and have some fine specimens of the breed. I sell eggs at "live and let live" prices, \$2 per 15, \$5 per 45, and I prepay expressage to any express office in the United States.

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Most complete work on this subject published. Used as text book by many Agricultural Colleges. Gives the facts about Modern Silage Methods—tells just what you want to know. 240 pages—indexed—over 40 illustrations—vast amount of useful information boiled down for the practical farmer. Tells "How to Make Silage"—"How to Feed Silage"—"How to Build Silos"—"How to Maintain Soil Fertility by Silage System." All about "Summer Silos" and the Use of Silage in Beef Production. Limited Revised and Enlarged Edition now ready. Send for your copy before too late. Enclose 10c in coin or postage stamps and mention this paper. Silver Manufacturing Co., Salem, Ohio

SHOEMAKER'S BOOK ON POULTRY

and Almanac for 1912 has 224 pages with many colored plates of fowls true to life. It tells all about chickens, their prices, their care, diseases and remedies. All about incubators, their prices and their operation. All about poultry houses and how to build them. It's an encyclopedia of chickenhood. You need it. Only 15c. C. C. SHOEMAKER, Box 899, Freeport, Ill.

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\$80 Per Month Straight salary and expenses, to men with rig, to introduce Poultry Remedies. We mean business. Eureka Poultry Food Co., D. 506, E. St. Louis, Ill.

WANTED—POULTRY; WILL PAY HIGHEST market price. Write or phone. Wise & Smelser, 1127 Kansas ave., Topeka, Kan.

SCOTCH COLLIES—BARRED ROCK COCKERELS. The choicest pedigreed stock. Also, 300 Barred Rock cockerels. Catalog free. Mrs. Florence B. Ziller, Hiawatha, Kan.

PFILE'S 65 Varieties LAND and Water Fowls. Farm-raised stock, with eggs in season. Send 2c for my valuable illustrated descriptive Poultry Book for 1912. Write Henry Pfile, Box 621, Freeport, Ill.

POULTRY



Remember the State Poultry Show will be held at Wichita January 8 to 13.

If you have surplus stock to sell now is a good time to advertise it in KANSAS FARMER.

We would advise the readers of KANSAS FARMER who are going to need new blood in their flocks next spring to secure it now. They can get bargains at this time. Besides, the stock they will have become thoroughly accustomed to buy will have become thoroughly accustomed to their new surroundings by the time they are wanted for the breeding pens.

Help the organizers of poultry shows to make a success of their undertakings. This is not only a duty but a profit. Exhibition are the surest means of creating local sentiment in favor of better poultry. Hundreds of persons in every community do not realize the value of poultry as a source of wealth. This the poultry show will teach to all who attend.

The man who coaxes his hens to double the output weekly will smile a pleased smile as he surveys his well-filled pocketbook. If your hens are each giving you one egg a week, they are paying the bills, and the extra egg will be clear profit. Let us have more eggs.

When the holidays are over and the days begin to lengthen, the careful breeder commences to think about mating up his breeding pens. In fact, many breeders of the large varieties, such as Brahmas, Cochins and Langshans, have their pens mated and hens laying in December, so as to have chicks early in January. It takes the large breeds so long to mature that it is necessary to have the chicks hatched early in the year in order to be large enough to exhibit at the fall and winter shows. The breeders of the smaller varieties are not so

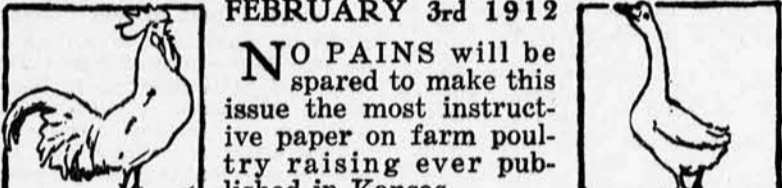
anxious for so early a start, but it is not too early for any of them to be on the lookout for anything in the chicken line that might improve the standard of their breeding stock, and there is no better place for them to secure this than at some of the poultry shows this winter.

Selling day-old chicks is practically a new departure in poultry culture in this country. Five or six years ago it was almost unheard of. No one thought of shipping newly hatched chicks hundreds of miles and expecting them to arrive in good condition. This, however, is what is being done at the present time with perfect satisfaction to the buyer. Dozens of breeders throughout the country have taken up this branch of the poultry industry during the past few years and are doing a thriving business. The chicks are usually shipped in shallow wooden boxes, about six inches deep, with small holes cut in the sides near the top for ventilation. The top consists of two thicknesses of burlap, with narrow strips of boards nailed across for protection. The chicks are taken from the incubator as soon as dry and packed somewhat closely in these boxes, and can be shipped one thousand miles or more in perfect safety. Owing to the fact that newly-hatched chicks do not need any feed for from forty-eight to sixty-four hours after they emerge from the shell, it is possible to ship them any distance that does not require a greater length of time than this, and by the time they reach their destination are ready for their first meal. This is a very suitable and profitable business for those who have neither time nor room to raise the chicks after hatching them. Profits are good, considering the amount of capital that is necessary to invest in such a business. It would be well for some breeders to think about the advisability of selling day-old chicks next season, so as to advertise accordingly.

OUR POULTRY ANNUAL

FEBRUARY 3rd 1912

NO PAINS will be spared to make this issue the most instructive paper on farm poultry raising ever published in Kansas.



KANSAS FARMER has on its regular staff some of the best informed men in the country on all phases of poultry raising. Editors Borman and Graham know by practical experience of poultry raising in Kansas. Otto Barth knows, by extensive experience, about artificial hatching and brooding as few men know it. G. D. McClaskey, licensed poultry judge, and breeder of a lifetime's experience, knows how to put practical poultry raising experience on paper equal to the best of them. Thomas Owen, poultry breeder and writer of 40 years experience, has made pure-bred poultry raising pay when most others had said it couldn't be done.

Besides these, other special contributors will help to fill the big special poultry number to overflowing with everyday, helpful information. Albert T. Reid will see that the illustrations are in keeping with the high class editorial matter. This issue will be full of up-to-date and reliable information never before published—matter which if put into book form would easily sell for more than the price of a whole year's subscription. Poultry breeders, and those dealing in poultry supplies and equipment, will find this an excellent issue in which to use advertising space. Advertising rates and any further information on this big issue will be cheerfully furnished on application.

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In any quantity, large or small, to the oldest and largest consignment house. Established 1870. We originated this plan for handling hides and furs in this field—have made it the special feature of our business for years, and have developed the best outlets in this country. We understand the requirements of the shipper, and send **quickest returns at top prices.**

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Send us your horse and cattle hides, as thousands of other farmers and stockmen are doing, and let us tan and make them into coats and robes for you. Don't sell your hides for a few dollars; we can make them worth \$10 to \$15 to you.


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We will be pleased to send you an attractive booklet giving prices for doing our work, and showing the saving we can make you also, telling you how to care for hides, how to ship, and much other valuable information. Sent Free. Write today Cowne Tanning Co. 103 2nd St Des Moines, Iowa



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Cattle or Horse hide, Calf, Dog, Deer, or any kind of skin with hair or fur on. We make them soft, light, odorless, wind, moth and water proof, and make them into coats (for men or women), robes, rugs or gloves when so ordered. Your fur goods will cost you less than to buy them, and be worth more. It will certainly pay you to look into it. Our illustrated catalog gives a lot of information. Tells how to take off and care for hides; how we pay the freight both ways; about our marvelous brush dyeing process which is a tremendous advantage to the customer, especially on horse hides and calf skins; about the goods we sell, taxidermy, etc., but we never send out this valuable book except upon request. If you want a copy send in your correct address. The Crosby Frislan Fur Company, 671 Lyell Ave., Rochester, N. Y.



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Smoke **VELVET** The Smoothest Tobacco. 10c. All Dealers.

BARTELD'S BIG SEED ANNUAL for 1912 is now ready 106 pages hundreds of illustrations. We handle only pure bred, highly germinating, Kansas grown seeds, tested by experts trained in U. S. Government Laboratory. Barteldes Seeds for field, farm or garden have been famous for 25 years. Write for our Cultural Guide and Free Book on Alfalfa. Our PINK LIST gives current prices of field seeds in quantities. Issued weekly. FREE. BARTELD'S SEED COMPANY, 807 Massachusetts Street, Lawrence, Kansas. Oldest Seed House West of Mississippi River. Est. 1886.

Shetland Ponies. C. H. Clark of Colony, Kan., is offering for sale 150 head of Shetland ponies. Please read his advertisement in this issue and write for price folder. Kindly mention Kansas Farmer.



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 My new Seed Catalogue is a wonder. Contains everything in seeds, bulbs, small fruits and plants worth growing. 600 illustrations; 176 pages. Any gardener sending his name on a postal card can have it for the asking. Send for it today. Address
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 Send 5 cents (stamps) mention this paper, I will enclose in the catalogue a packet of the above GIANT pansy.

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 Gold Signet Rings for Christmas presents. Engraved with any initial. A limited number on hand. Early orders get them.
BARGAIN PRICE \$1.00
 Warranted. Order from this ad, giving size, and initial wanted engraved. These rings are going fast. Order today, sure, if you want one.
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THE ROANOKE
Power Washer and Wringer.
 "World's Best Power Washer."
 Does all the work, washing and wringing by same power at same time. Clothes cleaned perfectly in a few minutes. No cogs, chains or sprockets to get caught in. Use any power, gas engine or electric motor. Write today for Free Illustrated Booklet with prices and 14-Day Free Trial Offer. **ALTORFER BROS. CO., Dept. 4612, Roanoke, Ill.**

Kellogg's
TOASTED CORN FLAKES
 Won its favor
 Through its flavor

ATLAS
E-Z SEAL JAR
 Easy to seal and to open.
 Wide mouth. Takes fruit whole.

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 Watch for the advertisement on page 7 in the issue of January 6, or write The Farmer's Wife, 309 Webb Bldg., St. Paul, Minn., for explanation.

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National Lead Co.'s Pure White Lead
 (Dutch Boy Painter trade mark)
 Ask for Help No. 65. Sent FREE on request.
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TRY on some thing nothing else will clean.
Old Dutch Cleanser
 Many uses and full directions on large sifter-can 10c.

SONG POEMS WANTED
WE PAY 50 per cent. Thousands of dollars in successful songs. Send us your work, with or without music. Acceptance guaranteed if available. Washington only place to secure copyright. Valuable booklet and examination FREE. H. Kirkus Dugdale Co., Desk 283, Washington, D. C.

ADAMS SEED CATALOG
 For 1912, now ready. Full of valuable information to farmers, gardeners and poultry raisers. Mailed free on request.
T. LEE ADAMS SEED CO.
 Dept. B, Kansas City, Mo.

