

KANSAS FARMER

FOR THE IMPROVEMENT

OF THE FARM AND HOME



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Ready For The State Fair

KANSAS STATE FAIR

HUTCHINSON

SEPT. 18, 19, 20, 21, 22, 23, 24, 25, 26 and 27, 1911

\$40,000.00 IN PREMIUMS AND PURSES
Exhibits must be in place SATURDAY EVENING, September 16th.

\$20,000.00 FOR RACING
\$1,000.00 in PREMIUMS for County Exhibits.

No other Fair in Kansas ever offered as much money to Exhibitors.

Cattle, \$6,657.00; Horses, \$7,330.00; Swine \$1,745.00; Sheep, \$1,123.00; Other Departments, \$3,775.00.

RACING

19 Harness Horse Races } \$20,000.00
36 Thoroughbred Races }

THE FOLLOWING IS COPIED FROM THE STATUTES OF KANSAS:
Be it Enacted by the Legislature of the State of Kansas.
Chap. II, Sec. 5. That the Central Kansas Fair Association is hereby authorized to police its Fair Grounds and to enforce the rules and regulations of said Association.
Sec. 6. Standing. That the Fairs held and the Premiums Awarded by The Central Kansas Fair Association SHALL HAVE THE SAME STANDING AS THOSE GIVEN BY THE STATE FAIRS OF OTHER STATES.

This Fair pays more money to exhibitors than any other Fair in America, except those supported in whole or in part by taxation.
This Fair is the largest in the world conducted in a city of its size.
This Fair has the largest percentage of out-of-town attendance and of farmers of any Fair in the United States.
Kansas loyalty to Kansas makes this Fair Great. It is for all the people and the people all attend. The meeting place of the breeder and buyer.

The Semi-Centennial—The Great Feature of 1911

Speaker Champ Clark, Sunday, Sept. 24th.

Various Governors, Monday, Sept. 25th.

President Taft, Tuesday, Sept. 26th.

Grand Parades (which will be reviewed by President Taft), Cornet Bands, Drum Corps, United States Cavalry and Artillery, State Militia, Great Men and Great People.

Ask your railway agent about train service—the railroads want to know what you want and you want to know what to get ready for. Come once and then again. It is TEN DAYS this year.

Write Col. L. A. Beebe, Secretary Commercial Club, for over-night accommodations.

Grounds in north part of city—double track electric street railway, city light and water.

A TROOP OF U. S. CAVALRY AND A BATTERY OF ARTILLERY WILL BE HERE BY ORDER OF THE SECRETARY OF WAR.

There will be 363 trains into Hutchinson during this Fair.

For catalog or information address

H. S. THOMPSON, President.

A. L. SPONSLER, Secretary.

WALLACE MAMMOTH POLAND SALE

Wednesday, Sept. 13, 1911

AT BUNCETON, MO.

The offering will consist of 30 splendid, brood sows, bred to Grand Leader 54911 or Expansion Wonder; 10 big, fancy open gilts by Grand Leader; 20 superb fall and spring boars.

60 — BIG — 60
POLAND CHINAS

The money-making, quick-maturing, mortgage-lifting kind, sired by or bred to the best boars in Missouri.

THE BIG KIND THAT
HAVE BIG QUALITY.

Sale at Farm at 12 o'clock sharp. Lunch for all. Come and see, whether you buy or not.

W. B. Wallace, Bunceton, Mo.

HARRIMAN, SPARKS, BEAN, AUCTIONEERS.

GENUINE KHARKOF SEED WHEAT
\$1.15 PER BUSHEL, SACKED, F. O. B.
GEO. T. FIELDING & SONS, MANHATTAN, KANSAS

WRITE FOR THE
FALL STYLE BOOK
of Men's and Misses'
Suits and Coats

that we are sending free to every one who wants it.
The garments shown in this book are guaranteed to be pure wool, and will be made good if they do not give two full seasons' satisfactory wear.

We Pay Express or Postage on all Orders in Kansas.

MILLS'
Mail Order Service
The Mills Dry Goods Co.
TOPEKA, KANSAS

This Great Rifle
22 CALIB HUNTING RIFLE

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, 134 Popular Bldg., Des Moines, Iowa.

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By special arrangement, The Ratekin's Seed House of Shenandoah, Iowa, agree to mail FREE a copy of their Winter Seed Wheat Catalog and a sample package of their New Imported Malakoff Wheat (a new Russian variety) to any and all who mention this paper. Write them direct today. The address is Ratekin's Seed House, Shenandoah, Iowa, and you will receive the catalog and sample by return mail.

Seed Wheat

SEED WHEAT.
Zimmerman, Fultz, Blue Stem varieties. Selected and graded seed. Write for prices.
The Deming Ranch, Oswego, Kans

TOO LATE TO CLASSIFY

FALL YEARLING BOARS
By Reserve Grand Champion Special Builder, at reasonable prices. Write
C. S. MOYER, Nortonville, Kan.

HIGH-CLASS Jan., Feb., March Bred by High Col. Crimson Perfection sire Perfection Wonder, first prize at Des Moines and Lincoln fairs in 1909; go back to Ohio Chief and Nebraska B prices right. Roy Shutwell, Shenandoah, Iowa, R. F. D. No. 1.

100 DUROC JERSEY PIGS PRIVATELY Richly bred boars and gilts in pairs related at prices to move them.
O. A. TILLER, Pawnee City, Neb.

WALNUT GROVE FARM POLAND CHINAS.—For quick sale, choice of 21 boars, litter brothers sired by Grand Leader and out of Expansion dam.
JAS. ARKELL, Junction City, Kan.

T. E. GORDAN, Waterville, Kan. Real Estate Auctioneer. Will cry sale any state; terms reasonable; write for prices.

GLEN HALL SHORT HORN HERD Headed by Choice Prince, by Prince of Choice Lawn and out of Good Lassie by Choice Goods. 5 choice red bulls in age from 14 months. Herd header, Prospects.
JOHN O'KANE, Blue Rapids, Kan.

Longview Poland China Herd boar young Mastiff. The first grand champion at Topeka, Kansas, State Fair, 1910. A few choice spring boars and gilts for sale, all large type. Priced reasonable and guaranteed.
D. M. GREEN, Harrisonville, Mo.

KANSAS FARMER

EDITORIAL

PATRONIZE COUNTY FAIRS.

What the state fair is to the state the county fair is, or should be, to the local community.

The man who lives apart from his fellows is sure to deteriorate and if his isolation is complete, he becomes a savage. On the other hand, the man who mingles with his fellows, who appreciates their efforts and who profits by what they have done, will develop the best there is in him, will increase his knowledge and will more nearly approach the ideal of civilization.

For the local community the county fair affords the best opportunity for these things and teaches by object lessons as no other institution can. Before him the visitor sees his own county on display. The best of the live stock, farm, garden and orchard products, implements and machinery are arranged for his inspection and information. Here he can compare the results and methods of his fellow citizens with his own to his advantage.

Through his own exhibits he gives pleasure and knowledge to his fellows, and yet he loses nothing. With them he gains information and inspiration for his own self betterment.

County fairs, thanks to the general uplift-sentiment which prevails, are not as they once were. Instead of being places of amusement and incentives to vice, they have become educational institutions of powerful influence for the upbuilding of both city and country life.

These county fairs are improving each year, but they still lack in one very important particular. They do not receive the co-operation of the community to which they are entitled and which they must have from both exhibitors and visitors if they are to succeed. The remedy for this lies in the hands of every citizen, and it always pays to apply it.

The statistical experts of the government at Washington have sent out some figures gleaned from the census reports which are interesting, but may be misleading. For instance, when compared with 1900, the number of cattle in Kansas in 1910 shows a great decrease, of nearly a million and a half. Apparently these are mostly classed as beef cattle, as the number of milk cattle increased nearly 60,000.

To those who live here and know the facts, these figures mean that the big ranches and ranges, where cheap cattle were then produced, have been broken up into farms. They mean that instead of the longhorn of a decade ago, there are now the heavy-meated, quick-maturing and highly profitable representatives of the beef breeds distributed in smaller groups, on farms, and they further mean that the state is growing as a dairy state.

The time of year for the big fairs and stock shows is at hand and the farmer cannot select a better time for a little vacation. Nor could he select a more profitable vacation than it to be found in attending one or more of these great shows. They are intensely interesting, the expense of attending is not great and the value received from the object lessons to be found in each is hard to estimate. Take the whole family to the county fair to see what your neighbors are doing for the betterment of their state and their own advancement. Then take them to the state fair, where the counties meet in competition and learn which is best in methods and in products. Every farmer needs a vacation, and a more enjoyable or profitable one can hardly be found than that offered by the state fair.

At least two granges in Shawnee county, Kansas, are holding annual fairs. These fairs are intended to be purely educational, and have no horse racing or other amusement features such as are usually found in county and state fairs, and yet they lack nothing in interest.

They are not money-making propositions, but seek to attract people by the real merit of the agricultural, live stock, horticultural and household displays. This they do and both of these fairs have been in successful operation for a number of years and they are growing. Games and athletic contests are provided as amusement features, and the results obtained by this sort of management have been entirely wholesome and valuable. There should be more of them.

With which is combined FARMER'S ADVOCATE, established 1877.
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ALBERT T. REID, President. J. R. MULVANE, Treasurer. S. H. PITCHER, Secretary.
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Special clubbing rates furnished upon application.

ADVERTISING RATES—2½ cents per agate line—14 lines to the inch. No medical nor questionably worded advertising accepted. Forms close Monday noon.

PUBLISHERS' GUARANTEE TO SUBSCRIBERS—KANSAS FARMER aims to publish advertisements of reliable persons and firms only, and we will make good to any paid-up subscriber any loss he may suffer through fraudulent dealing on the part of any of our advertisers, provided complaint is made to us within thirty days after the transaction, and it is shown that the subscriber, in writing to the advertiser, plainly stated: "I read your advertisement in KANSAS FARMER." We do not, however, undertake to settle, or be responsible for the debts of bankrupts, or for petty and trifling disputes between a subscriber and an advertiser, although we extend our good offices to that end.

PICTURES—Good photographs, drawings and plans are especially solicited. Senders' names should always be written on the back of each picture. KANSAS FARMER can not be held responsible for any picture submitted, except under special written agreement.

CONTRIBUTIONS—KANSAS FARMER is always glad to have correspondence on all farm, live stock or household subjects. Your name should be signed to all communications and they should always be addressed to

KANSAS FARMER COMPANY, TOPEKA, KANSAS.

OVER THE FENCE.

The mule is said to always find greener pastures on the other side of the barbed wire, and in this respect he is like many men.

How often it is that men will be induced to sell their farms and household goods and move to some other state where they have been tempted by the glowing advertisements of the real estate man or the scarcely less glowing descriptions of the government irrigation projects, only to wish themselves back on the other side of the wire.

No man with a family should undertake to make a home in these new regions with less than \$2,500 in money and his team and household goods. Even then he will have a hard time, as he will have to build his home, his society, his church and his school.

With the same equipment he can come to Kansas, where all these things already exist, where society has long been established and the comforts of life are many. His money will make the first payment on a good farm and his own ability will do the rest. Land costs about the same wherever bought. In Kansas it may cost \$100 per acre, but this will prove cheaper than land in some localities at one-tenth the amount. It is simply a question of buying a home ready made, with all that the word signifies, or of buying the raw material and building your own home. The cost is the same.

This has been a trying season and, until lately, the prospects were more or less gloomy for the farmers. With the coming of the later rains, however, the mental attitude of most of us has changed and we are now looking over a state where every prospect pleases. There will, perhaps, be no records of bumper crops, but there will be peace, health and plenty, and, besides, it takes a wonderful state to raise a bumper crop, as Kansas has been doing about every year. Everybody remembers 1901, when they should remember 1902. So it is likely that everyone will remember 1911, which scared us some, but didn't hurt so badly, and will fail to give credit for all the good that 1912 may bring to us.

If you do not read the advertisements which appear each week in the Kansas Farmer, you are missing something of much value to yourself and one of the strong features of this paper. Weekly there come to this office inquiries in regard to farm implements or other things that have been advertised in the Kansas Farmer, and which the readers have seen but did not fix in their minds.

Kansas Farmer advertisements are all scrutinized by our advertising experts before they are accepted, and nothing that is not perfectly reliable is ever allowed to appear in our columns, knowingly. In this respect the Kansas Farmer advertising service is superior to most and exceeded by no other paper.

There are 15,735,934 barnyard fowls in Kansas and room for as many more. Farmers are learning that the helpful hen is worth while and a mighty valuable "beastie" to have on the farm.

SAVE THE BIRDS.

As the hunting season approaches the desire to go out and shoot something becomes strong in the minds of the town boy, and he proceeds to gratify it. As game is not always plentiful in Kansas, thanks to our destructive policy in early days, he shoots at anything wild and some things that are not so wild.

Next to a tom cat the boy with a gun is probably the most destructive agent in decimating our wild birds. Nor is this entirely the fault of the boy. It is boy nature to want to kill something. That much of his savage ancestors remains in him yet. It is also his nature to want a gun, and both of these wants are not only natural, but right, if under control. If he shoot indiscriminately at all flying things, it is the fault of the parents.

This, however, is the condition which confronts the farmer, and which compels him either to post his land or to suffer the destruction of the birds which are his best friends.

Excepting the English sparrow, practically all birds in Kansas are of direct value to the farmer, and each one pays a good rent for his keep. They are here as a wise provision of nature to destroy the weed seeds and insects which are so greatly increased by the cultivation of the land. As things now are there seems to be but one way for the farmer to protect himself, and that is to post the land and enforce the laws.

A farmer just in from a central Kansas county states that the farmers in his section have practically abandoned live stock and are engaged in grain farming almost exclusively. He furthermore states that the wheat was only fairly good, the hay poor and the corn will make only about a half crop, and that these things are due in large part to the abandonment of live stock. He pleads guilty with his neighbors and admits that he knows better, but says that the prices for grain and hay have been too tempting during the last few years. He now plans to move eastward into a blue grass country to try to correct a mistake which he knows better than to make. Wonder where he will go?

The big meadows are being cut closer than common this year as a natural result of the effects of the season. This is well and good and what is to be expected, but the unfortunate circumstance lies in the fact that a very large percentage of this hay is being baled and shipped to market instead of being fed on the home farm. The selling of hay or other crops is a robbing of the soil which no returns. It is the selling of the farm itself. If fed to live stock the immediate returns would be just as good or better, and the soil would be enriched.

The census returns show that Kansas has 165,000 more horses than she possessed in 1900, and 90,000 more mules, but say nothing about automobiles.

Bulky feed is of the greatest advantage to poultry, as it serves to promote digestion and health.

BREEDERS' SCHOOL.

Knowledge is necessary to succeeding pure-bred live stock will be admitted, and that the demand for live stock is sure to increase and diminish is also true. Old experience gained by large business are going to be taken by younger men. To succeed these younger men must have expert knowledge and the securing it is important.

First, the Agricultural College course, the most effective means for acquiring such knowledge, but not every man who would breed pure live stock has access to its privileges. Second, farm journals are immensely valuable to him, whether he be a college graduate or not. Experience has a value not to be equalled, and observation results obtained by others is almost needless. All of these are necessary for the highest success, but all of them cannot be obtained at the same time and place of the college halls.

Most satisfactory training available to the breeder, of whatever age or educational advantages, is to be had in a well conducted state fair. The animals collected together in numbers of the best types of the animals he wishes to study. These animals are divided into classes according to age and sex, and an opportunity for observation is afforded a few days, as could not be had in a few weeks of travel. From them he learns what has been accomplished by breeders in their efforts to attain the ideal. Each breeder has in mind a goal toward which he strives, and his own individuality will make his selection, of care and of results, as well as his ideas as to type, more or less, from all other breeders. Results as shown in his animals are the one opportunity which the breeder needs of deciding whether his methods of breeding and care as practiced in these animals are the ones which he would pattern.

The work of the judges serves to give his own opinion, or to show him the mistakes, and through his observations the judges' work he has the best, the most effective and the most satisfactory schooling that he can get.

The state fair is the show window of the state. It is a miniature of the land we live and love and work, and it teaches lessons to the young breeder valuable in his chosen vocation, he can learn many other lessons as well.

The breeder must, almost of necessity, go to a farmer, and the exhibits in the departments of agriculture, horticulture, poultry, home economy and mechanics would fully repay the small expense in time and money and leave the breeder in stock breeding as clear as the college gives verbal instruction. Demonstrations and object lessons cannot give such opportunities as afforded by the state fair, because it is not possible to keep so many shows of so many different breeds as at the fair. Kansas needs more breeders, and they need all the education and training they can get. The state fair will encourage and help the breeder and the young men of Kansas, and will be especially favored this year.

STATE ALFALFA CLUB.

More than four years the Shawnee County Club of Topeka, Kan., has claimed the distinction of being "the only alfalfa club on earth." This claim can be made, as Illinois is now the headquarters of a state alfalfa growers' association which was lately organized at Topeka, with a membership of about 100 members.

Only two counties except two in the state are growing alfalfa, but, of course, the acreage is small as yet. This organization ought to become a power for the development of this wonderful crop.

In Kansas, with a million acres in alfalfa, does not claim to know all about it, and the organization of a state alfalfa club here would doubtless be of benefit.

One of the best of reasons why the alfalfa farmer is because it is a permanent crop. If it were a live stock or a dairy farm, he would not be able to leave, though he would find more work to do than on a grain farm. Work becomes play when it pays.

HEREFORDS MAKE BEST BEEF

I am always glad to say a few good words for the Herefords, because they always indorse anything good said in their behalf.

In the following remarks I intend no disparaging statements to the other beef breeds—they are all good—and I think it would not take a deep student of animal industry to pick out some trait in each breed that would perhaps excel either of the other beef breeds in that one particular. There is one common ground on which we can all meet, and that is for the betterment of our beef animals generally, both on the farm and the range, and can all join hands in the constant fight against the scrub.

In the above mentioned fight the Hereford scores a big point over all other breeds; none will compare with him to grade up a bunch of inferior cattle; none will stamp their get so uniformly and generally; none will cross on all colors and shapes with such good results, and sires from no other breed will get as large a percentage of calves, under range conditions, adverse or otherwise, as the Hereford.

The Hereford is a natural born grazer and rustler, and has the habit of adapting himself to conditions as he finds them; he makes himself at home in the west, the southwest or northwest, where grasses are often short and scattered, water not too plenty and the extremes of climate often, to say the least, not the most comfortable. Nevertheless, he adapts himself naturally to what he finds, turns out, makes the best of it and gets down to business; while the Shorthorn, if conditions are not just ideal, draws uninviting comparisons with the rich blue grass pastures he has left in the middle west, turns down some little ravine all by himself and indulges in a fit of homesickness. The Blacks, while good feeders and excellent carcasses, much sought after by the packers and very hard to rub up against in the single steer classes at the shows, on account of so very many of their best bulls being altered for this purpose, have met with such a limited circulation on the ranges of the west as to be hardly considered in comparison with the Hereford and the Shorthorn in this territory from a commercial standpoint.

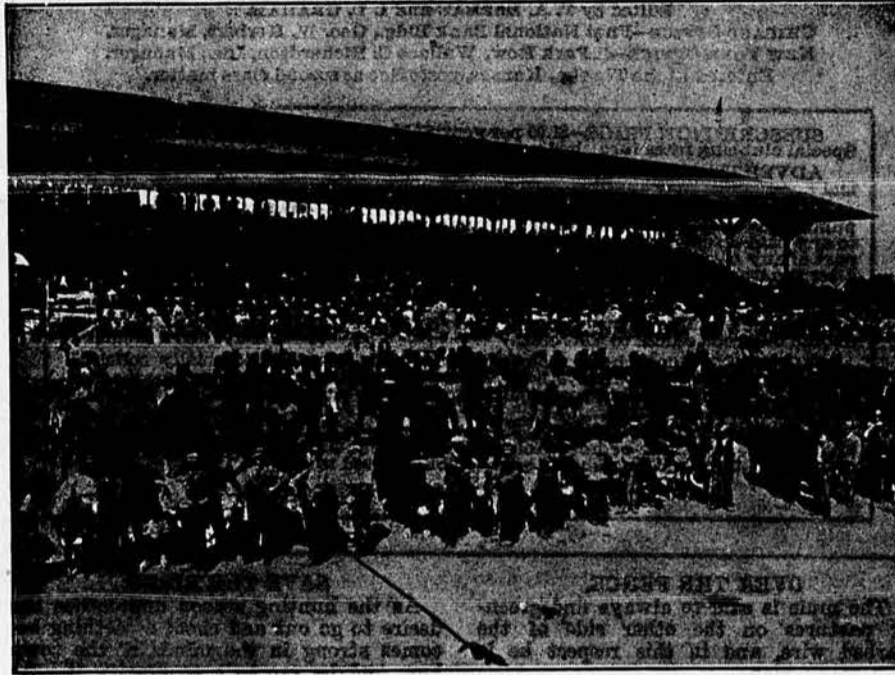
In 1883 when I first went into the cattle business, we went back to Polk and Story counties, Iowa, and bought seven carloads of high-grade Shorthorn cows and heifers. This was the foundation of our herd of cattle, which are now being run by the firm of which I was formerly a member. I might state that this herd has been crossed with Hereford bulls for a number of years. As long as the range was not overcrowded, and more old grass was left every spring on the ground than ever grows now during the whole year, the Shorthorns did first rate; our 3-year-old steers weighed about 1,100 pounds. We sold our steers four years running for Christmas beef right off the grass—without hay or grain—but these halcyon days were short lived; it was too good to last. The grass soon became depleted from overstocking, and in spite of fenced pastures for winter use, putting up hay, buying thoroughbred Shorthorn bulls every three years, our calf crop diminished in numbers, also the size of the calves; the size of the 3-year-old steers dropped to about 1,000 pounds and we had to sell them as feeders instead of beef, and our cows dropped in size to about 900 pounds. The size of the bone became deficient and their constitutions seemed to become impaired. Some people said they were bred too fine—whatever that means. The fact of the matter was they were not adapted to the country after the cream had been taken off it.

