

# KANSAS FARMER

WITH WHICH IS COMBINED  
**FARMERS ADVOCATE**

Volume 47, Number 48.

TOPEKA, KANSAS, DECEMBER 4, 1909.

Established 1863. \$1 a Year

## EIGHTY ACRE HOG FARM

The Plan can be Easily Adapted  
 to Fit Kansas Conditions

In a recent bulletin of the United States Department of Agriculture on "Planning a Farm for Profit," it lays down the following one for a hog farm: Suitable pasture of bluegrass, clover or other grass for hogs will make a bushel of corn produce 30 per cent more pork than when fed without the pasture, and there will be far less danger of disease to the hogs when so pastured. In an 80-acre farm for hogs therefore there must be pasture crops during the growing season.

An acre of clover pasture or its equivalent should carry, when at its best, 12 to 20 hogs. In the present plan it is assumed that each brood sow on the farm will have one litter of 6 pigs a season, probably in April, and that 15 bushels of corn will carry a sow a year or produce a pig 200 pounds by December.

If there is set aside about eight acres for the house, barn, orchard, garden, and permanent pasture for the cows, calves, and colts, there will remain 72 acres on which to grow crops for the fixed stock and the hogs.

This area may be divided into four fields of 18 acres each and a rotation followed of (1) corn, (2) corn, (3) oats, and (4) clover. The grain will be made into pork and the farm built up in productiveness considerably more rapidly than where all the corn is sold.

In the management of the fields the following general plan will be followed: One field of corn will be drilled in rows instead of check-rowed and with the corn will be planted about a peck of cow-peas. At the last cultivation of the corn a mixture of rye and rape will be sown in the corn to furnish additional green feed for the hogs in the fall. With the aid of movable fences this field of corn, cow-peas, rye and rape will be harvested by the hogs themselves, the hogs being turned into the field early in September of each year.

The following year this field of corn, enriched by the planting of cow-peas, and pasturing off of the whole field with hogs, and the plowing under of the excess stubble and straw, will again be planted to corn. The third year the field will be seeded to oats and clover and the oats cut for grain. The fourth year the field will be in clover. A part of the clover will be pastured by hogs, part will be cut for seed, and a portion of the field plowed and seeded to a mixture of sorghum and rape for midsummer pasture.

The use of 400 pounds of bone meal or its equivalent per acre on the corn and the growing of clover or an equivalent legume crop on the land once every three or four years in systematic rotation, the corn yield can be made to average on the farm in question 60 bushels and oats 40 bushels per acre.

For this type of farm, about four work mares, two cows, two colts, two calves, and in addition one boar will be kept. In order to reserve as much corn as possible for the hogs, this stock will be fed 630 bushels of oats, reserving 40 bushels for seed, which falls short 2,180 pounds of the required quantity. It will take 40 bushels of corn to make up this deficiency. In addition, 15 bushels of corn for the boar should be added.

NUMBER OF BROOD SOWS THAT CAN BE KEPT.

Thirty-six acres of corn are grown

in all and only one acre of it is required for seed and for extra feed for the fixed stock. It will therefore be safe to calculate roughly on about 35 acres of corn that may be fed to hogs. But it has been assumed that each brood sow and each of her six pigs will consume on the average 15 bushels of corn; therefore the total quantity consumed by one brood sow and litter, seven pigs in all, will be 105 bushels. At 60 bushels of corn per acre 105 bushels represents 1.75 acres of corn required for each brood sow and litter; 35 acres of corn land, then, will support 30 brood sows and their litters.

PASTURE FOR HOGS.  
 From the time clover pasture is

ready in the spring until about June 1 the hogs will be pastured on five acres of an 18-acre field of clover fenced off with a temporary hog fence. Up to about June 1 the suckling pigs running with the sows do not need much pasture, and this five acres of young clover will furnish them and the sows all they will need. After removing the hogs from this five acres the clover will come on and later be cut for seed. About June 1 the hogs will all be transferred to seven acres of clover adjacent, now in prime condition for pasture, and kept on it until about July 15.

To furnish fresh prime pasture for the hogs from about July 15, when the clover is past its prime, up to the

time when the corn is ready to be hogged off, six acres of the 18-acre clover field will be plowed up about May 1 and planted in sorghum and rape. About July 15 the temporary fence next to this sorghum and rape pasture will be removed and the hogs given the run of the pasture they are already on and in addition the six acres of sorghum and rape. This will furnish ample green feed for the hogs until September 15, when all but the sows will be turned in on a portion of the 18-acre corn field planted with peas and later sown to rye and rape.

The corn plant will have considerable feeding value for the hogs in September, but as the stalks become more woody the cow-peas, rye and rape will furnish the necessary green feed and the corn and cow-peas will furnish the grain. As the hogs clean up one portion of the cornfield the portable fence will be moved and another portion added, and by the time the entire field is cleaned up the hogs will be ready for market.

In handling the clover crop for seed it is quite desirable that the clover be pastured off until about June 1. The 5-acre field of clover that the hogs were pastured on earliest in the season has been handled so as to fulfill this condition, therefore it may be cut for seed in late August. After the clover field has been cleared of the hogs which were turned into the SIX tahordl tar corn field and after the clover for seed has been harvested, the sows and boars may be given the run of the entire 18-acre field until cold weather or until the field is plowed in the fall for the next year's crop.

FINANCIAL RETURN TO BE EXPECTED.

The gross returns that may be expected from the 80-acre farm as here planned are about as follows:  
 120 hogs, 200 lbs. each at 5½¢. \$1,350  
 5 a. of clover seed, 15 bu. at \$16, 90  
 2 colts, at \$50 each..... 100  
 2 calves, at \$5 each..... 10

Total ..... \$1,520

From this total must be deducted for the first few years about \$175 each year for bone meal for the corn, leaving \$1,340 to pay interest on the investment, wages and expenses.

Sugar Beet Pulp.

A western subscriber asks for the feeding value of beet pulp, or the refuse from sugar beet factories. The composition of beet pulp compared with several other feeds is:

Percentage Composition	Beet Pulp	Corn	Corn Silage	Sugar Beets
Water	87.03	15.00	79.10	86.50
Fat	.03	3.20	.30	.10
Protein	1.16	9.20	1.70	1.80
Crude Fiber	3.01	1.90	6.90	.90
Ash	1.04	1.40	1.40	.90
Carbohydrates	7.13	68.70	11.00	9.80

As may be readily seen, beet pulp compares quite favorably with corn silage and is a very excellent food for dairy cows when no other succulent food is available. It is scarcely as valuable as good corn silage because it contains slightly more water and less of the feeding nutrients. Its chief value lies in its succulent character. In vicinities of beet sugar factories large amounts of beet pulp are fed with good results where proper care and precautions are taken in its use. Cows will eat from 50 to 75 pounds daily and produce largely of milk and butter-fat. Care must be taken, however, to have it fresh and to keep it from freezing.

### Christmas Three Weeks Away



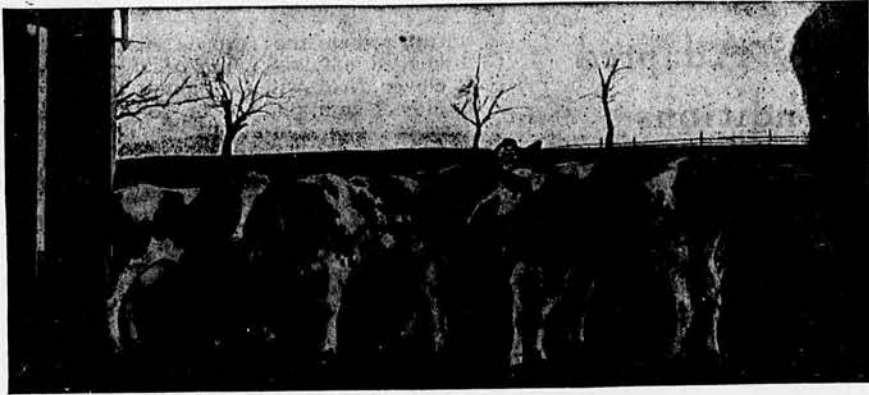
This is the Season When Mother's Wood-box is Never Empty.

# WEEDING OUT POOR COWS

To illustrate how the production and profit of a dairy herd may be increased by testing the individual cows, disposing of the poor producers, and putting better methods into practice, I desire to call your attention to the record of the herd of Mr. Charles Foss, which was tested by this Station. The detailed record appears below:

## Gain of 83 Pounds Butter-Fat Per Cow in Two Years.

These figures furnish a very interesting study. It is seen that the 14 cows the first year averaged 5,800 pounds of milk containing 24 pounds of butter-fat; that the 12 cows the second year averaged 7,105 pounds of milk with 260 pounds of butter-fat, and that the 14 cows the third year (1906) averaged 8,057 pounds of milk and 307 pounds of butter-fat per cow.



Four High Grades That Produced an Average of 10,060 Pounds of Milk and 378 Pounds of Butter-Fat Per Cow Last Year.

The greatest fact apparent at first sight is an average gain of 36 pounds of butter-fat per cow the second year, and another gain of 47 pounds of butter-fat per cow the third year—a total gain of 83 pounds per cow for the two years. This means a gain of 97 pounds of butter per cow in the year's production; which at the average price he has received amounts to about \$24.25. This gain is much more than the whole profit from the average dairy cow in Illinois. The above increase is known from an accurate record of the weight and test of the milk for a week at a time every nine weeks throughout the year.

### Sacrifice of Dairy Heifers.

Many Illinois dairymen are not raising their heifer calves; instead the herd is replenished by buying cows. Four professional cow buyers sold about 7,000 cows in the vicinity of Elgin alone last year; besides this cows were shipped in by the dairymen themselves. On many dairy farms the heifer calves, good, bad and indifferent, go for veal. Where this is done it means there is no provision for perpetuating the dairy herd or the best cows in it.

The dairyman from whom the Illinois Station bought cow No. 1 (whose story is told in this paper) with a three years' record of 405 pounds of butter-fat per year, was making no effort to perpetuate her superior qualities, but was selling her calves at \$2.50 each. This is certainly a ruinous practice to the dairy business.

### Tendency Is Toward Poor Cows.

The cow buyer cannot get enough really good cows to supply his purchasers, as but few of the best cows are for sale. The dairyman himself must raise the heifer calves of his best cows, and not depend on anybody's offerings to replenish his herd. He has the breeding stock, the feed—cheap feed—and the equipment. Calf-raising is a natural part of his busi-



Perpetuating the Good Qualities of the Tested Mothers, Making a Herd Much Better Than You Can Buy.

## W. J. FRAZER,

Illinois Experiment Station.

### Whole Herd Brought Up to 306 Pounds Butter-Fat, Building Up the Dairy Herd.

This article is the last of the series by Prof. Frazer, of Illinois Experiment Station. This concludes the record of the chief results of investigation extending over a period of many years. The articles have attracted wide attention throughout the world where dairying is practiced and KANSAS FARMER is the only Kansas paper to print them. These studies of cows and breeding for greater milk production and profit should be preserved by every reader.

ness. It is absurd to suppose that as a rule he can buy as good cows as he can raise. The reasons are very plain. He needs to retain but few calves each year and can sell the less-promising ones. He knows the parentage

of dairymen make no effort to save their best heifer calves, and they think they have a reason. They say that it takes too much milk. This question was carefully investigated with 48 calves by the Illinois Experiment Station. Twelve calves at a time were tested at four different times. It was found they could be successfully raised on 150 pounds of whole milk and 400 pounds of skim-milk. This milk was fed at the rate of ten pounds per day until the calves

No. of cow.	1904.			1905.			1906.		
	Milk, lb.	Fat, per cent.	Butter-Fat, lb.	Milk, lb.	Fat, per cent.	Butter-Fat, lb.	Milk, lb.	Fat, per cent.	Butter-Fat, lb.
1	5,970	4.55	272	8,062	3.5	282	10,201	3.55	363
2	5,579	3.19	177	6,663	3.9	258	6,895	3.88	269
3	4,813	4.27	206	6,196	3.5	218	7,674	4.83	371
4	3,212	4.7	151	5,807	3.9	229	6,992	3.41	239
5	6,360	3.72	237	6,442	3.4	220	9,367	3.6	338
6	9,802	3.94	386	6,634	3.6	236	8,313	3.55	296
7	4,701	3.67	176	7,819	4.0	316	5,943	4.22	251
8	6,992	3.41	239	5,834	4.2	244	8,202	3.83	314
9	4,403	3.79	167	4,356	4.2	182	8,211	3.21	264
10	5,368	4.05	218	7,731	3.1	238	7,493	4.17	313
11	4,498	4.35	196	7,263	4.1	298	12,989	3.80	489
12	6,823	3.71	254	9,660	3.28	317	6,669	4.15	277
13	3,773	4.47	167	.....	.....	.....	8,607	3.31	295
14	5,890	3.26	192	.....	.....	.....	4,442	4.8	209
15	.....	.....	.....	.....	.....	.....	.....	.....	.....
16	.....	.....	.....	.....	.....	.....	.....	.....	.....
17	.....	.....	.....	.....	.....	.....	.....	.....	.....
18	.....	.....	.....	.....	.....	.....	.....	.....	.....
19	.....	.....	.....	.....	.....	.....	.....	.....	.....
20	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	81,194	3.86	3,135	55,267	3.66	2,128	112,804	3.81	4,302
AV. per cow	5,800	3.86	224	7,195	3.66	260	8,057	3.81	307

\* For 11 months.



A Shrewd Young Financier's Clever Deal in Picking Up These Sacrificed Heifers at From \$2 to \$3 Apiece.

most progressive dairymen have said practically the same thing.

The three accompanying illustrations taken upon Northern Illinois dairy farms, well illustrate the right way to keep up the herd. One picture shows a boy's gathering of sacrificed calves that give promise of developing into a good herd for him.

### A Mistaken Idea.

Yet in the face of all this, hundreds

were 50 days old, when it was gradually lessened one pound per day for 10 days and then no more was fed. No substitutes for milk were used. Only ordinary grains which the farmer produces, and a good quality of legume hay were fed, showing that the dairyman can raise a calf in this way with almost no extra trouble. Several of these calves are now cows in milk and good producers, indicating that they were not injured by this method of raising.

The sale value of the milk fed these calves was as follows:

150 lb. whole milk at \$1.00 per 100	\$1.50
040 lb. skim-milk at \$.30 per 100	1.20
Total	\$2.70

And these prices of milk are liberal, especially as they are paid at the farm, and no money or labor is expended in hauling the milk to market. It is not so expensive to raise a calf as the dairymen have thought. The grain and hay consumed by the heifers of high quality will give much

better returns than the same feed fed to cows.

### Cheaper and Better Than You Can Buy.

A prominent and successful dairyman of the state says that he can raise a heifer to the age of two years at a cost of \$20, including the value of the calf at birth, and he has been offered \$50 for some of his heifers at that age.

Another dairyman who has successfully managed a large herd of cows for several years, estimates that it costs about \$18 a year to raise the average calf.

But even allowing \$40 to raise a heifer to the age when she begins to give milk, she will then be the equal of cows that could be bought for \$60. Here is a clear advantage of \$20 per cow in raising over buying, but the actual added profit in the life of the home raised and well raised cow is more apt to be two or three times this amount. Isn't this a good business proposition?

Another great advantage in raising the heifers is that the owner may feed his calves in the correct manner

to develop them to their greatest capacity. Cows that have been properly raised are much more efficient, and therefore worth more than if they had not been so raised.

Somebody somewhere must raise the dairy cows, and that somebody must be a dairyman if the calves are to be of high quality. Such calves cannot be raised on the range like feeder calves, horses and sheep, because they must be raised from tested dams.

If breeding means anything anywhere, it means that the quality of large milk production is likely to be transmitted to the daughters. This has been so thoroughly established by thousands of tests that it admits of no argument. There is no other animal from which such an absolute and complete record of performance can be secured as from the dairy cow. Shall the value of these records to her progeny be thrown away by not saving the good heifer calves?

Nobody else has so many natural advantages as the dairyman for raising good heifers, and nobody else has the dairyman's interest in or likely to succeed so well at it. That it is not now more generally done in Illinois is one of the vital defects in our dairying, and one largely responsible for the poor or very ordinary results too often obtained on our dairy farms.

### Good Roads Make Farm Nearer Markets.

The good road moves the remotest farm close to the market. A farm twenty miles from the market on all-the-year-round good roads is nearer market than a farm seven miles away on a bad road.

The results of bad roads are yearly tolls of \$12.50 against every person who eats farm produce. That yearly waste would build 200,000 miles of No. 1 macadam roads every year; or in ten years would turn every country road into such a highway as the Romans' famous Appian Way basing the cost at the very highest average of \$5,000 a mile. Though macadam roads, sometimes exceed that figure, owing to special difficulties of swamp or bridge work, on easy grade near the source of the rock bed, the average has come as low as \$2,000.

# How Shall we Improve Pasture

By HENRY WALLACE

## High Priced Corn Makes Better Grass Pasture Necessary.

It is becoming more and more evident every year to thinking farmers that, with the high price of corn past, present and prospective, it will become necessary to fatten cattle more largely on grass. To do this it becomes imperatively necessary to have more grass, not merely in acreage but a great deal more grass to the acre, and not merely more grass, but better grass.