HOME CIRCLE



Happiness.
 There are in this rude stunning tide
 Of human care and crime,
 With whom the melodies abide
 Of the everlasting chime,
 Who carry music in their heart,
 Through dusty lane and wrangling mart,
 Plying their daily toil with busier feet,
 Because their secret souls a holy strain repeat.
 —Keble.

[The kitchen is the good wife's workshop. She works there long days, year in and year out. Its arrangement should be as convenient and step-saving as possible. A handy kitchen expedites the woman's work—helps her get through and leaves time for rest or for other work. This article by someone who knows how to arrange a handy kitchen and which was printed in The Kansas Industrialist is worthy of careful note.—Editor.]

Make the Kitchen Handy.
 It doesn't matter, much, how rich you are or how artistic, if you start to improve your home you would better spend your first money in the kitchen. That's where the work begins.

No matter how many handy, little devices there are there, it must be a comfortable place, and the greatest source of discomfort in the average kitchen is the roaring coal or wood stove. The cook stove, ordinarily, is supposed to serve three purposes: It must furnish sufficient heat to do all the cooking; it must furnish plenty of hot water to the kitchen sink and the bath room at all hours, and in winter heat the kitchen, the last of which it does in summer as well as in the winter. Cooking with denatured alcohol during the hot months and having a small laundry stove in the cellar to heat the water seems to be the best solution of this problem. By having just a small fire in the range, just enough to take the chill out of the room, alcohol may be used for cooking right through the winter.

Instructors in the domestic science department of the Kansas Agricultural College have given much attention to the matter of conveniences. In the fore front, doubtless, is the fireless cooker. It is one of the articles which should rank near the first in the average kitchen. Its use cuts the work of the kitchen in two. A little fire early in the morning is all that is necessary. While there are many good cookers on the market, one can be made at home which for all practical purposes will be just as good as the other. All that is needed is an old bucket, wooden or steel, or a strong, heavy box, a little excelsior, some asbestos and cloth. Pack the excelsior around the edge of the box and cover this with the asbestos. Take the vessel or vessels which you intend to use for the cooker and pack excelsior and asbestos around them in the center of the box. Make a lid by padding a heavy board with excelsior, and the cooker is ready.

One of the standard kitchen cabinets is almost invaluable to the tired housekeeper, for it concentrates in a space of 40 or 50 inches all the kitchen utensils. Pure drinking water is of vital importance. Every city and town guards its water supply to the best of its ability against contamination. Why, then, should a farmer be negligent in this matter? As a general rule, the "old oaken bucket" is far from pure. Why not have a water still?

A brush mop is a collection of brushes and mops which are adjustable on the same handle or on different handles. Aluminum cooking utensils are easily kept clean, and for that reason are especially sanitary. They are impervious to most acids and, being cast in one piece, do not crack and gather dirt and germs.

Cooking in paper bags is just now being tried all over the country. Specially prepared bags may be purchased, or any clean paper bag may be used by greasing. They make pan washing unnecessary.

The dish pan stand consists of a rack made of heavy steel wire, on four legs three and a half inches high. The idea is to lift the dish pan from the sink bottom, not only making it easier to work at, but keeps the bottom of the

pan from marking the sink bottom. The rack may also be used for many other purposes around the kitchen.

Electric contrivances are numerous: The electric iron, small ones, and mangles; the toaster, hot water heater, chafing dishes, percolating coffee pots, tea kettles and electric disk stoves; also, electrically operated washing machines, hair curlers, and other devices. If you really want to lighten your burden, look about you. The world is filled with "helps."

Cooking Odors.
 A great many people now live in "rooms" and apartments, instead of separate dwellings, and it is very difficult to prevent the odors from the cooking from going into every nook and corner, not only of our own premises, but those of our neighbors, and to very many, this is one of the greatest trials in "bunching" families together under one roof. Yet this can be in a measure lessened, by seeing that every cooking utensil is perfectly clean when put away, or at least before again using. In order to clean even the hardest jobs in the dish-washing line, have a jar in which one pound of washing soda is dissolved in a gallon of boiling water, with a teaspoonful of ammonia added when cool. Keep this on the sink, and when cooking vessels are emptied, unless washed immediately, pour a little of the soda solution—about an inch deep—in each pot, skillet or sauce pan, turn them around rapidly a few times and leave stand until ready to wash them. Cabbage, cauliflower, onions, and all strong-odored vegetables, should be prepared several hours before time to cook them, and left stand covered with cold salt water; then, when ready to cook, rinse them well, and when the first scum arises in cooking, take it off carefully, adding salt as needed; then pour in a cupful of cold water, removing the second scum arising; then add another cup of cold water, and remove the third scum; there will be much less odor. If a window can be opened close to the range, so much the better. A hard crust of bread dropped in a pot of boiling cabbage will take up much of the odor, and also a half cupful of vinegar.

Garden Comfort.
 A bench or two in the garden is a good thing, as claimed by our correspondent, who writes: "I got a surprising amount of work done even that first summer, although I was a green city chap with a game leg. At each side of the garden I had a little bench shaded by a few sticks of arbor covered with bean vines, which made a cool resting place. I could work for half an hour or an hour, and then sit down and rest ten minutes. I had seven or eight of those little benches scattered about the place, each under shade; and no matter where I was I could rest a little when my game leg got too tired, and then go on working. Unless you've tried it you can't imagine how much work you can get done in that way." If the women do the gardening, try the plan suggested, even though you care nothing for it yourself.

No. 205.—Home, Sweet Home.
 Beautiful tinted pillow top in natural colors on ecru art cloth, intended for



outline embroidery. Price, 25 cents. Perforated pattern with stamping preparation, 25 cents. Transfer pattern, 10 cents.

This Great Rifle
22 CALIBER HUNTING RIFLE FOR EVERY BOY
 is over 30 inches in length. The barrel is bronze, 16 inches long and finely rifled. It has a built up steel jacket, giving it great strength and durability. The rear sight is open and adjustable and the front is a knife sight. The stock is made of fine walnut with pistol grip as shown. The gun has the hammer action and the shell is automatically thrown out when the barrel is "broken down" for reloading. The gun shoots 22 caliber long or short cartridges.
 This is one of the finest rifles made. I want you to have one. All I ask is a little easy work. Write today and I will tell you about the gun and how to get it.
A. E. Piper, 184 Popular Bldg., Des Moines, Iowa.

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 Your success in the business world depends entirely upon how you have been prepared. If you want to fit yourself for an important station in life—if you want to be more than a mere cog in the wheel of accomplishment—if you want to do worth while things, and receive a worth while salary—we can help you. Send today for our FREE descriptive booklet which tells how hundreds of young men and women have been equipped, by us, for the best things in life. The expense of preparation is very small—your need of it greater than we can say.
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 Nanticoke, Pa.

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 Model 59-T Five-Passenger Fore-Door Touring Car, \$900
 Wheel base 106 inches; motor 4x4 1/2; horsepower 30; Splittorf mangeto; transmission selective, three speeds and reverse; F. & S. ball bearing; tires 32x3 1/2 Q. D.; 3 oil lamps, 2 gas lamps and generator. Complete set tools.
THE WILLYS OVERLAND CO.,
 Toledo, Ohio.

Horticulture

Kansas University Helps Orchardists.
 Recognizing San Jose scale as the most serious menace to Kansas orchards, Kansas University has sent three expeditions into the field to co-operate with fruit growers on ways and means to stamp out the pest. The expeditions left Lawrence December 1, and will give farmers and fruit growers the latest ideas in methods of eradicating the scale, also instructions in winter pruning and in spring spraying. The expeditions are under the direction of Prof. S. J. Hunter, state entomologist, and member of the university faculty.

The work of these expeditions is representative of the interest which the university has for years taken in the welfare of Kansas orchard men. Professor Hunter, in his report read last week before the meeting of the State Horticultural Society, reviewed the work done in the past year by his department. It is a narrative of investigations carried on in many parts of the state, and conclusions drawn from them.

Especial attention was paid to the codling moth, which inflicted severe injury upon Kansas orchards this year. Professor Hunter's field workers reported that the blossom spray is the most important in holding the moth in check. Where it was used properly the injury from the moth was reduced to from 5.8 to 20 per cent. Where no spray was used there were no apples.

Experiments carried on in Douglas, Franklin, Shawnee, Reno and Sedgwick counties showed that the element of time is of great importance in spraying. If not done at the right time, spraying may as well be left undone. The investigators found, too, that an entire orchard must be sprayed, as disease is readily transmitted to sprayed portions from those in which no spray is used.

Professor Hunter's report shows that in the season of 1911, parties from the university examined and reported upon 17,000,000 fruit trees, 300 acres of small fruits, and 67,000,000 forest and fruit seedlings.

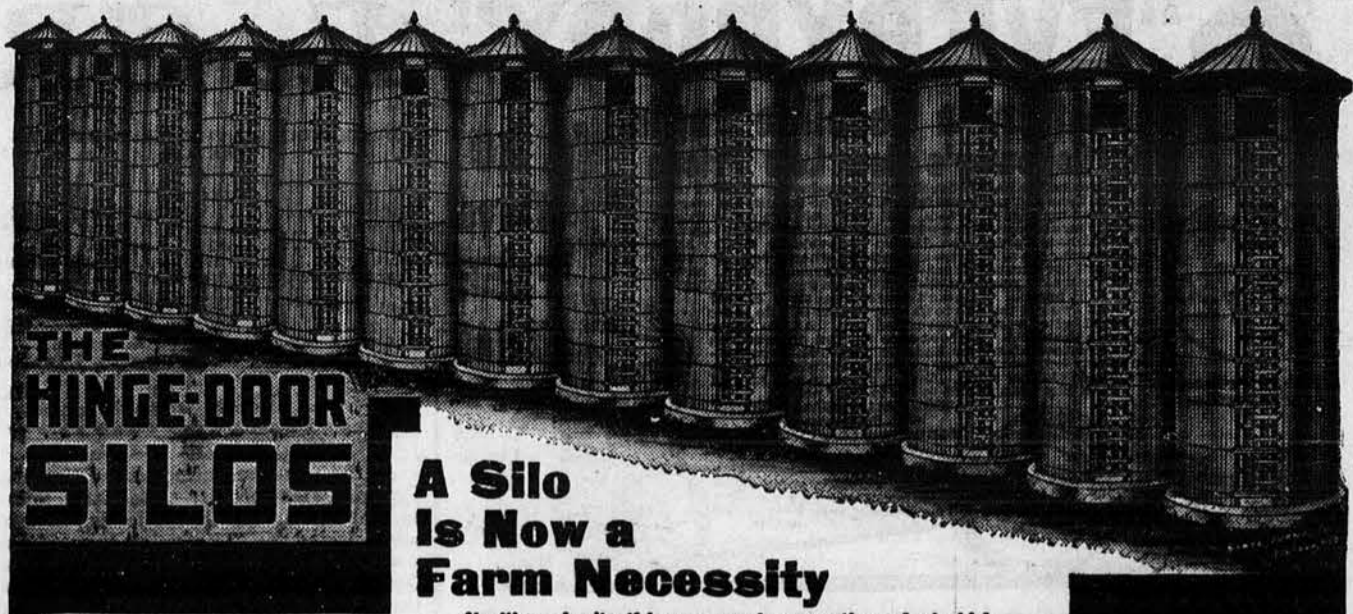
The seedlings were mostly apple seedlings. Practically the world's supply of apple seedlings is produced in Shawnee and Douglas counties. The state's system of orchard inspection and certification insures that this supply leaves the growing grounds free from insect and other pests.