Something had to be done; the Hereford came to the range. Of course he could not rejuvenate the depleted grasses, but he could and did give a much better account of himself and his progeny on the overstocked range than did his brother, the Shorthorn. Like hundreds of other cattlemen in the west—and I might add in all grazing section (including the Sandwich Islands and the large grazing areas of the Argentine Republic)—we thought the Shorthorn was the standard, and were loath to try the change, but once made it was never regretted.

The prominence and recognition the Hereford enjoys today is not due to boosting nor to the bolstering up by a rich breed association, but has been won inch by inch strictly on his merits as a grazer, breeder, feeder, butcher carcass

Natural Grazers and Rustlers, They Respond To Feed And Care

By JOHN E. PAINTER



GRAND PARADE OF LIVE STOCK AT KANSAS STATE FAIR, TOPEKA.

and money-maker generally. Further, I think I could state without fear of contradiction that the Hereford breed of cattle are the nearest to being immune from disease, especially tuberculosis, of any recognized breed of cattle on the American continent today.

An argument that has been used in favor of the Shorthorn over the Hereford on the farm is that the former is a dual purpose cow, and the Hereford does not give enough milk. In considering this argument I would state this is not a dual purpose age, in order to succeed at all—most anything or in any line of business—nowadays we have got to specialize.

The dual purpose cow that gives about three gallons of milk a day, and produces a long-legged, slab-sided steer that takes three years to mature to make just passable beef, is not the animal suitable to run on the high-priced farm of the twentieth century. If a person wants to dairy, he should get the kind of cattle that convert the feed they eat into the highest possible percentage of milk and butterfat, instead of flesh, in order to be run profitably. On the other hand, if he wants to produce beef, he wants

something that will mature early, put on the best quality of flesh with the least feed and in the shortest possible time. A middle course is a compromise, and, like all compromises, is unsatisfactory from both standpoints.

The Hereford as a beef animal is ready to put in the feed lot at any age, and will have been fitted and gone to the butcher before the calf from the dual purpose cow has grown sufficiently to put in the feed lot.

The Hereford gives enough milk and of rich enough quality to raise its offspring in fine shape; and this is all that can be claimed for the Scotch Shorthorns, which are the beef models of that breed today. As a matter of fact, at the Nebraska State Fair at Lincoln in 1910, one of the leading Scotch Shorthorn herds exhibiting there had four Hereford nurse cows to suckle their show calves on.

Another argument that has been used against the Hereford was that he was peaky behind. His forequarter meat, that was of a cheaper grade, outweighed his hind quarters, where the more expensive cuts are located. I think the American Hereford breeders of the last

25 years are entitled to more of the betterment of their breed generally accorded them. I think we have made more advance in our defects and producing better animals, with thicker meating, improving the types of ham and tremity and horn at the other end, forming the animal generally, than the other breeds put together. It is longer necessary to go back to where the breed originated, to improve what we already have in this country. According to the authorities on both sides of the improved American Hereford superiors and few peers in the world.

The writer was looking over the exhibit at the Denver show with a horn enthusiast and comparing the breeds; I drew the Shorthorn attention to some very heavy kind of some Herefords present and asked if they could be called peaky. His answer was, "Oh, you Herefords have stolen the Shorthorn's hindquarters." I do not know from whether he thought the Shorthorn deficient in this particular nowadays. The present day demand is for a balanced, thick, short-legged with good spring of rib and thick, early maturing qualities, also bone to balance these attributes. Of no animal that will compare with Hereford in these respects.

Auto Road to 'Frisco.

An agreement has been perfected between the new Santa Fe Trail and the Trans-continental Road, with headquarters in Colorado, by which a direct highway automobile tourist traffic will soon be established from Kansas through Salt Lake City, and connecting with a highway to San Francisco.

The recent establishment of the new highway across the state of Missouri, gives an eastern extension to the new Santa Fe trail, which will be the Arkansas valley route across the main automobile tourist route from St. Louis and Kansas City to the Pacific coast.

The route is free to all motorists being no attempt to charge toll advantage of the tourists. It is interesting in that it will promote passage of motor tourists across the continent via this route instead of the northern route through Omaha and Texas or the southern route through Texas.

Ocean to Ocean by Auto.

Every automobile owner has a for touring—a deep seated car that he must take a long trip. A long trip has its hardships, but the pleasures are many and often cannot be realized. The automobile of today is a dependable for long trips. This has been demonstrated by the "ocean to ocean" recently completed by 12 cars of 40 men, women and children in stages from Atlantic City to Los Angeles without a mishap. This is a record that will go down in auto history. The tour began June 1 and ended August 3. Harry Davis represented the United States in the writes Kansas Farmer as follows the trip:

"Outside of a few delayed bad stretches of road through Utah and several nights in barns, the backs of cars and open, there wasn't an incident with the entire trip that could be unpleasant. There were times, when traveling became rather but one night's rest was always sufficient to blot out the monotony of the previous day.

"The hardest going we had crossing the desert between Reno, a distance of about 600 miles. The roads we encountered on the stretch were very bad, although did not find as much heavy sand as would expect. The chief trouble with these desert highways is their roughness, and because of this roughness is practically impossible to make anything like good time. But, by it easy and not pushing the cars or harder than the roads warranted got through safely and with very little mechanical or tire trouble."

ALFALFA SEEDING

By Eugene D. Funk.

Get the best seed obtainable. Beware of the cheaper grades, usually these are low grades of imported seeds and are polluted with weed seeds and adulterated.

Care should be given to the preparing of the seed bed; the soil being thoroughly pulverized. The seed should not be sown more than one to one and one-half inches deep. A press wheat drill is the most practical machine for putting in alfalfa. Mix dry sawdust or bran with seed to keep drill from sowing too much seed. A perfect stand is best secured by drilling one-half amount of seed and then cross drill. The seed may also be sown broadcast and harrowed in the same as timothy.

Alfalfa can be sown either in the fall or spring. By fall sowing we usually gain one year's crop. August and September are the best months with ordinary season, and we recommend any time after the ground can be properly prepared following wheat or oat harvest.

Sow 20 pounds best, new, re-cleaned seed per acre.

Sow only a few acres at first, then more as you learn how.

Why not utilize some of the almost waste spots in getting a start of this greatest forage crop and nitrogenous feed? However, alfalfa will not do well on low, marshy or undrained soil.

A light top dressing of manure will greatly assist in stimulating the young alfalfa plants.

It has also been found that the application of finely ground limestone will sweeten the soil and double the yield.

The roots of the alfalfa plant require the little nodules bacteria, similar to (but not the same as) those so often observed on the root of our common red clover. Without these little parasites, the plant is unable to secure the required amount of nitrogen from the air. Some fields require the introduction of this bacteria and dirt dug from an old alfalfa field or often dirt taken from the roadside where sweet clover flourishes, 100 pounds to the acre, will inoculate the soil. Sow the dirt broadcast by hand or with a manure spreader set with slow gear.

EIGHTY ACRES AND A HOME

Plan for 80 Acre Farm Yielding Nearly 25 Per Cent on Investment Annually

The following plan, entered in Kansas Farmer 80-acre farm contest, was submitted by George B. Holmes, Manhattan, Kan., and was awarded first prize in competition with more than 200 other plans submitted. Mr. Holmes' Plan follows:

\$15 Prize Winning Plan.

In selecting an 80 acres such as you suggest, I would be very careful in getting it well located—on a good road, near a school, church and in a friendly neighborhood. These are very essential if the farm is to be a home also. The farm should have good drainage and a never-failing water supply. With these conditions and enough money an ideal and profitable farm can be equipped.

The farm home may be comfortable and modernly equipped, yet not too large or expensive. A good farm house can be built for \$2,500, which will accommodate the average family of five persons.

The home site will take about five acres. Here can be placed besides the house, the barn, cribs, chicken house, hog house, etc. This plot should be situated at the center of one side of the farm, and through it should pass the lane running through the farm. On one side of this lane will be the house and on the other side the stock buildings. This, then, keeps the house and barns separated, yet close enough to be handy for the farmer.

The barn should be large enough to hold all the hay cut on the place and under it should be a good basement for the cattle and horses. A barn 30x60 feet should be sufficient. Near the barn there should be a hog house 24x60 feet. A poultry house 15x30 feet should care for all the poultry kept.

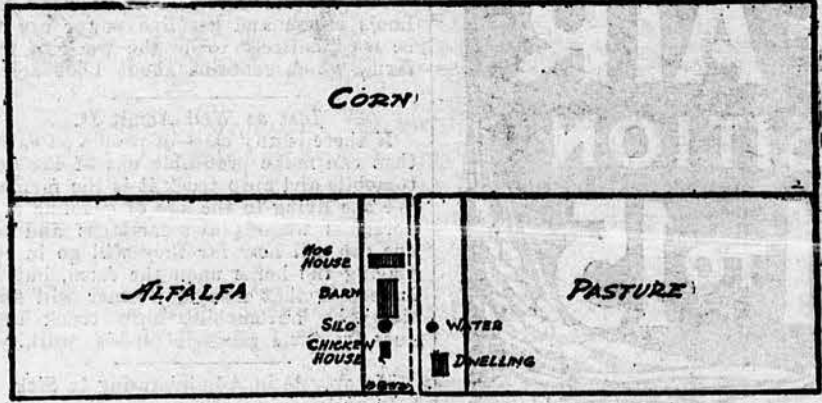
In arranging for the crops I would divide the farm into four equal divisions of about 20 acres each. As dairy stock and hogs would be my specialty, I would sow one of the fields to alfalfa, one to a meadow pasture and the other two I would plant to corn. These crops can be conveniently rotated and can be cared for by the farmer himself with a little help in the busy seasons. I would sow rye in the corn the last time through it and thus provide for a winter pasture for the stock. If a silo was used the corn could be cut for ensilage. The entire place should be fenced hog tight and cross fenced. This would greatly aid in utilizing the feed in the various fields.

In the way of stock I would keep two teams, one heavy farm team and one lighter road team. In busy seasons both teams could be used for farm work. As these would be mares they would produce colts every year. About 10 head of pure-bred Jersey or Holstein cows and a bull would be used as dairy stock. Such stock can be obtained at \$125 to \$150 apiece. From 100 to 150 hogs could be run on the alfalfa.

As the silo is of great economy on the farm where dairy stock is kept, it must have its place on this 80 acres. Its capacity and size will depend upon the number of cattle fed. If the number be 15 head, then a silo with a capacity of 50 to 60 tons will be sufficient. The smaller the silo, the better will be the condition of the ensilage, as about two inches must be fed off the top every day if the ensilage there does not spoil. This silo will be 11 feet in diameter and 29 feet high, and will require the corn from four acres to fill it.

A silo of this size will allow for a 40-pound feeding of ensilage a day for every cow for a period of 180 days. The material used in the construction of this silo will be concrete. If sand and gravel can be obtained, the concrete or cement silo is better for several reasons in that it is rot proof, vermin proof, fireproof, wind proof; it is air tight and requires few repairs. The initial cost may be more, but cement silos are being erected in preference to the wooden. A silo such as will be required on this 80 acres will cost approximately \$275. The wall will be solid and reinforced with wire mesh.

EQUIPMENT AND TOTAL OUTLAY	
80-acre farm at \$60 an acre.....	\$4,800.00
House	2,500.00
Barn	1,500.00
Hog house	250.00
Chicken house	250.00
2 1/2 miles 4-foot hog fencing.....	500.00
Windmill and tank.....	70.00
50 shade trees	10.00
50 fruit trees	50.00
Bushes, etc.	15.00
4 head horses	500.00
Well	100.00
10 head cows	1,250.00
1 bull	250.00
25 head brood sows.....	375.00
1 boar	25.00
Farm machinery	1,000.00
Gasoline engine	150.00



PLAN FOR 80 ACRE FARM BY GEORGE B. HOLMES

Cream separator	90.00
Lighting system for house.....	100.00
Total	\$13,785.00

This farm, as can be seen, will be well equipped. The home will be modern, bath, heat and light. The best of stock will be kept. The cream will be separated, the power coming from the gasoline engine. The cream will be sold and the milk used for the pigs.

After the farm is in operation, it will yield a net profit. There will be sold every year four head of colts, 10 head of young dairy stock, 125 head of hogs and 100 chickens.

FARM SALES FOR ONE YEAR.	
4 head of 4-year-old colts.....	\$500.00
10 head of young dairy stock.....	1,000.00
125 head hogs	1,875.00
100 chickens	50.00
Total	\$3,425.00

Thus, after this farm is in operation, the income would be \$3,425, not including the amount from the sale of butterfat throughout the year. The cows should produce an average of 280 pounds of butterfat, or a total of 2,800 pounds for the 10 head for the year. At 25 cents a pound this would give \$700 from the sale of butterfat alone. This amount added to the \$3,425 will make the total \$4,125. Is not this profitable? Of course a farm of this kind means work, but no other farm work yields the same profits.

Editor's Comment on 80-Acre Farm Contest.

In the column next is announced the decision of the judges in Kansas Farmer 80-acre farm contest. The drafts for the cash prizes have been sent the first and second prize winners and a receipt for paid-up subscriptions has been sent to

each of the others winning third, fourth and fifth prizes.

The judges selected to award the prizes in this contest were E. H. Webster, dean of agriculture in the Kansas State Agricultural College; G. L. McKay, formerly professor of dairying, Iowa Agricultural College; Obrecht, formerly professor of animal husbandry, University of Illinois and now a successful Shawnee county farmer; O. E. Walker, a highly successful general farmer, also of Shawnee county. The above gentlemen were selected by Kansas Farmer to pass on these plans submitted because it appeared that in this combination theoretical and practical ideas would be successfully merged. The first two judges named, while not now farmers, are men of exceptional training and experience in their lines, with wide observation confined not alone to farming, in the United States, and more, each grew to manhood as a tiller of the soil. Mr. Obrecht's work and education have been along live stock lines, and he is now working out his ideas on his own farm. Mr. Walker is the owner of a beautiful farm near Topeka, which farm he personally superintends, and makes money from land which would sell any day offered at \$200 per acre. It would seem that the gentlemen above were able to render as good judgment as could be given the large number of contestants, each contestant presenting a plan in which the main idea was viewed from a different angle. More than 200 plans were submitted in this competition. This gives a good idea of the interest of the day in the small farm, and when it is recalled that the competition was inaugurated during the busiest season of the year—June and July—the plans themselves are evidence that the management of the small farm is

being closely studied by Kansas people. Many contestants write that their plans submitted are in fact plans of their home farms, and the operations described exist in fact, and not in the imagination.

In almost every plan submitted is developed a point worthy of note. A composite made up of the best idea in each plan would come near describing the ideal 80-acre farm. It is the editor's intention later to attempt this composite and see how a grouping of the best ideas will work out and publish the results. A number of the best plans will be printed in Kansas Farmer. The plan of George B. Holmes, winner of first prize, is printed herewith. We will endeavor next week to tell something of Mr. Holmes and present his picture. The second prize plan, that of T. B. Johnson, Aurora, Neb., will be published next week. Others will follow as space permits.

The awarding of the prizes and the printing of the prize plans is really only the beginning of this interesting contest. Kansas Farmer will next week announce a list of prizes and conditions governing a competition whereby the prize plans of Mr. Holmes and Mr. Johnson will be criticised and suggestions made for improvement. This contest should be interesting, and the results instructive. Hundreds of people will find fault with the plans as printed, and Kansas Farmer desires to hear from each. It's easy, you know, to find fault, and no one should find fault without being able to suggest a correction of the fault.

From this competition and its continuance, the man located on a small farm should learn something worth many dollars—possibly turn losing operations into profitable conduct. The small farm will be the farm of the future. Farms are becoming smaller every day, first because population is increasing and tillable land is not, and, second, because farmers are finding out that it pays best to farm fewer acres more thoroughly than many acres in a slipshod way.

The judges mentioned above, with Albert T. Reid, president of Kansas Farmer, and the editor, before separating, spent several hours discussing the plan for a model 80-acre farm, with the idea of publishing the plan later. The possibility of six men agreeing on a model farm plan is quite out of the question. The editor proposes, in this matter, to have his ideas recognized—and he will. If time will permit a model plan will be worked out in miniature in paper mache and staff and exhibited at the Kansas State Fair, Topeka, September 11 to 15. This work will be done under Mr. Reid's direction, and every field, fence, building and tree shown, and this work itself should be one of the happy results of the Kansas Farmer 80-acre farm contest.

Treatment for Wheat Smut.

A Beloit reader asks that we publish method of treating seed wheat for smut.

There are two kinds of smut in wheat. Stinking smut is the only kind which has yielded to treatment of the seed, and presume it is to this that our reader refers. This smut attacks the kernels only and makes the grain black, reducing the value of the wheat for flour making.

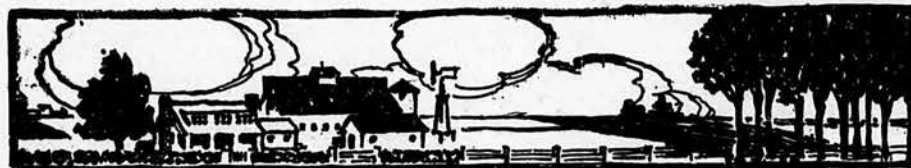
The Kansas Experiment Station recommends the following treatment for the seed: "Add one pound (pint) of formaldehyde to 50 gallons of water, or at the rate of one ounce of formaldehyde to three gallons of water. One gallon of the mixture will treat a bushel of grain. One pound of formaldehyde, therefore, will treat from 45 to 50 bushels of wheat. Formaldehyde costs 50 to 75 cents per pound at retail.

"Spread the wheat in a thin layer on a smooth, clean floor or tarpaulin. Sprinkle the grain with the formaldehyde mixture until it is thoroughly and evenly wet through. Then shovel the grain over to be sure to have all the seed wet, and cover the pile of seed with canvas, blankets, bagging or the like. The seed should stand from 6 to 12 hours and then should be shoveled out in a thin layer to dry, stirring frequently. It can then be stored. Bins, etc., should be disinfected with formaldehyde and also the drill. All seed to be treated should be fanned previously to being treated."



WINNERS IN KANSAS FARMER 80-ACRE FARM CONTEST.

1. George B. Holmes, Manhattan, Kan.; prize, \$15.
2. T. B. Johnson, Aurora, Neb.; prize, \$10.
3. Will Crenshaw, Harper, Kan., and J. P. Dam, Corning, Kan., each five years' subscription to Kansas Farmer.
4. A. Beck, Whitewater, Kan.; P. C. Trapp, Herington, Kan.; Barney O'Flannigan, Ellsworth, Kan.; Amanda Christiansen, Corning, Kan.; Dora Clark, Linn., Kan.; each three years' subscription to Kansas Farmer.
5. Mrs. Alice E. Wells, Princeton, Kan.; F. C. Jones, Washington, Kan.; Pearl Brooks, Fall River, Kan.; G. C. Elliott, Sedgwick, Kan.; Mrs. Miriam McCarty, Hutchinson, Kan.; C. F. Schaaf, Deerfield, Kan.; G. W. Woodruff, Welda, Kan.; Eliza Bedker, Utica, Kan.; E. A. Drumm, Cedarville, Kan.; Bruce Saunders, Holton, Kan.; Mrs. O. M. Edwards, Coffeyville, Kan.; A. Johns, Topeka, Kan.; Mrs. Ellen Richardson, Columbus, Kan.; Everett L. Platt, Montrose, Kan.; W. L. Wright, Dunlap, Kan.; each one year's subscription to Kansas Farmer.