Irish farmers describe their land by its grass-producing quality. The best lands have grass sufficiently rich and abundant to fatten a cow or steer without grain, and they do it year after year. These lands are not merely exceedingly rich and in a superb grass climate but they are old pastures that have not been plowed up for a lifetime; and every farmer who is experienced knows the value of an old permanent pasture. The second grade of lands is that which will grow a steer but not fatten it; in other words, fit for stock cattle. A still inferior class is fit only for sheep or goats. British farmers feed comparatively little grain or concentrates to their live stock, as compared with our farmers. And yet they manage to furnish beef of superb quality.

During every fall we have grass-fed cattle coming in from the range. A few days ago they sold as high as seven and a half cents a pound in

Chicago. These steers would not know corn if they saw it; and yet they are very acceptable to packers, and when not fully fattened are eagerly sought for by feeders in the corn states.

It is evident, therefore, that if we are to save our corn and make more use of our grass, we must have better pastures. The idea of cultivating pastures is a new one to the western farmer; but the fact that they need cultivation was evident this fall to any man who saw a ton or more of ragweed to the acre where blue-grass should have been growing luxuriantly, at least after the first fall rain.

The question therefore arises: How are we to improve them? First, follow the practice we have been recommending for many years, that of putting the manure on your pastures or meadows. If the manure contains grass seed, whether of clover, timothy, or blue-grass, so much the better. As we have often pointed out, the reason why ragweed takes the place

of blue-grass and foxtail the place of clover is simply because there is not a full and complete stand. These hardy beggars can live wherever they get a foothold; in fact, can live and thrive where the tame grasses can hardly exist on account of their inferior hardiness. Therefore, keep your land rich and well seeded to grass.

We suppose it takes on an average pretty nearly three acres of land in the western states to keep a steer seven months in the year. The very good farmers estimate two acres on their land, but we have seen farms in some years where one acre furnished abundant pasture for a thousand pounds of cow, horse, or sheep. This is the ideal at which every man should aim. Why take two acres to furnish pasture for a thousand pounds of animal during the summer season, when with thicker seeding and manuring one would be sufficient? Don't you see that if you double the yield of your pasture you double the

value of your land regardless of price?

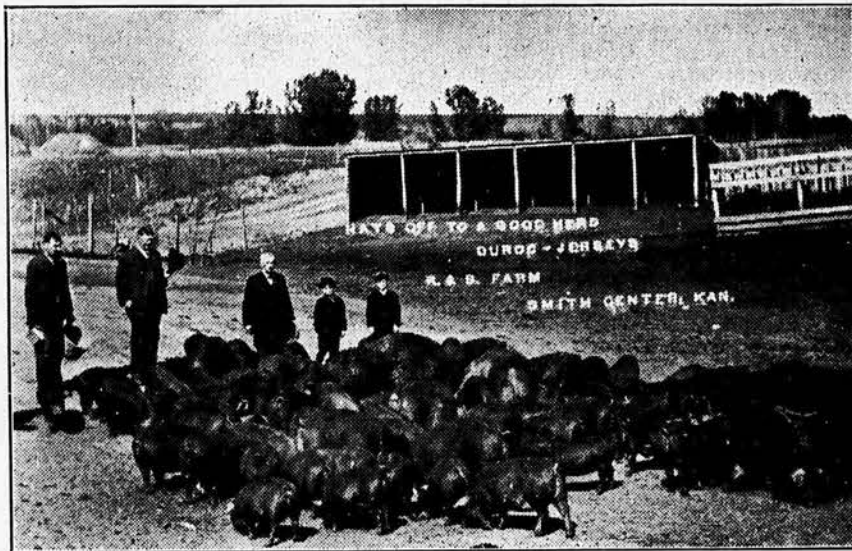
We again call the attention of our readers to the method we have been suggesting for thickening up the stand of grass and especially of blue-grass, by disking in clover and timothy as soon as the frost goes out of the ground in the spring. Where clover is only a partial stand and is intended for either hay or pasture, besides sowing the additional grass seed we would put in a bushel of oats to the acre and cut this when in the dough stage. We know of no better way to thicken up a pasture than this. Sooner or later, if we are to make money in growing live stock, we must improve our pastures; and the sooner we begin, the sooner we will reach ideal conditions.

The question may be raised: Can we grow grass good enough to fatten a steer without grain? Not in every year; and yet we have seen it done some years; so have you. We can, however, grow pastures on which comparatively little corn will be required; and these steers can be fed in the summer time on grass, provided you keep grass enough for two and put on only one.

As above stated, it is not only more grass but better grass that is needed. Better grass can be secured only by having richer land; and the quickest way to secure this is by putting your manure on the grass. That's the place for it anyhow.



Some of the beautiful Jerseys on the breeding farm of H. C. Young, Lincoln, Neb.



A bunch of the splendid young Duroc Jerseys belonging to Rinehart & Slagle, Smith Center, Kan.

How to mend the bad stretches in an otherwise good dirt road as provided by chapter 201, page 506, of the session laws of 1909, is the purpose of this article. The act relates to the improvement of country roads.

Under the 1909 road law a road can be improved its entire length in any county, if necessary. I take it, however, that the first effort under the new law will be to improve the worst places. In this state the sandy stretches are the worst places for a greater part of the year. The new law makes special provision for this kind of bad road. Its provisions for the adjustment of the expense, concerted action on the part of the land owners and other good features seem to be its main force. It provides for county control in making the improvement and gives the county commissioners power to require the county as a whole to pay a certain part of the improvement, or all of it if the commissioners so decide.

This plan of road improvement, new in Kansas, might be called the terminal system. I will illustrate by using the dirt road which is a continuation of Lawrence avenue beyond the city limits on the south into Waco township and across that township to the line of Salem township. We will say that this road has three miles of very sandy spots in it. They are just south of the city boundary. Aside from these sandy stretches this is a very good road.

Now as to the mode of procedure to repair the bad places in this stretch of road. We will make a district of ten miles of this road extending from the city limits south. The city limits will be on terminal and the points 10

## How Good Roads Can Now Be Built

By Representative Jewett, Wichita.

miles south of the city will be the other terminal. We will sub-divide the land abutting on either side of these 10 miles of road into quarter section tracts. There will be 40 of them. This would extend a half mile back from the line on either side of the road. However, there is no limit to the distance the benefit district can be extended on either side of the road.

Sixty per cent of the persons owning 50 per cent of the land abutting on the road included in the district must petition the county commissioners to get the work started. The petition must state the description of the land to be taxed for the improvement, the name of the road, the terminal points, the kind of improve-

ments and the number of annual assessments to be made in paying therefor, which must not exceed ten.

The county commissioners make surveys of the road, estimate the cost of improvement and the file maps of the land to be taxed. The commissioners take full charge of the improvement, let the contract for the work and issue the special improvement bonds. The abutting land pays three-fourths of the cost and the township or townships through which the roads pass pays one-fourth. The county can be made to pay part of the cost if the commissioners so determine. Where bridges and culverts cost more than \$200 the county pays for them. The distribution of the

cost of the repairs is a very interesting part of the good roads law.

To illustrate, we will say that it will cost \$6,000 to improve the ten miles of Lawrence avenue road taken for an example. This would grade, drain and cover it with shale or gumbo at the bad spots. We will give the forty quarter sections of land abutting this road an assessed valuation of \$40 an acre, or \$256,000, which is only about one-fourth its real value. The townships through which the road passes pay one-fourth of the \$6,000 or \$1,500. If the county as a whole pays one-fourth and gets the city in on the expense there would be left only \$3,000 for the abutting property to pay. Each quarter section would have to pay \$75. If paid in annual installments with interest on deferred payments it would cost each quarter section only about \$9 a year for 10 year.

The road improvement bonds are issued in the same way as improvement bonds are issued in the city. The land that is taxed is free from road tax while the bonds are running.

The paving of Lawrence avenue cost each 50 feet of ground abutting on that avenue from \$325 to \$350. This gives an opportunity to compare the cost of fixing bad spots in the country roads with the cost of improving the city streets.

This road law looks cumbersome but it is not. I do not believe a more equitable or feasible plan could be suggested for improving the dirt roads. The putting into motion of this machinery for the improvement of the roads is up to the farmer and the land owner. He can get good dirt roads under this law. He can not get them as cheap in any other way.



These Twelve Calves Are Half and Three-Quarter Blood Gaerneys. The Owner Refused \$50 Apiece for Them When 15 Months Old.



# KANSAS FARMER

## EDITORIAL



Published Weekly at 625 Jackson street, Topeka, Kansas, by The Kansas Farmer Company.

ALBERT T. REID, President. S. H. FITCHER, Secretary.  
J. R. MULVANE, Treasurer.

T. A. BORMAN, L. D. GRAHAM, Editors.

Chicago Office—1738 First National Bank Building, Geo. W. Herbert, Manager.  
New York Office—41 Park Row, Wallace C. Richardson, Inc., Manager.

Entered at the Topeka, Kansas, postoffice, as second class matter.

**SUBSCRIPTION PRICE**—\$1.00 per year; \$1.50 for two years; \$2.00 for three years. The date of subscription will be found on the label on your paper. We follow the usual custom of publications, and conform to the desire of most subscribers, by sending the paper until an order is received to discontinue it. We must be notified in writing when the subscriber desires the paper stopped. Returning the paper is not sufficient as we cannot tell from the label alone what the address is. Both name and address must be given and all arrears paid.

**ADVERTISING RATES**.—25 cents per agate line, 14 lines to the inch. Announcements of reputable advertisers respectfully solicited. No medical nor questionably worded advertising accepted. Forms close Monday.

**OUR GUARANTEE**.—It is our belief that all advertisements in this paper are from reliable persons or firms. To show that we are in earnest in protecting our subscribers we guarantee the trustworthiness of our adver-

tisers under the following conditions: We will make good the loss of any paid up subscriber who suffers by dealing with any fraudulent advertiser in our columns, provided complaint is made to us within thirty days after the transaction. This guarantee means just what it says. It does not mean that we guarantee to settle all trifling disputes between a subscriber and an advertiser, though we offer our good offices to this end. We do, however, protect you from fraud under the above condition. In writing to advertisers be sure always to say: "I saw your advertisement in Kansas Farmer."

**CONTRIBUTIONS**.—Correspondence invited on all farm topics, live stock, soil cultivation, grains, grasses, vegetables household matters, recipes new and practical farm ideas, farm news. Good photographs of farm scenes, buildings, live stock, etc., are especially invited. Always sign your name, not for publication, unless you desire it, but as an evidence of good faith. Address all communications to  
**KANSAS FARMER COMPANY,**  
Topeka, Kansas.

The heavy rainfall of the past week has been highly appreciated in the wheat country. Wheat is now in fine condition and perhaps it never looked better. It is a well established belief that a wet fall practically insures a good crop of winter wheat and if this be true, the crop of 1910 ought to be a record breaker.

Poor writing results in the receipt of 172,000 letters weekly at the dead letter office at Washington. One hundred and seventeen clerks are employed to handle domestic dead letters. Fifteen thousand pounds of dead letters are received weekly at Washington and ten thousand pounds are dispatched every seven days, which means that eventually five thousand pounds are destroyed weekly.

Farmers of the west have long been urged to buy more land, to raise more crops, to buy more land. They are now coming to see that this is a wrong policy and that intensive cultivation brings more dollars because it brings more crops and makes it possible for the farmer to attend to those he plants on the smaller area. Drain tilling will be one of the points that will receive serious consideration at the hands of the progressive farmers of the near future.

"Kansas millers are seeking markets in the west and southwest," said James A. Whitty, Editor of the Southwestern Grain and Flour Journal recently, "because prohibitive freight rates leave them no markets in the East. The millers of the Northwest and that means Minneapolis—have all the East for their own and lower rates. Using the Missouri river would give the Kansas millers the same territory for their product. Millers are ready to fight for water transportation and the Kansas grain journals should back them up."

Major Chas. P. Stevers, after a number of years spent in the Philippines as purchasing commissary for the Army, has been stationed at Kansas City in the same capacity. Major Stevers has just closed a contract for a large amount of Kansas hard wheat flour which he says is the best in the world. It is to his knowledge of its qualities that Kansas hard wheat flour supplanted the flour of Australia and California for Army use in the Islands.

Prof. Geo. L. Clothier, graduate of the Kansas Agricultural College in 1892 and now professor of Forestry and Plant Breeding in the Mississippi Agricultural College at Agricultural College postoffice, Miss., is the author of a bulletin on pecan culture. Professor Clothier read a very valuable paper before the American Breeders Association at Columbia, Mo., last winter on the subject of the "Growth and Care of Nut-Bearing Trees." He is a large land owner in Chase and Marion counties, Kan.

The prospects for the annual corn show which will be held at Columbia, Mo., Dec. 28-31 are exceptionally good. The classification is of the best and the officers enthusiastic. Special premiums amounting to about \$750 will be offered in the corn show proper and \$450 in the Boy's corn contest. Last year the Missouri state corn show was excellent in quality though not so large as that of Kansas. This year our sister state promises to give us a race for superiority.

The Missouri Pacific railroad is about to open an 800 acre sheep pasture and feeding yard near Paola, Kansas. The Grand Island road already has one at Hanover and the Santa Fe, at Morris but all these are merely for the care of western sheep enroute to the markets. Locally they are of value to the farmers as furnishing a market for hay and grain but how much more these same farmers would raise sheep for themselves and thus make their own market for feedstuffs and at the same time enrich their farms.

One of the best examples of good farming through tile draining with which the writer is familiar is to be seen on Walnut Grove Farm, adjacent to the city of Horton, Kan., where some 36,000 feet of drain tile have

been laid at an approximate cost of \$10 per acre. This tilling system covers only one portion of the farm, but its results are pronounced and satisfactory. Land which was formerly so wet or whose surface baked so hard after a rain that it was not available for cropping, is now among the best acres of the farm by reason of its ready drainage of surface water.

Even if clothes will be higher this winter and other prices were boosted by the patriotic action of Congress in passing the Tariff Bill, the lawmakers did not entirely forget the needs of the people. Overcoats may be beyond the general reach, but garden seeds will be free. Congress not only voted the usual gift to each of its members for distribution among his constituents, but increased it. Eleven million packages are to be sent to brighten the homes where it was necessary to cut down the supply of sugar. Each package contains five varieties of flower and vegetable seed, and is accompanied by a bulletin with instructions how to plant them.

A recent trip through eastern Nebraska showed a condition that does not exist in eastern Kansas. In Nebraska the feed lots everywhere seemed to be filled with cattle and sheep while in Kansas, the farmers are either not feeding cattle to anywhere near the same extent or else they have not begun feeding operations as yet. The number of sheep in the feed lots of Nebraska was much larger than the writer had seen in any other state this fall while the small number in Kansas was surprising. Nebraska farmers raise and feed sheep because they are profitable and Kansas farmers are supposed to have the same object in view. In the latter state however, the raising of dogs seems to pay better, at least we see many more of them. Why?

The abandonment of the western range to the seller has resulted in a two years' decrease in the nation's beef supply. The decrease of beef cattle from 1907 to 1908 was 1,492,731, and the present supply falls short of last year's total by 694,000. With a rapidly growing population, through increase both by birth rate and immigration, our supply of beef cattle is declining and we have lost 2,186,731 cattle in the last two fiscal years. Cattle are gone from eastern Colorado and are fast disappearing from the great ranges of Montana, Texas and New Mexico. The nation must depend upon the corn belt for its future beef supply and the farmers must breed better cattle. Cheap cattle do not go well with high priced land.

On a recent trip over a portion of southeastern Kansas this editor was interested in noticing at various points piles of drain tile which were evidently in place for immediate use in draining nearby lands. Too many farmers have the idea that tile draining is valuable only for marshy or overflow

land. This is not correct. It is of immense value in such lands, in fact it serves to reclaim them and put them in tillable shape, but it is also of value in other lands as well. In the older states of the middle west tile draining has been practiced for a quarter century or more, and has invariably resulted in an increase in value of the land so treated. It serves to rapidly drain the surface water, to aerate the soil, to make it warmer during the cropping season and to make available plant food contained in the sub-soils.

The United States Government is after good men and its Civil Service Commission announces a public examination to be held on December 15, of candidates for the position of Junior Animal Husbandman, in the Bureau of Animal Industry, department of Agriculture. Salaries paid in this Department range from \$1,260 to \$1,560 per year. The Commission also announces a public examination of candidates for the position of Assistant Curator in the Division of Marine Invertebrates of the Smithsonian Institution, which position pays \$125 per month. These examinations will be held in Kansas at Emporia, Ft. Scott, Lawrence, Manhattan, Salina, Topeka and Wichita and full information may be had by addressing the Civil Service Commission at Washington, D. C. or the postmasters at these cities.

In many sections of Kansas the farmers have united to protect the quail. This is as it should be. There is no more valuable bird on the farm than the quail. He is a great destroyer of noxious insects, and weed seeds, is not injurious to crops and is extremely ornamental on any farm. Just why a farmer's land should be invaded, in season and out, by a lot of irresponsible parties who slaughter these useful birds to their hearts' content is one of the things past finding out. These shooters have absolutely no right upon the land belonging to another and farmers should protect themselves. The payment of the hunter's license fee does not carry with it the right to shoot upon any body's land without his written permission, nor can the hunter shoot upon the public highway or railroad right of way at any season of the year without violating the law.