The system on which the field parties work in making orchard inspections is a model of accuracy and efficiency. To begin with, maps based on the county survey are made of the territory to be visited. One copy is taken by the field party and another is left in the office of Professor Hunter, who directs the work of all the parties by mail or telephone. So accurate are the details of the maps that there is no trouble with this method of working, and if a change should unexpectedly be made in the department, the work could be taken up by a new man exactly where it had been left off.

Directed by their maps, the field parties proceed to their territories and set to work visiting every farm or city lot. On blank forms they tabulate the number and kind of fruit trees, the location of the property, the owner, the condition of the trees and recommendations as to their treatment if they are diseased. On another part of the blank an inspector following later reports whether the recommendations have been carried out and the results of the treatment.

The blanks are bound together and form part of a permanent record of the orchard conditions in any given year. It is through this permanent record that the department of entomology at the university expects to compile data regarding orchard pests and their relation to general orchard conditions.

The university parties on their summer expeditions spend as much time as possible collecting insect specimens. The university has one of the largest entomological museums in the world, and about 30,000 specimens are added each year. The work was begun by the late Dr. F. H. Snow. An entomological survey of 28 counties covering the entire western end of the state has been completed. Every insect which either helps or hinders the farmer in field or orchard is registered at the university museum. When the report reaches the university that some unknown pest is damaging crops in a particular locality, reference to the data compiled at the university will generally show just what the de-



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stroyer is and whether or not there is an insect foe that can be turned loose upon him. Professor Hunter places great value on the permanent record of what the field parties have found.

Information of great economic value to the state has been gathered by these parties. For instance it was learned through this agency that contrary to the general belief the injurious grasshoppers in Kansas are natives, not migrants, and must be dealt with in alfalfa fields. It was demonstrated that the disc harrow is the most effective means of prevention against grasshoppers. It was the university department of entomology that demonstrated that the honey bee is a necessary factor in alfalfa seed production. Other discoveries of practical benefit to the farmer were the green bug parasite and the discovery of a wasp which preys extensively on a clover pest.

Planting Cedars.

Our subscriber, Charles C. Nimz, writes that no other tree so beautifies the farm home yard, and he urges farmers to plant them. Since most farmers have little success with cedars he gives his plan of growing, which has proven successful:

"Cedars are adapted to poor soils. Do not use the top soil. Dig the hole not less than 4 feet across and throw all the dirt to one side. When well through the rich soil throw the lower ground to the other side. Dig hole not less than 4 feet deep. Put in 18 or 20 inches of small or broken rock and fill in between and cover with sand. Pour water in and wash it down, or fill with water and let it soak. Fill the hole within 18 inches of the top and make it high in the center so that when you set the tree the roots will hang down all around. As cedars have many fine feeding roots they must be well spread and not turned upward. I would advise 2-year-old transplanted red cedars. Protect from the wind and hot sun the first year. Most people make a mistake in setting out trees and they make the greatest mistake right in the start. When they dig the hole they taper it at the bottom, rather than to have it slope outward and downward. When the roots strike the hard ground they will turn up and die and the tree will do the same."

Dirty Eggs on the Farm.

While there are a few egg producers who take the best of care of their product, the average farmer considers the eggs produced on the farm a by-product and makes very little provision for their care, aside from gathering them. A large loss is caused by dirty eggs, the number being enormous, and according to the estimate of Secretary Wilson of the Department of Agriculture this money loss to the farmers in the United States amounting to about \$5,000,000 annually.

This loss is very largely brought about by not gathering the eggs often enough. In wet weather more dirty eggs are found than at any other time.

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This is caused by the fact that the hen's feet are often covered with mud or other filth, and in going on the nest to lay she soils the eggs already in the nest.

An insufficient number of nests is often the cause of many of the dirty eggs found. Eggs are laid on the ground and around the hay and straw stacks, and becoming stained, are classed as "dirties." Again, when too many eggs are allowed to remain in a nest, some are broken and many of the others become smeared with broken yolks. This condition is often brought about by allowing the broody hens to use the same nests with the layers. On a farm where one nest to every four hens is provided and the nests are kept clean and well bedded, it is found that very few dirty eggs are produced.

After gathering the eggs, care should be taken not to put them where they will become heated, or near oil, onions, or other vegetables, as they readily absorb odors.

Although dirty eggs may be perfectly fresh, they invariably sell as "seconds," and when but a few dirty eggs are mixed with an otherwise fresh, clean lot, they materially decrease the price of the clean eggs.

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-W. T. Dickson, Carbondale
- Chairman of Legislative Committee.....
-W. H. Coultis, Richland
- Chairman of Committee on Education.....
-E. B. Cowgill, Lawrence
- Chairman of Insurance Committee.....
-I. D. Hibner, Olathe
- Chairman of Woman's Work Committee.....

The National Grange.

At the annual meeting of the National Grange which recently closed its sessions at Columbus, O., the following officers were elected for the ensuing term of two years: Master, Oliver Wilson, Illinois; Overseer, L. H. Healey, Connecticut; Lecturer, N. P. Hull, Michigan; Steward, D. C. Mullen, Idaho; Assistant Steward, George R. Schaefer, Wisconsin; Chaplain, C. F. Smith, Vermont; Treasurer, Mrs. E. S. McDowell, Massachusetts; Secretary, C. M. Freeman, Ohio; Gate Keeper, A. B. Judson, Iowa; Ceres, Mrs. Richard Pattee, New Hampshire; Pomona, Mrs. T. C. Atkeson, West Virginia; Flora, Mrs. A. B. Judson, Iowa; Lady Assistant Steward, Mrs. C. F. Smith, Vermont.

Although this ticket was elected by the so-called conservatives, it is believed that the results will go a long way toward smoothing out any little friction which may have existed in the past.

The National Grange voted \$2,000 for extension work in each state where the Grange is now organized, and \$5,000 for the same purpose in each state where the Grange is not organized.

Beginning with the statement that the fad of today is "back to the land," that the press is full of it, the agricultural colleges emphasize it, that special agricultural trains are operated, all carrying the gospel of better farming, the Committee on Agriculture signified approval of these agencies, but more is needed to be done. We may indulge the hope that remedial legislation needs no further spur than the evidence of existing wrong, but the manifest duty of the National Grange is to demand a substantial and immediate downward revision of the tariff.

On the question of good roads, the committee urged that the money now wasted in military and naval expenditure be used for the purpose of improving our highways and conserving our natural resources. The procrastination on the part of Congress in furnishing immediate legislation in aid of good roads, postal reform, in tariff reduction, was commented upon, and the committee recommended that the legislative committee continue its work to concentrate the influence of the order on their representatives in Congress until they secure the legislation needed. The committee suggested that a representative be established at Washington during the session of Congress, whose duty would be to scrutinize with interest all bills touching on the farmer's interests and report at once to the Legislative Committee.

The Committee on Education said the Grange should not limit its educational work to the ordinary work of schools. There are great educational problems facing us for solution and the Grange must do its part. Among the problems are such as the following:

What causes the high cost of living, not in agricultural products alone, but generally? How far does the burden of taxation affect the cost of living? Has the increase in the world's gold any influence upon the cost of living? What effect have past wars and the preparation for war upon the cost of living? How may the cost of distribution be reduced? How far should the government provide or control the means of distribution? How may the producer procure a larger per cent of what the consumer pays? Are the present high prices of farm products permanent or are they to find a lower level? Why was the proposed reciprocity with Canada bad for the United States farmers? What should be the future tariff policy of the Grange and our farmers? Who is most deeply interested in the cost of living, the producer or the consumer? Is the cost of distribution a problem for the consumer or the producer, or have they a common interest in it? Should our banking laws be amended? If so, how? Is a centralized bank desirable? Why not?

These are live questions and the

Grange should discuss them. It can do no better work than to familiarize its members with such problems.

Kansas State Grange.

Another annual meeting of the State Grange has come and gone, and with the many intelligent and interested delegates from the various counties of the state present, some good will necessarily follow.

Every Grange county of the state was represented except one, and these delegates comparing notes, experiences, and working together in various ways, will certainly bear fruit.

Worthy Master Black's address was of much interest. Coming, as it does, from one who has had a life experience in the work of the Grange, it has more than an ordinary influence upon the members of the order.

In his address the Worthy Master discussed all of the important measures before the progressive people of the country, emphasizing our own progress for the year just closing, our increase in membership and the steady increase in the growth of the Patrons' Fire and Tornado Insurance Company, which has increased the risks nearly \$2,000,000 during the last year.

The standing committee on legislation recommended to and instructed our legislative committee to work for the following measures:

The reason that the committee did not favor the initiative, referendum and recall was that the resolution contained other matter which was objectionable to the committee.

The State Grange adopted a resolution putting the organization on record as being opposed to the fee system as it applies to county officials. The resolution calls for the nomination and election to county offices of only such men as will pledge themselves to support a salary law and the abolition of the fee system.

In connection with the resolution it was stated that in several of the large counties of the state county officers receive under the fee system from \$6,000 to \$10,000 a year. It was stated that in Shawnee County the probate judge receives in the neighborhood of \$10,000 a year, while the governor of the state receives but \$5,000 a year. The Patrons favor placing all the fees in the county treasury and paying the county officers straight salaries.

The Patrons also went on record as opposed to the currency plan known as the Aldrich plan, or to the central bank under any name.

They declared in favor of a parcels post.

They declared in favor of the enactment of a state law raising the bounty on gophers.

They declared in favor of a reduction of import duties to a point which shall fairly represent the difference in the cost of finished products at home and abroad.

They declared in favor of a law forbidding the hunting or trapping of quails for a period of five years.

They declared in favor of the immediate ratification of the pending treaties with France and Great Britain.

On the question of interstate shipments of liquor the Patrons adopted the following resolution:

"Be it resolved that the Kansas State Grange oppose the shipping of intoxicating liquor into any prohibition state and that we urge our representatives in congress to amend the interstate commerce law so that it will not conflict with the passage of a law carrying out the spirit of this resolution."

The Grange has always stood for equal rights and that the right of franchise be extended to women. The following, offered by Mrs. Ed Blair, of Johnson County, was unanimously passed and heartily endorsed by every voting member present:

"Resolved, that the Kansas State Grange welcomes with delight the movement now being advocated to give the women of Kansas the right to vote at all elections."

At the present time, through organization, the members are benefited in a material way by buying in car lots such commodities as can be divided at the car.