KANSAS STATE FAIR AND EXPOSITION SEPT. 11^{TO} 15

ALWAYS
A RECORD BREAKER
BIGGER & BETTER THAN EVER IN 1911

STATE FAIR GROUNDS
TOPEKA KANSAS

DON'T FAIL
TO MAKE THE PILGRIMAGE

YOU CAN LEARN AS MUCH IN A WEEK AT THE
FAIR AS IN SIX MONTHS AT SCHOOL AND IN
ADDITION YOU WILL BE ROYALLY ENTERTAINED
SOME of the MANY SPECIAL ATTRACTIONS

Enormous Agricultural, Live Stock and
Industrial Exhibits

Five full days of harness and running races.
Pain's fireworks panorama, "The Fall of Pompeii."
Uncle Sam's naval display and battleship models.
Kansas Agricultural College display and trophies.
Grand Opera, fully costumed and staged [evenings].
Liberati's famous band—60 stars.
Patterson's colossal carnival combination.
Scores of clean, free shows each day.
Clark's Trained Dog and Pony Circus.
Kansas fish warden's demonstration car.
Henry Hammond Ahl's Marvelous Picture, "The Shadow
of the Cross."

*Kansas Semi-Centennial
Festival*

Will be Held During Fair Week with Historical Pageants
Tuesday Evening

SEPT. 11^{TO} 15 1911
STATE FAIR GROUNDS
TOPEKA

L. M. PENWELL

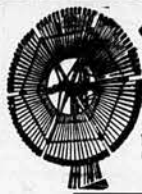
Funeral Director and
Licensed Embalmer

511 QUINCY ST., TOPEKA, KAN.

S. C. Buff Orpingtons

I won first on pen at Topeka 1911 show
against 12 competing pens; also won at the
other leading shows of the country. I have
the large, heavy-boned kind. Send for my
1911 mating list; am ready to sell you eggs
for hatching.

EVERETT HAYES, R. 4, Hiawatha, Kansas.



WIND and WATER FREE
with the use of that connecting
link.
The Success
Windmill
A SUCCESS FOR FORTY
YEARS. Runs easily,
lightly. A postcard brings prices and
a book from manufacturer to farmer
Hastings Foundry & Iron Works
Box 17
Hastings, Neb.

FOR SALE.

A1 feed mill, doing a good cash business
of \$150 to \$200 net each month; only one
in west part of the county; splendid trade;
coal bins on railroad right of way; owner
selling on account of losing his wife and
failing health; this will bear investigation;
in good, live town. For further particulars
call on or address

THOS. DARCEY.

Real Estate Agent. Offerle, Kan.

FARM POWER

DEVOTED TO GASOLINE ENGINES, TRACTORS
TRUCKS, AUTOMOBILES, AND MOTORCYCLES

Horseless Illinois Farm.

Out on the Mitchell farm near St. Louis steam and gasoline power are to be used entirely to do the work of the farm, which contains about 1,000 acres.

Just as Well Admit It.

If there is any class of people on earth that can make profitable use of the automobile and auto truck it is the farmer. We are living in the age of gasoline and horseless wagons and carriages and no one can tell how far they will go in replacing the horse upon the farm, but it is certain that many a farmer will find that the automobile, auto truck and auto tractor a great aid in his work.

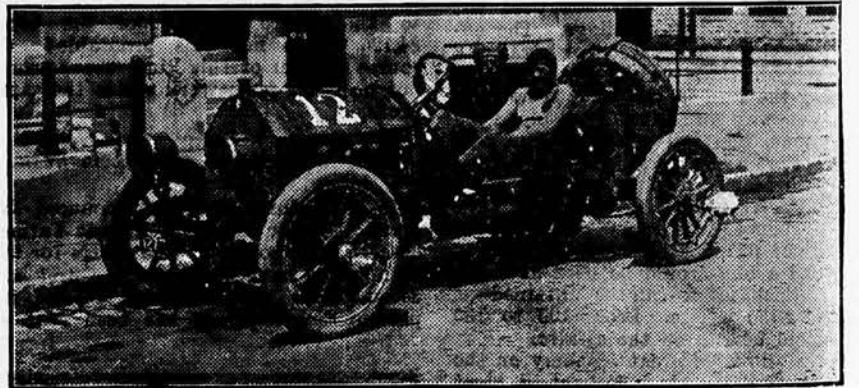
Motorcycle in Administering to Sick.

In mentioning the use of the motorcycle in a recent issue of Kansas Farmer we omitted to report its use by the country physician and the omission has brought a letter as follows:

"Last fall a doctor in a small town told us that since he began using his motorcycle in making country calls he had enjoyed a decided increase in his practice. Not alone had he increased his practice, but he had been able to give every one of his patients better and more prompt attention. He laid this largely to the fact that the people in his community realized that he could reach them with a motorcycle in one-fourth the time it took with horses. Naturally this appealed to the patients and pleased the physician."

Distinguished Caller.

Automobile enthusiasts of Topeka were last week honored by a call from Jack McLain, who is visiting Kansas towns, showing his Viele stock car, which won the Elm Ridge race at Kansas City, Mo., July 4, 1911. Jack's car turned over three times, while being driven recently by him at a rate of 70 miles per hour. The car landed upside down, but damaged to such an extent that road side repairs



only were needed and the machine drove to the garage by its own power.

Contractor Uses Motorcycles.

Not long ago a prominent building contractor of Topeka, in speaking of his motorcycle to Kansas Farmer said: "It would simply be impossible for me to get along without it. I can accomplish more work by far with my Harley-Davidson than with any other means of getting around. I have used both horses and automobile, in fact still have them, but they are simply not in it with a motorcycle. I have more contracts right now than I ever had before and I am handling them better, i. e., I am able to personally supervise the work on all of them. The motorcycle brings me nearer to being in two or more places at once than any other means of transportation."

Automobile and the Farmer.

A Shawnee county farmer who lives nine miles in the country drove up to Kansas Farmer office the other day with a pure-bred Holstein bull calf in a crate on the rear of his machine. The calf was to be shipped to a western dairyman. The farmer said: "I live nine miles out. Drove here in 30 minutes. Can come in less time. I find the automobile a profitable investment in my business. If a machine breaks down or material for running the farm is needed quickly, I find the automobile a most convenient way of obtaining it. Not only does it serve me in a business way, but I find it possible to attend evening entertainments in town with my family, which I could not when I had to depend upon horses."

What Can a 45-Horse Tractor Do?

A 45-horse power gasoline tractor was recently advertised in Kansas Farmer. A subscriber asked this paper how many plows this engine would pull. The inquiry was sent to the manufacturer and the reply, which is as follows, contains so much general information regarding tractors that it is printed in full:

This question seems simple, and yet it cannot be definitely answered because local conditions vary so widely. The number of plows that can be pulled by any traction engine depends on the footing for the engine, the kind of power used, the kind of soil and its condition, depth of plowing, and correct setting of the plows.

A traction engine uses a considerable percentage of the power developed in merely moving itself over the ground. If the ground is soft so the cleats sink in deeply it may use one-third its power for this purpose. Besides this there are friction losses in the gearing and bearings. So that under average conditions, about half the power developed at the crank shaft is available at the draw bar. Our 45 horse power tractor, for example, is capable of continually developing 45 horse power, and on firm level footing the available tractive effort of the engine is easily that of 22 horses. If the footing is quite soft, the available tractive power may be cut down to as low as 20 horse power. It is well known that on considerable grades a horse can for a few minutes exert two or three times its continuous pulling power, but a traction engine has no such large reserve power. So that on quite hilly ground they are not likely to be very successful.

There are two kinds of engine gang plows in common use, the mold-board and the disc. Each has some advantage not possessed by the other. In tough sod the mold-board plow is the only one that can be used for breaking. In sticky or "gumbo" soil the disc plow is the best for stubble plowing. In dry, hard soils, such as are found in most semi-arid regions,

the disc plow is equally suitable for breaking or stubble plowing. It is generally admitted that in any soil suitable for a disc plow, a wider furrow can be cut with the same effort when applied to disc plows than to mold-board plows. In such soils, therefore, an engine with disc plows can turn more acres per day than if using mold-board plows. And if each disc cuts a furrow only 8 or 9 inches wide, and 5 or 6 inches deep, the ground where there is more or less of hidden stones, the disc plow is the safest one to put behind an engine.

The condition of the soil and the depth of plowing also materially affects the draft of plows. It may take one-third more power to pull a plow through heavy soil that is almost dry, than if it were thoroughly moist. And on heavy soils the draft increases out of all proportion to the depth of plowing. And the proper setting of the plows also has no small effect on their draft.

From the preceding discussion it will be perceived why we can not definitely answer the question, "How many plows can your engine pull?" We can say this, however: We have never found any sod so tough that our 45-horse-power tractor could not pull four 14-inch breaker bottoms through it. On the other hand it has in some cases successfully pulled eight 14-inch breaker bottoms. Under average conditions six 14-inch mold-board plows make a suitable load for breaking, and 8 for stubble plowing. Where disc plows are used, it has successfully operated from 10 to 14 discs, cutting a furrow 8 to 10 feet in width, makes a suitable load.

Over 600 Iowa People Have Bought 10-Acre Tracts Or More Of The Fruit Land

IN THE

Iowa Colony Of The Houston-Galveston District

THIS land will produce as much, if not more, of the same kind of fruit, than the high-priced lands of California are producing, and at a less expense, and will sell for as much as the high-priced California lands in a very short time. DON'T delay in getting a tract of this land while it is in your reach. Land in this colony is selling now for \$70.00 an acre that is equal to the fruit lands of California that are bringing from \$1,000 to \$3,000 per acre.

These lands also produce big crops of all grains and vegetables. Right among the country's best markets, with abundant Railroad service. Fine climate and good water. Rainfall never failing. Soil rich and easy working. The place where living is easy and accumulation certain.

The Iowa Colony was organized and settlement begun two years ago by Iowa farmers on a tract of land twenty miles from Houston in the orange and fig belt of Texas. Over 600 Iowa people have bought. About 300 have moved into the Colony, built themselves nice homes and are improving their land, setting it out to oranges, figs and pecans, and in the meantime are raising all kinds of grains and vegetables, the last named producing in this belt from \$150 to \$500 per acre. Four to eight year orchards produced from \$600 to \$1,000 per acre last year.

If you want a home with all the conveniences of a city home and one that will make you several thousand dollars each year, in addition to your living, and where the climate can't be beat; or if you have a few dollars you would like to more than double in a very short time; or if you want one of the finest trips you could possibly take on a small amount of money, join us in one of these excursions and investigate for yourself. You will not be asked to buy. YOU WILL ASK US TO SELL YOU. You are OVERLOOKING SOMETHING if you overlook one of these trips.



STUDY THIS MAP.

Note the position of the Iowa Colony located on a beautiful prairie, covered with blue stem grass. Only eighteen miles south of Houston, the Manchester of America, where seventeen railroads meet the sea, and where they manufacture everything from a locomotive to a lead pencil. Houston, with 105,000 citizens, has doubled her population in the past five years, and expects to double this again within the next five years. Note the creeks heading in the Iowa Colony, and their course to the bays, indicating the elevation for drainage purposes. Note the railroads running through and to the east and west of the Iowa Colony.

The Iowa Colony is a LIVE community, where progressive minded northern folks are living in peace and plenty. Don't wait until prices are higher. Buy now and get the benefit of the rise in values for yourself.

Our best recommendations are the people who have bought the land and are living on it and making money. We want you to accompany us on one of our excursions. See this land and talk with the people who are living there and find out for yourself what a great opportunity it offers you for a small investment in land in this colony. Ten acre tracts can be bought for \$70.00 per acre, \$3.00 per acre down and balance on time to suit purchaser. This land will positively not sell for this price for a longer period than thirty or sixty days, therefore, buy your land now and make the advance that is coming yourself. If you cannot visit the Colony now, you are safe in buying the land and investigating it later, as ALL LAND IS SOLD ON A POSITIVE GUARANTEE TO BE AS REPRESENTED OR MONEY REFUNDED.

We can also furnish larger tracts of farm land at a price equal to any one in the business.

Join Our Next Excursion

Join Our Next Excursion

SEPTEMBER 5th and 19th NEXT

We will run personally conducted excursions in private cars at reduced rates from Topeka and other Kansas Points to the Iowa Colony, taking in Houston, Galveston, San Antonio and other points of interest in Texas.

Hereafter excursions will be run the first and third Tuesdays of each month until unsold lands are disposed of.

Make your arrangements to go with us September 5th, if you can; if not, come on September 19th. Write or wire us for reservations and all further information. Use the coupon at the right, or write us a similar letter, or send a day or night letter by telegraph at our expense.

HAZARD & CHESLEY LAND CO.,

C. L. SHARPE, Manager.

116 E. 7th Street

Topeka, Kansas

SIGN AND MAIL THIS COUPON AT ONCE

Hazard & Chesley Land Co.,

Topeka, Kansas.

I will be glad to receive further information concerning the possibilities offered by your company for an investment in land in the Iowa Colony of the Gulf Coast of Texas.

(Signed)

P. O.

R. F. D. State

The First Step In Scientific Farming Is An IHC Manure Spreader



YOU will never get the most out of your soil, until it is properly fertilized. And it will never be properly fertilized until you use a good manure spreader, because the use of a spreader will enable you to overcome the practice of spreading on one acre what should be used on two. Why delay the profits that are rightfully yours? Why not look into this manure spreader proposition at once? Learn the many reasons why thousands of other progressive farmers are having such great success with IHC Manure Spreaders. When you examine one of these spreaders, note the extreme simplicity and great strength of the working parts; note that the beater driving gear is held in a single casting, thus there is no binding nor cutting of parts caused by the gearing springing out of alignment. Notice the roller bearing support for the apron which reduces the draft of the machine; operate the convenient levers; notice how quickly and easily the feed changing device can be shifted, and the wide range of adjustment.

Corn King Cloverleaf Kemp 20th Century

Each of these famous IHC Spreaders is simple, strong, and durable in every part. Each is instantly adjustable to spread light or heavy as your judgment tells you is best for the soil. Whether you have a large or small farm, or whether you want a spreader for orchard use—there is an IHC that will suit your requirements.

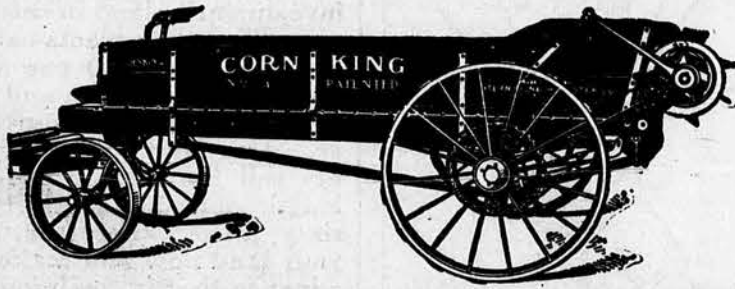
Why not see the IHC local dealer at once? Let him tell you why IHC Spreaders are so remarkably successful. Get catalogues from him, or, if you prefer, write direct for any information you desire.

INTERNATIONAL HARVESTER COMPANY OF AMERICA
(Incorporated)

Chicago USA

IHC Service Bureau

The Bureau is a clearing house of agricultural data. It aims to learn the best ways of doing things on the farm, and then distribute the information. Your individual experience may help others. Send your problems to the IHC Service Bureau.



85¢ Per Gallon in 5 Gal. Cans Freight Prepaid

Endurance Red Barn Paint

Save money on your painting, and get better paint. Our Endurance Red Barn Paint No. 52, at 85c. a gallon, freight prepaid in 5-gallon cans, gives you utmost paint value. Absolutely guaranteed for spreading and lasting qualities—is a strong, live, bright, rich red. You can't buy a better paint even at \$2 a gallon. Our price saves you all dealers' profits, traveling men's salaries and expenses, etc. You save all that for your pocket. It will do you more good there than it would in the pockets of others. Make no mistake. We guarantee every gallon. We are a responsible firm, are

NOT IN THE PAINT TRUST

We sell direct to the consumer only

We make our own paint and we make our own prices. Our customers know the meaning of that. Mr. B. W. Ramsey, Bedford, Kansas, recently wrote us:—"In May, 1910 I painted my large barn with your Red Barn Paint. A heavy rain storm followed the night we finished painting, but the paint showed no injury. Then it passed through the extreme hot weather of last summer, and again through heavy, blowing rains and storms of the summer and fall, and then passed through the cold weather of this last winter. It has not been affected in the least by the elements, and remains bright, and compact." We can furnish testimonials by the hundreds like this from nine western states. 1 gallon will cover close to 300 square feet, two coats. This is paint season. Don't delay. Send order now to—

Sunflower Paint & Varnish Co., Ft. Scott, Kan.

From Factory to Barn

ANYBODY CAN LAY IT.

Rubber Roofing

Warranted For Twenty-Five Years. FREIGHT PAID To Any Station East of Rocky Mountain, except Texas, Okla., Colo., N. D., S. D., Wyo., Mont., N. M., La., Ga., Ala., Miss. and Fla., on all orders of three rolls or more. Special Prices to these States on request.

ONE-PLY Weighs 35 lbs., 108 Square Feet, \$1.10 per roll.
TWO-PLY Weighs 45 lbs., 108 Square Feet, \$1.30 per roll.
THREE-PLY Weighs 55 lbs., 108 Square Feet, \$1.50 per roll.

TERMS CASH: We save you the wholesalers' and retailers' profit. These special prices only hold good for immediate shipment.

Indestructible by Heat, Cold, Sun or Rain.

Write for **FREE SAMPLES** or order direct from this advertisement. Satisfaction guaranteed or money refunded. We refer you to Southern Illinois National Bank.

CENTURY MANUFACTURING COMPANY, Dept. 666, East St. Louis, Ills.

THE FARM



"How to Grow Wheat in Kansas" is a bulletin from the Kansas Experiment Station which should be in the hands of every wheat grower. It is an exhaustive treatise on every phase of wheat growing, devoting the first few pages to the results obtained from different methods of preparing the ground, as well as results from time of preparation and time of seeding. Other pages have to do with the preparation of the seed bed, the "summer fallow," the kind of seed, testing seed wheat for smut, insect enemies, etc. If you have not already received a copy of this bulletin, send at once for it and be not content with reading it, but make use of it as a text book for study.

Wheat growing experiments from which the conclusions set forth in the bulletin are drawn have been carried on for a number of years. These conclusions have within the last month been printed in Kansas Farmer. Demonstrated beyond reasonable doubt, the difference between the best methods of cultivation and seeding at proper time, the yield is enormously increased over the common slipshod methods. The actual increased yield in the experiment was 34 bushels per acre, due wholly to differences in methods of preparing the land before seeding. This difference should cause the wheat grower to take close observation of methods and bend his energy to a close application of the fundamentals which enter into a tremendously increased yield and profit. The key is here given to the real situation—that of losing money or making money in wheat culture.

Of 11 methods compared land plowed early and deep—July 15, and seven inches deep—gave a yield of 38 1-3 bushels per acre. This was the highest yield of the experiment. After paying for the cost of preparation there was left \$25.74 per acre; the largest net return of any method under trial. In this case the cost of preparation was \$4.95 per acre and the value of the crop was \$30.69 at 80 cents per bushel.

Contrast the above with the method giving the lowest yield and lowest return, and, by the way, which method is one very commonly used in the west third of the state. That is the method of disking the land only, possibly plowing every third year. The plan is popular, apparently, because it will permit the farming of a maximum of acres at a minimum of labor expense. In the experiment land disked but not plowed cost \$1.95 per acre for preparation; produced 4 1/4 bushels, the value of which at 80 cents per bushel was \$3.42; the value of the crop less cost of preparation being \$1.47.

The two methods—the best and the poorest—will bear closer analysis. By the poor method it will require slightly more than 8.8 acres to yield as much wheat as the one acre by the best method. The cost of preparing 8.8 acres by the poorest method is \$17 and the value of the crop, less cost of preparation, \$13, or a profit of \$1.40 per acre—the net gain set forth above in giving the results of the poor method. Set against this are the results of the best method—one acre costing \$4.95 to prepare, yielding 38 1-3 bushels worth \$30.69, and giving a net return of \$25.74. This comparison is made to set against the frequent argument that it pays to slight the preparation of wheat ground, to prepare at less cost and take a smaller profit per acre on a larger acreage.