The weather conditions of the state are generally favorable for fall and winter plowing and the wise farmer is he who takes advantage of these conditions and destroys in part at least the hordes of insects which prey upon his crops. The tax levied by insects on the farmers throughout the country is an enormous one and is demanded as regularly as his other taxes. Fall plowing should be practiced on all portions of the farm except pasture and hay land and orchards, while alfalfa fields are all the better if given a cultivation with the renovator or spiked-tooth harrow in the early spring before insects begin to hatch. It is not

thought advisable to plow orchards in the fall though weeds, dead limbs and brush from them should be gathered and burned. All these operations serve to destroy innumerable insects and make a great saving on the next year's crop.

Those farmers and farmers sons who desire to compete in the Kansas State corn show to be held at Manhattan this winter should be careful in selecting samples for their entries. Uniformity in size of ears is an important point. Extra large ears are not so likely to win favor with the judges as are those of more moderate ears of about 10 inches in length and 7 to 7½ inches in diameter at a point ½ of the length from the butt. Do not pick tapering ears but get those that are nearest the same diameter throughout their length. Kernels should be in straight rows and of good depth in proportion to the size of the cob. Don't get ears with chaffy grains but those which fit tightly together. Be sure to pick those that are well and uniformly covered at both tip and butt. Avoid ears with mixed colors unless showing in the calico varieties. Pick out the best 50 or 100 ears and then resort until you have 10 good ones. Write to Supt. J. H. Miller, Manhattan, Kan., for rules of entry, prizes, etc.

Great preparations are being made by the state and local good roads associations for the meeting of the National Good Roads Association which will be held at Topeka on December 14 and 15. The Topeka-Shawnee Good Roads Associations was organized to act in conjunction with the Commercial Club as the local hosts for this great national body though the whole state of Kansas as represented by the Kansas Good Roads Association will welcome these guests. Speakers of the highest prominence from all over the Union have been invited and many of them have signified their intention of being present. This is the first time the National Good Roads Association has held a meeting west of the Mississippi River and this meeting promises to be the greatest in its history. It is estimated that some 2,000 delegates will be present besides the local attendance. Governor Stubbs has recognized this honor to Kansas by appointing delegates from every county and city in the state. The program will appear in KANSAS FARMER in due time.

If there is any section of country in the entire corn belt that would be benefited by the more general adoption of dairy farming that country would seem to be southeastern Kansas. This section has long been famous for its mines of lead, zinc and coal, for its oil and gas, and the exploitation of these natural resources would seem to have obscured, for the time, its agricultural possibilities. Mining regions are not always the best agricultural regions but they are among the very best market regions. Southeastern Kansas has some rough land, much mining and oil land, and farming operations like those of the wheat belt are neither possible nor desirable. With a market that is ready and more than willing to take every pound of product and with an abundance of good land for the purpose, dairy farming is both possible and desirable in this country. With the aid of the silo and suitable soiling crops the dairy farmer can limit his operations to a few acres and duplicate or exceed the profits of the bonanza farmer. His need for expensive machinery is not so great, the area to be cultivated is smaller and the intensive methods necessary will pay big profits besides the dividends he makes in the enrichment of his farm.

J. George Frederick, managing editor of Printer's Ink, recently delivered a stereopticon lecture on the use of automobiles on the farm, in which he stated that there are now, by an authoritative estimate 76,000 automobiles, or one-fourth of all the machines used in the United States, now in use on the farm. He stated that of the 45,016 autos, which were recently registered in Kansas one-half were owned by farmers.

The speaker told of the great help derived by dairy farmers from the auto as it enabled them to deliver milk

or cream quickly without disturbing the value of the farm horses during the busy season. He also showed that the use of an automobile in delivering milk to the railroad stations from the farm had greatly widened the area of farm lands on which it is profitable to engage in the milk business. As the auto has four or five times the capacity of a horse without his care it was shown how merely for traction power the auto is an economic advance. Trucks with a 5-ton grain capacity are now in use on the farm and plowing with gasoline tractors is not uncommon on the prairie farms of the west. With the aid of a little ingenuity the farmer may stack his hay, saw wood, pump water and do other work about the farm through the power developed in his automobile.

Just to show what can be done by a properly managed state fair in a very short time, the following facts are quoted from the report of Secretary I. S. Mahan of the Oklahoma State Fair association. The Oklahoma State Fair is now three years old and the total investment in permanent improvements is \$184,707.71. The total receipts for 1909, including gate receipts, concessions, race entry fees, stall rents and grand stand admission was \$86,159.42. The total expenditures for premiums, race purses, advertising and all other outlay was \$58,142.49. This shows a gain of 100 per cent over 1908, and an actual cash gain of \$28,016.93 for 1909. The increase in paid admissions was 33 per cent, in exhibits 40 per cent, in number of exhibitors 25 per cent. Premiums were paid in cash as follows: Live stock, \$8,840.50, farm products, \$2,656.50, women's department, \$1,464.75, total, \$12,961.75, which is an increase of \$2,202.25 over 1908. The newly elected officers for 1910 are: President, John Fields, vice-president S. C. Heyman, treasurer, J. L. Wilkin, General Manager, H. Overholser, Secretary, I. S. Mahan, Oklahoma City, re-elected.

#### A CONCRETE SILO.

The Department of Dairy Husbandry at the Agricultural College has built a concrete silo on a novel and original plan. After a proper foundation has been laid the form of the silo is built of metal lathing which is properly wired together with strong wires to the height and dimensions desired for the finished silo. When this coat has seasoned it is plastered on the other side. Additional coats are added on both sides until the desired thickness is obtained. This seems to be the cheapest and most effective means of building concrete structures of this kind that has yet been thought of, and while this particular silo has not been given a long time test, it promises well and the idea may be suggestive to readers of KANSAS FARMER who can use it or some adaptation of it. This idea could be employed in building watering-troughs, hog houses and other farm buildings.

#### THE ROAD OF THE FUTURE.

All road builders are now engaged in trying to devise a road which will stand motor traffic. Many new methods have been tried, with varying degrees of success, but none of them seems to be perfectly satisfactory. If broken stone is to form the wearing surface then some means must be found to hold the binding particles so firmly that they cannot be sucked out; and sufficient strength must be given to the mass to enable it to withstand the sliding action of the wheels at bends and turns. Several kinds of tar macadam answer fairly well, but they are expensive.

It seems to me that the most promising kind of road for heavy automobile traffic is what is called durax in England. It is a pavement of three-inch irregular cubes of hard stone, laid in small segments of circles. These stones can be cut by machinery, they are laid without grout, but there seems to be no reason for its omission except the cost. Great quantities of this kind of pavement have been laid in Germany.—The Century.

#### BORROWERS WITH FIRST RIGHTS.

There are four great interests, each of which in its turn in the course of the year makes more than ordinary demands upon the credit and the currency of the country. They are agriculture, manufacturing, transportation and finance. This is the season of the year when money and credit for the moving of the crops have reached the maximum of demand. For that reason the interest of agriculture and of transportation should be entitled to

have the first call on financial resources of which, under existing currency systems, there are not enough to go round at this time of year.

Just now, also, manufacturing and merchandise are beginning to call for much larger uses of working capital. The best three months of the business year are ahead for the retail traders, and the manufacturing world generally is enlarging its orders and extending its scope of activity. There is no doubt about the larger measure of demand which this ground of enterprises will make upon the money resources of the country. As the wage list lengthens and the volume and cost of materials advance, more funds are needed to conduct business than under a lower scale of prices. Thus the burden of manufacturing and the merchandising falls with special force upon the banking capacity of the country in a period when neither agriculture nor transportation can be expected to choke up their channels of activity for want of funds to do their work promptly.

Any extraordinary financing by the issue of bonds and stocks which would for any considerable period tie up money must be deferred. On equally good grounds, any effort to maintain a campaign of purely speculative activity would tend to check the true wealth producing activity elsewhere. The banking community can do the country no more positive service than to teach to the speculative world the duty, wisdom and necessity of self restraint, at least until the current of cash and credit begins to swell the central resources of the country's banking power. Meanwhile the lengthening of the period of improved net earnings by the industries and the railroads of the country should form a safer basis for speculative market movements, as well as for enlarging investment in agriculture, in manufacturing, in transportation or in finance.—Wall Street Journal.

#### THE NATIONAL FARM LAND CONGRESS.

Begun as a private enterprise, the National Farm Land Congress, which held its sessions in Chicago last week, soon grew beyond all bounds and became really national in its scope and powerful in its influence.

The men who comprised this congress constituted an extraordinary gathering. They came from every quarter and section of the country. Governors, senators, congressmen, railroad presidents, men who do things in all walks of life were assembled under the motto: "Homes for the People, and People for the Homes." It was a public movement for the public good and was not organized for any man's profit or any man's glory.

The assembled audience was enormous and its quality of the highest. This congress was the greatest public expression of sympathy with the idea suggested by President Roosevelt when he awakened the nation to the eminent necessity for the conservation of our national resources. It went further than this. It was at once a warning against the danger of congesting our population in the cities, and of depleting our farm working force so that we shall soon become a nation of importers instead of exporters of food stuffs. Above all it was a plea for better methods in farming.

Some idea of the purposes, objects and work of the congress may be gleaned from speeches made by prominent men during its session. Senator Wm. E. Borah of Idaho, said: "The farmer of today is the most potential factor in the whole economic life of the nation. Not so because he is entitled to peculiar favor but because of favors long withheld from him while bestowed upon others. No more important phase of our industrial life has been up for consideration than the exodus from the farm to the city in the last thirty years. If this should continue to the same extent for any considerable time it would be fatal to republican institutions. We can win the gratitude of posterity in no better way than by laying strong and firm and broad the system upon which we are to develop and make permanently prosperous the goodly land which the Lord our God has given us."

Governor Eberhardt of Minnesota: "The most important factor of any commonwealth, as well as the welfare of all civilized nations lies in the soil. No nation, no state, no community great or small can become prosperous without a soil of strong producing power. Without this the physical and

industrial activities as well as the moral and intellectual standard of the people, lags. The climate of Minnesota is all that could be expected of any section. The air is always clear and healthful. The state has still more than twenty million acres of fine agricultural land awaiting settlement by active and progressive farmers."

President F. A. Delano of the Washash Railroad: "Congestion in large cities means high rents; high rents mean high wages, deficient productivity of the farms means high cost of farm productions, high cost of living for the city man, and that again means higher wages and higher cost of railway operations. The railroads have favored and should continue to help in any proper way in anything that will tend to improve the condition of the farmer."

Senator R. L. Owen, of Oklahoma: "Under proper conditions nothing can be more beautiful or more attractive than farm life. In times past, with bad roads and muddy weather and fields too big for the farmer to cultivate successfully, men have often worked themselves down, have grown weary and made themselves poor by ill-directed effort, and with them their wives and children have become miserable in consequence.

#### EXECUTIVE COMMITTEEMAN.

A. L. Mort, National Dry Farming Congress: "The work of the general land agent who sells great tracts of land is not to be encouraged. What we want is the man who can take up and operate a small tract successfully. The great trouble and danger in farm life is for a man to try to carry more than his capital warrants. No business can thrive without capital and the man who urges his fellow to secure a large tract of land and undertake to work it with little or no capital is doing him a harm. Small tracts thoroughly cultivated will bring capital for larger uses.

Governor Vessey of South Dakota: "The whole republic of the United States has been built with the farm for its basis, and the change in public sentiment in recent years which has taken away so many boys away from the farm is to be deplored. The remedy lies in making country life so fascinating and so profitable to young people that they will drift to the farm rather than to the city. They will study improved methods of agriculture and with them improve their health increase their wealth and multiply their happiness."

#### TAX DEEDS.

If you have old mortgages, or ever lost land by Tax Deed, write Lawyer, Lock Box 383 Akron, Colo.

**Horse Owners! Use GOMBAULT'S Caustic Balsam**  
 A Safe, Speedy, and Positive Cure  
 The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or HORN. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. THE LAWRENCE-WILLIAMS CO., Cleveland, O.

**9 CORDS IN 10 HOURS**  
 BY ONE MAN with the FOLDING SAWING MACHINE. It saws down trees. Folds like a pocket-knife. Saws any kind of timber on any kind of ground. One man can saw more timber with it than 2 men in any other way, and do it easier. Send for FREE illustrated catalog No. A87 showing Low Price and testimonials from thousands. First order gets agency. FOLDING SAWING MACHINE CO., 158-164 E. Harrison Street, Chicago, Illinois

**Save One Third On Farm Telephones**  
 Buy everything needed for farm line or rural companies direct at best prices. Over 12 years in business. Our goods used everywhere. Not in the trust. Write today for our big FREE book. It gives complete instructions for construction work, and tells you how to operate your telephone line successfully. Central Telephone & Electric Co., Desk 24, St. Louis, Mo. or Dallas, Texas.

**LUMP-JAW**  
 Quickly and positively cured in less than three weeks with one application of ADAM'S RAPID LUMP AND SWELLING CURE. Easy to use. Written GUARANTEE. THE accompanying card explains. Don't delay but write today for free literature. Dept. 28, 112 Adams Bldg., Co., Algona, Ia.

**THE STRAY LIST**

Sherman County.—Wilson Peters, Clerk. HORSE—Taken up, July 19, 1909, by W. G. Bateman in Grant tp., one sorrel horse, x on left shoulder; valued at \$75.

Woodson County—John E. Barrett, Clerk. HEIFER—Taken up, Oct. 1, 1909, by I. T. Summers, in Vernon. Kan. one roan heifer, "F" on right hip; valued at \$20.

Graham County, W. W. Goodow, Clerk. MARE—Taken up, October 2, 1909, by J. A. Crabtree, Hill City, one iron gray mare, weight about 800 lbs., salt in right ear, valued at \$60.

Wyandotte County, Clerk. COWS—Taken up, October 7, 1909, by A. D. Phelps, 1718 Freeman Ave., Kansas City, Kan., one dun or brindle cow, rather large, large branching horns, white head, white underneath, all four feet white; valued at \$40. Also taken up by the above, one young black cow, small curved horns, white spot underneath and on left hip; valued at \$80.

**LATEST POPULAR SHEET MUSIC HITS**  
 (By Mail 16c a Copy; Any Seven \$1 Postpaid.)

VOCAL.	VOCAL—Cont'd.	INSTRUMENTAL.
Words and Music for piano or organ.	Moon Bird—Indian Love Song.	Ben Hur Charlot Race.
Alexander Jones	Napanea.	Black and White Rag.
Are You Sincere?	Oh You Kid.	Carbolic Acid Rag.
Boom Boom.—Comic.	Pride of the Prairie Mary.	Bill Pickles.
Bolo Rag Song.	Rose Marie.	Dixie Jingles—New.
Clover Blossoms.	Red Wing.	Dublin Daisies.
Can't You See?	Rainbow.	Enterpriser Mar-h.
Dear Heart.	Roses Bring Dreams of You.	Easter Lilies Waltz.
Denver Town.	Silver Threads Among the Gold.	F'refly—Intermezzo.
Down in Jungle Town.	School Days.	Funny Bones—New Rag.
Dreaming.	Sweetheart Days.	Floating Along.
Daisies Won't Tell.	Sweetheart—New.	Fairy Kisses Waltz.
Dublin Daisies.	Stingy Kid.	Golden Arrow—Indian.
Floating Along.	Shine On, Harvest Moon.	Garden of Love—New Waltz.
Golden Arrow.	Tittle, Tattle, Tattle Tale.	Happy Days Waltz.
Garden of Roses.	I Love My Wife, But Oh! You Kid.	Heart's of Gold March.
Garden of Dreams.	I've Lost My Gal—New.	Indian Summer Intermezzo.
Her Name is Mary Donohue.	It Looks Like a Big Night Tonight.	Iceless Rag.
Heinz—New Comic Song.	I'm Afraid to Come Home in the Dark.	Joan of Arc Waltz—New.
Honey, On Our Honeymoon.	I Used to Be Afraid to Come Home in the Dark.	Love Watches Waltz.
Hat My Father Wore on St. Patrick's Day.	There's a Big Cry—Baby in the Moon.	Lincoln Centennial—New March by E. T. Paul.
I Wish I Had a Girl.	That's What the Rose Said to Me.	12 Sorrells.
I Want Someone to all Me Dearly.	There Never Was a Girl Like You.	Merry Widow Waltz.
If I Only Had a Sweetheart.	When I Marry You.	Moon Winks.
Little Lady—New.	When I Dream in the Gloam- ing of You.	My Pony Boy.
Lady Love—A Big Hit.	When the Moon Plays Peek-a-Boo.	Moon Bird, Intermezzo.
Meet Me in the Rose Time, Rosie.	Wild Rose.	Popularity.
Mandy Lane.		Powder Rag.
My Heart is Beating Over-time For You.		Pearls—New.
My Cousin Caruso.		Piggy Back. Two-step.
My Pony Boy.		Red Wing.

Send 25 cents for any piece not listed. If more we will advise if less we will refund.  
**E. B. Guild Music Company, 722 Kansas Ave., Topeka**

**Lightning Pitless Scales**  
 New Pattern. Solid Channel Steel Frame  
 Channels are seven inches which is the height of platform from ground. Levers are octagon in shape giving greater strength. Beams are Toolsteel. This Scale will last a life time with ordinary care. Equipped with compound Beam Free. Furnished absolutely complete except platform planks. Guaranteed accurate and tested to more than its capacity. Write for price and description before buying.  
 120 N. 2nd St. Topeka, Mo.