The next annual session will be held in Manhattan in December, 1912.—O. F. WHITNEY, Secretary Kansas State Grange, Topeka, Kan.

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Dry Farming National Issue This Aluminum Table Set

By L. H. Bailey, Director New York College of Agriculture in Dry Farming Bulletin

Dry farming methods are generally thought of in connection with semi-arid regions. This editor contends that the principles of conserving moisture as exemplified in "dry farming" practice are only methods of good agriculture, whether in dry sections or those sections blessed by a reasonably heavy rainfall. This idea is in accord with that expressed in the following article by Dr. Bailey. Other phases than those generally considered in connection with dry farming and which are well worth a thought, are given in the article.—Editor.

I am convinced that the dry farming movement has direct value in its application to eastern as well as western conditions. The movement is necessary, and therefore worth while, in its western applications alone, and in its bearing on the welfare of those regions it should appeal to all the people; but it also has a bearing on agriculture in the entire country such as our people do not yet understand.

We habitually associate "dry farming" with dry regions; but the conservation of water lies also at the foundation of agriculture in most humid regions, as well as semi-arid regions, for the crop in humid regions is very generally determined by the pinch of the "dry spell" or drouth. As the strength of a wall is measured by its weakest course, so is the crop producing power of the year determined, under prevailing farming methods, by the poorest or least effective growing month.

Farmers in the semi-arid regions are compelled to save the rainfall, and they prepare a definite program of conservation, making this program a part of their reckoning. But the farmer in humid regions usually makes little or no allowance or reckoning for drouth, and when it comes he is caught; and yet the drouth and not the rainfall determines his crops.

We shall never have a good agriculture until the farmer prepares for dry times and drouth just as consciously as he prepares for winter. The "dry spell" of summer is usually considered to be a calamity; it is probable that a properly regulated system of husbandry would make such spells to be advantageous.

DROUTH LOSSES.

Of course, the figures of rainfall cannot of themselves establish the presence of drouthy conditions, for several other factors are involved; but they are the best measures that we have on record. It is certainly not too much to say that in most parts of the humid regions the farmers may expect conditions of dryness about every other year sufficiently marked greatly to reduce his yields. We are accustomed to hear estimates of the loss occasioned by injurious insects and by diseases of animals and plants; but it is probable that the loss from "dry spells" greatly exceeds any or all other cases. Humid regions are likely to suffer most from dry weather.

Nor is it merely a question of carrying the crop over the recognized dry spells. A sufficient supply of soil moisture continuously throughout the year is a fundamental necessity of crop growing. The acre-production must be made to increase, which means that we must be increasingly careful of our water waste.

In the hard-land, hilly regions of the east it is not only a question of the actual quantity of water falling on the earth, but quite as much the loss of the water by rapid run-off. Within a few minutes after a heavy rain, the streams are choked and the lowlands fill up and perhaps overflow. The water is lost to one place and is accumulated in too great quantities in another place. The violent run-off is like water running from a roof. It tears the land, moves stones and other heavy objects, and carries away immense stores of fertility. Within two or three days after a heavy rain, the sides and tops of hills may be suffering from dry soil. Many of the hills of the humid eastern states are unproductive or even sterile because they are dry. I see as much disaster from drouth in New York as I see in the less humid regions of the middle west.

The discussions of the Dry Farming Congress, therefore, should have significance to the entire country. We shall find the principles of dry farming to be increasingly applicable to the east. In fact, these principles have been worked out in humid countries. But the present recognized methods of dry farming are not sufficient for hill regions and something further must be developed. The accepted practices of dry farming are associated with two main ideas;

such preparation and tillage of the land as will catch and hold the rainfall; the perfecting of such a cropping scheme as will make the most of the situation. These are fundamental to all water-saving practices. To these methods may be added the supplying of water, other than that of rainfall, by means of irrigation. But beyond all this, we must in time devise some mode of storing the water of rainfall on the hills of individual farms.

STORING WATER ON HILLS.

Many of the hills cannot be tilled with profit, certainly not by dry farming methods; nor is it advisable to cover all of them with forest or even with other cover—and even a crop cover could not hold the water. A method or "system" of storing water on steep hillsides was perfected and even patented by Asahel N. Cole of southwestern New York in 1884, and it was made the basis of his book called "The New Agriculture." It consisted of a series of ditch-reservoirs running along the face of the hill, connecting with each other, and filled with stones and covered with brush and earth. These tranches were to catch the run-off and to hold it against the time of drouth. Whether such a system is practicable I do not know; but it is suggestive of a solution, perhaps in a simpler and less expensive form, of a very real problem in hilly regions. It is a problem of farm engineering. We must make the most of our hills, in time.

Irrigation and dry farming are complementary processes in the problem of saving and utilizing water. Dry farming practices are essential to the best results after irrigation water is secured. Irrigation will certainly come in the east; but it is first necessary that we save and utilize the water that falls on any farm.

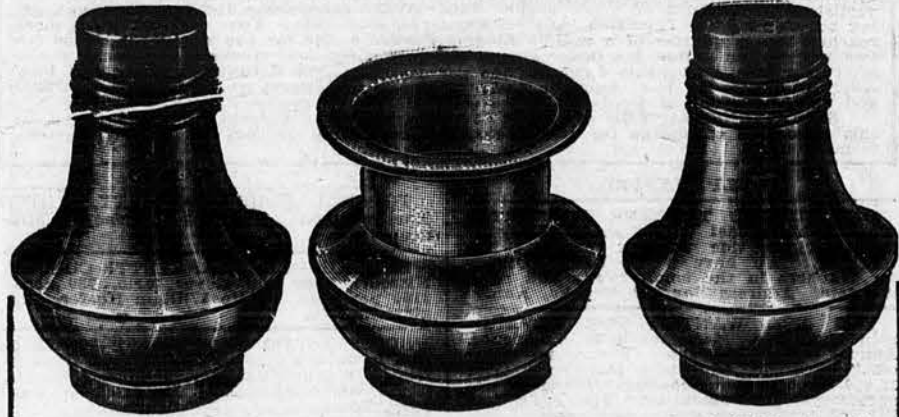
I hope that the Dry Farming Congress will be held to a scientific and non-partisan discussion of the problems involved; and I hope also that its meeting places in the future will not be withheld exclusively to the west.

The year 1911 has been one of the most successful years in the history of the Kansas City live stock market. Local packers and outside killers have bought heavily of all classes of live stock, and it has been one of the big years in the stocker and feeder trade. Prices paid for hogs at Kansas City have been so strong throughout the year that the territory of competing markets has been invaded to an astonishing extent. Nebraska shipped 183,000 hogs to Kansas City in 1911, and 64,000 in 1910. That is a gain of 170 per cent in Nebraska hogs at Kansas City, indicating the supremacy of Kansas City over Omaha and St. Joseph in the matter of hog prices. Missouri shipped 915,000 hogs to Kansas City in 1911, and 558,000 in 1910. That is a gain of 64 per cent, largely at the expense of St. Joseph and St. Louis, competitors with Kansas City for the Missouri hog business. The slaughter of sheep in Kansas City in 1911 breaks all previous records by 400,000 head.

In 1911 95 per cent of all the live stock received in Kansas City found ready sale. Stock cattle and sheep, en route from one part of the country to another, made up most of the remaining 5 per cent. Very little live stock was forwarded to other markets because of unsatisfactory bids at Kansas City.

Great improvements in the facilities at the yards were made in 1911. On the site of the old Exchange building new unloading and loading chutes have been erected. One of the most important additions to the facilities that has been made in years was the erection of new sheep barns in 1911. These barns cover three acres of ground, and are as near fire-proof as they could be made. Nearly 2,200,000 sheep, lambs and goats were received in the yards in 1911, an increase of 350,000 head over the best previous year, 1910. In all departments 12,000 more car loads of live stock were received in the stock yards at Kansas City in 1911 than in 1910.

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Our Shetland Ponies.

On the last page of this issue appears the announcement of our Mid-winter Shetland Pony Contest, in which KANSAS FARMER will give away four Shetland ponies, and other prizes to boys and girls living in Kansas.

We are giving away in this contest the very best ponies and outfits we can buy. They are well worth the efforts of any boy or girl to win them. A child cannot have a more desirable pet than a Shetland pony. There is something about these little animal friends which wins the heart of every boy and girl. A child who grows up with a Shetland pony has a companion which yields a most wholesome influence. This love for animal pets should be cultivated because the child who is the master or mistress of one grows up with a tender heart and kindly disposition. The contest which we have just announced will be conducted upon a competitive basis and the business training each candidate will receive will be most helpful.

Every candidate will be given a prize, regardless of whether a pony is won or not. Tell the little folks in your home about the contest and let them enter. The Pony Boy will be pleased to give them full information and help them get started.

SOOT in pipes and chimney makes a house a FIRE TRAP. For safety, try 20c pkg. from Soot Destroyer Co., Shemandoah, Ia.

Ten Weeks for Ten Cents.

KANSAS FARMER will be sent on trial to any address 10 weeks for 10 cents. Could you do a friend or neighbor a better turn than to take advantage of this offer? Why not pick out five of your friends and send each of them KANSAS FARMER for ten weeks?

To any lady reader of KANSAS FARMER who sends us 50 cents and five trial subscriptions, we will send free of charge a KANSAS FARMER COOK BOOK. This is the best cook book ever published, none excepted. If you don't say so when you get it, we will send your money back.

To any gentleman reader sending us 50 cents for five trial subscriptions we will send, free of charge, a fine fountain pen. Address, Subscription Department, KANSAS FARMER, Topeka, Kan.

Jacks and Stallions.

J. P. & M. H. Malons, of Chase, Rice County, Kansas, are offering a few big jacks and stallions for sale. Everything sold on an absolute guarantee and priced reasonably for first-class stock. Please read advertisement in this issue and write or call.

HOW TO Get Better Light FROM KEROSENE (Coal Oil)

Recent test by Prof. Rogers, Lewis Institute, Chicago, and Prof. McKergow, McGill University, Montreal, on leading oil-burning lamps shows the Aladdin Mantle Lamp is the most economical and gives over twice as much light as the Rayo and other lamps tested. It is odorless, safe, clean, noiseless. Better light than gas or electric. Every Aladdin Lamp fully guaranteed and protected by patents in nearly every country on earth. Our burners fit your old lamps. To introduce the Aladdin, we will give

ONE LAMP or BURNER Free

in each neighborhood. Send postal with name and address. Ball sold over ask for catalog M. Agents 1000 on money back guarantee; not one returned. Bruner sold \$800 in 15 days. Ask for liberal agency proposition. Sample lamp furnished. MANTLE LAMP COMPANY, 195 Aladdin Building, Chicago, Ill.

TROJAN STEEL FARM GATES



DIRECT FROM FACTORY TO YOU

\$4.95 The biggest gate offer ever made—on the best gate ever built. Made of 1 1/2-in. steel tubing; bull proof, hog-tight, easy to operate. Sold on two years' guarantee, and your money back if not satisfactory.