This is evidence weighing heavily in favor of the most thorough preparation, and showing that the slipshod method cannot, in results, be compared with the best method—that it actually costs more to produce wheat per bushel under poor methods than by the best, as is illustrated by these figures. By the poorest method it cost 45 cents worth of labor to produce a bushel of wheat, while by the best method it cost slightly less than 13 cents worth of labor to produce one bushel. It is not possible, if wheat land be given any preparation at all, to do less work on it than my disking, and the figures would indicate that the wheat grower cannot afford to do even this lit-

tle work. The cost of labor in these experiments in the thorough preparation of wheat land does not increase in the same proportion as the increased yield and return. These experiments substantiate the still undisputed maxim that "whatever you do it pays to do well."

The figures go to show that the theory of sowing many acres and accepting a smaller return per acre is an error. There are seasons—we have seen them—when that theory would prove out, but such seasons are the rare exceptions. To take advantage of such theory and sow wheat according to it we premeditatedly gamble with the weather and against great odds. When all weather conditions are favorable a crop grows in spite of the planter, but the all-around favorable season is the exception. Unfavorable conditions are largely overcome, greatly minimized at least, by good culture methods, and if our farming operations are to yield a steady income, we must adopt such methods as will tend to equalize seasonal variation. In those sections where a fairly good wheat crop is expected only every three or four or five years, the expectancy is the result of habit—the habit of poorly preparing the land, seeding just any old time and depending upon Providence for the balance.

In the above remarks the best and poorest methods were contrasted for the reason, as stated, that the poorest is a method practiced year after year on many farms in some sections, and for this reason the comparison is justified. The experiments reported in the bulletin are 11, each involving different methods. Other methods, varying slightly from the best here quoted, seem, from the bare figures, to give satisfactory results. A close analysis of the figures, however, shows results strongly in favor of the best method herein reported, and the deduction that early, deep plowing and thorough preparation of the seed bed is the only really profitable method for the wheat grower.

An interesting feature in connection with these 11 experiments, each by a different method, is that the average yield per acre was in excess of 25 1/2 bushels, or exceeding the average yield of Kansas for the 10-year period of 1901 to 1910, inclusive, by 12 bushels, the average Kansas yield for the above period being 13 1/2 bushels per acre. The figures are significant in that they indicate that the great part of the wheat farming of the state is done by what we may call very poor methods. It is not pleasant to recall the fact that our wheat growing methods are open to such criticism, but the fact remains, nevertheless. In the 11 experiments, if the four-bushel yield be eliminated, the average yield of the remaining 10 would be slightly less than 28 bushels per acre, or 14 1/2 bushels per acre in excess of the average Kansas yield for 10 years.

In total amount of wheat harvested per acre honors are about equally divided between Kansas and Minnesota—they being the two states first in total bushels of wheat produced. This standard is by virtue of the numerous broad acres of Kansas soil seeded to wheat, and not because of high average yield per acre. In average acre yield Kansas stands thirty-second among the states. The only state yielding less per acre is a southern state where wheat growing is a side issue and not a mainstay as in Kansas. The average acre yield of Maine is 25 bushels; New York, 18; Nebraska, 18; United Kingdom, 33; Germany, 29; France, 20 1/2; United States, 14.3. With Kansas land increasing in value and the necessity of a greater income to offset the interest on the increased investment, should we not wake up?

The value of charcoal for poultry is best ascertained by allowing them constant access to it. Wet, filthy or old charcoal is not desirable. Do not expect fowls to eat charcoal, grit and shells the way they eat corn. Do not force it on them, but rather have it in convenient reach of the poultry and they will eat as much as they need or is good for them.

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(Not for boys—they're all right and their turn will come later—but this is for the boss.)

Thousands of farmers will buy gasoline engines this Fall. I want to get in direct and personal touch with every one of them, as I want them to know about the Olds Engine.

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It will hold fifteen bills easily. When folded it will go in a small pocket. It is very convenient, handsome and useful; will last a lifetime. Has no advertisement on it.

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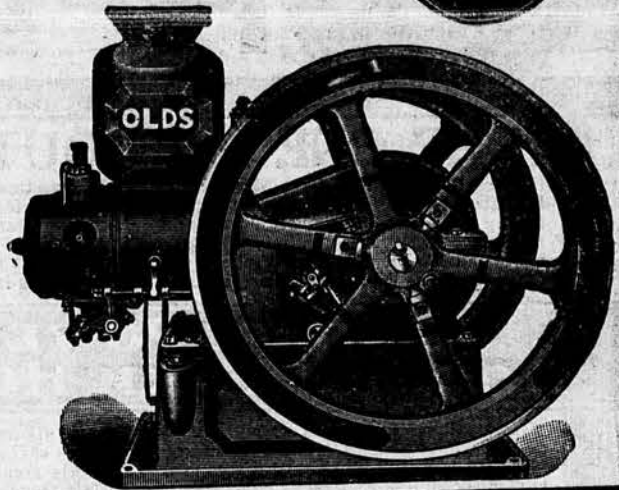
If you are going to buy an engine, put a check mark (X) in the place showing the size and style engine you want, and when you expect to need it, and mail to me personally at once. Address me as below.

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J. B. SEAGER, Gen. Mgr.
Seager Engine Works
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To make quick deliveries, I also have a complete stock of engines and parts in warehouses at
Houston, Tex. Atlanta, Ga. Decatur Ill. Lexington, Miss.
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NOTICE—If you prefer, write to my nearest branch, and if I am not there, my personal representative will attend to it.



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Send me full particulars about the following engine. It is understood that I do not obligate myself in any way by asking for this information.

Style wanted: Portable Stationary
Horse Power wanted: 1 1/2 3 4 1/2 6 8 12 15 20
Expect to need it: Aug. Sept. Oct. Nov. Dec.

Name
Town R. F. D.....
County State
Sign name plainly just the way you want it on bill fold.

Don't Give Up.
P. Grout, Illinois' big alfalfa grower says: "To those who sow alfalfa for the first time I can only say, 'If at first you do not succeed, try, try again.' It is through the effort and success will surely come with a thorough understanding and employment of right methods."

Prepare as for Onion Bed.
Alfalfa is a deep rooted plant and, before the ground should be plowed, it should be thoroughly pulverized to a considerable depth in order to give the plant a good start. It is better to plow some time before seeding and give the ground frequent disking or harrowing until it is thoroughly and finely pulverized. It is impossible to have the seed bed too well prepared. It is one of the most important things in sowing alfalfa.

Curing Alfalfa in Swath.
Louis Lowenstein of Whitehall, Ill., thinks the best way to cure alfalfa is in a swath. If it gets wet, he lets it lie until it dries. He has had hay that was cut by a five days' rain come out of the stack in almost as good condition as that cut up with no rain. He says it is a mistake to keep kicking up wet hay with a header, as too many of the leaves are shed off. Last year Mr. Lowenstein had an average of five tons of alfalfa to the acre from 30 acres. The alfalfa was cut four times.

Inoculation for Alfalfa.
I am frequently asked if inoculation is really necessary. I can most emphatically say that it is, if immediate and satisfactory results are desired. When my first attempts at growing alfalfa were made, I knew nothing about inoculation; in fact, had never heard of it. My first sowing never grew very thick and only lasted three or four years. When this field was plowed up and reseeded with additional ground, I discovered that the reseeded part was much thriftier and better than the other. It was about this time that I learned about inoculation, and tried it, and obtained a good, healthy growth from the start. After a start has once been made and alfalfa hay has been fed upon the farm

and the manure applied to the fields to be sown, there will likely be sufficient inoculation for all purposes, but in the beginning, inoculation is absolutely necessary for best results.—A. P. Grout.

Alfalfa Needs Limestone and Phosphorus
Twenty years of alfalfa growing in Illinois is an experience worth noting. A. P. Grant, the progressive farmer, and probably the pioneer alfalfa grower of that state, says alfalfa loves sweets and not acid. In this statement is expressed the reason that southeastern Kansas farmers having sour soils do not succeed with alfalfa. Mr. Grant says: "I have obtained very good results without the use of ground limestone, but, on the other hand, I have obtained better results with it. There is, I think, no question that for best results on most soils, limestone is necessary. No doubt there is so much acidity in some soils that alfalfa cannot be successfully grown without it. It is a condition that should be ascertained by test."
"I can say the same of phosphorus as of limestone; that I have grown good alfalfa without it, but I have grown much better alfalfa with it. I do not know that it is necessary after the plant roots have extended down below the soil that has been exhausted by frequent croppings of much of its phosphorus, but I do believe it is just as essential and necessary in the beginning as any of the other elements of plant food."

Kafir Not Hard on Soil.
Last week we gave the best obtainable information covering the point as to whether sorghum and kafir were more exhaustive to soil than corn. John Fields, of Oklahoma Farm Journal, writes this on the same subject:
"Will those of you who are sure that 'kafir ruins the land' please plow half of your kafir stubble in November or December and give it decent preparation for spring crops? Let the other half go as you usually do. Plant the land to whatever you want to and observe the results. The facts are that a crop of kafir or milo removes no more plant food from the soil than is removed by a crop of corn of equal weight. But these crops dry out the soil more completely than corn does. Corn dies while kafir and

milo still find enough moisture in the soil to keep them in good condition for growth when rains come. Corn is dead in August or September and quits taking moisture from the soil. Kafir and milo keep on growing until killed by a freeze and thus usually leave the soil very dry in November. Better preparation of the land is necessary for spring crops to be planted on kafir stubble than on corn stubble. And this better preparation will pay amazingly.

Increasing Humus.
Much soil is lacking in humus and of this condition a great deal is being written. The reader is likely to conclude that he can, within a very few years, build up a large humus content in his soil. It can be seen by the following figures that this is not an easy thing to do. It has been found that not over 10 per cent of the organic matter plowed under can be figured on as being converted into humus. The surface eight inches of the average clay loam weighs approximately about 2,000,000 pounds. Taking the humus content as five per cent you would have 100,000 pounds to the acre. If the farmer should ever turn under four tons of organic matter per acre annually, it would take a very long time to build up a large humus content.
Fifty years would be a short time in which to accumulate humus to any extent, and even a longer time would be required if one removes a crop from time to time. From these figures one should not conclude that the addition of humus to the soil is not highly desirable, for it is. It can be seen, however, that at the most we can do but little more within our short lives than to maintain the humus at a constant percentage by frequent green manuring, and by plowing under everything we can get onto the land.

A high grade, guaranteed durable live rich red barn paint is sold by the Sunflower Paint & Varnish Co. of Ft. Scott, Kansas, direct to the consumer at only 85c per gallon in 5 gal. cans freight prepaid. This is a paint proposition worth considering by every farmer. This is a reliable company and now is paint season. Try this paint.

HOME Protection

THE home may go. Every loved memory may be utterly destroyed in a few brief moments by lightning.

How About Your Home?
You have a home and family. You see your children in terror at the approach of every thunder storm.

Are You the Prudent Man? Have you taken steps to protect them? Or will your cars remain deaf to their cries until the lightning stroke falls upon you, and then vainly sit down and mourn your loss?

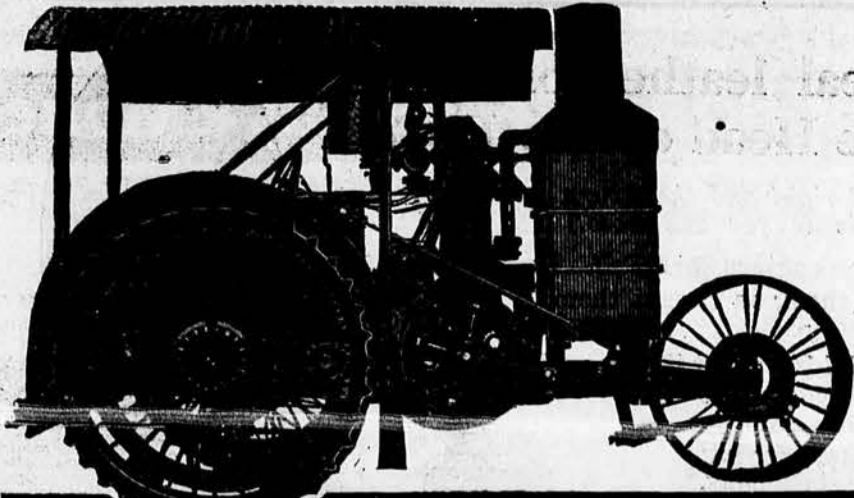
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Best and Cheapest Hog Conditioner The World Has Ever Known

That is the enthusiastic verdict of thousands of farmers and hog raisers all over the United States who feed **MERRY WAR LYE** regularly EVERY DAY with their hog rations.

The Cost Is A Trifle

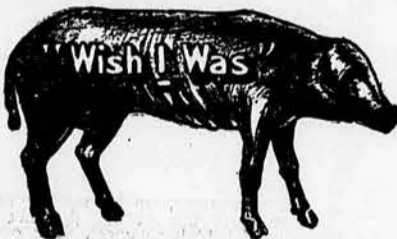
MERRY WAR LYE is the least expensive as well as the best protection against hog losses ever discovered. It prevents hog cholera, cures worms, renders hogs immune to infectious diseases, keeps them on their feet with hearty appetites, tones them up, makes them fat and sleek and insures your getting them to market in prime condition to bring top prices. Its action is sure and you notice the improvement in your hogs at once. Feed it EVERY DAY, night and morning, and increase your pork profits.

A fair trial will convince you beyond all doubt that **MERRY WAR LYE** will do everything that its thousands of Farmer Friends over the country claim for it.

Prevented Hog Cholera

Mrs. B. Aholt, Mo., writes: "Fed **MERRY WAR LYE** twice a day. It surely prevented our hogs from getting the cholera, while our neighbors lost all of theirs."

Mr. H. G. Acker, Chickasha, Okla., writes: "I have been feeding **MERRY WAR LYE** some two months, and it expelled worms after the first few feeds."



IMPORTANT WARNING!

Don't infer that ordinary, or regular, lye can be used as a hog remedy.

MERRY WAR LYE is prepared ESPECIALLY as a hog remedy and it is the only lye that is guaranteed to be absolutely safe to feed to hogs.

Feed "Merry War" Every Day

You can have healthy hogs the year round if you feed **MERRY WAR LYE** EVERY DAY. Keeps them on their feet all the time and makes them fat quicker than anything else. Get it today.

Save These Directions

Follow these directions carefully: Mix one tablespoonful **MERRY WAR LYE** with slop for ten hogs, or 1/2 can with barrel of swill. Stir well and feed night and morning. If your hogs are on a dry feed ration, mix 1/2 can **MERRY WAR LYE** to each barrel drinking water.

At All Leading Dealers

Most dealers handle **MERRY WAR LYE**. If yours can't supply you, write us, stating your dealers' names, and we will see that you are supplied and will also send you, free, a valuable booklet on "HOW TO GET THE BIGGEST PROFITS FROM HOG RAISING."

MERRY WAR POWDERED LYE comes in 10c cans, full case of 4 dozen cans for \$4.80, at Grocers', Druggists' and Feed Dealers'. There are no substitutes. E. Myers Lye Co., Dept. 12 St. Louis, Mo.



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LIVE STOCK



Bran is a good ration for the horse, but must not be fed too frequently, or it will cause indigestion.

When the hogs show signs of illness or being off their feed, a change of rations becomes necessary, if, indeed, it should not be made before that time. Cut out the corn and feed a ration composed of shorts and bran, to which may be added a little oil meal. Then dissolve about three ounces of blue stone to the barrel of water for drinking purposes. Hog diseases are too often due to environment, and preventive measures are of more value than the veterinarian's skill.

The use of prod poles, clubs and whips in handling live stock between loading and slaughter points is being severely condemned by the packers. Rough usage has been the rule for some time, and has resulted in more bruised carcasses and damaged hides than is generally believed. Meats that are spotted with bruised portions keep poorly and become a wholesale risk after remaining any length of time in the chill room or storage cellar. The reform campaign will be watched with interest and is expected to produce fruitful results.

Cottonseed Meal With Ensilage.

Erie (Kan.) subscriber: Has just completed a silo; will fill with Indian corn and feeds steers for the market; wants to know whether to use cottonseed meal or oil meal with ensilage.

Cottonseed will furnish protein at lower cost than oil meal and is better adapted for use with ensilage than oil meal. Ensilage is succulent and a laxative, and so is oil meal—the combination, for this reason, not giving best results. Cottonseed meal is constipating.

Good Farm Book.

"Meadows and Pastures" is the title of a new book by Josiah E. Wing, which deals with one of the most neglected crops on the American farm, the grass crop. The book furnishes a wealth of information, the result of world-wide experience and investigation. The author has attempted to show that grass when given proper care is one of the most profitable crops in America, and he has succeeded in a marked degree. Every phase of the subject is discussed and every paragraph is worth reading. Send \$1.50 to Kansas Farmer and you will soon own a copy.

Hog Must Have Water.

About one-half of the live weight of the hog is water. The amount of water in the carcasses, however, depends considerably on the condition of the animal. A thrifty, growing hog that is not very fat, will contain proportionally more water than a hog that is very fat or in prime condition for market. Generally speaking, hogs with this degree of variation, will contain from 42 to 50 per cent of water. In order to have a hog develop to the best possible advantage, he must have sufficient water to supply this amount, and besides, he must also have water for the general working of his internal mechanism.

Type of Breeding Sow.

It is not the little, fat, chubby females which should be retained as breeding animals, for they almost always prove disappointing at farrowing time. They neither produce large litters nor save the little ones from being crushed in the pig bed. They are not good milkers, either, and thus do not give the litter a good send-off during the sucking days.

One should select the long, growthy females, taking care, however, that they do not stand too high from the ground and are not contracted at the heart girth or near the flank. One should make sure, too, that there is no tendency for the back to sag or the feet to go down on the dew claws. It is better to select one with some arch to the back, making sure that the arch is in the back and not in the rump. An arched rump with a low-set tail means a shorter ham, and that curtails the carcass in its best part. The back should be wide and the sides should come down perpendicularly to a low, straight underline.

Imported Horses Require Certificates

In compliance with the provisions of recent federal legislation no horses used for breeding purposes in the United States are admitted to this country they are vouched for by the Department of Agriculture. If the animals meet all the requirements, the department issues a certificate of pure breeding and permits of the animals being landed and shipped to their destinations. This is of great value to horse breeders, as they are now doubly protected against misrepresentations and the use of fraudulent pedigrees on the part of dealers.

During the first three months 280 stallions and 280 mares, all of which were certified. Of this number the Percheron, with a total of 242 stallions and 95 mares, headed the list, with the Belgian, with 140 stallions and 112 mares second on the list.

More animals were brought to this country during this period than ever before, but some of them were held in account of defective registration certificates. Some have been returned to the importer or to the foreign breeder for correction. In some instances the animals did not agree in age, color markings with the data on the certificates.

Pigs From Immune Parents

In speaking before the National Stock Sanitary Association Dr. W. Niles of the Iowa Agricultural Experiment Station said:

"Some years ago we bred quite a number of immune sows. We bred immune sows to immune boars and the offspring from these sows were exposed to cholera in different ways. We found that the spring of immune parents had more resistance to cholera than the offspring of susceptible sows. They did not, however, ever have enough protection to stand heavy infection; that is, they were exposed to virulent hog cholera by being placed with the sick or being injected with virulent blood, a considerable percentage would die. The percentage, however, was usually larger than in the case of pigs from unprotected mothers. Pigs raised from immune animals show more resistance than pigs from susceptible immune mothers. During 1907 we vaccinated a number of herds near our experiment station and we found the year on buying pigs from these herds on which we had practiced vaccination did not contract as acute diseases as pigs procured from other farms; we discontinued buying pigs from other farms until they had secured other sources, while we were not able to determine the exact amount of protection given these animals through the immune mothers, we were well satisfied that had more immunity than animals from other sources."

The Cost of Horse Labor.

The tradition that "it doesn't pay anything to keep a horse when you own a farm" has been disproved by recent tests made by Prof. Thomas Cooper. In this work the professor found that, taking into account only the items as a city business man would consider in keeping a debit and credit account with a horse, every such animal really does cost the farmer a round sum of money for his keep.

First, there is the interest on the purchase price or selling value of the horse. Putting the rate at 6 per cent and the value at only \$150, the interest comes to \$9.

Next we must consider that the average working life of a horse does not exceed 10 or 12 years; therefore, at least one-twelfth of his value must be annually charged to depreciation.

There goes another \$12.50 on the horse, and if the animal is worth \$150 the depreciation cost is doubled.

The average duration of a horse's life in a barn, according to underwriters' statistics, is 40 years, and the capital per horse invested in such structures may be to average \$60. Divide this by 40 and we have \$1.50 as depreciation on the horse as interest, making the cost of a horse, per year, \$4.50.