# DAIRY



## Brown Swiss Cows.

The Michigan Agricultural College farm has some notable Brown Swiss cows in its dairy herd. One of these cows gives in a year 9,633 pounds of milk, which made 424 pounds of butter.

Another one 10,158 pounds of milk making 457 pounds of butter.

Another 9,477 pounds of milk, and 416 pounds of butter.

Still another gave 8,120 pounds of milk and made 406 pounds of butter. Their average weight is 1,250 pounds.

## What Oleomargarine Is.

According to one oleo manufacturer's recipe book, "fancy butter" is made from "30 pounds of white oleomargarine, 60 pounds of poor quality butter and 30 pounds of water. Mix well and add coloring matter to suit." Four truck loads of this mixture were seized in Chicago, and the above recipe came to light in the United States District Court. This is what the oleomargarine dealers sell for butter. The people who pay for butter should get butter. The dairymen are willing that oleo should be sold as oleo not as butter.

## Value of Ancestry.

If illustrations of the unerring law of heredity, the value of development and the importance of using only sires from highly developed dams were needed, they are furnished in the records and the pedigrees of the cows that now hold the world's records. The Holstein cows that hold the records in every class are from developed advanced registry dams. Every cow that holds the record in the different classes with one exception, either through her sire or dam, traces to cows that have held the world's record, and that one is from a highly developed cow. What better evidence of the value of ancestry could be asked.

## Select a Breed and Stick to it.

Twenty-five years ago D. Drummond, of Ontario, bought an Ayrshire bull and heifer and from this beginning and by the continued use of good bulls has reared some of the largest producing Ayrshire cows of America. He selected a breed and stuck to it. He says:

"I would strongly urge the necessity of choosing at the outset one of the best milking breeds, and stick to it. I have very often seen a farmer start out fully determined to get up a herd of grade Ayrshires, using a good male animal of that breed, continuing in that line with apparent success, but before he required to change the male, some neighbor had got a nice Jersey, and thinking he had done better with this than the Ayrshire, farmer number one decided to try a Jersey. Following on that line for a few years, not with the success expected, he decided to try a pure Holstein. After giving that cross a trial, he found he had practically put himself out of a dairy cow, without milking qualities, shape of size for beefing purposes."

## The Reason of Things.

The successful man in any walk of life is the man who can give a good reason for everything he does. This is positively true of the successful dairyman. He does things differently from other dairymen for a reason. "The successful dairyman," says Gov. Hoard, "knows the reason of the things he is trying to do and the unsuccessful does not."

"Take for instance, this simple matter of supplying a cow with all the pure water she needs. The 'reason of things' tells us, that about seven-eighths of all milk is water; that the more milk a cow yields the more water she must drink; that if she is not furnished this water in a way that she can get it without too much exertion she will go without it, to our most evident injury; that if in winter the water is too cold the cow will not

drink the amount she really needs for our profit; that if the water be impure the milk must necessarily be impure also. All these things or conditions belong to the reason, or absolute nature of the cow in her relation to water.

"But as we note how many farmers violate this established reason of things, we can see how little they know and understand the nature of the cow, or the nature of the very profit they are seeking.

"A humorous old Scotchman in Canada once told us that he thought that the reason why there were so many poor dairy farmers was because they had a sort of 'lazy faith in the Lord.' They think or hope, said he, that He will somehow make up for whatever they fail to do. 'O,' he added, 'we are a trusting lot.'

"Come to think of it, there is a good deal in the kind of faith we have in Providence, whether it is a working faith or not. But we must look into the 'reason of things.'"

## Maintain Oleo Tax.

The next session of congress will be asked by the packers to repeal or modify the present law taxing oleomargarine and other imitations of butter.

Congress ought not to be willing to listen to appeals in behalf of anything that is counterfeit, and especially a counterfeit directed against a good industry and a fraud upon honest people. Your congressman won't help abolish the anti-oleo law if you and your neighbors make your wishes known to him.

The present oleomargarine law ought to be maintained and enforced because it stands for honesty in dealing, just as any other law in behalf of integrity and against fraud should be supported.

The law should also be supported and enforced in simple justice to the foundation industry of the nation, whose dairy interests are menaced, perhaps will be ruined, by cheap, spurious butter.

The law should be enforced and indeed extended as a pure food regulation—good butter made from cow's milk is the healthiest and most easily digestible of fats, while the fake butter is a handicap on the stomach as well as a tax upon the pocketbook.

And yet there is unquestionably an effort to be made in the next session of congress to repeal the anti-oleo law, or modify it so as to be ineffective. After which, in such condition is secured, there will be the competition of bogus butter against the genuine dairy product, with both decreased sales and lessened profits for honest butter.

A good method of opposition to the repeal or weakening of the present anti-oleo law is by resolutions of agricultural societies, clubs, granges or other associations. An equally forcible and more direct method is by personal letters to congressmen. Farmers can prevent action in congress hostile to their interests if they choose to exert themselves, and within the next few weeks is the time to make the effort most effective. Congressmen from agricultural sections will not dare let the anti-oleo law be repealed if their constituents advise them plainly and forcibly.

Write your congressman now. Tell him it will hurt you and your neighbors to weaken or abandon the present anti-oleo law. Explain your position to him, your business, your investment in cows, your work to improve stock and farm, how many people are interested in your dairy interest, what your community thinks of the value of the present law. When the repealer or weakener of the anti-oleo law comes along in congress write your representative again, and watch closely that you may know when such repealing bill is introduced.

## The Profitable Dairy Cow.

The question often arises, "What is a profitable dairy cow?" The only direct answer must of necessity be a general one. A profitable dairy cow may be defined as one that will pro-

duce enough to pay for her feed, care, interest on the necessary investments, and some profit besides. A profitable dairy cow then is one that will convert feed and labor into profits economically without removing the fertility from the farm.

The cost of keeping a dairy cow will vary according to locality and cost of feed and labor. Under ordinary conditions in South Dakota, the cost of keeping an average dairy cow is about \$35 per year. Three thousand pounds of milk testing 4 per cent fat, contains 120 pounds of fat and yields about 2,500 pounds of skim-milk. The fat is worth about \$30 and the skim-milk about \$5, a total income of \$35. Such a cow is not earning money very fast for her keeper. The only profit obtained is what the calf is worth and the fertility retained on the farm. These latter are of course important factors. According to the best obtainable statistics the above mentioned figures represent the average production of each of the 300,000 dairy cows in South Dakota.

In passing from range conditions to a system of mixed farming, as South Dakota is, its people naturally carry with them cows representative of the range type and also a cultivated liking for that particular type.

That there should be some degree of slowness in changing from the range type to the dairy cow type can not be wondered at. Those who have not been fortunate as to buy large tracts of land while it was cheap years ago, and who are obliged to farm more intensively, and who like the mixed system of farming, are rapidly seeing that it does not pay to milk the cow that produces only about 120 pounds of butter-fat per year, when it is so evident that a cow producing twice that amount can be secured by the application of a few simple principles. Improvement in the production of the dairy cows may be accomplished:

1. By using a dairy sire, whose dam, grand-dam and great grand-dam have all been excellent and profitable dairy performers. The sire, if of pure blood, has more than half the influence on the character of the offspring. For this reason, the head of the herd should be selected with extreme care.
2. By selecting for the future herd the better calves from the best producing cows.
3. By culling from the milking herd the poorest cows as fast as they can be spared.
4. By giving these cows the best of feed and care.—C. Larson, Prof. Dairy Husbandry, S. D. Agricultural College.

## Reduce Cost of Milk Production.

Cheap milk production is the theme of the dairyman, or at least should be. The cow, the food and the care, are the main channels to this end. All should be studied by the milk producer and neglecting either will mean loss. The cow should be a dairy animal or at least a good producer, and knowing that to keep her means expense, the net profits should come through her production over and above cost of feed and care.

In the corn belt it costs from \$25 to \$35 to feed a cow one year and her care will cost close to \$25, then the total cost is about \$60 and to reduce this without lowering the production means good feeding and care. The cow that produces 125 pounds of butter-fat per year will return \$31.25 for butter-fat at 25 cents per pound, \$8 for skim-milk, \$5 for a calf and \$10 for fertilizer, making \$54.25 in total. Such a cow, it will be seen, can make little or no profit. The price of the calf is low, but it is quite the average for the country over, and only pure bred stock can make a better showing on values of calves. Such a cow would hardly cost \$30 to feed and no doubt her care would be less than \$25 per year, but the profit, if any, would be very small and her keeper would be doing a very poor business.

The cow is the first and most important channel for milk-production. It may be said that it is not necessary to keep such cows, and of course it is not, but we must remember that two-thirds of the cows of the country are of the 125-pound butter-fat per year kind and so long as this is true, there is need for improvement. The feeding of the cow is neglected fully as much as the kind of cow and in nine cases out of 10, the cow is underfed and not supplied the food necessary for her greatest profit. Good feeding means supplying the animal with required nutriment at the least possible cost. The roughage is of the most importance and should be produced on the

farm. Silage, alfalfa, clover and roots should be the principal crops of this kind and the manure from the yard will insure large yields.

The silo I consider of the greatest importance in reducing the feed bill and this forage with alfalfa hay should make up at least two-thirds of the bulk of the feed given. For grain and mill stuff, the price should determine what feeds to choose and here a knowledge of stock feeding is required. In general, corn, bran and oil-meal will be found of the best and cheapest. The grain should be given in amounts consistent with the animal's ability to handle the food. In general, it can be said that they should have what they will eat up clean and not gain in body weight. A dairy cow should not be fattened, although she should be kept in good condition.

The care given the cows will to quite an extent influence the cost of the milk. An animal will do her best when she is comfortable and her comfort will mean plenty of food and water, a good place to rest and regular feeding, milking, etc. The cows in our barn will show much uneasiness if the feeding time is delayed fifteen minutes. Dairying to be the most profitable should be a business and not a neglected side issue. If it be a side issue, some of the principles at least of good dairying should be practiced.

In the cornbelt milk can be produced as cheaply or more cheaply than in any section of our country, but I am free to say that I believe it is not being so produced and the principal cause is due to its being a side issue where it does not receive the care and study required to make it pay. With business methods applied to dairying and study given the cow, her feed and care, the land of corn and alfalfa can produce milk at the lowest cost and greatest profit.—A. L. Haecker, Nebraska Experiment Station.

## Some Dairying in Country Schools.

Every farmer should be interested in keeping the boys and girls on the farm. One way to do this is to make farm life and work as attractive that they will not want to leave it. This can be done by showing the young folks that there is something to farming besides hard manual labor something requiring study, exercise of brain power, intelligence. This can be shown by simple instruction in the fundamentals of agriculture in the country schools. Dozens of important agricultural truths can be simply and plainly presented which will open the eye of the boy or give to the possibilities of exercising brain power in their dairy work.

A. O. Auten, Jerseyville, Ill., the president of the Illinois Dairy Cattle Improvement Association, is a very practical business man and, therefore, a successful dairyman. He conducts a model dairy that has from the first made a good showing on the right side of the ledger. President Auten has interested a few county superintendents of schools and teachers and the results have been so highly satisfactory in educating the boys and girls in the study of milk production, milk testing, the ration of milk, etc., that he has in the following letter invited the 102 county superintendents of schools in Illinois to co-operate with the Illinois Dairy Cattle Improvement Association in the work of promoting the dairy industry of that state:

"A county superintendent of schools in a county in this state is doing a great work for the dairy industry of his county by an object lesson in milk testing, which has proved to be not only popular but profitable to the owner of every cow, who has children attending the rural schools in said county.

This very practical and far seeing

**"THE WORLD'S STANDARD"**

**DE LAVAL**

**CREAM**

**SEPARATORS**

**THE DE LAVAL SEPARATOR CO**

165-167 BROADWAY, NEW YORK. 42 E. MADISON ST. CHICAGO, ILL.

**PATENTS that PROTECT**

Our 3 books for inventors mailed on receipt of 6 cts. stamp.  
R. S. & A. B. LAOEY, Washington, D. C., Dept. 40, Est. 1889

Readers Market Place

CLASSIFIED ADVERTISING

3 CENTS A WORD

The rate for advertising in this department is low, only three cents per word each insertion.

county superintendent of schools has purchased a Babcock milk testing outfit for the use of the teachers of the rural schools of his county.

"The children bring to the school samples of milk of one or more cows. The milk is tested and the result is announced for the benefit of the entire school.

"These data enables the teacher to determine the weight of the milk for a month, the per cent of butter-fat and its value, which is posted on the black board.

"The county superintendent who has introduced this striking object lesson in reporting results, remarked that the parents of the children who were taking part in the milk testing study were selling many of their former favorite cows.

This milk testing lesson, if it could be presented but twice in each school year to the several rural schools of the state, would accomplish wonders in the way of weeding out poor cows and the study of the breed and ration necessary to ensure a better margin of profit on each cow in the herd.

"The children that have the advantage of milk testing study referred to above will soon increase the demand for pure bred dairy cattle in their respective localities.

"You are invited to consider the matter of securing the simple and inexpensive milk testing outfit referred to above and give the pupils of the rural schools in your county a demonstration that will be of untold value to the dairy industry of your county and the entire state.

"The dairy will soon be the leading industry in Illinois and the profit therefrom will depend largely upon the education of the boys soon to be our dairymen in all matters that enter into economy of production of milk and the quantity of the milk, cream and butter marketed.

"Your hearty co-operation in the above matter is invited." Now isn't that easy? Isn't it worth while? Will you not show this article to the teacher in your district and ask that such an exercise be introduced into your school?

Cleanliness in Farm Buttermaking.

When using the term cleanliness in speaking of buttermaking it means to most people simply the necessary care taken to prevent contamination during cream ripening and during the manufacture of the butter.

This subject should, however, be considered under two heads, (1) cleanliness in the production and handling of the milk and cream, and (2) cleanliness in the manufacture of the butter. The place and conditions for carrying out the operations under both of these heads vary considerably.

HELP WANTED.

WANTED—ECONOMICAL AND PARTICULAR people to take advantage of our prices and service. Western Printing Co., Ptg. Dept. of Kansas Farmer, Topeka, Kan.

WANTED—A SOLICITOR WITH HORSE and buggy to drive through the country and solicit subscriptions. Address Circulation Manager, Kansas Farmer, Topeka, Kan.

WANTED—LOCAL MEN TO TAKE ORDERS for high grade western grown nursery stock. Experience unnecessary. Outfit free. Cash weekly. National Nurseries, Lawrence, Kan.

WANTED—LADY OR GENTLEMAN AS local representative in every Kansas county. Splendid chance to make good wages without great effort and no expense. Write for particulars. Address, Circulation Department, Kansas Farmer, Topeka, Kan.

CATTLE.

POLLED JERSEYS—FOR BREEDERS' names write Charles S. Hatfield, Box 8, Route 4, Springfield, Ohio.

FOR SALE—12 GRADE JERSEY MILK cows, seven to ten to freshen. Exceptional lot \$800. Sayda Polo Jersey Farm, Parsons, Kan.

SEE US BEFORE PLACING YOUR stock catalog printing. Western Printing Co., Ptg. Dept. of Kansas Farmer, Topeka, Kan.

FOR SALE—25 FANCY BRED, GRADE Holstein heifers due to calf by registered Holstein bull this winter. H. B. Browning, Linwood, Kan.

FOR SALE—FULL BLOOD RED Polled bull, eleven months old. Duroc Jersey hogs, 70 head to select from; priced right. I. W. Foulton, Medora, Kansas.

JERSEY CATTLE, CHOICE BULL calves of the very best breeding \$25.00 each. A few cows and heifers. H. C. Young, Wineford Farm Dairy, Lincoln, Neb.

FOR SALE—TWO SHORTHORN BULLS One red September yearling, sire Barnpton Knight, out of a Gallant Knight cow. One roan pure Scotch bull fall yearling. Sire Lord Bauff 2nd, out of Red Lady 5th a pure Scotch cow. Harry H. Holmes, Great Bend, Kan.

FOR SALE TO DISSOLVE PARTNERSHIP—Fourteen head choice Jersey cows, ten heifers, and three year old bull. Financial Count, a half brother to Financial Countess, last year champion butter cow of Jersey breed. Eleven head registered. Will sell registered separate. Kirkpatrick & Musil, Wellsville, Kan.

ALYSDALE SHORTHORNS — HERD headed by Archer's Victor 292012. For Sale. Prince Consort 187008, beautiful dark red, 8 years old, sired by Imported Prince of Perth, dam full sister to "Lavender Viscount." Is a straight Scotch bull of the finest breeding. Also four fine yearling bulls, red in color, and about 8 richly bred cows and heifers, all at a bargain. Come and see them. Chas. W. Merriam, Columbian Building, Topeka, Kansas.

HORSES AND MULES.

SHETLAND PONIES—WRITE OR COME and see us; we are sure to please you. Low prices for 30 days only. Clark Bros., Auburn, Nebraska.

FOR SALE OR TRADE—ONE JACK was two years old August 5; weight 750 pounds, is 1 1/4 hands high and has very heavy bones. Earl Wilson, Palmer, Kan.