Write for Free Gate Offer.

We will send complete price list, also special proposition how one farmer in each community can get gate free by helping us introduce them. Address Standard Mfg. Co., 808 State St., Cedar Falls, Iowa.



CASE CARS

Ask your dealer or write us for free demonstration.

J. I. Case, T. M. Co. RACINE, WIS.

400 STOVES Factory Price CASH OR CREDIT

Write for our big Factory Price Book No. 189; saves \$5 to \$40 on cook stoves, ranges, heaters, gas stoves and furnaces. 400 styles.

30 DAYS FREE TRIAL KALAMAZOO STOVE CO., Kalamazoo, Michigan.

SHORTHORN—DISPERSION—SHORTHORN.**BERRYTON, KAN., WEDNESDAY, JAN. 10, 1912.**

Nineteen registered cows and heifers, 16 of them bred to calve early in March and later. Mostly sired by a son of Gallant Knight. Also the Double Standard Polled Durham herd bull, Scottish Baron 321097.

Take 9 o'clock a. m. Missouri Pacific train at Topeka for Berryton, 9 miles south.
JAMES A. BAXTER, R. 15, Tecumseh, Kan.

Our Farm Library Offer For 1911-1912

We are pleased to announce to our readers thus early in the season our **SPECIAL FARM LIBRARY OFFER**. We have been particularly fortunate this year in making arrangements with the publishers of some of the best publications in the country, which enables us to offer our readers a greater bargain than ever before. This Club positively gives you a regular library of the best farm periodicals.**THE LIST IS AS FOLLOWS:****One Year's Subscription to KANSAS FARMER—**The cleanest, most practical weekly agricultural paper in the Southwest. Not a line of medical, whisky or fake advertising accepted. Every line of reading matter written by actual farmers or men with experience on the farm. Special departments devoted to all kinds of live stock, dairying, poultry, bees, and home circle, farm, etc. A whole library of information will be found in the two thousand or more pages of **KANSAS FARMER** each year.**One Year's Subscription to The American Swineherd.**

For over twenty-five years the Swineherd has been the hog raiser's acknowledged authority. There is hardly a farmer in the Southwest who is not more or less interested in hogs. You cannot keep in touch with the swine industry of the United States without the Swineherd.

One Year's Subscription to Kimball's Dairy Farmer.

Every man who keeps a cow ought to have this great semi-monthly dairy magazine. Each issue printed on high-grade book paper, containing from 32 to 74 pages of the best information on dairying and the breeding of dairy cattle by expert dairymen. If you breed, feed or milk cows for profit you need this great dairy paper.

One Year's Subscription to The Poultry Standard.

The wonderful progress of the poultry industry in the Southwest has placed it on a level, if not above, in importance with any other interest of the farmer. The women and young folks will be especially interested in the Poultry Standard, which is one of the very best publications devoted to this growing industry.

One Year's Subscription to The Fruitman and Gardener.

Fruitman and Gardener has the strongest department devoted to the growing and marketing of fruits and vegetables of any publication in the country. It carries a department entitled "Correspondence School of Strawberry Culture," answering free all questions of subscribers who are interested in strawberries. Its department on practical spraying is edited by Mr. A. N. Brown, a man of twenty-five years' experience in spraying materials and an expert in his line. These are only a few of the special features of the Fruitman and Gardener. Its value to anyone owning even a small orchard or garden cannot be estimated.

One Year's Subscription to The People's Popular Monthly.

The People's Popular Monthly is not a cheap, trashy paper, but a beautifully illustrated magazine with clean, wholesome reading matter and stories, and departments of particular interest to the ladies and young folks in every home. It is worthy a place in every library.

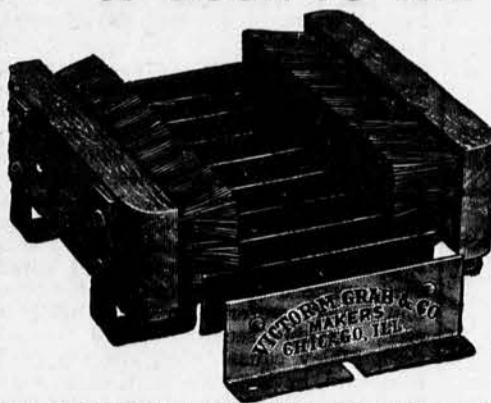
THIS GREAT GROUP OF MAGAZINES will give to every home they enter the best reading matter covering every branch of the farming industry as well as interesting articles on practically every subject of importance along other lines. If you are already a subscriber to any of these papers, your subscription will be extended one full year from expiration.

HERE'S THE BEST OF IT ALL.After weeks of endeavor we have completed arrangements whereby we can send you all six of these publications one full year for only \$1.50. The combination cannot be broken, but renewal subscriptions to any of the magazines will be accepted the same as new. Send us your order at once, and have these magazines upon your reading table during the long winter evenings. **ADDRESS ALL ORDERS TO THE KANSAS FARMER, TOPEKA, KANSAS.**

P. S.—We can save you money on the subscription of every paper you wish to take, new or renewal. Send us your list and let us quote you a price. Also send for our catalog of farm books, mailed for 4 cents in stamps.

MENTION KANSAS FARMER WHEN YOU WRITE.

A BOON TO THE HOUSEWIFE

**Crab's Foot Scraper Saves Time, Labor and Temper, and reduces the**

labor of housecleaning to a minimum.

This is the most practical foot scraper ever invented. Tacked upon the front porch or walk, it is as good as a sign "Wipe Your Feet Before You Enter!"

It cleans the sole and side of the shoe in one operation. Made of sheet steel and the side brushes are made of the best stiff bristle.

One of these foot scrapers ought to be upon every door step.

The regular selling price is \$1, and hundreds of them are being sold at that price every day.

Sent free to any subscriber, new

or old, sending \$1 for a year's subscription and 25 cents extra for express.

Sent absolutely free to anyone sending four new trial subscriptions to **Kansas Farmer** for three months, at 25 cents each. Address,**KANSAS FARMER, Topeka, Kansas.****Wheat on Alfalfa Sod?**

KANSAS FARMER has repeatedly urged that when the alfalfa fields have passed their prime that the field be plowed and cropped with wheat or corn. Reports of greatly increased yields following alfalfa have been received and printed from all parts of the country. The accompanying cut was sent us early in June of this year, and was, of course, made before the crop was threshed. The cut, with the comment of our subscriber, A. H. Greisa, is nevertheless interesting: "It is four feet nine inches high. It is free from rye, but has a little of the bearded



variety with it. It is the Peerless Prolific. It was sown on alfalfa sod for four acres, and ten acres on clover sod. I think that accounts for the good showing it has made. Corn grown on that sod makes similar growth in comparison with no sod land. I am thinking very favorably of that as a soil renovator in this state. I am planning to plow some clover sod each spring or fall for corn or wheat in the future, as I have in the past done to some extent. I believe that beats the wheat in the golden belt this year, where it is reported to be from five to seven inches high, ready to head."

Building Up the Soil.

Think of a six-hundred acre farm yielding \$350 per acre for the year 1910! This is what is reported for the farm of F. W. Mills, Madison, Wis. The soil is clay loam, with good natural drainage. On the farm are 200 pure-bred Holstein cows, 200 to 300 hogs, 40 horses and 100 sheep. The article by G. H. Dacy in Farmer's Review describing the general farm operations is intensely interesting, but only that part follows which pertains to the method of maintaining, or, in fact, building up the soil. There is much food for thought in these paragraphs:

"The endeavor is to feed all the grain and roughage produced on the place, in addition to considerable quantities of concentrates and mill feeds which are purchased. This buying and feeding of protein adds greatly to the soil's store of plant food, as it means the addition of considerable phosphorus, potash and nitrogen to the soil through the medium of carefully conserved stable manure. Each year 40 acres of alfalfa and a similar amount of clover are grown in the rotation, so that the nitrate supply of the soil is being constantly replenished and its physical condition is being improved.

"Each day the manure is hauled directly from the barns to the fields, and the disastrous results from leaching and wasted fertility, in cases where manure is piled outdoors and exposed to weathering, are controlled. Two hundred pounds of raw rock phosphate is sprinkled in each load of manure, and this returns considerable phosphorus to the soil. This inexpensive system of fertilization could be advantageously practiced on every general farm; it would partially atone for the large amount of plant food extracted from the soil by the crops and would ultimately increase not only the soil's resources in fertilizing elements, but would also materially abet crop yields. A decided gain is noted in the current corn and oat crops on the Monona Farm, which are being grown on land which has been accorded this treatment for several years. Another Wisconsin farmer who applied one-half ton of raw rock phos-

Reo the Fifth

The Farewell Car of Mr. R. E. Olds—Price, \$1,055. Catalog on request. **R. M. OWEN & CO.,** General Agents for Reo Motor Car Co., Lansing, Mich.**Don't build until you get our bargain catalog of Mill-work and Lumber. It's Free. GORDON VAN TINE CO.,** 2774 Case St., Davenport, Iowa.

GOODYEAR

This name on Automobile Tires and Rubber Accessories Signifies Inherent Qualities of Material and Workmanship that Insures the Maximum of Service at the Minimum of Expense. (340)
The Goodyear Tire & Rubber Co., 42nd St., Akron, O.**FOR SALE**

At farmer's Prices, two black Percheron stallions, also two Shorthorn bulls. Senator Bruce and Lord Marr breeding. All stock guaranteed.

L. P. GERTSON, Clyde, Kansas.**LIMESTONE FARMS**breeds Shropshires, Big Poland Chinas, Buff Orpingtons, S. C. Brown Leghorns, Indian Runner ducks and Chinese geese. Choice cockerels for sale worth the money.
M. GOTTSWILER, Clarksdale, Mo.

NOTICE!

Stolen, from Tecumseh, Neb., on November 12, one dark, solid brown driving mare, 4 years old, weight 1000 pounds; very small spot in face, wire marks on both front feet; a patch of hair off from center of belly; good style and action; was hitched to a new Velie auto-seat buggy; had on new harness with spots. Good reward is offered. Notify George S. Phillips, Tecumseh, Neb.

phate per acre incorporated in well-rotted manure to one of his fields, harvested a crop of hay which averaged three-fourths of a ton per acre more than did an adjacent untreated area.

"The crop rotation includes corn, oats, clover and alfalfa, pasture, and small grains. Forty acres of silage corn is grown, 210 acres of corn being produced all told. Sufficient silage is produced to feed the dairy herd nine months in the year on account of the limited pasturage. About 450 acres are under cultivation, raising grain and roughage with which to feed the live stock. Efficient cultivation is employed to control weeds on this profitable farm; the use of a cultivated crop followed by alfalfa on a weed-infested area eradicates the pests in short order.