The items of use and depreciation on harness, shoeing and miscellaneous

penses add an average of at least \$2.87 annually, and bring the total cost on the \$150 horse up to \$27.87, without any reference to the cost of feed and labor expended in caring for the animal. The farm value of the feed, based on accounts kept with 100 horses in different parts of the state, averages \$54.84 per horse; the value of labor spent in caring for them, \$15.25 per horse. These items bring the aggregate average cost of keeping a \$150 horse for one year up to \$98.96. Mr. Cooper's tables, however, are based on an average valuation of considerably less than \$150 per horse and omit any allowance for the cost of barn room or shelter; hence, they make the cost of maintenance only about \$85 per year.

Even at this low figure, however, it will be seen that with, say, four horses on the farm, the expense entailed reaches the very respectable sum of \$340 a year. As the workhorse on the average farm actually works only about 1,000 hours in a year, it is seen that the cost of horse labor, with the low-priced animals used as the basis of Mr. Cooper's figures, is 85 cents per day of 10 hours.

A variety of suggestions are made, looking to the reduction of this heavy drain upon the farmer's resources. These include (1) The use of more brood mares on the farm; (2) a better distribution of horse labor throughout the year by diversified farming; (3) reducing the number of work horses on the farm; (4) more economical methods of feeding; (5) the use, on small farms, of machinery requiring less horsepower.

Among these methods the substitution of brood mares for the geldings most commonly employed will commend itself as the most desirable. It is demonstrated that mares in foal can, with care, be worked 10 months in the year, not only without injury, but with advantage to both mare and foal. The 3 and 4 year old colts can be used for much of the work in the place of the aged horses now driven. And, finally, the sale of colts will more than pay for the keep of the mares.

However, the general adoption of the gasoline engine for doing certain numerous kinds of work for which horses have heretofore been kept, will do more to reduce the expense too often incurred for the maintenance of a large number of horses on the farm.

Cottonseed Meal for Hogs.

A feeder, Potwin, Kan., asks: Is it safe to allow hogs to follow steers being fed cottonseed meal and shelled corn,

There is some danger in feeding cottonseed meal to hogs, but that danger is not nearly so great as believed several years ago. In this section there is no necessity for making cottonseed meal a part of the ration for hogs, but there is no danger in allowing hogs to follow steers being fed two to three pounds a day each. The Texas Experiment Station, during the past few years, has demonstrated that for short periods of from 70 to 85 days a grain ration may contain as high as 20 per cent of cottonseed meal without injuring the hogs in the least.

Other stations have fed hogs for three months and more on a ration of grain containing 10 per cent of cottonseed meal without any injurious effects whatsoever. It would not be economical to feed cattle more than about 10 per cent of cottonseed meal, and usually not that much, consequently there could be no danger in allowing hogs to follow cattle getting a moderate amount of this product to balance the corn ration.

In the southern states large quantities of cottonseed meal are fed to swine with impunity. Some farmers, however, allow the meal to ferment 24 to 48 hours before feeding. The fermentation seems to counteract the injurious effects that sometimes attend the feeding of the meal without being fermented.

Timothy Hay vs. Alfalfa.

The Illinois Experiment Station is doing, at present, more to demonstrate the value of alfalfa compared with other hay and forage crops than any other station. The farmers of Illinois are excited over alfalfa, and alfalfa clubs are being organized for the instruction of growers. The following report by the Illinois station gives interesting figures:

Legumes not only give larger yields per acre than timothy hay, but are also more valuable ton for ton as feeds for dairy cows, because they supply a large part, or all, of the protein furnished by the high-priced concentrates usually purchased. Because dairymen in general do not realize this fact a feeding experiment was conducted throughout the

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Save every cent you can. The total will be worth while. We carry in stock more than 125,000 articles of every day use. On every item in this tremendous stock you are offered a saving that ranges from 20 to 50 per cent. So we offer you your choice of 125,000 separate and distinct opportunities to save money. We secure the lowest possible prices by buying in great quantities. The prices you pay us are a very slight advance over those we pay! Every article we sell is of the best quality—the biggest value. We guarantee that every purchase will be satisfactory. Return any article that is not. We will pay transportation charges both ways and return your money or make any exchange that is fair. Start saving NOW. Tear out the coupon and check the books you want. Mail it to us.

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This chair is a large, comfortable, upholstered rocker for the sitting room. It is covered with black imitation leather and is 40 inches high and 25 inches wide. It will be an ornament in your home and will give long service. This is just one out of the many hundred furniture bargains we offer. We buy the entire output of furniture factories. We know that our furniture is made of best materials and by expert workmen because we superintend every detail. We know our prices are the lowest because we ask only a slight advance over the manufacturing cost. You save 50c on the dollar. Send for our new furniture book, book No. 7, to-day. You will get it by return mail. Look into this plan for securing at rock bottom prices, the best furniture that is made.

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Feed cookers, tank heaters, incubators and brooders and winter farm necessities we can sell you at a great saving. Select the books you want from the list. Send us the numbers of them.

Get a Cream Separator that is Guaranteed for a Lifetime

We know that we have the best cream separator on the market because ours was made especially for us. It combines all the good features of every cream separator and has many additional ones. It is because we are so sure of every detail of its construction, so sure of its lasting efficiency and durability, that we are able to guarantee it for a life-time. Buy your cream separator from the maker at one profit. We tell you all about our cream separator in the special catalogue (Book No. 21).

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JUST OFF THE PRESS—Fur Coats for \$13.65 and up. Fur gloves and caps, heavy mackinaw and sheepskin lined coats. This catalogue of special interest to all men who have to go out in cold weather. Our fur coat sales are about the largest of any house in America. This catalogue prices dog coats at \$15.95 and up, raccoon at \$48.50 and up, muskrat lined at \$48.50 and up, lamb at \$25.75 and up, coats for doctors, automobilists, lumbermen, farmers and livestockmen. Also containing complete line of heavy underwear and outer clothing. Ask for book No. 18. You will find it interesting.

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Montgomery Ward & Co.

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Please send to my address below the books I have checked absolutely free of cost.

- 1 Paints
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- 16 Building Plans
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- 19 Sewing Machines
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- 21 Cream Separators
- 22 Building Material
- 23 Stoves and Ranges
- 24 Underwear Samples
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- 26 Bicycles—Motorcycles
- 27 Baby's Dress and Toilet
- 28 Women's Tailored Suits
- 29 Circular and Drag Saws
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You can forget that you have a roof if it is protected with our guaranteed roofing. Just send for Book No. 5. Compare our prices for yourself. You will see that you can save just 1/2. Remember, you are taking no chances because we guarantee the roofing for periods of 10, 12 and 15 years, depending upon the quality you buy.

READ THESE CAREFULLY

Fall and Winter Necessities at Big Savings

Two New Clothing Books

Save 1-2 on Your Fall and Winter Clothing Dress comfortably and stylishly this winter at half the usual cost. Provide yourself with clothes made of the latest and best fabrics and perfectly tailored by experts. In two special books we offer you the opportunity to do this. They are the "Women's Fall and Winter Fashions" and "Men's Fall and Winter Clothing." We know that our clothes are made of the best fabrics and from the latest designs because the manager of our tailoring division keeps closely in touch with the leading fashion centers of the world. He selects those fabrics and designs which he knows to be the best. We know that our prices are lower than you would pay elsewhere for the same excellent quality of clothes we sell because we buy the clothes in great quantities. We get right down to the rock bottom prices at which clothes can be bought. Then we ask but a slight advance over these in the prices we ask you to pay. Get an early start and have your selections made before the fall and winter season is upon you. Send for the book you want—women's fashion book is No. 30, men's book is No. 33—and make your choice without delay.

MONTGOMERY WARD & CO.

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winter to show the relative value of alfalfa and timothy hay in the ordinary ration for dairy cows.

For this purpose 16 cows were divided into two lots of 8 each. As the other portion of the ration for both lots was exactly the same, 10 pounds of corn stover and 12 pounds of grain, a direct comparison was made between alfalfa and timothy hay. The results showed alfalfa hay to be worth \$10.86 per ton more than timothy hay. The average yields per acre obtained in Illinois are approximately four tons of alfalfa hay and one and one-half tons of timothy. When timothy hay is worth \$10 a ton, one acre of alfalfa is worth \$68.44 more than an acre of timothy, under the conditions which existed in this experiment, and when milk is sold at \$1.30 per 100 pounds.

The value of the alfalfa will vary with the price received for the milk and for

This Table Shows the Feeding Value of Alfalfa Hay Over Timothy with Milk at Different Prices.

Milk per 100 lbs.	Value of alfalfa per ton above timothy.	Value of alfalfa per acre above timothy, when timothy is worth \$10 per ton. (Alfalfa 4 T. per acre; timothy 1-2 T. per acre.)
\$1 00	\$ 8 36	\$58 44
1 10	9 19	61 76
1 20	10 03	65 12
1 30	10 86	68 44
1 40	11 70	71 80
1 50	12 54	75 16
1 60	13 38	78 52
1 70	14 21	81 84
1 80	15 06	85 24
1 90	15 88	88 52
2 00	16 72	91 88

It must be borne in mind that the above figures can be applied to alfalfa only when fed with the feeds used in this test, or with other similar feeds.

Besides the greater returns in milk, the condition of the cows counts for much. At the end of the experiment the cows which were fed alfalfa hay were in much better condition than those fed timothy. The timothy, although of good quality, was not palatable, and the cows receiving it lost in flesh, their hair was rough and they were in poor condition generally. A number of them were more or less "off feed" at different times. Such was not the case with the same cows while being fed alfalfa. They had better appetites than when receiving timothy hay. If the effect on the cows is so great in so short a time, too, it is easy to see why many of the dairy cows come out of the winter in poor condition and have a small milk account to their credit.

The demand is great just now for good dairy cows. If a lot of the heifer calves which will be sold for beef this fall were dairy bred and from good milking mothers, they would sell for double the price.

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This rate to new subscribers only. For 50 cents we will send KANSAS FARMER until January 1, 1912, to two new subscribers and send the person who sends in the names a set of 50 beautiful postcards. These cards are not cheap, but just as good as if you paid 5 cents apiece for them. Address KANSAS FARMER, Topeka, Kan.

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Permanent fertility means maintaining the three necessary elements of plant food. Your subsoil contains inexhaustible potash. Alfalfa supplies the nitrogen.

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The only permanent and economical source of phosphorus is finely ground phosphate rock. Write us. We lead in quality and price.

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There are three things that destroy your lawns: Dandelions, Buck Plaintain and Crab Grass. In one season the Clipper will drive them all out.

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At Harvest Time —and All the Time

There's never a day on the farm when a man doesn't need overalls.

Certainly it's sensible to wear them in your daily work. They'll save more than one pair of trousers a year. And because they're usually washed, you can always look clean and neat.

On Sundays and holidays they're specially necessary. It's so easy to slip them over your good clothes when you're ready to harness up or do the chores. They'll protect your suit from dirt and grease, and keep you from worrying for fear you'll get spots on you.

Be sure you buy good overalls. Don't get the baggy, rippy, skinny kind, that wear and fit like gunny-sacks. Be on the safe side—buy

Ideal Overalls

They can't be beaten for long wear, comfort and good looks. Our 25-year success and our absolute guarantee say so. Made right here, in our eight big, modern factories, by skilled operators using latest machinery.

We use only standard, close woven Indian blue denim and drills. Our patterns are perfect—roomy, non-pinchy, non-binding—cut to fit the form. Every seam is double stitched with an elastic stitch, and is warranted not to rip. All buttons riveted on—won't pull off. Buttonholes can't tear off. Legs are shaped like trousers, with inseam and outseam. Lots of pockets.

Man! You ought to go straight to the dealer who sells them and look them over. And see the whole line of Ideal Work Clothes—overalls, jumpers, shirts, duck and corduroy coats—and Ideal dress shirts. If not sold in your town, tell us your dealer's name, and we'll mail you our illustrated booklet, together with a fine toy for the children.

M. E. SMITH & CO.
Sole Mfrs.
608 Farm Street,
Omaha



DAIRY



The creamery promoter, after a decade of inactivity in Iowa, a few months ago again began operations. He is the man who has \$1,500 worth of machinery to sell to a company of farmers for \$4,500, taking stock subscriptions therefor. The same man has heretofore operated in Kansas, 20 years ago, with a good deal of success for himself, and within the last few years being able to locate a plant here and there. In Iowa his recent efforts were frustrated by Dairy Commissioner Barney, who exposed the plant of the professional "promoter" and who advertised that his department would, when called upon, furnish the plans and estimates for creameries, saving the farmers from \$2,500 to \$3,000 on each creamery built.

The law of Kansas provides that all operators of the Babcock test for the purpose of purchasing either cream or milk shall make application to the dairy commissioner for a license to operate the test. This insures that competent men will test the farmers' cream.

In almost every state plans are being adopted for the purchase of cream on grade, and for Kansas the Experiment Station is now making an investigation which it is hoped will lead to a feasible and practical system under Kansas conditions. The work is under the direction of Director Webster. By grading cream, making two grades—one to be sweet and of good, clean flavor, the second to be that which is sour but of good flavor, and to absolutely refuse to accept cream that is rotten and of bad flavor—will bring to each patron a direct, immediate realization of the necessity of giving proper care to the milk utensils and the cream, or suffer financial loss. The general improvement that will come through the grading system will assist very materially in raising the quality of the creamery's output and the relative price received.

The cow that gives the greatest number of pounds of butterfat for the food she consumes is the most profitable dairy cow. Not the number of pounds of milk, remember, but butterfat. Milk wouldn't be worth anything if it did not contain butter, and the more fat the greater the value of the milk. The Babcock test will enable you to know about the production of butterfat.

The strictly dairy breeds, according to the accepted classification, are Holstein, Dutch Belted, Guernsey, Jersey and Ayrshire. There are very few Dutch Belted cattle in the United States, as compared with the other breeds. In the so-called dual-purpose class come the Red Polls, Brown Swiss, Polled Durham and Shorthorns. The strictly beef breeds are Herefords, the best families of Shorthorns, Aberdeen-Angus and Galloways. No great claims are made for them as milkers, although many Shorthorns are of great value as such.

A Wisconsin court awarded damages to the owner of the famous cow, Martha Piltertje Pauline, against the owner of a scrub bull, which broke the fence and served the famous cow. The damages against defendant were \$75 and costs. The offspring of the scrub bull was sold for \$7, while the jury decided that the cow, bred to the pure-bred bull of her owner, would have resulted in a calf worth at least \$150, and on this ground gave the verdict. The decision is worth noting by breeders who are annoyed by neighbors' scrub bulls.

The cow is largely influenced by training and habits, and any change in custom in feeding or milking will affect the milk flow.

The greatest source of loss in the dairy industry is the feeding of unprofitable cows. For example, a certain cheese factory in Ohio, in one year paid one of its patrons \$877 for the product of eight cows, while it gave another patron \$9 less, or \$868, for the milk from 22 cows. The latter dairyman boarded nearly three times as many cows as the other to get less gross return.

Until the feeder has known his cows through the scales and the Babcock test, he can never claim to be doing a "dairy" business; he is merely doing dairy "guess work," and may be feeding into Polly all the profits he should make from Bess and Spot.

A great many farmers lose cream unnecessarily because they do not flush the cream separator at the close of the run. The object in flushing is to remove the cream lodged in the bowl and in the spouts and covers, and the necessity for flushing exists, regardless of make of separator. This flushing does not remove the slime or dirt gathered in the bowl, and the cream received from the flushing operation is as clean and sweet as any obtained from the separator.

South Dakota creameries will at their stations receive no cream showing in excess of 6 tenths of 1 per cent acid. Such cream is quite sour to the taste, but is not nearly so sour as much of the cream delivered to stations in Kansas. The same creameries will not receive cream at stations after the train on which cream should be forwarded has passed the point. This obviates the necessity of holding cream over night and prevents deterioration of cream quality.

Butter Next to Milk as Food.

If there is any kind of food that comes near to holding the importance of milk as human food, that article is butter. The commonest food set on our tables is bread and butter, and it is so common, in fact, that we do not realize as we should its importance and value as a food. The greatest value of butter probably lies in its indirect value as a lubricator for the body.

Farm Care of Cream.

Purdue University Experiment Station says: "All movable parts of the bowl of the farm separator should be taken apart, thoroughly cleaned from all remnants of milk, cream and separator slime and scalded after each separation. Only a clean separator can deliver cream that is pure, sweet and that keeps well.

The farm separator should be so operated as to deliver cream testing about 35 to 45 per cent fat. After separation the cream should be cooled and kept cool by setting the cans containing it in fresh well water. The cans should remain in the water until the cream leaves the farm. This will prevent its souring and wheying off in summer, and its undue thickening and freezing in winter. Cream should be stirred occasionally to prevent excessive separation of the fat and the drying of the cream on the surface.

The cream should be delivered in clean cans or pails not less than twice per week and three times per week in summer. In transit cans should be covered with a dry blanket or jacket in cold weather to avoid the freezing of the cream, and with a wet blanket or jacket in hot weather to protect the cream from the heat.

Cheese as Food.

In a bulletin on the nutritive value of a number of common foods Secretary Wilson of the United States Department of Agriculture, says that a pound of cheese has nearly the same food value as two pounds of fresh beef, or any other fresh meat. It is worth as much as a pound of ham, is more digestible, equals 2 pounds of eggs; 3 of fish. In price it is about the same per pound as the cheaper cuts of meat and practically the same as smoked ham or bacon. Secretary Wilson urges as one means of reducing the cost of living a liberal portion of cheese in the daily fare.

Dairy Farming.

There are three types of agriculture: Grain farming, grain and live-stock farming and dairy farming. Dairy farming in American agriculture is fast becoming a necessary adjunct because of its usefulness in retaining, restoring, and in most cases increasing the fertility of the soil, making the productive value as well as the money value of the farm greater every year. With the growing demand for the products of the farm, those who



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QUALITY Is All That Counts In A Cream Separator

If you put your money into some disk-filled or cheap cream separator, how long will you be satisfied? Only until you find that such machines repeatedly lose the price of a

SHARPLES Tubular Cream Separator

The self-balancing Tubular bowl, hung like a plummet below a single ball bearing, and fed through the lower end, gives Tubulars twice the skimming force of others. Tubulars skim twice as clean. Dairy Tubulars have no disks.

You will finally have a Tubular because it is the World's Best. If you get some other first, you will discard it for a Tubular—just as thousands of others are doing right now.

A wasteful separator is expensive, even as a gift. We tell you positively that other separators repeatedly lose the price of a Tubular by wasting what Tubulars save. Tubulars are cheapest in the end, wear a lifetime and are guaranteed forever by America's oldest and world's biggest separator concern.

Is it not simply common sense for you to write us for a free trial of a Tubular? Other separators taken in exchange.

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DE LAVAL CREAM SEPARATORS

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\$10.00 Sweep Feed Grinder. **\$14.00** Sanitized Stock Wind Mill.

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gricultural pursuits are guaran-
perity just so long as farm lands
productive. It is not only neces-
serve the fertility, but it must
for the time is coming when
of land under cultivation must
more heavily in order to fur-
and clothing for the growing

M. Washburn, who made such
ord as the first state dairy com-
of Missouri, has been called
of dairy husbandry of the
College of Agriculture. Like
in public life, he has a plat-
which he announces as follows:
a strong advocate of the dairy
the dairyman; and
co-operative creamery for dairy
and state; and
lieve in producing just as good
possible at the price being re-
it; but
not believe in, nor will I doff
to, political health boards who
ome lopsided and unjust in the
of clean milk demands; and
believe that milk costs the farmer
an he is getting for it, and that
th more than the consumers are
for it.

The Value of a Good Cow.
are some figures given to show
erence between a cow producing
s of butter a year and one an-
producing double that amount,
L. B. Gurler, the Southern dairy
y. When a cow that produces
of butter per annum at a food
\$39, and a labor cost of \$12.50 is
\$5, the cow that produces 400 lbs.
er annually is worth \$400, and
er can net \$16 more from her
ying interest on the \$400 than
from the cow that produces 200
butter. There is no more labor
d with the 400-lb. cow than there
the 200-pound cow. The price at
butter has been credited, i. e., 20
er pound, is the net price from
mery after the making has been
t. In this herd the increased cost
for the 400-lb. cow was more than
y the increased amount of skim
we have 200 pounds of increase
er as net profit over the 200-lb.
two hundred pounds of butter at
is \$40. We have \$400 invested
cows, which at 6 per cent inter-
t, which we will deduct from the
we have left \$16 to the credit
0-pound cow.