NAVAJO PONIES—HAYNES BROS. OF Haynes New Mexico can furnish ponies in car lots, either sex and all ages and colors. Would consider trade for young Percheron mares and stallions. Also want two good Shorthorn cows and yearling bull.

SWINE.

O. I. C. BOARS OF ALL AGES AT farmer's prices. Prize winning stock. Arthur Mosse, R. F. D. No. 5, Leavenworth, Kan.

POLAND CHINA BOARS, PURE BRED, fine individuals, 175 lbs., big boned, growthy, no culls. A. P. Wright, Valley Center, Kan.

POLAND CHINA BOARS AND GILTS; pure bred, Meddler strain, fine individuals, big boned, growthy. G. F. Lilly, Silver Lake, Kan. Bell phone, 515.

Rasmussen in Bulletin 141, N. H. College of Agriculture.

Cure Egg-Eating Dog.

A subscriber writes: Make a hole in either end of an egg and blow out about half of the contents. Then blow in cayenne pepper and put wax over the hole. Put this egg where the dog will find it easily. Usually one experience with an egg of this sort will break him of egg-eating.

If leaves are not plenty, millet hay or unthreshed oats make good material for the hens to do their scratching in and remember that where there is no scratching or exercise for the hens, there will be but few eggs.

REAL ESTATE.

WE CAN TRADE YOUR PROPERTY. Book of 500 exchanges free. Graham Brothers, Eldorado, Kan.

NOTICE THE OTHER BARGAINS IN Real Estate offered under Bargains in Farms and Ranches in this paper.

FREE INFORMATION ABOUT OKLAHOMA. Homer B. Wilson. Here since 1893. Enid, Okla.

A 1953 ACRE IMPROVED RANCH IN Hodgeman county, Kansas, for sale at \$15 an acre. John L. Wyatt, Hutchinson, Kan.

CHOICE KANSAS FARMS AND Ranches. Bargains in Pottawatomie and Wabaunsee counties. Write Umschied & Ulrich, Wamego, Kan.

NORTHEASTERN KANSAS FARMS FOR sale near St. Joseph, Atchison, Leavenworth and Topeka. Come and see. E. T. Lehman, Nortonville, Kan.

BUSINESS CARDS 500 FOR \$1.50—Prompt service. Send for samples and estimates. Western Printing Co., Ptg. Dept. of Kansas Farmer, Topeka, Kan.

CHOICE DAIRY FARM—240 ACRES, 1 mile from Concordia, Kan. Alfalfa, corn, wheat, pasture, water. Write Theodore Laing, Concordia, Kan.

FOR SALE—SEVERAL FARMS, just listed, from 10 to 30 acres, in this vicinity, that are bargains. H. C. Bowman Real Estate Agency

TWO 80-ACRE FARMS AT \$1,200 EACH. 240 acre farm well improved, 150 in cultivation, 100 of this bottom land, does not overflow. For any information write Box 41, Maronie, Okla.

240 ACRES SMOOTH LAND 85 ACRES under cultivation, fair improvements, good well and windmill. \$35 per acre. W. L. Bidwell, Rosalia, Kan.

A LARGE LIST OF DESIRABLE farms for sale on very liberal terms and prices. For further information call on or address Thomas Darcey, Real Estate Agent, Offerle, Kan.

MR. FARMER, BUY A FEW ACRES ADJOINING Kansas City. It will make you rich as the city grows. I have some real bargains. R. W. Sholders, Kansas City, Mo.

FOR SALE—SIXTY ACRE FARM NICELY improved, three miles from Coffeyville, possession. Price, \$2,800. \$1,000 cash will handle. See The Upham-Cherokee Land Agency First National Bank Building, Coffeyville, Kansas.

COME TO OREGON. I HAVE BEAUTIFUL homes and farms for sale. Write or send \$1.00 for a year's subscription to the Silverton Leader. J. E. Hosmer, Editor, Silverton, Oregon.

FRANKLIN COUNTY, KAN., 160 ACRES, 100 plowed, most of which is alfalfa land; will rent for \$275. Only \$30 per acre. Also extra fine dairy proposition. Buckeye Agency, Williamsburg, Kan.

FOR SALE—1050 ACRES OF RICH bottom land within one mile of a good R. R. town in Wilson county, Kan.; 450 acres in cultivation now and all can be cultivated. Price \$27.50 per acre. Terms on part if desired. This is a snap. J. L. Skaggs & Co., Fredonia, Kan.

SELL YOUR PROPERTY FOR CASH IN less than 90 days; properties and business of all kinds sold quickly in all parts of the world; send description today, we can save you time and money. The Real Estate Salesman, K. Funke Bldg., Lincoln, Neb.

NO. 80—30 ACRES OF CREEK BOTTOM, balance upland, 60 acres in cultivation, 3 acres meadow, balance in pasture, a new 3 room house, and small barn, good water, only six miles from the county seat and a bargain at \$3,600. J. S. Boyle, Bennington, Kan.

FOR SALE—3 QUARTER SECTION OF land on the north slope of wheat ridge, 6 miles south of Dodge City, Ford Co., Kan. Price is right. 135 a. in wheat, good stand, good terms. Buy of me and save commission. W. S. Marlon, owner, Dodge City, Kan.

KING ALFALFA MAKES FORTUNES for owners of Eastern Colorado irrigated low-priced farm lands, near Denver. Send for our alfalfa literature, Colorado Farm Land Association, 279 Dearborn St., Chicago, Ill. Live agents wanted in town or country.

WHO WANTS THIS INVESTMENT?—\$20 acres of nice rolling, not rough land, 9 miles from town, 235 in cultivation; \$5 nice meadow; a small granary, only building. This is a good wheat farm and for an investment pays a good income. \$37.50 per acre. Write for list. V. E. Niquette, Salina, Kansas.

FOR SALE—THE CHEAPEST RANCH IN Eastern Kansas; 1120 acres, 90 miles southwest of Kansas City; joining railroad station; all tillable land. Well fenced, subdivided and watered; 300 acres in cultivation. Excellent and extensive improvements. A complete ranch, in good order. Can sub-divide. Price \$45 per acre. Daniels & Martin, 23 Columbian Bldg., Topeka, Kan.

TRADE EQUITY FOR PERCHERON Stallion or mares. 80 acre improved land, 55 acres cultivation, balance pasture. 5 room house, good barn, room for 15 head, 800 income crop. 1 mile to town and school. Hedge fence, plenty water, price \$35. Only 4 miles from Harveyville. Write or come, Box 15, Harveyville, Kan.

REAL ESTATE.

WANTED—FARMS AND BUSINESSES. Don't pay commissions. We find you direct buyer. Write, describing property, naming lowest price. We help buyers locate desirable properties FREE. American Investment Association, Minneapolis, Minnesota.

A CRACKER JACK FARM, 360 ACRES, 2 miles from Clyde, with magnificent improvements, house 18x28 2 stories high, lot 16x24, barn 60x65, 70 acres in alfalfa, 80 acres in wheat, 80 acres corn ground, 2 acres of fine orchard, balance in meadow and pasture, a perfect water system for stock. This is a bargain for the man who is looking for a fine home. Price, \$75 per acre. J. C. Murphy, Clyde, Kan.

MISCELLANEOUS.

FINE CHEWING AND SMOKING TOBACCO. Send stamp for sample. J. F. Miller, Adams, Tennessee, R. R. 1.

PURE HONEY, TWO CANS 120 POUNDS, \$8.50; single can, \$4.50. F. O. B. care W. F. Morley, Los Animas, Colo.

PATENTS.

PATENTS PROCURED AND SOLD; BIG money in patents; book free. H. Sanders, 115 Dearborn St., Chicago, Ill.

POULTRY.

EXTRA GOOD BUFF ORPINGTON cockerels. Harry Cure, Atchison, Kan.

PEKIN DUCKS, BUFF PLYMOUTH Rocks. Dudley, Lawrence, Kan., R. 1.

BUFF ROCK COCKERELS—\$1 AND \$2 each. Mrs. John Beil, Ackerland, Kan.

50 WHITE ROCK COCKERELS AND A few good pullets for sale. J. C. Bostwick, Hoyt, Kan.

MAMMOUTH TOULOUSE GEESE FOR sale, \$2 each. Mrs. W. E. Bradley, Effingham, Kan.

SINGLE COMB WHITE LEGHORN hens, pullets, cockerels. R. W. Yeoman Lawrence, Kan.

FOR SALE—BUFF WYANDOTTE COCKERELS. Write for prices. Address W. K. Heaton, Garfield, Kan.

SINGLE COMB RHODE ISLAND REDS—Pullets and cockerels for sale. Harry Menter, 1534 Mulvane street, Topeka, Kan.

"EVERY FEATHER BUFF" LEGHORNS and Rocks, best grown, \$2 each. Mrs. Cora Ben, Moline, Kan.

BARRED ROCK COCKERELS FOR SALE at reasonable prices. Mrs. E. L. Rice, Route 2, Eureka, Kan.

S. C. W. LEGHORN COCKERELS, farm raised, two for \$5, one for \$3. Carrie Dawdy, Jewell, Kan.

FOR SALE—A CHOICE LOT OF BARRED P. Rock cockerels at \$1.50 each. D. N. Hill, Route 1, Lyons, Kan.

FOR SALE—SINGLE COMB BUFF ORPINGTON cockerels, hens and pullets; also Buff Orpington ducks. C. B. Owen, Lawrence, Kan.

WHITE PLYMOUTH ROCK COCKERELS prize winners at \$1.50 and \$1.00 each; also Pekin drakes \$1.00 each. L. T. Spellman, Route 8, Paola, Kan.

BLACK LANGSHAN COCKERELS—Standard bred. Large bone. Green barring. One for \$2. Two for \$3. Mrs. D. A. Swank, Blue Mound, Kan.

CHESTNUTS GUARANTEED FORMULAS for Roup and Poultry Food. \$1.00. H. V. Chestnut, Centralia, Kansas, (breeder of White Faced Black Spanish Chickens.)

LETTER HEADS AND ENVELOPES—Descriptive of your business. Best prices. Send for samples. Western Printing Co., Ptg. Dept. of Kansas Farmer, Topeka, Kan.

PARTRIDGE WYANDOTTES—A number of good cockerels from prize winning stock. Write your wants to S. S. Jackson, Scranton, Kan.

PURE BRED WHITE HOLLAND TURKEYS, \$7.00 per pair; toms, \$4.00. Strong, vigorous Barred Rock and R. C. R. I. Red cockerels and pullets. Write your wants. Mrs. W. A. Schreier, Argonia, Kan.

CHOICE LIGHT BRAHMA COCKERELS at \$2 each. Remember we won first pen, Kansas State Fair 1908, first pen, Kansas State Show, 1909. Order from this ad. Satisfaction guaranteed. Western Home Farm, St. John, Kan.

100 EXTRA GOOD BARRED PLYMOUTH Rock Cockerels. They are of the E. B. Tompson strain, large birds and nicely barred, have won over 50 premiums in last three years, satisfaction guaranteed. Paul Oliver, Danville, Kan.

LAYING STRAIN ROSE COMB BROWN Leghorn cockerels, fine birds, no disqualification, \$1.00 each. Selected for high scoring \$2 to \$5 each; yearling hens, \$12 per doz.; return if not satisfied. H. M. Johnson, Formoso, Kan.

DOGS.

FOR SALE—Brown and black spaniels, both sexes, good ones, cheap; closing out. Thorndale Kennels, Wayne, Kan.

FOR SALE—COLLIES OF ALL AGES. Natural born cattle drivers. Pedigreed stock. Write for circular. Harry Wells, Belleville, 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.

COLLIES OF ALL AGES FOR SALE—They are stock drivers, pets and home protectors, 260 head sold last year. Write for illustrated circular and prices. Would like to buy a few ferrets. Address Harvey's Dog Farm, Clay Center, Neb.

LAWYERS.

A. A. GRAHAM ATTORNEY AT LAW, Topeka, Kan.

## DRY FARMING METHODS

Dust Mulch Necessary to Conserve Moisture.

The scarcity of farm lands and the necessity for farming western lands has caused a rapidly increasing interest in dry farming methods. KANSAS FARMER has stated time and again that the so-called dry farming methods are only the methods of good farming. Whether the farmer is in western Kansas or in Illinois there is the same reason for conserving the moisture of the soil. Good farming in Illinois will result in keeping the moisture in the soil, just as good farming in western Kansas makes it necessary.

At the dry farming congress recently held in Denver, a southwestern Texas farmer made a practical statement of dry farming methods, deemed so important that it has been published in a bulletin. From this bulletin the following has been taken:

The great principal underlying this mode of farming is how to get moisture to our growing crops when rain is deficient. Where you have a retentive subsoil the problem is more easily solved. A clay subsoil is the sheet anchor of dry farming.

When this subsoil has absorbed moisture it retains it until liberated by frequent tillage. The reason, therefore, of my success is that I have the subsoil necessary to retain moisture and have applied the necessary means of bringing to the growing crops the moisture required to their full development. It is my practice to keep the soil continually stirred, thus keeping it mellow and friable. This method of cultivation is known as the dust mulch or blanket system. This enables capillary attraction to do its work.

Last season we were deficient twelve inches of rain; again this season we are, at present, behind that. Still, by my method of frequent cultivation, I have now growing and nearly matured, Irish potatoes, peas, tomatoes, radishes and about 5,000 cabbage plants, making good growth, some of which will be fit for market in six weeks, although our rainfall during the last three or four months has been less than three inches.

In my truck patch all land uncropped, when possible, I keep plowed on the surface. Land allowed to get hard on the surface will soon dry out and deteriorate. Soil, to retain its vitality, requires air as well as water, therefore if you cannot get the one give the other. It is the same by irrigation or by excess of rain; after the

land becomes saturated it needs constant cultivation to give vitality. Plant life is much like human life, requiring the elements most necessary to produce growth, and unless we aid the soil to give it elements conducive to growth we get sickly plants and poor returns.

Some may say that it is fertilizing that gives the growth. Yes, under proper conditions only, and unless you make these conditions available all your fertilizers will be of no benefit. I am aware that many farmers have an idea that when the season is dry, soil should not be disturbed or it will dry out.

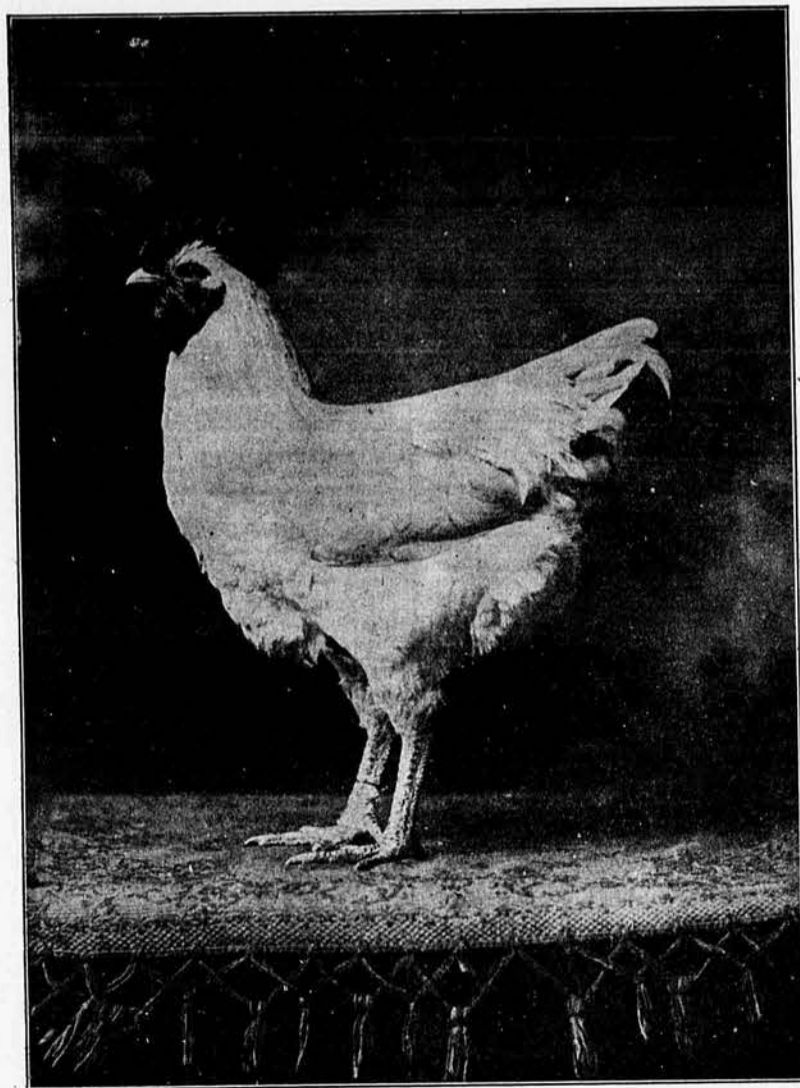
This is true with regard to deep plowing but it is just the opposite with shallow cultivation. By constant cultivation of soil, cropped or uncropped, a falling rain will penetrate readily and prevent washing of the soil to a great extent. This method of mulching by constant cultivation is, I believe, also on the principle of the Campbell system of dry farming, and is just as applicable to corn as to truck growing.