"The most notable evidence of the increased productivity of the soil resulting from the praiseworthy efforts to maintain and increase the fertility of these valuable fields is the marked gain in the crop production. The general tendency has been toward a material increase in both the quantity and quality of the crop produced. Corn has attained a mark of 85 bushels per acre, oats have jumped to 65 bushels per acre, while two to two and one-half tons of clover and alfalfa to a cutting have been harvested.

"What an example of playing square with the soil bank this farm should be to the average American countryman! Here the deposits are greater than the withdrawals. The question in all its simplicity is before the individual farmer—the means and methods of maintaining soil fertility lie within easy reach—whether he will grasp them and thereby advance to material prosperity or whether he will overlook them and continue in the deplorable rut of antiquated ancestral practices remains for each countryman to decide for himself."

The farmers of Kansas are becoming awake to the possibilities in draft horse breeding and the state is now one of the best into which the breeder and importer can sell. The business is growing more rapidly than any other line of stock breeding, with the possible exception of dairy cattle. There are still thousands of farmers who could and should turn their attention to pure-bred draft horses as the most promising field of enterprise. Kansas can produce as good draft horses as any country on earth. Good draft horses are profitable, and Kansas can add millions to her annual income through the development of the draft horse industry.

FRANK IAMS' PARIS WINNERS

Are the real "medal winners"—"show horses of note"—"sensational" "ripe peaches" from the "select 400." Big, Classy, "Peaches and Cream"—"Black Boys." The "Iams Brand" of Drafty "top-notchers." Iams' 1911 Importation of Percherons and Belgian stallions and mares have arrived by "Special train." "Ikey Boy," smile sweetly, and hundreds of Iams' satisfied customers "will sit-up-and-take-notice" that Iams, the "King Pin" horse importer, is still "doing business" at the "old stand" (and good for 50 years more).

Iams is "pushing" his horses to the front. The big "Peaches and Cream" "Boys and Girls" are attractions that can't be overlooked. Iams mesmerizes buyers with "real Drafters," at "Bargain prices," and having the "Horses as advertised," Iams' "competitors" and "Hammer Knockers" are "boosting Iams" by their "Knocks," until now he is known as the "Millionaire Horseman," and on "Easy Street," and growing fast. "Ikey"—"Come-on-along—Come-on-along"—and sing Iams' song. He is selling these "aristocratic," fancy "Black Boys" cheaper than ever—or better horses for less money—\$1,000 and \$1,400 (few little higher). Iams has

120 PERCHERON and BELGIAN STALLIONS and MARES 120

They are "Models"—"Humdingers." They are 2 to 5 years old, weigh 1,700 to 2,500 lbs.; 80 per cent Blacks, 50 per cent Ton Horses. All "approved and stamped" by European government. Registered in popular stud books of U. S. Many "prize-winners" and "gold medal horses." Big drafty "top-notchers," with big bone, quality, style, finish and action to burn. They are "Eyeopeners." Larger and better horses than seen elsewhere. Big "business propositions" that make "the wheels work fast" under a "buyer's hat." "Georgie dear, Iams made a 'Big Killing' by buying his horses in Europe in October, 1911. "Dry weather," "bad crops," "close money" and "Iams' cash" caused the "prize-winners" and "tops" to be thrown on the market for a "good selling." Iams "cut the melon" and bought the "rippers" at "knockout prices." Iams will give his customers the benefit of his "good buy." "Ikey Boy," come on down town—get into

IAMS' "GET RICH WAGON" and SAVE \$1,000

on a "top stallion" (and you wear the diamonds). Iams is a "big fly in the ointment" in the horse world. "He keeps the Gang guessing." "He is up-to-the-minute." Iams' "daily Horse Show" will be a day of "profit and pleasure," and worth going 2,000 miles to see. Iams sells only "prize-winners" and best big drafters. He sells no "International tail-ends." No "Auction stuff" or "peddlers' horses." No American so-called full-bloods with questionable breeding (only imported horses). Iams has the "crack stallions and mares" you "read about." Buy horses of Iams and you won't "get stung" in horse or price. "Dolly D," waltz me around once again "Ikey," land me at Iams' Box Office and Importing Barns. Full to "the roof" with "Black Boys" (and all must be sold). Reduced prices. All the world knows Iams and his "Peaches and Cream" horses. 1911 was Iams' best business year. 1912 promises to be a bumper year to Iams and his customers. He saved \$300,000 to stallion buyers in 1911. Watch "Iams' smoke" in 1912. Iams' 30 years of successful business makes him a safe man to do business with.

IAMS SELLS HORSES "ON HONOR." A BOY OR A LADY

can buy as cheap as a man. Iams, the "square deal" horseman, makes every statement in ad. or catalog good—or you get the \$500 he hangs up. Iams guarantees to sell you a better Imported stallion at \$1,000 and \$1,400 (few higher) than are sold to stock companies for \$2,500 to \$5,000. Imported mares, \$700 and \$1,000. Iams gives 60 per cent Breeding guarantee; pays freight on horse and fare of one buyer. He can furnish \$1,500 insurance at 8 per cent. IAMS buys and sells every stallion himself. Saves buyers \$1,000 in commissions and middlemen's profits. He buys stallions by "trainload." He speaks the languages—

—"Stick Salesman" a commission to help "do you." He has no 2 to 10 partners—to share profits. He "pays cash" for his horses—and sells "Top-notchers" by "hot advertising" and having "the goods." "Big Ikey," leave your "happy" home and buy a "Top" "so-called" "American full-bloods" of Questionable breeding. Buy an Imported horse of Iams, the "reliable horseman." Then we will "all wear diamonds." Iams' "selling clothes" fit all buyers. Write for Iams' million-dollar horse catalogue. Iams won't let you go without a Peaches and Cream stallion or mare. "He sells the tails off them." Iams' guarantees are backed by "half-million dollars." References—1st Nat'l and Omaha Nat'l Bank, Omaha; Citizens State, 1st State and St. Paul State Banks, St. Paul, Neb.; Packers' Nat'l Bank, South Omaha. Iams buys big ad. space because it is cheaper than flannel-mouthed horse salesmen.



ST. PAUL, NEBRASKA

Egyptian Wheat.

"Egyptian wheat is a grain crop that is fast attracting the attention of farmers in Texas. It is a new grain, having been introduced into Texas about three or four years ago. The seed was obtained from Russia and it has proved a success wherever it has been tried in Texas. Three crops can be obtained from the same stubble in one year, each crop yielding from 50 to 100 bushels of grain per acre.

"The grain is the finest of feed for poultry and all kinds of live stock. When parched, the grains pop out crisp and white like popcorn. In Russia the wheat is manufactured into flour and is the chief food of the poorer class of people.

"This is my first year to plant Egyptian wheat, and I only planted a small amount. The yield was at the rate of 75 bushels of grain per acre. I planted late, but the second crop is ready for cutting. The stalks and blades make the best of forage. I plant the wheat in rows, the same as when planting sorghum."—B. F. PEREGO, Newton, Tex.

As our correspondent has just harvested the first crop his later experience may prove that some of the advantages claimed for this crop do not meet his expectations.

As he offers to send seed to farmers desiring to try this "wheat" it seemed best to state both sides of the case. Mr. Peregó's letter was sent to the Agronomy Department of the Kansas State Agricultural College, and brought forth the following reply:

"The sample of seed submitted in connection with the letter by Mr. Peregó is that of Shalu, a variety of sorghum originally coming from India, but which has been grown more or less in the United States for a number of years. This sorghum has no claim whatever to the name of 'Egyptian wheat,' which is simply a selling name applied to it by unscrupulous parties in the attempt to sell the seed at fabulous prices. Under ordinary conditions in the central part of the United States it yields less grain and roughness than does

Kafir and the grain and roughness are both less desirable. It usually yields less grain than milo, though the roughness may weigh more than that of milo in the milo belt. As far as known, the grain is desirable for poultry food, as is also Kafir and milo grain, and, as the seeds are harder, they require more preparation for horses, hogs and cattle than does either milo or Kafir. The statement that the crop is from Russia and used there for food by the poorer classes of people, is entirely without foundation.

"The statement that the plant will make several crops is based upon the fact that any of the sorghum crops, if cut early, will produce a second growth from the roots. Sometimes this second growth produces heads, but a second and third crop depends entirely on the weather, and is not a matter of any importance in Kansas. In India a great deal of importance is given to sorghum crops in the dry section, and they are used for many purposes, but of the hundreds of varieties tested in this country in recent years, not one of them has equaled Kafir or milo in the central west. What these sorghums will or will not do in Southern Texas has no bearing whatever on its being desirable in Kansas, and I might add that the enormous yields reported by the men who have been selling this seed have never been proven. Small amounts of this seed have been sold at as high as \$1,500 per bushel."—A. H. LEIDIGH, Assistant Professor in Crops.

One thing that operates to prevent success in horse breeding lies in the fact that the owners do not work their stallions, as is the universal practice in the old country. Farmers are accustomed to making their beef cattle and hogs lay on fat. This is their way of making money for their owners. Too many farmers seem to think that the same practice should apply to the horse, especially the stallion. This is wrong. The stallion needs work for his own good and the good of his progeny. He can be made a money maker in the field and

Imported — Percheron — Stallions

At the 1911 shows we won Championship on both Percheron and Shire Stallions, at the American Royal, the Inter-State and the Missouri State Fairs. All our horses are imported. We sell as low as anyone on earth, quality considered. Our guarantee and insurance are the best known.

PERCHERON IMPORTING CO., South St. Joseph, Mo.

40 STALLIONS AND MARES.



My barn is full of good Percheron, Belgian and Shire Stallions. Priced to sell. I mean business. Come and look them over. If you want good horses, we can deal. My prices are from \$400 to \$1,000. Come and see me before you buy. Then be your own judge. Barn right in town.

Joseph M. Nolan, Paola, Kan.

PERCHERON STALLIONS

Priced to sell—from yearlings to three-year-olds. All dark colors, heavy bone and large size; plenty of quality. The best of breeding. All registered in Percheron Society of America. Come and see me.

J. W. BARNHART, BUTLER, MO.



Percheron Stallions and Mares



A few choice stallions and several brood mares safe in foal. Matched teams from 2 to 5 years old. Come and see me.

F. H. SCHREPEL, Ellinwood, Kan.

50 — PERCHERON STALLIONS AND MARES — 50

Bishop Brothers have 25 big boned stallions that weight 1,700 to 2,100 pounds that they can and will sell for less money than any firm in the business, quality considered. Write us what you want.

BISHOP BROS., TOWANDA, KAN.

should be. In this way he will develop bone and muscle instead of fat, and will be in better health and sire fewer weakling foals.

Roy Johnston's Coming Sale. The next Poland China brood sow sale will be at the home of Roy Johnston, near South Mound, Kan., on January 20. This

event will afford an opportunity for breeders to buy up-to-date, large type, big boned Poland Chinas at their own prices. The offering is a grand lot of tried sows, fall yearling gilts and spring gilts. Mr. Johnston will sell a number of gilts sired by the great Blain's Wonder and Orphan Chief. Don't fail to send for a catalog, and arrange to attend this sale. Kindly look up advertisement in this issue and mention Kansas Farmer when you write.