The Butter Situation.
Chicago Dairy Produce, a market
at all times closely in touch with
ter market situation, says:
easier tone in the butter market
welcome to all who are solicit-
ut the future of the market.
s generally conceded that lower
ons would be a boon to the but-
stry, and that the avoidance of
er advance, which threatened a
of weeks ago, has headed off trout-
would have been felt through
remainder of the year.

Everything considered, butter is a fair
and has been so much better than
ed when the season opened, that
dincer certainly feels satisfied.
consumer, too, has liked the price,
evidence being found in the fact that
ption of butter is fully one-third
in this territory than it was last
this time. Most of the fine but-
danced in July and so far this month
e into consumptive channels.
we are at the danger point. The
of oleomargarine firms have, be-
of late prices, been active among
sellers, and a further advance would
helped them enormously. On the
hand, a weaker tone lessens the
of their efforts, and a decline of
at this time would practically
their work. Later, when the time
that consumers expect to pay
for butter, advances are less in-
to the trade.

Year the high prices, in June
rove a large share of the consum-
oleomargarine. Prices continued
ance at the time when the whole
nitive demand should have been
ter. Consumers were driven away
flush season of butter production
not come back.

Year, with the prices satisfac-
consumers, the output of oleo-
ine in July was 30 per cent less
in that month last year, and as
percentage of decrease appeared
same figures."

ure Sires as Herd Builders.
great man—I believe it was Dar-
was once intending to punish
children for some little crime or
they had committed. But when

The Range With a Reputation

See This Range at Local Dealers Before Buying

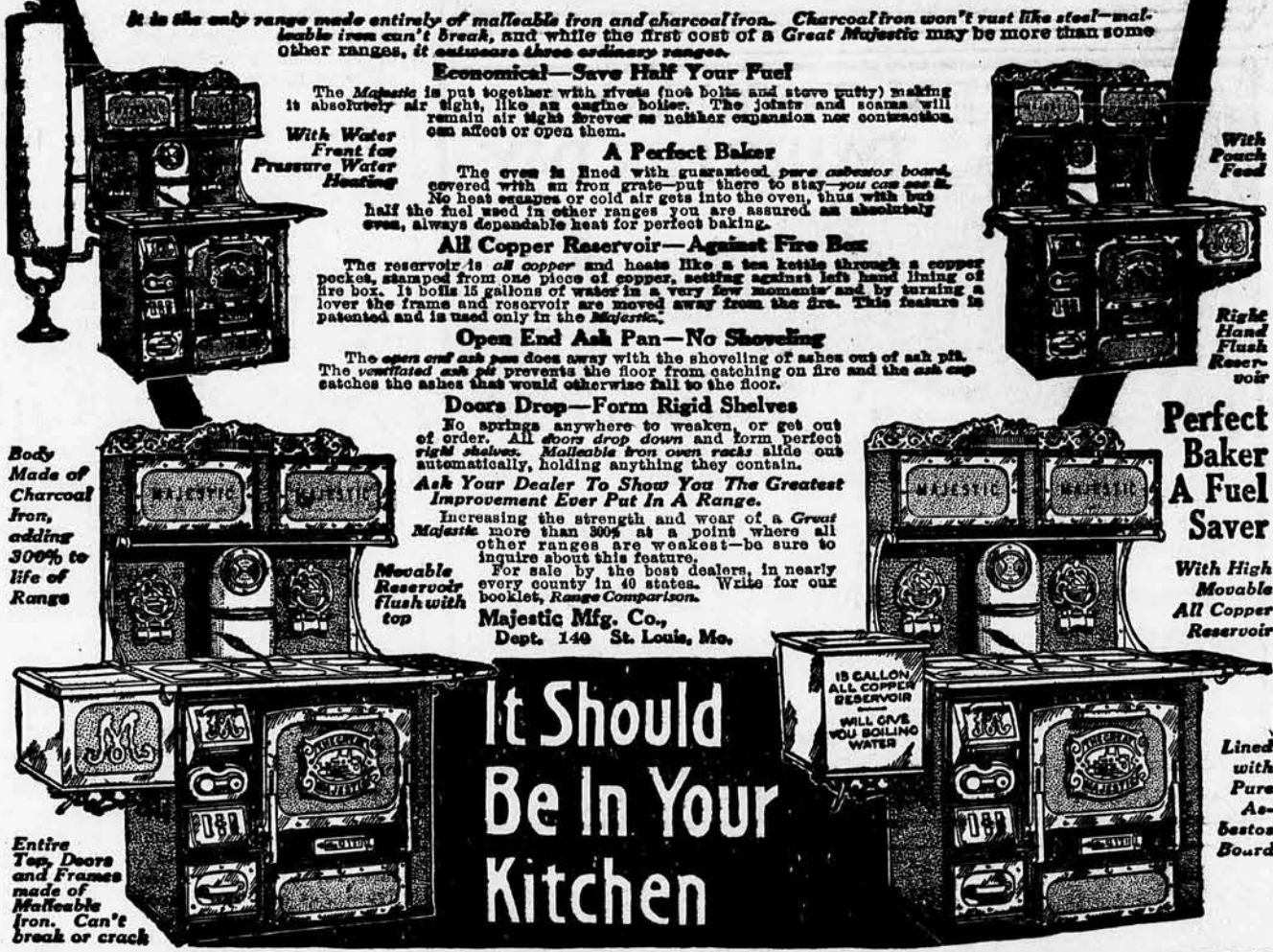
If anyone asked you to buy a team of horses "unsight, unseen," from a mere printed description you would think he intended to "sting" you. Now there is no more sense in buying a range "unsight, unseen" than there is in buying a team of horses—nor is it necessary. *The Great Majestic* is in use in almost every township in the United States west of the New England States. Possibly one of your neighbors has been using one for years—and is thoroughly satisfied.

If not, there is a dealer somewhere in your county who sells them—and it will pay you to drive an extra ten miles, if need be, to see and carefully examine the *Great Majestic*—the range with a reputation—built on honor—of the best materials—before investing your money in a range of any kind. You don't buy a range every day, or indeed, every year, and when you do you want the best your money can procure—that's the

Great Majestic Malleable and Charcoal Iron Range

Won't Break or Rust Like Steel—Outwears Three Ordinary Ranges

It is the only range made entirely of malleable iron and charcoal iron. Charcoal iron won't rust like steel—malleable iron can't break, and while the first cost of a *Great Majestic* may be more than some other ranges, it outwears three ordinary ranges.



Economical—Save Half Your Fuel
The *Majestic* is put together with rivets (not bolts and stove putty) making it absolutely air tight, like an engine boiler. The joints and seams will remain air tight forever as neither expansion nor contraction can affect or open them.

A Perfect Baker
The oven is lined with guaranteed pure asbestos board, covered with an iron grate—put there to stay—you can see it. No heat escapes or cold air gets into the oven, thus with but half the fuel used in other ranges you are assured an absolutely even, always dependable heat for perfect baking.

All Copper Reservoir—Against Fire Box
The reservoir is all copper and heats like a tea kettle through a copper pocket, stamped from one piece of copper, setting against left hand lining of fire box. It boils 15 gallons of water in a very few moments and by turning a lever the frame and reservoir are moved away from the fire. This feature is patented and is used only in the *Majestic*.

Open End Ash Pan—No Shoveling
The open end ash pan does away with the shoveling of ashes out of ash pit. The ventilated ash pit prevents the floor from catching on fire and the ash cap catches the ashes that would otherwise fall to the floor.

Doors Drop—Form Rigid Shelves
No springs anywhere to weaken, or get out of order. All doors drop down and form perfect rigid shelves. Malleable iron oven racks slide out automatically, holding anything they contain.

Ask Your Dealer To Show You The Greatest Improvement Ever Put In A Range.
Increasing the strength and wear of a *Great Majestic* more than 300% at a point where all other ranges are weakest—be sure to inquire about this feature.

For sale by the best dealers, in nearly every county in 40 states. Write for our booklet, *Range Comparison*.
Majestic Mfg. Co.,
Dept. 140 St. Louis, Mo.

Body Made of Charcoal Iron, adding 300% to life of Range

Movable Reservoir flush with top

Perfect Baker A Fuel Saver
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It Should Be In Your Kitchen

the time came to inflict the punishment he hesitated. It occurred to him that he couldn't in this manner remove the cause. He would simply add by punishment—just one more crime to the list. He realized that a man comes into this world with absolute disregard to any wishes he might have. Then, as soon as he is born, his surroundings begin to shape him. But man can, to a certain extent, pick his surroundings, his environment, you say. This is true, but this desire, the ambition or energy to "pick" are all effects. They have a cause. In seeking this cause we become involved in a study of heredity. It is evident that in selecting any kind of animal to perpetuate his kind we should know much more than is evident from his looks. We must look back over the ancestors, as we would over a map, and study them. Thus, in selecting a dairy sire, we casually require constitution, capacity, nervous temperament, masculinity, a large and correct circulatory system. We then delve into the study of pedigree and records. We look for large milk records. We demand purity of breeding, because we know that, as far as the next generation is concerned, these "effects" will in turn become "causes."

Top Iowa Boar to Kansas.

H. B. Walter writes from Rochester, Minn., where he is confined in a hospital, that himself and H. C. Graner of Lancaster, Kansas, bought the top boar in the Pfander sale held at Clarinda, Iowa, recently. Mr. Walter also bought a Glantess fall yearling open gilt in the same sale. She is to be bred to the great Expansive. Mr. Graner bought a sow on the circuit bred to A. Wonder. Remember the H. B. Walter fall sale to be held November 1, and H. C. Graner's the day following. Mr. Walter authorizes us to claim Jan. 6th for his bred sow sale.

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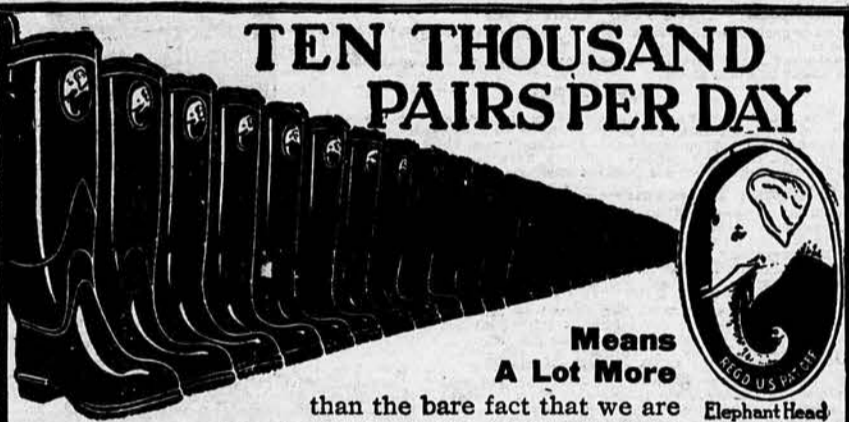
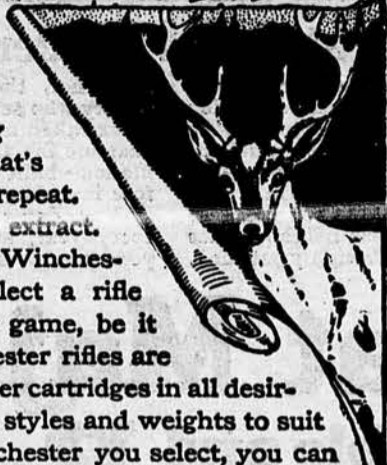
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POULTRY



Beans are highly nitrogenous and make an excellent food for the fowls. So also are peas and will be relished by the chickens as a change in their diet.

Sour food should never be allowed to remain in the feeding pans from one meal to another. Sour feed is dangerous, especially during extra warm weather.

When the hen shows a pale head and is sluggish, indigestion is at fault. Unless too far gone, a change to a grass run will be beneficial.

Surplus stock should be converted into cash at the earliest profitable opportunity. Money talks, but it doesn't eat its head off or die of cholera or roup or some other ailment prevalent among fowls.

A surplus rooster is an expensive ornament in the poultry yard. Kill him off or sell him before he eats double his value in food and robs the hens of their share.

There is no reason why the farmer should not at least keep his own table supplied with baked, fried or broiled chicken. Chicken meat is often cheaper than any other and is much handier.

Lice play havoc among the fowls at this time of year and they are not inspected for these pests as often as they should be. Lice Keep the young chicks from growing and the old hens from laying.

Not enough importance is placed on the value of good air-slaked lime for use in the poultry house and on the runs. Properly used, the lime is of great sanitary value. It will counteract disagreeable odors. A free use of air-slaked lime on chicken runs where gaps prevail is exceedingly beneficial. Its use no doubt also destroys other germs and bacilli. The wise poultryman will always have a good supply of lime on hand and use it both inside and out of his poultry houses.

Buy Your Stock Now.

If you are contemplating starting in the fancy poultry business next spring, don't wait till that time to buy your stock. So many wait till the last moment before buying their stock that it is an annoyance to themselves as well as the breeder to be told that he has no stock for sale. Here are some of the advantages of buying June bred poultry at the present time.

1. The breeder has a larger stock on hand than he will have in the spring.
2. He has more birds than he can properly accommodate now, and will "thin out" at a sacrifice.
3. As business is dull with the poultry fancier at this time of the year, he is more anxious to sell and will do better by you.
4. If he is compelled to keep his stock over till spring, he will add the extra expense to the birds, and if eggs for hatching are in demand, he will not sell at any price.
5. In the spring the pens are mated up, and the careful breeder will not break up his matings.
6. Hens and pullets, of any breed, are seldom to be had in the spring.
7. By buying young birds now, you may get the very best, for the best cannot be picked out till they are fully matured.
8. Cockerels are in excess now. You cannot find a better time than the present to secure one.

How Eggs Are Inspected.

The inspection of eggs is more thorough than it used to be some years ago. The law compelling the candling of eggs by buyers and the penalty for selling rotten eggs has made the sellers more careful about offering stale eggs for sale, still the candling process is more rigid than ever.

Eggs used to be purchased by large dealers in two ways; so much per dozen "case count," or so much per dozen, "subject to candling." "Case count," means just as they run in the cases, a full case containing 30 dozen eggs. "Subject to candling," means payment for eggs that pass the candling inspector and are

therefore classed as good. The method is the only way eggs are during hot weather. In candling the inspector has a small, dark room. He sets three cases before about the height of a table. In each is a case full of eggs, on either side into which to deposit "stale" and "freshes." Near by is a candle and "spots" and another "cracks." On the case from which the inspector is a candle and behind it a cloth hung on the wall. He picks up eggs in his left hand takes two in his right hand, and holds them close to the candle, juggling them before the candle and in a moment he has them sorted.

The way he determines the age of an egg is by the ring he sees through the shell. Every fresh egg has a large space at the top. When the egg is month old, the albumen becomes watery and the yolk is almost larger. In sixty days, the albumen is still more watery and the yolk comes down further. A month longer and the ring is almost gone. The center of the egg, and it is predicted to be bad. "Cracks" are easily detected in candling. In shipping those even very slightly cracked eggs aside, for they would be sure to be detected by the inspector at the end and thrown out, to the loss of the shipper.

When the albumen of an egg is watery, the yolk floats up and the egg lies long, it will stick to the shell. When an egg of this kind comes to the candle, it shows a dark spot on the shell and is called a "spot." This spot is often the result of an egg for some time on the damp ground in a wet nest. Sometimes the egg looks strangely mottled or freckled when held against the candle. This is the result of having been packed in an old-fashioned custom still in vogue on some farms. It injures the sale whenever detected, as buyers do not buy salted or limed eggs in days of cold storage. An inspector pick out an egg that has been in cold storage by its pale or faded color and can tell a salted egg by its being near the center of the egg.

In the summer inspection, inspectors often open a case of eggs to find hatched chickens peeping within. A case may have stood on the shelf or on the country station platform for the sun for days, and the heat formed the duties of a mother hen would not happen if farmers would separate the males from the females and keep them apart after the breeding season is over and they would make money out of their eggs by the keeping qualities of them. Some inspectors use electricity in inspecting and several kind of patent egg candles are on the market, but the old-fashioned way of inspecting them by the candle is said to be the more satisfactory. No more can the setting of eggs be abandoned in the hay-mow because of market and escape detection, or in eggs left in the incubator be checked fresh eggs, for the inspector stands guard to protect the buyer from deceits. Gather your eggs often and to market every day is the only way to get the top-notch price for fresh eggs.

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Success' frames are second-growth white oak and oak, mortised, bolted and trussed—double sills through the middle.

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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.

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JOHN DEERE PLOW CO. MOLINE, ILLINOIS

The moulting hen is not necessarily a sick hen, but it is in that condition that neglect will so weaken it that disease will find an open door. See that they get plenty of nourishing food.

There are periods when the hens lay but few eggs, especially if they have done good service since the season opened. Such an occurrence does not indicate that they will be no longer profitable, but that they are recuperating.

Changeable Weather.

The sudden changes of the weather usual at this season of the year should be guarded against by the careful poultry breeder. The first cool weather is apt to bring on roup, which is usually caused by dampness, drafts and sudden cold weather.

Keep the Hens Busy.

Every poultry writer in the land has told his readers day in and day out that exercise is necessary for the well being and well doing of laying hens.

A Ticket to California for \$25

That's what a one-way second-class ticket from nearly all Santa Fe stations in Kansas and Oklahoma to California may be bought for September 15 to October 15 inclusive.

If you buy one of these tickets you will save considerable money—in many cases as much as \$15. Isn't that worth something to you?

You may travel in tourist sleepers or free chair cars,—both carried on each of the Santa Fe's three fast trains that leave Kansas City daily. These

Tourist Sleepers

are of latest design and have electric lights, good beds, large dressing rooms and men's smoking rooms.

Very liberal stop-over privileges give chances to visit Grand Canyon, Yosemite Valley and other points of interest.

If you are interested, I will send you a copy of "Tourist Sleeper Excursions" and other literature.

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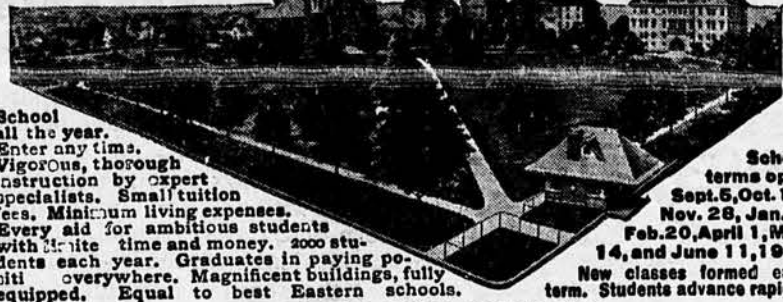


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Suppose!

Suppose that all the little boys,
And every little girl,
Should be compelled to change their names
Of Lily, Rose and Pearl;
Or Harry, George and Francis, too;
To put these on the shelves,
And answer to the very name,
That best described themselves.

Suppose when teacher called the roll,
That it should sound like this:
Decetful Jenkins, Lazy Brown,
And Disagreeable Bliss;
Or Selfish Hopkins, Stingy Green,
Jones Brothers, Fret and Tease.
If anything could queerer sound,
I wish you'd tell me, please.

Suppose, just for a moment, that
The teacher called your name,
I wonder if you would be pleased,
Or hide your head in shame.
Suppose I question mother;
Because, of course, she knows,
Would you be glad or sorry, dear?
Now which, do you suppose?
Pauline Frances Camp in *The Housekeeper*.

Salt added to starch makes the gloss on linen when it is ironed.

It is said that if a knife is thoroughly heated it will cut hot bread or cake easily.

It is said that rubbing the hands with raw celery will remove any odor left after peeling onions.

It is said that the skins can be removed easily from walnuts if they are placed in cold water a few minutes as soon as the shells are removed.

It is said that an excellent way to bleach clothes is to put into the wash-boiler with them a few peach leaves tied in a piece of cheesecloth.

To Lengthen the Life of Pillow Slips.

Pillow slips which are made of tubing may be made to last longer by reversing the seam end. When the sides are beginning to look thin, rip the seam and turn half way around so that the former folds meet in the center and stitch up again. This gives a new surface for the heavier wear and practically doubles the service of the pillow slip.

A Persuasive Agent.

Mrs. Kallerinnes—Oh, I see you have bought a fireless cooker.
Mrs. Yungwif—Yes, I bought it today. I told the agent I was going away for three months and wouldn't get a cooker till I came back, but, when he told me how nice it would be to put some eggs in it just before I left and find in their places splendid, piping-hot roast chickens when I returned, I just couldn't help yielding to the temptation.

In No Hurry.