The fact is indisputable that it is only quite recently that we have discovered the value of the semi-arid lands. To develop these we need education to enable our farmers to cultivate these lands under improved methods. As to tools to be used for securing a dust mulch, these should be of five-tooth one-horse expansion cultivator as also the one-horse expansion harrow of fifteen teeth. Sweeps and shovel plows will not answer as well. Shallow cultivation is needed and in dry weather never expose or turn over new soil, but let the dirt or soil fall back with little exposure. Allow no weeds or grass to interfere with your growing, as they will rob the moisture from your plants.

### Agriculture in Country Schools.

Miss Lois Coffey, of Macomb, Ill., has developed some very good work in teaching agriculture in the geography class.

The uppermost idea here is to show what practical things of the farm can be successfully taught to children and made even more cultural and interesting than the old book studies. Garden plots, 20 feet square, were planted, one each in corn, clover, cow-peas and soy-beans and two in alfalfa.



First cockerel, Kansas State Show at Newton, Kan., 1909, bred and owned by Blue Ribbon Farm, Sharon, Kan., originator of the famous white ivory strain of White Rocks.

## PERCHERONS, SHIRES, SADDLERS & JACKS

We have for sale 28 head of registered jacks and jennets, 12 head of registered Percheron stallions and mares, one imported English Shire stallion, and one combination saddle and harness stallion. We will make prices to quick buyers that will be sure to move them. Come and see them or write to F. W. FOOS, POTTER, KAN.

## 100 RHEA BROS. 100 Acclimated Percherons

You may say, this little ad looks cheap offering so many good horses. Well friend, it is cheaper than a larger space, that's why we use it. The buyer pays for it. REMEMBER THAT. You who have seen our horses at the State Fairs for years know that they are not the cheap kind; although by our economical system of raising and selling our stallions we can sell cheaper than most dealers. The records show that we exhibited three year old Percheron stallions at the Nebraska State Fair 1909 with five importers who claim to have bought the best in France and our horses stood 1st 3rd and 5th. They are all for sale at very reasonable prices. Every one fully guaranteed. Terms to suit. Life insurance furnished.

Write today or come to

### ARLINGTON, NEB.

On main line C. & N. W. R. R., 25 miles N. W. of Omaha, 8 miles east of Fremont, 12 passenger trains daily.

The daily lessons in corn were written in composition form by each pupil. The errors made were noted, but the work was not rewritten. This furnished excellent motive for correct English.

Each child decorated his booklet cover with an original corn drawing, and some excellent results were obtained. The following items were taken from the best one of these booklets in the pupil's language:

"Humus is wholly decayed vegetable matter of a very fine texture and dark-brown or black color. Partly decayed vegetable matter is not humus.

"Humus is formed by the action of bacteria on vegetable matter in the presence of a small amount of air and dampness. If too much air is present carbonic acid gas is formed.

"The principal use of humus is for food for growing vegetable organisms because it is decayed vegetable matter which is composed of hydrogen, nitrogen, oxygen, and carbon. It also improves the texture of the different soils. Humus united with clay makes it more porous, and with sand, makes it less porous. Humus, being of a loose, fine texture, increases the capacity or film water because it has more surface to be covered.

"Leguminous plants produce their seeds in pods and transfer nitrogen from the air to the soil. Clover, white or red, alfalfa, soy-beans, cow-peas, and vetches are the commonest legumes.

"The bacteria gather the nitrogen from the air and when the plant dies the nitrogen goes into the soil. Bacteria are microscopical vegetable organisms which are present in almost everything. These live in the nodules of tubercles on the roots of legumes. These bacteria have plenty of nitrogen to draw from as there are 75,000,000 pounds in the air on every acre of land.

"Tillage also saves moisture because it increases the capacity of the soil for film water. One man found that on a soil nine to 17 inches deep there was 17 per cent of water, and in another part of the field there was only 12 per cent of water. The first part of the field had been properly tilled and the other had not. Tillage prevents vaporation by making a soil mulch or blanket to keep the sun from evaporating the underlying moisture."

L. S. Wilson, of Cheyenne Wells, Colo., has a 130-acre farm 8 miles from Cheyenne Wells that will please any one interested at \$16.00 per acre. Easy terms. Mr. Wilson is the owner. Write or go and see him at once.

### Hide and Fur Market For week ending December 4.

Hides.	No. 1.	No. 2.
Green Salt Cured	12 1/2 c	11 1/2 c
Green Salt Cured, Side Brands		10 1/2 c
40 lbs. up		10 1/2 c
Green Salt Cured, Side Brands		9 1/2 c
40 lbs. down		9 1/2 c
Green Salt Cured Bulls and		10 1/2 c
Stags	11 1/2 c	10 1/2 c
Green Salt Cured, Glue		6 1/2 c
Green Salt Cured Deacons	25 c	50 c
Skunk	15 c	20 c
Tallow	5 1/2 c	4 1/2 c
Bees Wax	25 c	15 c
Horse Hides	2.50@3.25	1.50@2.25
Ponies and No. 3		75c
Dry Horse, half price of Green		
Green Salt Sheep Pelts	25c@1.00	
Green Uncured Hides	1 1/2 c less than same grade cured.	
Green Half Cured	1/2 c less than cured.	
<b>Dry Hides.</b>		
Dry Flint, Butchers' Heavy	17c	
Dry Flint, Fallen Heavy	16c	
Dry Flint, Light, under 16 pounds	17@18c	
Dry Flint, Culls	10c	
Dry Salt, Heavy (18 lbs. and up)	14c	
Dry Salt, Light (under 18 lbs.)	10c	
Dry Sheep Pelts	10c@12c	
<b>Furs.</b>		
Raccoon, large, prime	\$1.00@1.30	
Raccoon, medium	.85@1.00	
Raccoon, small and No. 2	.50@.75	
Skunk, black prime	1.75@2.50	
Skunk, short	1.25@1.75	

Skunk, narrow strips	.85 @ 1.25
Skunk, broad	.25 @ .50
Mink, large dark, No. 1	4.50 @ 5.00
Mink, medium, No. 1	3.00 @ 3.50
Mink, small and No. 2	1.75 @ 2.25
Opussum, large cased No. 1	.35 @ .50
Opussum, medium	.25 @ .40
Opussum, small	.10 @ .15
Muskrat, winter	.25 @ .30
Muskrat, fall	.25 @ .30
Kits	.25 @ .45
Civit	.05 @ .10
House Cats	.60 @ 1.00
Fox, gray	3.50 @ 4.50
Fox, red, prime	3.00 @ 3.50
Wolf, prime mountain	1.00 @ 2.00
Wolf, prairie	.25 @ .75
Wild Cat	5.00 @ 6.00
Beaver, large, each	3.50 @ 4.00
Beaver, medium	1.50 @ 3.00
Beaver, small	.50 @ 1.00
Badger, No. 1	10.00 @ 12.00
Others worthless	
Otter, prime, large	
Unprime furs at value.	

### Hides are Valuable

and you cannot afford to run chances by shipping to anyone but the firm at the head of the trade in KANSAS—THE PIONEERS KANSAS HIDE TRADE—established 1865—Forty-five years business existence must prove—our prices the highest—service the best—so ship to us.



Write for shipping tags

**HIDES**

Postal card is sufficient

Topeka **JAMES C. SMITH** Kansas  
**HIDE COMPANY**

### SEND US YOUR HIDES.



We will tan and make them into Coats and Robes at a great saving to you. Do not sell your hides for a few dollars and then buy a coat or robe made from scraps and pieces. But send us a horse or cattle hide and we will make you a Coat or Robe from the whole hide and save you 50 per cent.

Write for Free Catalog.

**MONARCH TANNING CO., Des Moines, Ia.**

### SALE OF UNCLAIMED FREIGHT.

Notice is hereby given, that on Monday the 20th day of December, 1909, at 10 o'clock A. M., there will be sold at public auction, for cash, at the east door of the freight depot of The Chicago, Rock Island and Pacific Railway Company, in the city of Topeka, Shawnee County, Kansas, one carload of ties, shipped from Forsythe Junction, Missouri, to Topeka, Kansas in car 31216 Frisco, by W. K. Folks, of Lawrence, Kansas, on or about January 8th, 1909, said ties now being stored in the freight yards of the said Railway Company at Topeka, Kansas, and having been unclaimed for more than six months, and that the proceeds of said sale will be applied to the payment of freight charges, demurrage, storage, and other charges due on said ties.

**THE CHICAGO, ROCK ISLAND and PACIFIC RAILWAY COMPANY.**

### S. C. R. I. REDS.

75 selected pullets and a few choice cockerels at reasonable prices. Flock headed by cock that won first at Mo. state show last year.

**DeLOSS CHAPIN,** Kan.  
(Clay County)

### BRONZE TURKEYS.

Choice toms and hens from pen headed by 40 lb. tom; 25 fine Rose Comb Brown Leghorn cockerels; reasonable prices.

**MRS. H. B. WALTER,** Kansas.  
Effingham

### SEED CORN.

Plant Young's Yellow Dent seed corn, the best on earth. Won Missouri gold medal at National Corn Show, Omaha, 1908. Guaranteed 90 per cent germination under all conditions, or will fill order again free of charge. Price, \$2 per bushel. Sample ears 50 cents each. Sample free. Choice Poland China fall pigs, \$25 each. One Jersey bull calf for sale.

**ROBT. I. YOUNG,** St. Joseph, Mo.  
**R. F. D. E.**

### WHITE IVORY STRAIN WHITE PLYMOUTH ROCKS.

Kan. State Show at Newton, 1909, 1 won 1st cock, 1st cockl., 1st hen; Wichita Fair, 1909, won every 1st. If you want over weight birds, white as chalk, deep bay eyes, yellow legs, low well spread tails and grand in shape, write. 200 early cockls. and pullets from \$1.50 up. Fine show birds with scores from 95 to 97 points.

**CHARLES C. FAIR,** Sharon, Kan.  
**Blue Ribbon Farm.**



I'll Make You a Price of Only

42<sup>30</sup>

If You Want It

F. O. B. Waterloo Without Mud-Lugs or Force Feed

But, remember, you need both, and nobody else can supply you with my Endless Apron Force Feed, worth \$25 alone in labor saved.



Wm. Galloway, The Farmer's Manufacturer

# Galloway's New Clincher Proposition for 1910

## Manure-Spreader Prices Now Based on 30,000 a Year Capacity

I BAFLE all competition combined to equal my new 1910 Proposition. Get it today. I will crack the whip to the full extent of the law on infringers and imitators. They haven't got the spreader nor the patents, and they know it. I have 11 patents on the Galloway and will protect them. Nobody can get around them.

Get \$5.00 Cash Off the Price at Once, Freight Prepaid (E. of Rockies) to You Anywhere Direct from Factory ON 90 DAYS' FREE TRIAL

Money Back at 8% Interest After 360 Days, if My Spreader Does Not Prove a Paying Proposition to You. Quick, Prompt Delivery Now.

That is my selling plan. Nobody can beat it. Nobody can touch it. It has them all on the run. Galloway is a whole race-track ahead of all competition in spreader proposition and price. Remember, I pay freight. When I added to my factories the Kemp Manure Spreader Factory, conceded to be the largest in the world, formerly owned by the International Harvester Company, now owned and equipped by me with the very latest automatic machinery throughout, I did this: I called in my factory superintendent and I said to him—"How many Galloway Manure Spreaders can we make a day now?" He said: "We can make 100 a day—30,000 a year." I said, "All right—get out your pencil. The first thing you do, figure how much we can save farmers on price, based on 30,000 capacity." He figured it out mighty quick. He says to me: "If you can sell them, we can make them. We can save \$5.00 apiece in cash to the farmers if you can sell 30,000." I said, "That is the idea. That's the stuff. We will do it. They will buy them. They know me and they know my spreader."

I'LL SAVE THE FARMERS \$150,000 THIS YEAR IN CASH MONEY. Are you one of them? Try me. Get my new Clincher 1910 Proposition and my Catalog today.

Wm. Galloway, President  
THE WILLIAM GALLOWAY CO.  
389 Galloway Station, Waterloo, Iowa

Spend 1 Cent and Make 50 Dollars Here is \$5.00 to Start on.

William Galloway  
389 Galloway Sta.  
Waterloo, Iowa

Rush your special 30-day, prepaid-freight proposition to me with your big Galloway free spreader catalog. This coupon is good for \$5.00 on any one of your spreaders for 30 days, at catalog price.

Name.....  
Address.....  
City or Town.....  
County..... State.....

FREE BOOK and My Special Proposition Coupon

## The Great Galloway Line of Spreaders Five Sizes 50 to 70-bu. Which One May I Send to Your Farm—for a Month's Free Trial? —FREIGHT PREPAID



Fits Your Own Truck or Wagon

All Complete 70-bu. Size Only \$95, Including Gear, Force Feed and Mud Lugs. Freight Paid East of Rockies.

### About Buying a Boar.

The Nebraska Farmer gives to prospective boar buyers some good advice which can be easily followed by Kansas farmers in-as-much as breeders never before through their sales offered such a choice lot of individuals. That paper says no farmer should be content to use a grade or scrub boar. The number of farmers who do use this kind of a sire in their swine herd is diminishing from year to year, we are glad to say. However, many farmers who use pure bred sires are satisfied with a rather inferior animal, because such can be secured at a price considerably lower than is demanded for the better individuals. Among hogs, pure breeds have become so common and so many of them have fallen into poor hands that it is necessary to use a good deal of discrimination in selecting breeding animals.

There is a well recognized class of hogs known among breeders as pure bred scrubs, and these the swine grower should avoid with as much emphasis as the genuine scrub. In fact the pure bred scrub is apt to do more harm in a herd than the scrub because the purity of breeding of the former makes him more prepotent. The really good hogs are not so plentiful as the number recorded in the herd books would indicate, and when breeders of the really good sorts ask a somewhat lengthy price for hogs the farmer buyer should not make too wry a face. At any rate, he should buy the best he can afford, not allowing a matter of five or ten dollars to deter him from getting something good.

It is scarcely necessary to tell farmers in these days what constitutes a good hog; most of them are thoroughly aware of the proper conformation. They know that excellence includes a head characteristic of the breed, a stout well crested neck, smooth but well developed shoulders, broad well fleshed back and loin, well sprung ribs, large heart girth, deep straight sides carrying out the same width at the belly as at the back, broad deep hams, strong legs and ankles with upright feet and good action. We say these are the things which constitute excellence in a boar, but he is never so perfect in all these respects and have not the power of transmitting them to his offspring, he is a failure as a breeding animal. Prepotency is therefore a prime requisite in a herd boar.

One of the chief indications of prepotency in a boar is masculinity. This quality is shown by the develop-

ment of a masculine head, short well crested neck, and general masculine appearance. If while at some distance from the animal you cannot tell by a glance whether the animal is a male or female there is too little masculinity for a good breeding hog. Most farmers who produce pork hogs for the market do not have pure bred sows. It is of all the more importance then that such sows should be mated to a prepotent boar, that the offspring may not only have the desired characters which make them good feeders and good sellers, but shall also be uniform, which is of great importance from a feeding and marketing standpoint.

We cannot urge too strongly that farmers who contemplate purchasing a boar this season do so at once while breeders have a full lot to select from. The early buyer always gets the best, or at least has an opportunity to get the best. Early buying, too, gives time to get the boar accustomed to his new surroundings before the breeding season opens.

The most satisfactory method of buying a boar, or breeding animals of any kind for that matter, is to pay a visit to the breeder's herd and make a personal selection. Not only is this the most satisfactory method to the buyer, but to the seller also. Before visiting breeders, however, it is well to write to a goodly number and learn what each has to offer. If it is impossible to make a personal selection of the herd boar, then write to a number of reliable breeders and tell them what you want. In nine cases out of ten this will result in securing as good a hog as if selected personally, for reliable breeders are very careful with their mail orders.

### Silage in Hog Ration.

Before the Iowa Breeders' association a speaker said: "Silage has a great value as a succulent crop for hogs. A large part of the nutriment is contained in the juice and four pounds of silage a day along with a little oil meal will winter a brood sow and bring her through in good shape. An average corn field will yield about 12 tons per acre and if it is saved in a silo the leaves and stems will be fully as valuable, if not more so, than the corn if it is husked out and placed in the crib. Keeping ensilage is simply the same as the canning process and you have your corn in nice sweet condition to use any time during the year." The speaker called attention to the fact that young cattle could

be made to gain when carried through the winter on ensilage alone, a feat that could not be accomplished by timothy hay or even by feeding dry corn fodder. The tendency of all young animals is to get heavier every day and when they get lighter they are actually starving to death, and there is never any profit in letting a growing animal go back. The use of ensilage will prevent this, because it means the supplying of the cheapest food that is found on the farms of Iowa, a food that not only furnishes materials for maintenance, but also nutrients that will cause an increase of flesh and fat.

### Grades at the Fairs.

For some years KANSAS FARMER has thought that the fair associations should provide classes for grade animals. The lists however are now so burdened with classes that it seems quite out of the question to expect a greater number. The Dakota Farmer has an article on the necessity of such classes and says:

"Probably not one man in 50 is fitted by nature, training or equipment for a breeder of pure bred live stock. Every farmer however is, or should be, equipped to make the best use of pure bred sires.