PUBLIC SALE OF BIG TYPE POLAND CHINAS

AT SOUTH MOUND, KANSAS, JANUARY 20TH, 1912
100 - Head Big Type, Quality Poland-Chinas - 100

Here is a Big Type with quality enough to win in the show ring. There are brood sows, herd boars, fall yearlings, extra large spring gilts and a few choice spring and fall boars—24 are tried sows, 20 are yearlings, 10 yearling February gilts, and 35 big spring gilts with two of my great herd boars. The balance spring and fall, 1911, boars. There are 12 Blain's Wonder daughters, 12 Orphan Chief, 12 Long John, 12 Logan Look, the balance are sired by boars at the head of best herds in Kansas and Missouri.

The sows will be bred to the following boars: Blain's Wonder, Orphan Chief, B. Wonder, a great son of Blain's Wonder that won first at Kansas City Royal in 1911, a 650-pound yearling. They will be bred early. So many of my sows are sired by Orphan Chief that I can't use him longer, and will sell him, and for same reason will sell Blain's Wonder. I know of no two better boars. Come and see at the sale. Hogs free from disease, none within thirty miles during past year. Guaranteed absolutely free of disease. Bred deep in the Big Type.

Catalogs will be ready by December 30. Write and get your name on the list. Col. F. M. Woods, Col. F. J. Zaun and Col. Charles Beard will do the selling.

If you cannot come to my sale, send a bid to O. W. Devine, who will represent KANSAS FARMER. Any bid sent him in my care will be carefully and honestly handled. This is positively the best offering I have ever sold. Come and spend a day with us.

Auctioneers: COL. F. M. WOODS, COL. F. J. ZAUN, COL. C. E. BEARD.

ROY JOHNSTON, : Southeastern Part of State : SOUTH MOUND, KAN.

BREEDERS' SALE

400—HORSES—400

In Coliseum, Bloomington, Illinois,
Jan. 23, 24, 25 and 26, 1912.



On Tuesday, Wednesday, Thursday and Friday we will sell
300 Imported and Native Bred Registered

Percherons, Belgians, French Draft, Shire and Clydesdale Stallions and Mares.

100 Head of Imported Stallions and Mares that will land by sale day.

150 Head of Imported Stallions and Mares that have been here a year.

150 Head of the BEST Registered Mares that ever went into an auction ring.

50 Head of Imported Fillies, 1 and 2 years old.

100 Head Reg. Stallions of very choicest breeding and individuality.

ON FRIDAY, JANUARY 26, 1912

100 Head Registered Trotters Grade, Draft, Single Drivers, Saddle and All-Purpose Farm Horses, Stallions, Mares and Geldings.

100 Head PONIES. IMPORTED and NATIVE BRED REGISTERED Shetland, Welch and Cross-Bred, from the best breeders in the state. Stallions and Mares good enough to head any herd; Mares and Geldings broke, and safe for your wife or child to drive.

Catalog Ready January 8, 1912.

D. AUGSTIN, Pres.; C. W. HURT, Mgr., Arrowsmith, Ill.



**PERCHERONS
SHIRES
BELGIANS**

**We Want
You to Come to
Lincoln and see our Stallions**

They were selected from the oldest breeding farms in Europe, and their pedigrees can be traced for thirty generations. They will please the most critical American buyer.

Our contract of guarantee is as good as a government bond. Our prices are reasonable. Big catalog and letters from hundreds of satisfied customers sent upon request.

Watson, Woods Bros. & Kelly Co., Box 34, Lincoln, Neb.

L. R. WILEY'S STALLIONS



Imported and Home Bred Percherons, Belgians and Shires. All Percherons are Registered in the Percheron Society of America.

50—Head STALLIONS AND MARES—50

Including an unusual variety from which to select. All we ask is a chance to show the goods. You'll say the price is right, and buy. Write today.

L. R. WILEY, EMPORIA, KAN.
Breeding Farm, Elmdale, Kan. Sale Barns, Emporia, Kan.

150 Shetland Ponies 150

Stallions, Geldings and Mares. All colors and ages. Thirty-four to forty-eight inches high. Call on or address,

C. H. CLARK, Colony, Kansas

BEN BELL'S Big Annual Bred Sow Sale

AT BEATTIE, KANSAS
Thursday, Jan. 4th, 1912

Fifty head, the best lot I have ever offered. Not a poor one included. 25 2-year-old sows, 10 spring yearlings, 15 December and January gilts. 15 head bred to B. Hercules by Nebraska Jumbo; 15 to Bell's A Wonder by A Wonder; 10 to Bell's Long King by Long King's Equal; 5 to What's Ex.; 7 to Bell Metal.

The 2-year-old sows were sired by Bell Metal, What's Ex. and Nebraska Jumbo. The spring yearlings are daughters of Bell Metal, What's Ex. and Colossus. The December and January gilts are by a son of Bell Metal. This is without doubt the greatest variety of famous big type breeding ever catalogued for a public sale. The Bell Metal and What's Ex. sows mated with the blood of the noted A Wonder and Long King's Equal and noted Colossus sows bred to Bell Metal. I have selected this bunch out of nearly 300 head and have picked the best. This is the opportunity, if there ever was one, to buy the best the breed affords. Come early and look the offering over carefully. It will be a hog show as well as a sale. Catalog upon application. Free accommodations and transportation.

**BEN M. BELL
Beattie, :: :: Kansas**

Auctioneer—H. S. Duncan.
Jesse Johnson will represent Kansas Farmer. Send sealed bids to him.



CHOICE JERSEY BULL CALVES.
Sired by Silverine's Lorne, a son of Silverine's Lad. These calves are good individuals and out of cows with individual tests; some of them capable of making as high as 550 pounds of butter in one year. Included is the eight months old bull out of Golden Fern's Rowena, carrying 50 per cent of the blood of Golden Fern's Lad. Made 402 pounds butter in nine months. Began as a three-year-old. Her photo is shown here. Write for records of dams and prices.
CHESTER THOMAS, Waterville, Kansas.

PERCHERON, BELGIAN, GERMAN COACH STALLIONS AND MARES.
Imported and home-bred. Will sell our 1911 champion and other prize winners. Write or come. I make good. Mention this paper.
PIONEER STOCK FARM, J. W. Waddill, Prop., BRASHEAR, MO.

REGISTERED PERCHERON STALLIONS

Young registered stallions, from weanlings to 4-year-olds, outstanding in bone, size and quality. All registered in Percheron Society of America. Write for bargains.
WILL F. HOOKER, Hamilton, Caldwell Co., Mo.
On Main line C. B. & Q. Railway, 60 miles east of St. Joseph.

Last Call for Young's Sale. Don't fail to attend Robert I. Young's Poland China sale at the horse sale pavilion...

Ben Martin's French Draft Stallions. Ben Martin of Garden City, Mo., is advertising some French Draft stallions for sale...

L. R. Wiley's Stallions. L. R. Wiley, the importer at Emporia, Kan., has a barn full of nice 2 and 3-year-old stallions...

Baker Bros. Sell, February 3. On February 3, 1912, W. A. and W. Z. Baker of Butler, Mo., will sell a draft of Poland China bred sows and bred gilts...

Spring Boars. James Arkell, proprietor of Walnut Grove Farm, located at Junction City, Kan., writes that he still has for sale a few very choice spring boars...

Imported Percheron Stallions. Dr. W. H. Richards of Emporia, Kan., has a number of imported Percheron and Belgians and they are priced to sell...



The Champion Saddler. Herewith is a picture of the grand champion saddle stallion at the Topeka State Fair of 1911. This stallion won the championship at the Enid (Okla.) Horse Show of 1909...

An Old Reliable Breeder. One of the reliable breeders of jacks and jennets is H. T. Hineman, of Dighton, Lane County, Kansas. Mr. Hineman has some as good jack stock as you can find anywhere...

L. E. Klein's Big Type, Large Boned Polands. One of Kansas' most successful young breeders who has spared nothing to make his herd one of the best in the state is L. E. Klein of Zeandale, Kan. He has been in the pure-bred hog business only a short time...

know that it pays to breed good hogs as well as it does to breed good horses or cattle, and Klein is promising his friends something in the hog line that will be hard to beat...

Choice Stock Farm for Sale. This week's issue of Kansas Farmer contains announcement of Mr. W. H. Webster of Greenleaf, Kan., relative to the sale of his big stock farm, located near Greenleaf, in Washington county, Kan. The writer has known this farm for years and has noted its annual production for the past 15 years...

Roy Johnston's Brood Sow Sale, Jan. 20, '12. A fieldman for Kansas Farmer last week called at the Roy Johnston stock farm near South Mound, Kan., and carefully looked over the best bunch of Poland Chinas that has ever been offered for sale on the Johnston farm. One hundred head of the large, smooth, western type of Poland Chinas, consisting of brood sows, fall yearling gilts, herd boars and a few spring and fall boars...

FARM NEWS

One good hog raiser says that he has instructed his men to drop everything if necessary and give first attention to the hogs. The heavy shipments of shoats, pigs and brood sows throughout the whole country means something, and those who can save even a few head will be well repaid.

J. C. Burneson, connected with the federal department of agriculture, has completed a test of nearly 1,000 dry cows in Wyandotte and Johnson counties—those furnishing milk for Kansas City—and has found that less than 4 per cent of the total number of cows are afflicted with tuberculosis. These animals were condemned.

Charles Harris, director of the state free employment bureau, has received a letter from a young man in Kansas, a graduate of the Kansas State Agricultural College, who wants a job on some farm near Topeka. He wants some practical experience in farming. After he secures that he intends to buy and operate a stock farm somewhere near Topeka.

There is an important irrigation campaign in Logan County. Along the Beaver, a lively and picturesque little stream, fillings are being made and dams being constructed. In one place a dam twelve feet high has been put in, and in another place the Bilby ranch—is one eighteen feet high. Each dam is to form a reservoir, the water of which is to be used for watering the fields.

According to J. B. Nicholson, general manager of the Kaw Milling Company, the prospects at the present time are for a big wheat crop over the eastern two-thirds of the state. Over the other one-third the prospects are not as good because of a lack of moisture. "However, in my opinion, the wheat will receive plenty of moisture later on, and Kansas will raise a bumper crop in the year 1912," he said.

Three hundred tons of baled alfalfa, enough to fill a train of 25 average-sized box cars, are already stored and two baling gangs are at work to have 200 tons ready for market in a few weeks. This will fill about 18 more cars as is a part of the alfalfa raised on the C. M. Gregory farm, in Chase County, this year. As no seed crop was saved from the alfalfa, five cuttings of hay were secured from most of the fields, and the average yield per cutting was about a ton per acre.