Once three men were to be hung, an Englishman, an Irishman and a Scotchman. The judge told them that they might choose the tree that they would prefer to be hung on.
"What kind of a tree do you prefer?" he asked the Englishman.
"An oak, sir."
"What kind will you have?" to the Scotchman.
"A cedar, sir."
"What kind will you take, Pat?"
"Faith, and Oi'll take the gooseburrey tree, sir."
"Oh, that won't do, Pat. A gooseberry is too small."
"Faith, thin, and Oi'll wait till it grows."—Holland's.

The Head Poise.

Do you sigh to be called a stylish-looking woman? Consider the poise of your head. You may have taste and money to gratify it, but you will never show off your clothes if you turtle your head, thrust out your chin, carry your neck to one side or draw your chin back until your whole body and carriage is rigid. A Frenchwoman when asked why her countrywomen usually had such finely poised heads said it was because they were taught to show the tops of their collars. Most of us hide our collar top, as the con-

dition of ruchings plainly shows. Try to remember the simple rule of showing the collar edge and you will quickly assume the head poise of a thoroughbred. If you have a double chin this rule holds doubly good. Don't think that by drawing in the rolls of flesh you diminish or conceal them.—*American Home Monthly*.

Stricken at Last.

"Oh, John," cried the farmer's wife, "I'm afraid I've taken that dreadful new disease."

"What makes you think so, dear?" he asked, alarmed, gathering the frail little woman into his arms and stroking the thinning hair, as she sobbed out the story of her fears upon his broad shoulder.

"Well," she explained, "after I have gotten up, dressed myself and the children, cooked breakfast, prepared the children for school, strained the new milk, and set it away to cool, churned and worked the butter, swept and dusted, done the ironing, given baby his bath, cooked dinner and washed the dishes, sewed all the afternoon, cooked supper and washed the dishes, undressed the children and put them to bed and sat down for the evening, I am too tired to do my darning. I never used to feel so. It must be hookworm."—Puck.

506-C. Design for Waist.

A dainty Clematis design for an embroidered frock, suitable for shadow embroidery. Stamped on 2½ yards of pure imported white linen, \$2.10; stamped on 2½ yards of pure ecru linen, \$1.85; stamped on 2 yards of 39-inch fine lawn



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Stamped on 5 yards of 36-inch pure imported white linen, \$4.50; stamped on 5 yards of 36-inch pure ecru linen, \$3.85; stamped on 4 yards of 39-inch fine lawn or nainsook, \$2; stamped on 4 yards of 39-inch voile, \$2.75; perforated pattern, 25c; transfer pattern, 10c.

8952. Comfortable Frock for Little Miss.

Girl's dress with or without tucker. For cool days a guimpe or tucker will finish this frock satisfactorily, while for warm weather the short sleeves and round neck will be most desirable. Any of the materials now in vogue will develop the design suitably. As here shown blue linen was used, with a simple finish of stitching and a black belt for contrast and ornamentation. The pattern is cut in four sizes, 4, 6, 8 and 10 years. It requires 4½ yards of 24-inch mate-

Try a Coconut Pie next time you bake



Your family will surely enjoy the enriching goodness imparted by fresh, wholesome

BAKER'S Shredded Coconut

One of the easiest digested foods. Contains more food value than most food products. Yields maximum amount of energy and muscular power. Put up in convenient form, shredded and ready for instant use, in

10 and 20 Cent Packages lined inside, and covered outside, with oil-proof, germ-proof and dust-proof paper.

Write to us for Baker's Coconut Recipe Book—FREE.

THE FRANKLIN BAKER COMPANY
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TOPEKA wants ambitious young men and women. She offers you the finest opportunities, at good salary, in big concerns—and the best facilities for business training.

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Good chances to earn expenses. Write for set of 8 handsome post cards, showing Topeka views.

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BUSINESS TRAINING

Increases every man's efficiency as a producer. It helps to save waste and loss of effort, time and product. Every farm is a business institution and business training for the farmer is an every day necessity. The

PRACTICAL COURSES

In our school are specially designed to meet the needs of young men and women of the farm. Cost is relatively small; our work of highest efficiency. The success of our graduates proves this. Save time and expense by coming to us. Write today for full particulars.

FREDONIA BUSINESS COLLEGE,
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Superior, up-to-date methods. 25 years continued success. Students in every state in the U. S. A good position for every competent young man or woman. Write us.

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WE TEACH YOU

to operate and repair automobiles in our fully equipped modern shop, giving training in vulcanizing, drill press and lathe practice, qualifying you in six weeks. Address **LINCOLN AUTO SCHOOL** 2240 St. Lincoln, Nebr.

MANHATTAN Business College

Thorough work offered in Bookkeeping, Banking, Shortland, Typewriting, Penmanship, Court Reporting and Civil Service. Special Short Course in Farm Bookkeeping. Work may be taken in connection with regular course at Kansas State Agricultural College. Fall term begins Sept. 5, but students may enter at any time. For catalog address: **L. W. NUTTER, Pres.,** Lock Box E, Manhattan, Kan.

Ottawa College
Business Catalogue

rial for the 8 year size for the dress, and 1 1/4 yards of 32-inch material for the tucker. A pattern of this illustration



mailed to any address on receipt of 10 cents in silver or stamps.

No. 8. Water Color Outfit.

This up-to-date outfit consists of eight water colors (the very best for photographs, drawings, leather novelties, burnt wood articles), one camel hair quilt brush, two mixing cups, one chart showing the harmony of colors together with valuable instructions, seven perforated



patterns of floral and fruit designs, five patterns of stencils and all necessary materials for transferring perforated patterns; the whole packed in a very neat tin box. With this outfit any adult or child can pass many pleasant and instructive hours. Price, postpaid, 60 cents.

Why Not Plant More Orchards?

Just at the present time there is more interest in the securing of the supply of apples for the coming winter than the thought of planting trees for future use. There are comparatively few places in Kansas where the supply of apples is now equal to the demand, even in years of plenty.

Even with this condition little interest is being taken by farmers who are quite favorably located, and in some places many orchards that were approaching maturity have been removed that the owner might grow more grain or forage crops. At the present time the demand is greater, and the consumers are better able to pay good prices than ever. Much is being written as to the possibilities of the west and northwest. Newspapers are carrying much advertising matter to that effect, while here in our own community it is possible to secure almost as good results if we would but make the effort.

In traveling about the state I am led to believe that the productive capacity of our orchards has greatly depreciated during the past ten years. Few new orchards are being planted, the old ones have served their period of usefulness and from present appearances, if we do not have a shortage of fruit in the near future, it will not be the fault of the local growers, but due to the more successful neighbors in the west and northwest.

During the past season many apples have been shipped in to our local markets. The transportation charges alone would have paid all the cost of growing

and have left a good margin of profit, if grown at home. The writer does not wish to advise indiscriminate planting, but there is hardly a school district that could not afford one or two small orchards. Most orchardists are inclined to get into this work too heavily at first. The small, well kept orchard of, say, 5 to 10 acres, will yield more barrels of first-class fruit than 40 acres handled according to the usual method. And it is the small orchard which the great mass of Kansas farmers are interested in. For 50 years, or since the settlement of the state, orchardists have been growing fruit in the state, so that now it is possible for beginners to plant of those sorts that are suitable to Kansas conditions. It has been demonstrated just what sorts are suited for certain communities; also what location is best adapted.

An immense amount of nursery stock is planted every season, but in too many cases little judgment is used. Many wait until the last moment to place their orders, so that the desirable sorts are not to be had. Others do not get their ground in suitable condition. The present season is a good example to illustrate the benefits of proper preparation. Where the ground has been well worked and trees planted early in the spring, little loss was experienced, while on the other hand, those trees that were planted late and in soil improperly prepared, the percent of loss was quite high, for which the nursery man is receiving more than his share of blame.

To those that are contemplating the planting of trees next spring, it is well to have in mind in advance a few of the principal points. Select the best location that the farm affords. Do not plant the trees in a location where the air drainage is retarded. It is not safe to plant in narrow creek bottoms, but plant on well drained upland. The slope

does not make so much difference, but avoid steep hillsides fronting south and southwesterly. See to it that the upland is fall plowed and in shape to plant early in the spring. Use care in selecting your stock, particularly with reference to your varieties. Place the order with a reputable firm and get the order in early.

The writer will be pleased to hear from farmers who are expecting to plant an orchard next spring and suggestions will be sent free upon request. Where personal visits are necessary, the party requesting the same will be expected to pay traveling expenses incurred while making the visit.—C. V. Halsinger, Horticulturist, Kansas Experiment Station.

The farmer who owns his farm, is the particular person who is fixed. Banks may fail and factories close, workmen strike and mines suspend, merchants fail and towns burn, times may be panicky and even crops may be short—but the farmer who owns his acres will get along. He will live in comfort and quiet with plenty to eat, drink and wear. He is the most independent man on earth. Yet there are lots of them who do not appreciate their situation.

Never feed whole grains to chickens from a trough. The stronger and the bolder will get more than their share and more than is good for them, while the weaker ones will be underfed. Scatter all grain over as wide an area as possible. If in narrow quarters, go to some pains to bury it in straw or litter or even to sow it several inches deep in the ground.

In feeding mash, give as much variety as possible, always using cornmeal and bran, together with some kind of cooked vegetable.

OFTEN IMITATED—NEVER DUPLICATED
Suesine Silk 39¢

TWO Silk Dresses Instead of ONE

Every time you decide to have a new Silk Dress you can have TWO instead of ONE—if you make it of Suesine Silk.

This is how you do it. Suesine Silk costs but 39¢ a yard—not less than half the price of good China Silk. So for the price of a single dress of China Silk you can get two of Suesine Silk. Years ago when Suesine was first introduced, women of taste and discrimination bought Suesine Silk for a single dress, because they liked its value.

Today they are buying Suesine Silk again and again—not alone for one dress but for many—because they have proved for themselves by their months of trial that Suesine Silk is the best silk VALUE they can buy.

Go to your Dealer today and ask for Suesine Silk. See that the words

SUESINE SILK

are on every yard. Beware of accepting substitutes.

These substitutes are finished with glue, to make them glossy, and are weighted with tin and iron dust to give them "body". They look beautiful at first. A few months' wear will prove them worthless. Insist upon the genuine Suesine Silk with the name stamped along the edge.

We will send you absolutely free, forty-two samples of Suesine Silk—more than 255 square inches altogether.

We ask only, that, when writing for these free samples, you will mention the name of your regular dry goods dealer, and say whether he sells Suesine Silk or not. Please be sure to give that information in writing to us.

No matter where you live, it is easy to get genuine Suesine Silk

We do not sell Suesine Silk except through regular retail merchants. But if we cannot send you the name and address of a dealer in your vicinity who has Suesine Silk, we will see that your order is filled at the same price, and just as conveniently, by a reliable retail house, if you enclose color sample and price, 39¢ per yard.

The price of Suesine Silk in CANADA is 50¢ a yard

Bedford Mills Dak 13
8 to 14 W. 3d St. New York.



Don't Use Laundry Soap on Your Face

JAP ROSE
"The Bubble Bath Soap"

is unequalled for cleansing your skin because it is the original, transparent Toilet and Bath Soap and is absolutely pure. Because it is made of vegetable oils, it cleanses instantly, thoroughly and refreshingly. For genuine pleasure and satisfaction insist on getting

JAP ROSE
Sold by dealers everywhere

REFUSE IMITATIONS
Look for the Jap Girl on every package.

A Large Cake for 10c

KIRK
Established 1839

Plain as two plus two

If you use full strength spices—Tone Bros.—you get full value for every cent. But it is simple arithmetic that if you use inferior spices of half strength, you lose half your money. Study spice economy and buy

TONE SPICES

Stock carefully selected, then thoroughly cleaned to give you full weight of actual spice. Ground by up-to-date machinery, and then into sealed boxes that keep the strength. That's spice—better isn't possible. Look for the cannon on the box, and you'll be right.

10c at Your Grocer's—any kind. If he can't supply you, send 10c for full size box. **TONE BROS.,** Des Moines, Ia. Blenders of the famous OLD GOLDEN COFFEE.

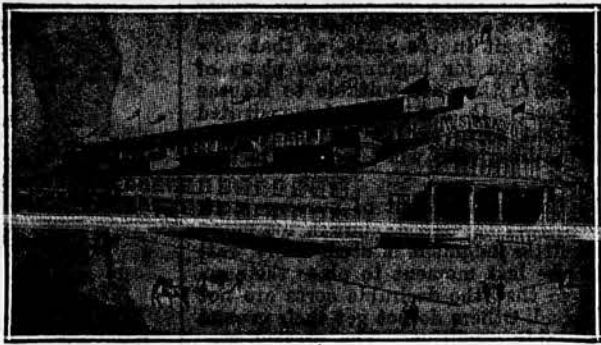
Oklahoma State Fair

Oklahoma City, Okla.

Sept. 26 to Oct. 7, 1911

\$47,259.50
In Cash
Premiums
And
Purses

Cattle, \$6,861.
Heavy Horses, \$3,813.
Horse Show, \$3,000.
Sheep, \$1,217.
Swine, \$2,139.
Poultry, \$2,124.



Mammoth Live Stock and Horse Show Pavilion

Southwest's Greatest Live Stock Show

If you are in business for profit, reserve stalls and pens at once. Write today for premium book, entry blanks and any other information. Entries close Sept. 25. Half a million people are coming to see what you have to sell.

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OKLAHOMA CITY, OKLA.

Poland China Sale

AT

Pilot Grove, Mo.,
Sept. 14th, 1911

10 tried brood sows, all large type and bred. 25 fall yearling gilts, all bred to Mount Vernon Hadley, my herd boar. 8 fall boars, sired by Big Designer, and 7 spring boars sired by John Wonder. My sows are all large type; some of them cost me over \$300. The offering is the best I have on the farm. Send for my catalogue.

I Am Selling the Best

Arrange to attend my sale and you will not be displeased. I have bought the best I could buy from many of the good herds, and I am selling a bunch that I know are good. If you cannot attend, send bids to O. W. Devine, representing the Kansas Farmer. For catalogue apply to

BERT HARRIMAN
Pilot Grove, Missouri

THE GREGORY FARM

Of White Hall, Green Co. Ill.

Will show their string of Percheron horses and their Berkshire hogs at Topeka and St. Joe fairs.

Don't fail to see their grand string of Percherons. A large number will be mares and colts by the great stallions Radziwill and the grand champion Carnot.

A number of these mares, bred to these great stallions, will be sold on November 8, at the annual Percheron sale, held at the Gregory farm.

The Berkshires will be mostly the get of Masterpiece.

W. S. CORSA, PROP.

Mr. W. V. Hoppe of Stella, Neb., writes that he has sold his herd boar Looks Reserve to Mr. Bunnell of Atchison, and asks us to make change in advertisement. He states further that he attended the Pfander sale recently held in Iowa and bought a boar sired by Mastadon Wonder,

he by A. Wonder. His dam was Giantess first by Long King. Mr. Hoppe makes the statement that Looks Reserve is one of the great sires of the West and says he was rather hasty in letting him go. Remember the Hoppe sale at Fall City, Neb., Oct. 28th.

The GRANGE

Agriculture in School.

The Grange fully indorses the following, as it is the doctrine the Grange has been advocating for 35 years:

A late bulletin of the Illinois Farmers' Institute makes an urgent plea for the teaching of matters pertaining to farming in the country schools, contending that the whole trend of the present school system is to fit boys and girls exclusively for city life, with no attention to preparing them for life on the farm. A paragraph is worthy of quotation:

"Shall farm boys become farmers wholly through the aid of self-educated farmers, taught in the school of experience, be that ever so good, or shall the farm school aid these parents, through scientific knowledge that has already passed into written form? Schools have been so busy producing great men at the top of every other calling that they have failed to administer the simplest facts of agriculture to these actual tillers of the soil.

"The sentiment in my county now favors emphasizing in the one-room school the fact that the business of the farm is as worthy of study as is the business of the city; that a trial balance of feed rations requires as much skill as the trial balance of bookkeeping, and that to work for \$25 or \$30 a month and call it a wage is more remunerating and just as worthy as to stand behind a counter for \$10 or \$12 a week and call it a salary."

Farming Calls for Knowledge.

One of the points most emphasized by National Lecturer Wilson in his recent talks to the members of the Grange in Kansas is the fact that the farmer needs education more than anything else. Not that he needs it more than anyone else, but because there is more science in farming than in any other business today. Then, too, the science of farming is constantly changing, the same as in other lines. Medical science is a good illustration. The methods that killed or cured years ago are not thought of today.

A farmer should know something about botany in order to understand plants. He should be a chemist to understand the chemistry of the soil, and an entomologist to understand and know how to combat the insects that destroy his crops.

What Mr. Wilson says is true beyond the shadow of a doubt. Of course, it is true, too, that only a comparatively few farmers have had an opportunity to attend the Agricultural College, and, much as they would like to do so, many young men on the farm will not be able to do so. But there is no reason why the farmer, young, middle aged or old, should not secure a liberal education along practical lines in this day of good, cheap literature. We maintain that a man may secure information of as much, or more, value to him by carefully reading the well edited agricultural papers of his state or section of the country as by a course in the Agricultural College.

We do not maintain that the Kansas Farmer is the only good agricultural paper published, but we do know that any farmer who will carefully look through the 52 copies of Kansas Farmer in a year cannot help finding articles written by men who out of their own experiences have been successful along certain lines that will be worth many times the price of the paper to him. Too many people get the erroneous idea that "paper farming," as they are pleased to style it, amounts to nothing. We can all learn from the experiences of others, and there is no other way under the sun that you can benefit your fellowman more than by giving him the benefit of your experience. Hundreds of articles written by successful farmers are published each year in Kansas Farmer. We are seeking for this information all the time. The work of the great agricultural schools of this country has been worth millions of dollars to the farmer. Few, if any, have the time or land to spare upon which to experiment with seed, soil and conditions. The work of the agricultural experiment stations is for your good, and you get the benefit of all these things through the columns of the Kansas Farmer.

Now, it was not our purpose when we started out with this story to "toot our own horn," particularly, but the fact remains that you cannot possibly get in any other way one-hundredth part as much information for your money as you get for only \$1 invested in a year's subscription to a good agricultural paper.



Let us send you on
FREE TRIAL

this genuine **GOUMAT CORNET** complete in a beautiful velvet lined case.

Warranted FIVE years; 1912 perfected model; HIGH and LOW pitch quick change to A; new horn and latest improved valves; light action and easy to blow; triple silver plated and burnished bell and tips; case of hand some black seal Keratol and lined with fine silk plush. Entire outfit complete, only..... **\$22.50**

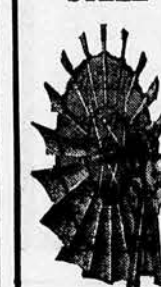
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Our new 1912 catalog of brass and string instruments; the most complete ever published; sent free to any address. Ask for catalog F.

JENKINS SONS MUSIC CO.
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CLIPPER GALVANIZED STEEL WINDMILLS

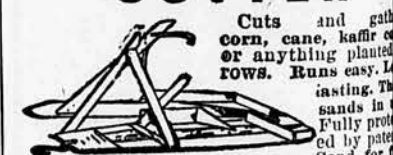
And Towers are Warranted



Write for our new and attractive catalog describing the best, strongest and most durable windmill on earth at very lowest price.

THE CLIPPER WINDMILL AND PUMP CO.
TOPEKA, KANSAS.

GREEN CORN CUTTER



Cuts and gath corn, cane, kaffir or anything planted in rows. Runs easy. Lasting. The sands in it fully protected by patent. Send for circulars.

J. A. COLE, MFR., TOPEKA, KAN.

WE WANT A GOOD MAN OR WOMAN—TO ACT AS GENERAL AGENT.

Selling our new and winning merit household necessity. It is easy to sell article that people actually need in life. Appeals to the housewife on account of being economical; repeats quickly sells the year around. Yields large profit to the agent. We want to hear from applicants having a good standing in the community and these willing to hustle. Opportunity affords you a permanent pleasant business. If you have the ability to sell goods, send full particulars. If you desire a sample send five 2-cent stamps regular 25c package.

FAMOL PRODUCTS CO., 1237 Fair Bldg., Wash. D C

1 MAN HAY PRESS

With one horse you can bale a ton an hour with our wonderful Daisy. Self-feed, condenser, bar-sided hopper, self-threading device, reduce hand work and materially increase the baling capacity. We have hundreds of delighted users. Write today for circular K-167 which gives testimonials, prices and details of five days' free trial.

GEO. ERTEL CO. QUINCY, ILL.