Improvement is utterly impossible without their use and no farmer should be content to raise stock year after year that does not show improvement. It is true that there are many who do not know the real value of a pure bred sire who would at once possess one were their real value brought to their observation. The average farmer does not wish to become a breeder of pure bred stock and but comparatively few are fitted to become such, even if they so desired.

It seems to the writer that in this connection lies a very valuable opening to the breeder, and one which he should eagerly urge upon fair managers and that is a classification for grades in all breeds of stock. Under such classification the breeder would have an opportunity to place an object lesson before the farmer that would necessarily result in great mutual benefit. Let him show a common scrub cow, just such an individual as graces or disgraces the majority of farms; let him show such a cow with a calf at her side from a good pure bred bull. If an object lesson is not possible in this way it is time to quit harping on the value of good blood. It is up to the breeder to show the farmer the result of a single infusion of good blood. In the writer's opin-

ion there is no way so good and so sure to bring the desired results as in a first class exhibit of grades at our fairs. Rest assured that the farmer visitor will be there and will make the most of it. The Dakotas are just at the opening of an era of great uplift in the stock business. Breeders should not forget that the proper way to make a pure bred stock breeder of a man is to get him to using good pure bred sires.

Under ordinary circumstances the farmer visits the stock exhibits at the fairs and of course admires the beautiful animals but he says to his neighbor, "Well, John, they are sure fine, but they are not for us," and passes on to the midway or the race track.

Breeders! You are missing golden opportunities for yourselves when you do not make the showing of grades a feature of your exhibit.

The man who listened to advice last summer and resisted the temptations of high prices for his pigs and thin sows is surely reaping his reward now. It appears that present conditions are to continue for some time to come and, while it takes nerve to feed high priced corn to hogs, the reward is sure. These conditions serve but to emphasize the fact that money may be made out of hogs but more care and skill in feeding will be demanded in the future. The combination of high priced land and high priced corn demands more careful methods.

### Needs Money to Wage War on Hog Cholera.

Live Stock Commissioner Mercer would like to have a special session of the legislature called in order that an appropriation might be made to carry on the work of stamping out hog cholera in this state. Speaking of the matter Mr. Mercer said:

"If we could get an appropriation of six or seven thousand dollars for the agricultural college or the state university so they could manufacture this hog cholera serum in sufficient quantities we could drive this disease out of Kansas," says Mr. Mercer. "Every year the farmers lose thousands of dollars through the death of their hogs. We know how to stop it but we haven't the funds to start the serum plant on a large enough scale. There is hog cholera in all parts of the state."

A load of sand or gravel in the poultry yard would be a great boon to the chickens, especially where there is no grit in the soil.

## Go Southwest and Grow

There's room enough in Texas and Oklahoma for thousands of good, energetic men—farmers and artisans. The best chances will fall to the man who acts quickly and takes advantage of present opportunities.

Land can now be purchased at reasonable prices; in a few short years it will greatly enhance in value.

### SEE THE COUNTRY FOR YOURSELF

Special excursions by the M., K. & T. Ry. are run on the first and third Tuesdays of each month, at exceptionally low rates.

Liberal stop-overs are permitted so you can see the country to best advantage.

Any agent will give you particulars; or, better still, write me for helpful information, rates or anything you want to know about this land of Possibilities.

**W. S. ST. GEORGE**  
General Passenger Agent,  
ST. LOUIS, MO.

11



## Sound as a Dollar

That's the way to keep your horses. It's easy to do it with Kendall's Spavin Cure. Thousands of other horsemen have done it in past 40 years.

**Cured Spavin**

"Two years ago, I bought a pair of fine black mares. In about six months one had a spavin. I simply used your Spavin Cure, and cured her entirely, which mystified all the horsemen. Yours truly,  
M. S. Culver, Union City, Conn."

Letters like the above are received by us daily from grateful horsemen.

## Kendall's Spavin Cure

is the only safe, sure cure for Spavin, Curb, Splint, Ringbone, Bony Growths and all Lameness. Save your horses with the old reliable cure. Leaves no white hairs or scars. It is the world's best liniment for man and beast. At drugists, \$1 a Bottle; 6 for \$5. Ask your druggist for book, "Treatise on the Horse," or write to  
**Dr. B. J. Kendall Co., Enosburg Falls, Vt.**

## Horse Secrets

### Do You Know Horse Talk?

"When you come to the foot of a hill, I you he's right there."  
(Meaning he will balk.)

"He will stand without hitching."  
(Also balks.)

"He doesn't look very well."  
(Going blind.)

"If he ain't windy, you needn't take him."  
(Has heaves.)

Did you ever buy a horse that was guaranteed to do any of these things—only to find out later that it was true—**TOO TRUE?**

How to protect yourself from gyps and tricky traders is fully explained in **HORSE SECRETS**, an expose of the tricks and dopes used by gyps and peddlers. It also discloses many secrets heretofore carefully guarded and explains the methods of reputable horsemen.

We publish **FARM JOURNAL**, the foremost farm and home monthly in the world, and our offer is—**"Horse Secrets"** with **Farm Journal** five full years, only \$1.00.

650,000 subscribers pay in advance to get **Farm Journal**; every name on our list is a cash subscriber, and most of them have paid five or ten years ahead. We have no rate for one year subscriptions—don't want 'em. The first copy of the paper will show why we have so many friends. And when you have received your last copy the paper will stop.

If you send \$1 within 10 days, we will include free (for promptness) "Poor Richard Revived," our splendid new Almanac for 1910.

**FARM JOURNAL, 1025 RACE ST., PHILADELPHIA, PA.**

# THE FARM



The safest corn to grow is the variety which will mature within the normal corn growing season of your locality. This very thing of trying to make a 140-day variety fit into a 100-day growing season is responsible for millions of acres of soft corn.

Cattle are now beginning to pasture the corn stalks and from this time on there is going to be more or less complaint of losses. Much of the loss of cattle pasturing stalks will be the result of impaction due to the lack of salt and water. It is well to salt the cattle heavily while pasturing stalks and the farmer should see that every animal drinks heartily. The liberal supply of salt will insure liberal drinking. Impaction occurs much more often in seasons of early frosts. There are more blades on the stalks of early frosted corn. The blades are drier than other years, too. The cattle eat heartily of the blades and impaction follows unless the animals drink heartily. There is not so much danger of impaction as long as the cattle get plenty of corn from the stalks. When the nubbins are gone and the blades remain plentiful be careful.

The evenings are long now, but the corn husking is on and there will not be much time for reading evenings until the corn is out. After supper just now the corn wagons must be unloaded and when that's done it's early to bed so that the teams may be in the field again at day break. But, as opportunity presents, do not fail to begin planning on next season's work. We once knew a man who had a complete schedule of his spring planting operations made and ready for execution as soon as the frost was out of the ground. That man worked to that plan. His only mistake was in not figuring on a rainy day now and then. This man was a success as a farmer. His seed was ready when needed and was gotten ready before planting season. His machinery was in perfect order. When he started in the spring things went off with a rush. He pushed his work. The work did not drive him. The plan looked good. Try it.

Every farmer ought to save as many back aches as possible for the hired man, the boys and himself. An implement which will save a lot of very hard work is the farm grain elevator—that kind which elevates ear corn, shelled corn, and all small grains. The horse furnishes the power. The use of one of these during corn husking season would make the unloading a snap instead of a job to be dreaded after supper and by lantern light.

The long hours of the farm are disliked by the hired man. While the farmer is boss he can do as he pleases about the hours he works, but he ought to see if he can reduce a 16-hour day to 12 hours at least. Is there not a way to plan the work so this can be done? The boys will appreciate the effort. Twelve hours of well planned work will result in greater accomplishment than more hours of poorly directed labor. If the hired man and the boys knew that 10 or 12 hours was a day maybe they would soldier less and move faster and accomplish as much in 10 hours as in 14 or 16. An extra horse on the plow would help reduce the working day and would be a good investment. Think this over during the winter.

In some sections are to be seen walking plows and the farmer or the hired man or the boys trudging along at a snail's gait from one end of the field to the other. The day of the walking plow is past. It is fit for nothing but plowing the garden patch and laying out the potato rows. The farmer who asks his boys or hired man to follow a walking plow is hopelessly behind the times. The walking plow does not move fast enough. It will not do work enough. Its use is more time and energy thrown away. The same is true of the walking cultivator. Buy riding implements. Get

an extra horse if necessary. Let the horses move right along and much more work will be accomplished than with walking implements.

The most that books or papers can do for a farmer is to set forth general principles, to unfold and explain the laws of nature under which he must needs operate; to suggest the help that he may have from nature in the growing of his crops, etc. The book or paper can teach the laws and principles, but they cannot apply them. This must, as a rule, be left to the farmer himself. If by book farming you mean doing just what the book says, regardless of conditions, then it is a failure. Get hold of the underlying principles, laws reasons for doing things, and then use your best judgment in applying them. In that way only will you succeed.

The farmer must exercise independent judgment. No man can farm successfully by book or paper. No book or paper can tell him just what to do under every possible condition. Conditions of climate, weather and numerous other things which affect the farm vary so greatly that no one can tell just what should be done under all circumstances without the exercise of independent judgment.

**160,000 Acres Trees in Central Kansas.**  
There are now 160,000 acres of planted trees in Central Kansas, where at once time it was thought that trees could not be grown. As the area in which agricultural crops can be profitably grown is steadily extending, so the limit of forest planting and tree culture is widening always. The native timber in Kansas is also on the increase.

In some counties cottonwood was the only tree planted for many years. Then boxelder, honey locust, catalpa, osage orange, Russian mulberry, black walnut and red cedar were tried, and all of them were found suitable over the greater part of the state.

### Real Farming Here.

The island of Guernsey, consisting high, rocky cost-line, intersected by steep ravines and containing a large amount of waste land, supports a population of 41,000,000. Farming is so systematic that besides raising all their own fruit and vegetables and all the forage for their cattle they export many thousand dollars worth of produce annually. Ninety per cent of the vegetables exported are grown under glass. About 30,000 visitors are annually entertained at the island, and estimating the consumption of supplies by them and the inhabitants and the exports, including garden produce, poultry, eggs, beef and pork, the land is figured to produce an income of \$4,500,000, or \$387 per acre.

### Ninety Day Corn a Success.

Last spring after the June floods had devastated the corn fields along the Marias des Cygnes bottoms, the Commercial Club of Ottawa decided to try, as an experiment, the introduction of the "ninety-day" variety of corn. A supply of this corn was secured by the Commercial Club at \$1.50 a bushel and sold to such farmers as wanted it at \$1.00 a bushel. About forty farmers around Ottawa gave the new corn a trial and reports from these farmers as to the success of the experiment are now beginning to come in.

The general opinion of the farmers seems to be that the ninety-day corn is a big success, and many of them will put it in again next year, in spite of the fact that much of this year's planting was caught by the killing frosts of a week ago. Most of the corn that was planted before the first of July was matured before the frost hit it, and consequently farmers whose earlier planting was all lost in the flood, and who would have had no crop at all but for the Commercial Club's experiment, now have 35 to 50 bushels to the acre of excellent corn.

## Better Farming

A John Deere Book



—Just Out  
A Farmer Can Get It Free

If interested in farming, get our FREE book called "BETTER FARMING." It tells all about—

- |                   |                  |
|-------------------|------------------|
| Alfalfa           | Making Hay       |
| Dairying          | Fighting Frost   |
| Seed Wheat        | Silos            |
| Corn Crops        | Cultivation      |
| Stock Feeding     | Cotton Crops     |
| Art of Plowing    | Soil Fertility   |
| Boll Weevil       | Gasoline Engines |
| Controlling Weeds | Adjusting Plows  |

### Hired Help Costs Big Money

Your land is high priced and hired help expensive. There is only one way to make big money—use implements that cut down the cost of your crops. Isn't it true that when you break something on a plow it is nearly always a cast part? Wherever strain comes on a John Deere Plow there you will find steel—tool steel. Take any plow that has had hard work for five years, put it along side of a John Deere which has been in service that long—and see the difference. Then there is no paint to cover up poor material. You can see the wear and the defects. The John Deere will be solid, staunch and ready for the hardest job. Then you begin to know that quality counts.

You can take pride in owning a John Deere—the standard plow of the world for two generations.



We will send you the 80-page, illustrated book free if you write and ask for

Package No. 13

Mention the package number *sure*, then you will get exactly the right stuff.

**DEERE & COMPANY, MOLINE, ILL.**

### 10.95 Buys This Large Handsome Nickel Trimmed Steel Range

without warming closet or reservoir. With high warming closet, porcelain lined reservoir, just as shown in cut, \$17.95; large, square, oven, wonderful baker, 4 cooking holes, body made of cold rolled steel. Duplex grate burns wood or coal. Handsome nickel trimmings, highly polished.

**OUR TERMS** are the most liberal ever made. You can pay after you receive it for 30 days. You can take it into your home, use it 30 days. If you don't find it exactly as represented, the biggest bargain you ever had, we will return it to us. We will pay freight both ways.

Write Today for our beautifully illustrated **Stove Catalog No. 2182**, a postal card will do. 100 styles to select from. Don't buy until you get it. **MARVIN SMITH CO., CHICAGO, ILL.**

## WESTERN CANADA

Prof. Shaw, Well-Known Agriculturist, Says: "I would sooner raise cattle in Western Canada than in the corn belt of the United States."

**60 ACRE FARMS IN WESTERN CANADA FREE**

Food is cheaper and a dinner better for the purpose. Your market will improve faster than your farmers will produce the supplies. Wheat can be grown up to the 60th parallel (800 miles north of the international boundary). Your vacant land will be taken at a rate beyond present conception. We have enough people in the United States alone who want homes to take up this land. "Nearly

### 70,000 Americans will enter and make their homes in Western Canada this year.

1909 produced another large crop of wheat, oats and barley, in addition to which the cattle exports was an immense item. Cattle raising, dairying, mixed farming and grain growing in the provinces of Manitoba, Saskatchewan and Alberta. A adaptable soil, healthful climate, splendid schools and churches, and good railroads. For settlers' rates, descriptive literature "Last Best West," how to reach the country and other particulars, write to Sup't of Immigration, Ottawa, Can., or to the Canadian Government Agent.

J. S. CRAWFORD,  
125 W. 9th St.,  
Kansas City, Mo.

(Use address nearest you.)

## L. M. PENWELL

Funeral Director and Licensed Embalmer.

-11 Quinoy. Topeka, Kan)

**Orchard Fertility.**

How to keep up the fertility of orchard lands is a problem which our orchardists are beginning to consider more and more. Not that there is yet a crying need for fertilizers, but it must be apparent to all thinking men that the enormous drain on fertility cannot be continued indefinitely. Fortunately commercial fertilizers are out of our reach on account of high prices. Barnyard manure is no very big item in the orchard districts, but fortunately green manures are within the reach of all.

Organic matter does many things for soils, but the one important thing for us to consider in this connection is that it sets free some of the locked up plant food elements. All our soils contain an abundance of fertility, but it is mostly in forms which are useless to plants.

The decay of vegetable matter generates materials which decompose the soil particles, and also promotes various soil activities. All these working together are continually making food elements available. And the family of plants which includes the clovers, beans, peas and alfalfa, actually add fertility to the soil.

**Value of Manure.**

Hoard's Dairyman in a recent issue publishes a table giving the manurial value of different feeds based on greatly reduced and conservative values. It estimates the manure from a ton of corn silage to be worth 43 cents; corn stover, \$1.03; clover hay, \$1.96; timothy, \$1.17; ground corn and cob, \$1.80; ground corn, \$2.24; ground oats, \$2.60; wheat bran, \$4.74; cottonseed meal, \$8.36; linseed meal, \$8.36; linseed meal (new process), \$6.91; gluten feed, \$3.42; and gluten \$4.90. All this, however, on the assumption that the liquid manure is not permitted to go to waste, or the manure left in piles to leach in the field or in the yard. Inasmuch as it is not possible to save all the liquid portion, and where cattle are kept in large yards not possible to get the manure out to the field as soon as made, it will not be possible to realize these full values in actual farm operations. We publish them, however, in order that our readers may see the amount of waste that is going on from year to year through the improper handling of this by-product of the stock farm.

While it is not possible to save all the liquid manure, it is possible where cattle are fed in a yard, to save a large per cent of it by simply keeping the live stock well bedded. The best way to use up wheat straw, or any other roughage of but little feeding value is to use it as bedding and absorbent.

The way to get the most value out of manure is, wherever possible, to get it onto the manure spreader and put it on the field as fast as it is made. The field which gives the greatest profit is the one in grass, whether pasture or meadow. The poorest way to handle manure is to throw it out from the stable, where it will take the water from the eaves, leave it out in the yard, where it can absorb all the rains of summer, and then haul it out in the fall, when it can add but little more than humus material to the land.

**Kansas Farmer the Official Organ.**

At the meeting of the Executive Committee of the National Good Roads Association, held in Chicago last week, KANSAS FARMER was designated as the official organ of that great body. The 10th annual meeting and the first one to be held west of the Mississippi will be held in Topeka on Dec. 14, 15 next and several thousand delegates are expected to be present.