"When everybody follows the old custom of going out and buying steers when he needs them, the supply is likely to run short and the price to raise," said Frank Penrice, of Eskridge, Kan., in a recent interview. Someone has got to raise cattle, and the time is right here when our beef must be produced on the farm instead of on the ranch or range. The talk about a cattle

Another All Purpose Tool. These illustrations show the Buffalo staple puller and fence pier less than one-fourth its exact size. This is positively the handiest fence tool ever made. It can be used as a wire stretcher and splicer, or staple puller, hammer, pipe wrench, monkey wrench or pincers, and is the handiest horse-shoe puller ever made. It is a whole kit of tools in one. It is the only fence tool made that has a detachable jaw, making it almost indestructible, for if one of the jaws is broken, another can be secured for only ten cents. We positively guarantee this tool in every respect. It will be sent free to any one sending \$1.50 for a two years' subscription to KANSAS FARMER—new or renewal, or to any one sending us one new yearly subscription to KANSAS FARMER at \$1.00. Address all orders SUBSCRIPTION DEPARTMENT KANSAS FARMER, Topeka, Kan.

Use A KANSAS FARMER SAFETY RAZOR. Price complete 65c. With 12 Extra Blades \$1. This Razor is not silver or gold plated. It IS heavily nickle plated and will not rust. It will not clog up, as many safety razors do. It is made for every day use. No delicate parts to get out of order. Guaranteed unconditionally to shave as good as any razor made, none excepted at any price. Packed in a neat box. An embossed, plush lined, leather case does not impair the cutting edge of a razor. Sent free to any subscriber, new or old, sending \$1.00 for a year's subscription and 15 cents extra for shipping. If extra blades are desired, add 10 cents each three or 35 cents for one dozen. Throw away your old razor and enjoy a clean, easy shave, and so change cutting your face. Address, KANSAS FARMER, Topeka, Kan.

100 HEAD OF IMPORTED AND HOME BRED STALLIONS and mares of the different breeds, 50 head of coming 3-year-old American-bred, pasture raised stallions; the kind that give satisfaction. Reference: Any bank in Grand Island, Cairo or Bridgeport, of the horse and large calendar sent free to horsemen. NORTH-ROBINSON DEAN CO., GRAND ISLAND

shortage has been regarded as a joke for the past two or three years, but feeder prices prove that it is actually with us. Stock shipments from Chase County have been very heavy during the past two weeks. Shippers say conditions have been very favorable this fall for the fattening of stock. More cattle were held over at the close of the grazing season than is usually the case. This was because cattle were not in good condition for market when they came off grass and because the demand for stock was poor. As a result, most of the farmers who had fed held what stock they could care for and now they are finding that the few weeks of full feeding has paid well. The only thing that holds down the price of hogs at both pure-bred and farm sales is the uncertainty as to whether there still exists a danger from the cholera. W. E. Elston, of Osborn, Mo., states that if the farmers could be sure that the disease had finished its course and there would be no more losses, the brood sows would command fabulous prices, and shoats would sell high. The frost will greatly help to check the disease, but careful disinfection and the adoption of sanitary methods will do more to enable the farmer to stay in the game. Exactly \$80,000,000 is proposed to be appropriated by congress during the next five years under a bill introduced by Representative Prouty of Iowa, who advocates national and state co-operation in road construction and maintenance. He proposed that congress appropriate and apportion among the various states \$5,000,000 in 1912; \$10,000,000 in 1913; \$15,000,000 in 1914; \$20,000,000 in 1915, and \$30,000,000 in 1916. The federal expenditures of each road is limited to one-half the total cost. A corn contest of the best corn growers of Cowley County was won by Phillip Short of Walnut Township. The display of ears was creditable. The cobs were unusually small, the ears well filled with perfect grains, large in size. The judges declare some of the ears were almost equal to the "thousand dollar prize corn" shown by the W. K. Kellogg people at the fairs last fall. The display would certainly have been a credit to any corn growing section of the United States, and proves conclusively that Cowley County can produce fine corn. The Clay Center Farmers' Institute has taken up the question of teaching agriculture in the country schools and has determined to assist the county superintendent in his work of interesting the young people of the county in their agricultural studies. Superintendent Coffman will carry a Babcock tester around with him to the country schools, and when the children bring in specimens of the milk from their cows, he will test the milk, showing just how the

TO CLOSE THE DEMIN Oswego, Mo. Our registered Short. 45 head cows, bulls and breeding on request. process is performed. Another the farmers' institute experts buy a moving picture machine and slides. Officers of the institute will travel with Superintendent Coffman, giving picture shows of farm work, farm statistics and matters pertaining to agriculture.

INDEX TO VOLUME 49, KANSAS FARMER. (Continued from page twenty-nine)

Subject.	Date.	Page.
Poultry, Whole grains for, Septem-		
ber 2.....		17
Poultry breeders' profit, November 25.....		14
Poultry business, November 25.....		15
Profitable age of fowls, December 9.....		12
Poultry in Kansas, December 16.....		14
Past, present and future of poultry, January 28.....		12
Poultry and fruit, January 7.....		14
Poultry success, February 4.....		3
Poultry as pastime, February 11.....		16
Pedigreed poultry, February 11.....		21
Poultry at the State Fair, October 7.....		14
Poultry must have care, November 18.....		12
Poultry notes, December 23.....		14
Poultry notes, September 30.....		14
Poultry notes, Dec. 30.....		14
Poultry Annual, Dec. 30.....		14
Protect the hen, September 30.....		14
Rats, damage to poultry, August 26.....		14
Roup among turkeys, July 15.....		12
Report of Canadian Experiment Farm, August 26.....		14
Summer bowel disease, July 29.....		12
Summer work, August 12.....		16
Selling baby chicks, September 23.....		14
Success with poultry, September 16.....		14
Score cards, January 28.....		13
State Poultry Show, February 4.....		16
Sprouted oats for poultry, March 4.....		14
S. C. B. Leghorns, April 8.....		12
Seasonable hints, April 22.....		12
To hasten moulting, August 5.....		10
Tobacco prevents lice, August 12.....		16
Topeka Poultry Show, November 18.....		12
The wonders of an egg, August 26.....		15
Turkeys for profit, Feb. 4.....		16
Turkeys profitable, December 2.....		14
Winter food for poultry, September 23.....		14
White Leghorns, May 9.....		1

MORE SHETLAND PONIES

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JUST think of it! Kansas Farmer will give away four more beautiful Shetland Ponies and Outfits to Kansas boys and girls. If you would like to have one of these for your own and get it without costing you one cent, be sure to read all on this page. Kansas Farmer has already given away ten Shetland Ponies. We shall be pleased to tell you who we gave them to and just how you can get one of these four ponies which we are going to give away

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To Boys and Girls Living in Kansas

THE PRIZE PONIES.

Are little beauties. They are gentle and you can drive, ride or lead them anywhere you please. One of our ponies would sure make you a fine playmate, and they are so cute that, after you have had one a few days, you would not want to part with it for anything. Just the trick to ride or drive to school. Every boy and girl wants a Shetland pony because they are so useful, pretty and good. You can certainly have a happy time if you get one of these ponies and outfit. A Shetland pony always makes a fine pet, and they are so loving that they will follow you everywhere you go. But the ponies which we are going to give away are good to mind, and we are sure that the little master or stress of one of them will think you have the best pony in the world. Be sure to send in your coupon, so you will have a chance to win one of these



GRAND PRIZE.
Shetland Pony, Cart and Harness.

THEIR OUTFITS.

With the pony, which we will give as Grand Prize in this contest, goes one of the nicest outfits that you ever saw, consisting of a cart and pretty tan harness that are just dandy. All are made from the best material, and we have spared no time or money in getting this outfit so that it will be bound to please the boy or girl who gets it.

The second and third prize ponies have each a saddle, saddle blanket and bridle, so nice that you will never get tired of using them. They will last a long time, and the boy or girl who wins one of them will spend many happy hours in riding one of the finest ponies any child ever owned.

The fourth prize pony has a saddle and bridle just as good as the second and third, only they are just a little smaller, because this pony is not so big as the other ponies, but just as good and gentle. Some boys and girls might like a smaller pony better. All of the outfits are new, and we will send each with the pony to the winner without one cent of cost.

TO BOOST KANSAS FARMER

we are going to give away these ponies, outfits and numerous other prizes, in this contest. **KANSAS FARMER** is one of the best weekly farm and home papers in the United States. Each week it is full of good reading of especial interest to those living in the country and on the farm. Every farm home should have this paper, and we want a number of hustling boys and girls to help us boost **KANSAS FARMER**. We are going to give every hustler a prize. The work will not be hard, and all of your friends will help you, for everyone likes to help boys and girls who are ambitious to do something for themselves. The contest is limited to the boys and girls of Kansas only, so you will not have to compete with those in other states. You can be one of the four who are going to get these ponies. Don't say you can't get one of them; just "pitch in" and try. It will be easier than you think. **GET AN EARLY START BY CUTTING OUT THE COUPON BELOW AND SENDING IT IN TODAY.**



SECOND PRIZE.
Shetland Pony, Saddle and Bridle.



THIRD PRIZE.
Shetland Pony, Saddle and Bridle.

GET AN EARLY START

by sending in the coupon today. Our contest will be short, and it will not be long until the four beautiful Shetland ponies and outfits will be sent to their winners, with all express charges paid. You have just as good an opportunity as any other boy or girl. It does not make any difference in what part of Kansas you live, or how busy you are in school or with your work at home. We want busy boys and girls to help us boost **KANSAS FARMER**, and the busier you are the better it will be for you. Be sure to send in the coupon right away, so you can get an early start.

COUPON

THE PONY BOY, Care **KANSAS FARMER**,
625 Jackson Ave., Topeka, Kansas.

I would like to become a contestant for one of the four ponies and outfits and other prizes you are offering to boys and girls living in Kansas. Please tell me how I can help you boost for **KANSAS FARMER**.

My Name..... Age.....

P. O., Kan., R. R.

Parents' Name.....



FOURTH PRIZE.
Shetland Pony, Saddle and Bridle.

NO EFFORTS WILL BE LOST.

Every contestant will be given a prize which will not only please, but be useful. Besides the four ponies and their outfits, we will offer a bicycle, watches, rifles, cameras, bracelets, fountain pens, knives, post cards and numerous other articles which every boy and girl would be delighted to get. We will do this so that all of the contestants will receive something nice for their time and efforts. You can't lose. Try your best to win the Grand Prize and have a beautiful pony, cart and harness all for your own. You can do it. Send in your name at once. You never can tell what you can do until you try.

BEGIN NOW

by clipping out the coupon at the left of this, fill in the blanks plainly, and mail it today to the address below. We will then send you full particulars and help you get started. Be sure to mail us the coupon right away, so you will have an early start. You can send it in a letter or write on a post card.

Address all Letters
and Cards to

THE PONY BOY

Care **KANSAS FARMER**
Topeka, Kan.