CORN HARVESTER

Something new; cuts complete row without stopping team; makes shock row to 80 rods apart and leaves the land clear for seeding or plowing; just what the farmer has been needing; sold direct; are guaranteed; price \$20; write for circulars. **CORN KING HARVESTER CO. Box 1522, Salina, Kan.**

Readers Market Place

CLASSIFIED ADVERTISING 3 CENTS A WORD

"bargain counter." Thousands of people have surplus items or stock limited in amount or numbers hardly enough to justify extensive display advertisements of other people want to buy these same things. These intending to buy the classified "ads"—looking for bargains. The "ads" are easy to find and read. Your advertisement here reaches a quarter of a million readers for 3 cents per word for one, two or three insertions. Four or more insertions, the rate is 2 cents per word. No "ad" taken for less than 30 cents. All "ads" set in uniform display. Initials and numbers count as words. Address counted. Terms as above with order. Use these classified columns for paying results.

- SALE HELP WANTED.**
- MENT FARMERS WANTED—** on October 18. High salaries; free terms. If you understand farming contact, 14, St. Louis.
- D-LOCAL MEN TO TAKE OB-** ursery stock in Kans., Mo., Ill. at free; cash weekly. National Lawrence, Kan.
- ANTED FOR GOVERNMENT** October examinations every- nce unnecessary; average sal-; annual vacations; send imme- list of positions open; common sufficient. Franklin Institute, Rochester, N. Y.
- REAL ESTATE**
- L YOUR PROPERTY, WRITE** n Business Agency, Minneapolis.
- LE-80 A ALFALFA LAND. IF** write for list of ten 80 acre tracts V. E. Niquette, Salina, Kansas
- LICS-BUY FARM NEAR \$90,000** six priests; circulars free. Box ul, Kan.
- ED SMOOTH 85-ACRE FARM** ngfield, Mo. Catharine Allen,
- BURKS & PATTON, REAL** ers. Write them for informa- rd to Arkansas lands, Mont-
- ll my improved 80 a., Eastern** ose to city of 5,000, for \$4,000. nal. easy. Address Owner, care armer.
- FOR SALE OR EXCHANGE** n Kansas, Okla., Mo., Texas and te me or call. C. L. Sayler, Top-
- RCE CO.—RICHEST IN AGRI-** horticulture of any in Mo.; the nature of investment you ge or small tracts; terms. King arionville, Mo.
- EENERS, COME TO OREGON,** re are no storms, cyclones or fall- ps; write for list of bargains in ain, fruit and poultry ranches. bber, Philomath, Benton Co., Ore.
- RES EXTRA FINE FARMING** n cultivation, unimproved; only om Crookston, Minn.; will sacri- n soon. E. J. Kennedy, Limon,
- KANSAS FARMS—RICH SOIL, LEV-** ve and well located, at \$8 to \$15 large list and homeseeker's guide ee; state map 10c. Moore, Searcy,
- TEAD RELINQUISHMENTS AND** nds in famous Arkansas Valley of Act quickly. G. W. Keller, Colo.
- ALE OR TRADE—LAND TRADE** d for all or any part of \$25,000 stock; up to date. What have rshorn Millinery Co., 618 Felix st., h, Mo.
- S FARMS AT SPECIAL PRICES—** e Brazos Valley is being thrown small farms at bargains; send 2 ps to the sec'y of Brazos Valley al Club, Bryan Texas, for a map and information.
- WANTED—WE HAVE DIRECT** Don't pay commission. Write de- roperty, naming lowest price. We ers locate desirable property free. Investment Association, 43 Palace neapolis, Minn.
- IDAHO, OFFERS WONDERFUL** ites for farmers, investors, stock- ruit-growers. Splendid climate, re- ormation and illustrated literature Address Welser Commercial Club, Idaho.
- RE FARM, 2 1/2 MILES FROM** Butler Co., Kan.; 65 a. in cult., 71 t meadow; small orchard, plenty of t; 8-room house, good condition, arch cave, barn 30x40 with hay nary, hen house, buggy shed; well th wire and hedge; for quick sale t. mtg. \$1,000. H. H. Berste, Eldo-
- QUICK SALE, BY OWNER—** section prairie land, unimproved, oll; good for general farming or are; 3 miles from Wheatley; price e; easy terms.—Half section farm, o acres in good timber, balance some land in cultivation; fair im- ts; fine for general farming, rice or stock farm; 4 miles from Stutt- ee \$37.50; easy terms.—Sixty acres er land, fine soil, half mile from t; good timber; price \$30; easy t. A. Reinsch, owner, Stuttgart, Ark.
- CATTLE.**
- TEENS FOR SALE—TWO REGIS-** earling bulls raised in Western Fifty dollars each. Ira Hawkins, Kan.
- SALE—DOUBLE STANDARD** Durham bred bull; Lord Victor X- 1899; sire Lord Mayor, dam Vic- t; sound and all right; priced rea- Frank Michael, Erie, Kan.

FOR SALE—FINE REGISTERED JER- sey cow; heavy milk and high test; will sell cheap for immediate sale; write for full information and price. Address A. R. T., Kansas Farmer, Topeka, Kan.

JERSEY CATTLE, COLLIES, POLAND Chinas and White Wyandottes; one Scotch Collie pup, female, 8 months old, partly tramped, nicely marked, natural healer. \$15. U. A. Gore, Seward, Kan.

POULTRY.
BARRED ROCK BABIES AND BREED- ers. Eggs, 15, \$1.00; 50, \$3.25; 100, \$8.00; Mrs. D. M. Gillespie, Clay Center, Kan.

ROSE COMB WHITE LEGHORN COCK- erels, 50 cents. Mrs. John Hill, Vinland, Kans.

S. C. BUFF ORPINGTON EGGS \$1.50 per 15, \$6 per 100. Mrs. Ella Sherburnaw, Fedonia, Kan.

SILVER SPANGLED HAMBURGS EX- clusively; nothing better. J. L. Brown, Box B, Kearney, Neb.

WHITE WYANDOTTE COCKERELS, \$1 each; three for \$2.50. Geo. E. Gould, Bluff City, Kan.

WHITE PEKIN DUCKS; 125 TO PICK from; 10 weeks old; weigh 5 to 6 lbs.; satisfac- tion guaranteed; \$1 each. J. T. Welch, Whitewater, Kan.

S. C. R. I. REDS, STOCK AND EGGS FOR sale in season. Write for prices, Moore & Moore, 1238 Larimer Ave., Wichita, Kansas.

LOWEST PRICES ON CHICKENS AND ducks; write us your wants; we have a stamp. J. M. Bahn & Son, Clarinda, Ia., Route 15.

BUFF WYANDOTTES—BARGAIN PRICES for balance of season. Eggs \$1.50 per 15; day-old chicks 15c each. High scoring birds only in breeding pens. A rare chance to get a start from high class stock. G. C. Wheeler, Manhattan, Kan.

BLAKER'S BARRED ROCKS ARE SU- preme in type and color, winning at the largest shows. Get my catalog and see for yourself the grand quality I am offering in eggs from blue blood stock. Choice incu- bator eggs \$2 per 30, \$6 per 100. A. E. Blaker, R. 22, Parsons, Kan.

SCOTCH COLLIES—PUPS AND YOUNG dogs from the best blood in Scotland and America now for sale. All of my brood bitches and stud dogs are registered; well trained and natural workers. Emporia Kennels, Emporia, Kan. W. H. Richard.

FOR SALE—TEN THOUSAND HEDGE posts. H. W. Porth, Winfield, Kans.

25 HEAD WELL-BRED HORSES FOR sale; a bargain. S. R. Shupe, Sitka, Kan.

TAKEN UP—A STRAY STEER, TWO years old, at N. C. Pedersen's, Route 10; phone No. 6, on 28, Emporia, Kan.

FOR TRADE—A GOOD THRESHING outfit for western Kansas land. Write W. J. Trousdale, Newton, Kan.

E. R. BOYNTON HAY CO. KANSAS City, Mo. Hay receivers and shippers. Try us.

FOR SALE CHEAP—22 H-P. 5-PASSE- nger Buick. Write W. C. Macy, Woodston, Kan.

FOR SALE—RAMS OF THE DORSET, Hampshire, Southdown and Rambouillet breeds. Animal Husbandry Department, Kansas State Agricultural College, Man- hattan, Kan.

FOR SALE—FOX TYPEWRITER, nearly new, \$20. B. V. Wilcox, Atchison, Kan.

"SEED WHEAT," INSPECTED KHAR- kof wheat, \$1.40 per bushel; sacked, f. o. b. cars here. Henderson Long, Haddam, Kan.

SEED WHEAT, CRIMEAN VARIETY, good quality; write for sample. Alva Alexander, Protection, Kan.

SEED WHEAT FOR SALE. GARDEN Kharhoff wheat at \$1.25 per bushel. C. W. Taylor, Pearl, Kans.

FOR SALE—PURE KHARKOV SEED wheat, \$1.50 per bu.; alfalfa seed, \$10.00. Recleaned and sacked, F. O. B., Emmett, Kan. Mrs. Theodore Saxon.

KHARKOV SEED WHEAT FOR SALE. Seed originally obtained from Hays Experi- ment Station. \$1.25, sack included. W. W. Cook, Russell, Kan.

ALFALFA SEED, FINE QUALITY, clean, free from weed seed; \$1.50 and \$8 per bu., sacks extra; sample upon request. C. Markley, Belle Plaine, Kan.

Men are the greatest factor that go to build agricultural wealth and to secure bright, energetic men to the farm we must win the bright, pushing boys over to the idea that there is more to the farming business than mere drudgery and dollar-getting. Live stock breeding and growing, which it is conceded requires the highest class of mental equipment, will appeal to our bright farm boys as being a game worthy of their effort, and when we get them to see that there is something on the farm that requires their every faculty in its mastery the future greatness of the rural south will be assured, because the place that the bright, cultured men and women call home will never be suffered to retrograde.

The Grange of the Future.
The Grange was originally organized for the purpose of aiding the farmers to sell for more and buy for less, but the order has greatly increased the field of its labor since then. It has proved a great benefit to the farmers and has given them a much greater influence in their communities.

Conditions are changing and the Grange of the future must face them. The consumer is calling for better and more varied products. The New England farmer must meet the competition of the new land of the great west. He must practice intensive farming. He must have a better distribution of his products. The farmer and the consumer must be brought nearer together. The Grange of the future must work less for the benefit of the individual and more for the benefit of the whole community. The Grange must become a national rather than a sectional organization. The Grange must stand for the farmer and fight the farmer's battle. It must be a studying organization. It should be careful to know what it is doing and what the effect of what it does will be. The time is coming when the true test of the Grange will be what it does or has done for the community. The Grange of tomorrow must be aggressive and work outside of the Grange for the reforms advocated in the Grange. It must also work out a better method of co-operation.

Human Side of Rural Life Problem.
The human side of the rural life problem is to make the career of the farmer and the career of the farm tive as corresponding careers in the laborer as attractive and remunera- city. Now, I am well aware that the farmer must himself take the lead in bringing this about. It is absurd to think that any man who has studied the subject only theoretically is fit to direct those who practically work at the matter. But I wish to insist that it is pernicious absurdity for the practical man to refuse to benefit by the work of the student.

One reason why the great business men of today—the great industrial leaders—have gone ahead, while the farmer has tended to sag behind the others, is that they are far more willing and, indeed, eager, to profit by expert and technical knowledge—the knowledge that can only come as a result of the highest education. From railways to factories no great industrial concern can now- days be carried on save by the aid of a swarm of men who have received a high technical education in chemistry, in engineering and in electricity, in one or more of scores of special subjects. In just the same way the farmers should benefit by the advice of the technical men who have been trained in phases of the very work the farmer does. During the last half century we have begun to develop a system of agricultural education at once practical and scientific, and we must go on developing it. But, after developing it, it must be used.

It is certain that the well equipped farm of the future will have a stationary gasoline engine to serve as the "man of all work." Such engine is usually thought of in connection with feed grinding, pumping water, cutting ensilage, etc., but one other important utility is that of operating a small dynamo for house and barn lighting. Manufacturers, with a keen eye to business, are already de- voting much attention to lighting farm buildings by electricity and electrical apparatus particularly adapted to such purpose is already on the market. This season brings to the farm owner a com- plete, yet very simple, outfit for sup- plying electric lights to farm buildings, which is easier to operate and take care of than an automobile or ordinary farm machinery. It enables him to do away with oil lamps, lanterns and candles, which are inconvenient, a nuisance and a constant fire danger.



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makes night work easier. Rayo lanterns give the most light possible for the oil used. Rayo Lanterns will not blow or jar out. They are easy to clean. Easy to fill and light. Made to stand hard wear. You can get Rayo Lan- terns in various sizes, finishes and styles. Each is the best you can buy of its particular kind.



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SAVE SOIL-MOISTURE by using the TOPEKA PACKER after your plow and ahead of the Seeder. Nothing ever invented for western farmers goes farther to insure better crop yields or to save seed, time and labor. Thousands in use and proving every day, that all our claims are facts. We sell direct for wholesale prices and guarantee every packer we ship. Write for special fall prices and full description. Address, UNITED MERCANTILE CO., TOPEKA, KANS.

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THOROUGHbred CHOICE FEBRUARY Duroc Jersey boars for sale; Climax and Wonder families; prices reasonable. Ros- coe C. Bryant, Neosho Falls, Kan.

HORSES AND MULES.
CLEVELAND BAY STALLION, COMET 1080, cheap for cash, or will trade for good horse or jack; Comet is right every way. L. J. Cox, Concordia, Kan.

OILS.
WRITE US TODAY FOR OUR PRICE list of our complete line of oils; best oils on the market for the price and quality. The Rollin Oil Refinery, Chanute, Kan. (Best independent refinery in Kansas.)

FIELD NOTES

FIELD MEN.

Wayne Devline...Topeka, Kan.
H. Johnson...Clay Center, Kan.
J. Cody...Topeka, Kan.

PURE BRED STOCK SALES.

Percherons.
14-15-H. G. McMillan & Sons, Rock Rapids, Ia.
H. G. McMillan & Sons, Rock Rapids, Ia.

Holstein-Freislans.
7-8-H. C. Glissman, Station B., Omaha, Neb.

Herefords.
10-Thos. Crawford, Butler, Mo.
17-18-G. W. Newman, Emporia, Kan.

Poland Chinas.

13-W. B. Wallace, Bunceton, Mo.
14-Bert Harriman, Pilot Grove, Mo.
15-J. A. Winebrenner, Tipton, Mo.

16-Oak Hill Stock Farm, Esbon, Kan.
17-J. D. Spangler, Sharon, Kan.
18-J. D. Gates, Ravenwood, Mo.
19-Geo. M. Hull, Garnett, Kan.

20-A. H. Foster, King City, Mo.
21-Baker Bros., Butler, Mo.
22-C. H. Halderman, Burchard, Neb.
23-O. James, Bradyville, Iowa.

24-E. W. Barber & Son, Franklin, Neb.
25-A. P. Wright, Valley Center, Kan.
26-W. Jones, Solomon, Kan.
27-Miller & Manderschied, St. John, Kan.

28-J. F. Ware, Garfield, Kan.
29-George W. Roberts, Larned, Kan.
30-O. M. Furnas, Oxford, Kan.
31-T. J. Meisner, Sabetha, Kan.

32-A. L. Albright, Waterville, Kan.
33-J. H. Hamilton & Son, Guide Rock, Neb.
34-A. C. Lobaugh, Washington, Kan.
35-T. J. Charles, Republic, Kan.

36-H. C. Graner, Lancaster, Kan.
37-George M. Hull and Col. C. E. Bean, Garnett, Kan.
38-W. E. Willey, Steele City, Neb.
39-Oak Hill Stock Farm, Esbon, Kan.

Waite Gets Master's Longfellow.
Leon A. Waite of Winfield, Kan., has lately purchased the great Berkshire boar Master's Longfellow, for which he paid a long price to G. C. Nash of Eskridge.

Wallace's Big Poland China Sale.
On Wednesday, September 13, at 12 o'clock noon, Mr. W. B. Wallace of Bunceton, Mo., will hold his annual sale of mammoth Poland Chinas, and he wants every breeder and every farmer who likes this breed to be on hand.

New Offices Opened at Topeka, Kansas.
(From the Iowa Colonist.)
The Emigration Land Co. has appointed as state agents W. S. Hazard Jr. and O. G. Chesley of Des Moines, Iowa, and C. L. Sharpe of Topeka, Kan.

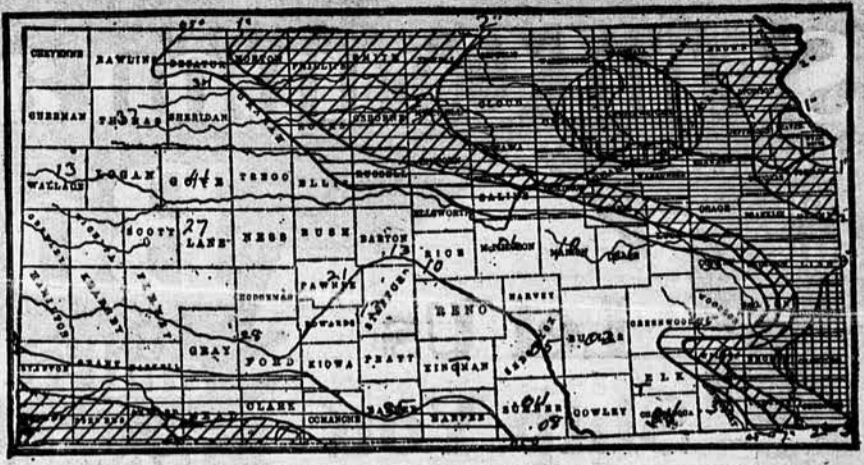
Sutton's Berkshire Dispersion.
Sutton farm of Lawrence, Kan., which has long been famous for its Black Robin Hood Berkshires, held a dispersion sale on August 17, 1911, at which time the splendid animals which composed this herd were scattered broadcast over 13 different states.

Herd Boar For Sale.
Jas. Arkell, Junction City, Kan., one of the successful Poland China breeders of central Kansas, has an advertisement in this issue of Kansas Farmer offering for quick sale the choice of his tried boars sired by Grand Look.

Practical Education at a Low Cost.
Highland Park College of Des Moines, Iowa, has been aptly termed "The greatest Exponent of Modern Education."

KANSAS CROP REPORT

Rain chart prepared by T. B. Jennings from reports collected by the Weather Bureau.



UNITED STATES WEATHER OBSERVER'S REPORTS BY COUNTIES

INCHES:
SCALE IN
Less than .50. .50 to 1 1 to 2. 2 to 3 Over 3. T. trace

Allen-Light showers during week. More rain needed.
Anderson-Good rain August 21. Crops badly damaged by dry and hot weather from August 3 to 21.
Barber-More rain needed. Crops doing fairly well.

Johnson-Good rainfall August 21, which will mature late corn, improve the pastures and gardens.
Lane-Week has been very favorable with the exception of August 19 and 20, which were very hot.
Leavenworth-Weather conditions excellent this week. Growing things have been benefited considerably, though rain came too late to help corn.

mail. Over 8,000 students enrolled in the Correspondence School. The opportunity for advancement and education at this college should be taken advantage of by every earnest-minded, determined young man and woman.

might be cited the report of the board of government experts who, after a thorough test of various makes, reported officially that Winchester rifle cartridges were superior to all others.

Harriman's Big Poland Sale.
On Thursday, Sept. 14, Bert Harriman of Pilot Grove, Mo., will sell at public sale a draft of 50 head of choice sows, gilts and boars that are hard to beat.

Chas. Pilcher Visited.
Mr. C. H. Pilcher of Glasco, Kansas, was visited recently by a fieldman for this paper. Mr. Pilcher is one of the old time breeders of Kansas and has one of the best and most uniform herds to be found in the corn belt.

How Winchester Guns and Cartridges Are Made.
As the hunting season will soon be here sportsmen generally are thinking of their hunting outfits. This makes it most opportune to call attention to the repeating rifles, repeating shotguns and ammunition of all kinds manufactured by the Winchester Repeating Arms Co.

Lambert's Poland Chinas.
Josiah Lambert, Poland China breeder of Smith Center, Kan., is a new advertiser in Kansas Farmer this week. Mr. Lambert has bred Poland Chinas for more than 12 years with marked success.

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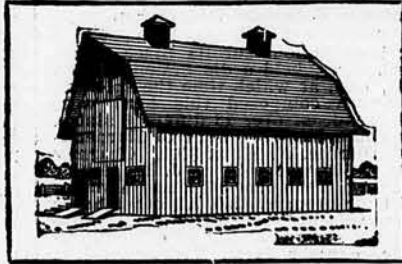
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\$685 buys all the Lumber and Millwork for this barn. Plan No. 202.



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