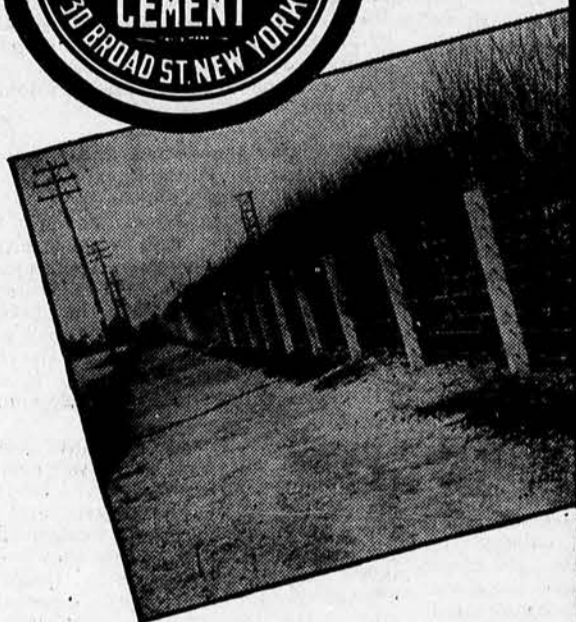
Good roads and the suppression of the mud tax is one of the most important subjects before the American people today. Governor Stubbs has appointed delegates from every city and county in Kansas and other Governors report that they have each named from 50 to 100 delegates. Every body is invited.

**Less Feeding in Southern Kansas.**

Fewer cattle will be fed in southern Kansas this winter than during any winter for years past, according to the well substantiated opinion of some of the biggest feeders in this section. A number of these feeders have not a single steer in their pens this year, while others have only a few instead of the train load they usually handle.



**NONE JUST AS GOOD**



**One of the 150 illustrations in our new Cement Book Sent Free**

**Progressive Farmers Use Concrete**

A fence-post made of concrete never rots, or wears out. Any farmer can make concrete fence-posts indoors during the dull Winter season, and have them ready for use when Spring comes.

**Our FREE Cement Book**

"Concrete Construction About the Home and on the Farm" tells all about concrete. It gives directions for making and handling this economical and everlasting building material in over a hundred ways. It tells how to mix concrete in proper proportion, and includes specifications, sectional drawings, and photographs of the smaller constructions that can be made by any farmer himself. There are 168 pages and over 150 illustrations.

**ATLAS Portland Cement Makes The Best CONCRETE**

In making concrete it is important that ATLAS Portland Cement be used. ATLAS is the standard American Brand of cement. It was bought by the U. S. Government for the Panama Canal. There is only one quality of ATLAS manufactured—the best that can be made and the same for everybody.

Ask your dealer for ATLAS. If he cannot supply you, write to

**The ATLAS Portland CEMENT Co.**

Dept. 107 30 Broad Street New York

Daily Productive Capacity, over 50,000 barrels—the largest in the World.

**Farmers Must Awaken to the Necessity of Cleaned and Graded Seed.**

We want to do all we can toward hastening the day when every farmer will consider it as necessary to prepare the seed for the soil as to prepare the soil for the seed. It is well within the actual figure to say that farmers of many states lose a million dollars a year through neglecting to properly clean and grade the seed and grain planted. And this loss gets larger as land values increase.

We are never going to have any more land than we have today. The value of our farm land goes up and up each year. Taxes increase. It is a case of every farmer being confronted by the absolute necessity of getting more and more in the way of crops from each acre. And what is logically the first step in this direction is a greater care in seed selection. Keeping up fertility, thorough tillage, assiduous cultivation, what will these avail if the seed is poor and if we plant partly weeds when we want grass or grain?

Give back to the land the best that it gives you, the plump seeds heavy with vitality, discarding the shrivelled seeds with the weed seeds. Take this matter up earnestly enough to investigate now and you will not drop it until you have a fanning mill and seed grader.

You will see at once the injury you do yourself, the needless loss you sustain, each year by failing to clean and grade the seed sown or planted. For instance, consider your hay crop. You sow the grass seed mixed with weeds. You get weedy hay and feed most of it if not all of it to your own stock. The weed seeds go through the animal and remain in the manure. Then you spread that manure over any or every field, the result is more and more weeds, every year, everywhere.

Then again, the seed of the grass or grain crops you are raising runs down, gets poorer and poorer every year, naturally as it becomes more and more choked with weeds. Stop it. There is no compromise. There is no excuse for a compromise. You can get a fanning mill that will clean the weeds from any grain or grass seed you grow and one that will grade the seed to the point where you are certain of a full stand if other conditions are made right.

A good fanning mill will soon clean a farm of weeds, enables a man to soon breed up his crops in point of production and quality, and gives him a reputation in the community for having seed or grain that is worth his price in case he chooses to sell.

**Good Seed Grain.**

The importance of selecting good seed grain cannot be emphasized too strongly or too often. By selecting good seed it is not necessarily meant that the farmer should send to some seed house a long distance away from home each year for seeds with a fancy price attached to them. If a new variety is wanted, a reliable seed house would be a good place to get it. The average farmer, however, cannot afford to buy these fancy priced seeds each year and must resort to some more practical method of securing his seed grain.

It would be a very poor crop that would not contain 15 or 20 per cent of good grain. If a large amount of this were run through a good fanning mill and about 10 per cent of the best grain taken out for seed, a good grade of grain would be secured. The cost of this separation would perhaps not exceed 4 or 5 cents per bushel for the seed saved.

That means that the seed would only cost that much above market price for the grain, which is very reasonable. The grade of the grain from which the seed is taken will not be lowered and can be sold at the same price as before. If this method of selecting the best grain for seed were followed for a few years on every western farm, the average yield would soon show material increase.

**Give the Horse a Chance to Breathe.**

A farmer, plowing with three horses hitched abreast, noticed that the middle horse became tired and exhausted long before either of his mates. As the animal was the equal in every way of the other two, he was puzzled as to the cause of this horse's not being able to stand the same amount of work. He finally observed, however, that as they drew along, the three horses held their noses close together, with the result that the middle horse was compelled to breathe the expired air from its fellows. The farmer then procured a long "jockey" stick, which he fastened with straps to the bits of the outside horses. The device worked perfectly; for, given his rightful share of good, fresh air, the middle horse was able to do the same amount of work, and with no greater fatigue than his fellows.

**First Corn Article Ever Written.**

So far as is known the following was the first article ever written on corn and how to grow it. It is printed here for its historical value. It shows how English was written centuries ago. The author of the article was Mr. Thomas Harriot, one of the pioneer colonists of Virginia. It was published

in book form in London in 1588 and in Frankfort in 1590.

"Pagatour a kinde of graine so called by the inhabitants; the same in the West Indies is called Mayse. Englishmen call it Guinney wheate or Turkie wheate, according to the names of the countries from which the like hath been brought. The graine is about the bignesse of our ordinary English peaze, and not much different in forme and shape, but of divers colors; some white, some red, some yellow, and some blew. All of them yeelde a very white sweet flowre; being used according to his kind it maketh a very good bread. We made of the same in the country some mault, whereof was brued as good ale as was to be desired. So likewise by the helpe of nops thereof may be made as good Beere.

"It is a graine of marvellous greate increase; of a thousand, fiftene hundred and some two thousand folde. There are three sortes, of which two are ripe in eleum or twelve weeks at the most; sometimes in ten after they are set, and are then in height of stalke about six or seven foote. The othere sorte is ripe in fourteene, and is about ten foote high; of the stalkes some beare foure heads, some three, some one or two; eury head containing fiue, six or seuen hundred graines within a few more or less.

"Of these graines besides bread the inhabitants make victuall eyther by parching them or by seething them whole till they be broken, or by boyling the floure with watter into a pappe."

**The planting of corn:**

"Then there setting or sowing is after this manner. First for their corne, beginning in one corner of the plot, with a pecker they make a whole, wherein they put four grains with what care that they touch not one another (about an inch asunder), and couer them with moule again, and so through the whole plot, making such wholes and using them after such manner; but with this regard that they bee made in rankes, eury ranke differing from other half a fadome or a yarde, and the holes also in eury ranke as much. By this means there is a yarde of square ground between eury hole; where according to discretion here and there, they set as many Beanes and Peaze, in different places also.

"The ground being set according to the rate by us experimented, an English Acre containing fourtie perches in length and foure in breadth, do the yeild in crophe of corne, beanes and peaze at leaste two hundred London bushelles; when as in England fourtie bushelles of wheate yeelded out of such an Acre is thought to be much."

# POULTRY



Charcoal is one of the best blood purifiers that can be given to fowls and is a preventive of disease.

If you burn wood there is generally enough charcoal in the ashes to supply a good sized flock of chickens.

If you don't burn wood, just some ear corn in the oven and thoroughly char and it will provide both food and charcoal.

Twenty-five cents per pound for turkeys, eighteen cents for chickens and fifteen cents for ducks and geese is what the householder in Topeka had to pay for the above named delicacies for his Thanksgiving dinner. Those who raised the fowls made a handsome profit. Were you among the number?

This kind of weather is favorable to egg-laying. If your hens are not laying these mild days, there must be something radically wrong with them or their surroundings. It behooves you to investigate and see what the trouble is, for if they do not lay now while it is warm and dry, how can you expect them to lay when it gets cold and wet.

If you expect eggs this winter you must see to it that the poultry house has plenty of windows so as to admit the sunlight. It not only warms up the house and the chickens but is a good tonic for the fowls. With plenty of sunlight and lots of leaves and litter on the floor the fowls will manage to keep themselves warm and comfortable and when they are in such condition they will shell out the eggs.

There may be several causes why your hens are not laying. Maybe they are infested with lice. This is a very frequent cause of non-laying. Maybe they don't get sufficient green food or animal food; either cause may prevent them from laying. Maybe they don't get enough exercise. Keep investigating till you find out the cause of the non-supply of eggs and if you find that and apply the remedy your trouble will be over.

At one of the principal meat markets of Topeka, we observed that the quality of the chickens that they were selling at eighteen cents per pound was very poor. The chickens seem to have been half starved for they were very lean and scrawny. It would have paid the owners big to have fed them more liberally and if you purpose selling any kind of poultry for the Christmas trade, feed them all they will possibly eat till the time of killing and you will be paid for the feed a hundred fold in the weight of the fowls besides making them look much more palatable than lean, lanky scare crows.

When rats get into a poultry house they become a great nuisance. They generally come from the barn or corn cribs. One farmer's method of ridding his premises of rats and mice is as follows: If you sprinkle sulfur on our floor and through the corn as you gather it, there will not be a rat or a mouse to bother you. I have done this for years and have never been troubled with rats or mice. I have some old corn in my crib at present and not a rat or a mouse can be found. In stacking hay or oats, sprinkle on the ground and a little through each load and my word for it, rats or mice can't stay there. A pound of sulfur will be sufficient to preserve a large barn of corn, and is good for stock and will not hurt the corn or bread.

**Grain Mixtures for Laying Hens.**  
The poultry department of the Maryland Experiment Station has recently compiled some interesting data relating to the question of feeding laying hens. That institution made a study of the methods employed by successful poultrymen in the state, and as a result of that study a few of the best grain and mash mixtures are given. The following is method No. 1:

Grain Mixture.	Mash Mixture.
100 lbs. cr. corn.	100 lbs. bran.
100 lbs. wheat.	50 lbs. linseed meal.
100 lbs. oats.	50 lbs. corn meal.
	50 lbs. middlings.
	50 lbs. beef scraps.
	2 lbs. charcoal.
	2 lbs. salt.

For the morning feed each pen of forty fowls receives two quarts of the grain mixture well scattered in the litter. Between 8 and 9 o'clock from three to five pounds of cabbage is given to every forty fowls. At noon the grain mixture is repeated the same as in the morning. This constituted all the feeding that is done by hand. The dry mash mixture, grit and shell are kept in hoppers to which the fowls have free access at all times. This method of feeding has proven very satisfactory both as to egg production and general health of the fowls.

The following is method No. 2:

Grain.	Mash Mixture.
Wheat screenings.	1 bushel wheat.
Corn.	2 bushels bran.
	1/2 peck beef scraps.
	4 teaspoons of ginger and black pepper mixed to every bushel of mash.

In the morning the fowls receive a feed of wheat screenings well scattered in the litter, and alternating mornings cabbage and ear corn are hung up in the pen. A liberal feed of shelled corn is given at night. The dry mash mixture, beef scraps, grit and shell are kept in hoppers to which the fowls have free access at all times.

The following is method No. 3:

Grain Mixture.	Mash Mixture.
100 lbs. wheat.	100 lbs. model egg mash.
100 lbs. corn.	100 lbs. wheat bran.
100 lbs. barley.	200 lbs. beef scraps.
100 lbs. oats.	100 lbs. charcoal and salt.
100 lbs. buckwheat.	
100 lbs. Kafir corn.	

The hens on this farm are kept in flocks of 1,000 and both grain and mash is hopper fed. The fowls are always well supplied with grit, shell and charcoal. The green food is made by sprouting oats and allowing them to grow until they resemble a thick mat of green grass; this is kept before them most of the time. During the molting season linseed and cottonseed meals are added to the mash, sunflower seed is also liberally fed.

The following is method No. 4:

Grain Mixture.	Mash Mixture.
1/2 bushel corn.	200 lbs. bran.
1/2 bushel wheat.	100 lbs. middlings.
	100 lbs. gluten meal.
	100 lbs. linseed meal.
	100 lbs. beef scraps.
	100 lbs. oat meal when available.

The morning feed is the grain mixture scattered in the litter, about one quart to twenty fowls. At 9:30 mangels are given as a green food. The evening feed is given at 3:30 and consists of grain the same as in the morning. The mash mixture, grit, shell, charcoal and bone are kept in hoppers to which the fowls have free access at all times.

The following is method No. 5:

Grain Mixture.	Mash Mixture.
20 lbs. wheat.	100 lbs. bran.
40 lbs. corn.	100 lbs. corn meal.
10 lbs. oats.	100 lbs. beef scrap.
	8 lbs. charcoal.

With this system of feeding laying hens it is the plan to give half as much more of the grain mixture in the morning as at night. The amount of grain fed is regulated by the quantity of dry mash consumed, the aim being to feed twice as much grain as mash. The grain is fed in the litter

or scattered broadcast in the runs in favorable weather. The dry mash mixture, grit, oyster shells and cracked bone are fed in hoppers to which the fowls have free access at all times. During the winter months they are fed about 2 per cent more corn and 2 per cent less of wheat. For green food they are fed on alternate days, beets, cut clover hay or alfalfa; allowing about two pounds of beets and one pound of clover or alfalfa to every 100 hens. Beginning in August, 5 per cent of oil meal is added to the daily ration for the purpose of encouraging and hastening the molt.

**Shall I Use Incubators and Brooders or Hens for Hatching and Raising Chicks.**

Taking the practical side of the poultry business, the biggest profit comes to those who raise their chickens in the country—in the villages, suburban town and on the farms. Nearly all of the incubator and brooder buyers live outside the big cities and they raise chickens to sell to the city folks and they make money by doing it.

It has not been so very many years since eggs were selling in the spring throughout all the west central states, for 10 cents a dozen, and in the extreme eastern and western sections of the United States they were down to 20 and 25 cents. Quite a change though in late years, especially so the last two years. I don't know of the market price of eggs at Lincoln being below 20 cents during this time. Chickens have been so scarce and the price so high that I could not have enjoyed many chicken dinners had I not made broilers out of some of my chicks hatched for exhibits and in my experiments.

These good prices have come to stay. In every part of the entire country, poultry raising, for eggs and market, can be carried on successfully. It is not much work to raise a profitable bunch of chickens if you have good incubators and brooders. The work, drudgery and disappointment comes from raising in the old way with hens or with cheap, unreliable machines. It is true, some care and patience is needed. There is only one way you can get money without having to do something for it, and that is to have it left to by a rich relative. People who are in the poultry business find the work of hatching and raising chicks, and in gathering the eggs, sending them to market, etc., very pleasant. Lots of people who, on account of their health, can't do hard work, find that the outdoor life of the poultry raiser just suits them.

The only way to raise chickens in large numbers in a short space of time and have them at the right time to get the biggest prices for them is to use incubators and brooders. By use of the hen for hatching and brooding, enough chickens can not be raised in a season to make it pay. Many of my customers tell me that they would rather take care of 100 chicks in a brooder than to care for one old hen and her brood. You can set as many eggs in a medium sized incubator as you can put under ten sitting hens. With the machines you have absolute control at all times. No lice to fight. No danger of eggs being broken or chilled during incubation. Eggs and chicks perfectly safe at all times. No work at all compared with the work that ten fussy old hens would cause you.

Reader, if you want to raise chickens, show chickens or market chickens, either for pleasure or profit, you will be better satisfied if you use incubators and brooders. During a year's time I get letters from thousands of poultry raisers, who tell me how they raise their chickens and the methods they have found the best. If I didn't know from my own experience that artificial hatching and brooding gives the best satisfaction, the letters I get would soon make me know it.—P. M. Wickstrum, Lincoln, Neb.

**Hens and Incubators.**

In a recent bulletin of the Oregon Experiment Station at Corvallis Prof. James Dryden gives the result of certain incubator experiments. He notes the fact that the frequent renewal of the flock is one of the first essentials of profitable poultry keeping. It has been proven that to get a good egg yield the stock of laying hens should be renewed at least once every two years. To keep the flock

**WHITE WYANDOTTES.**  
If you want the large Pure White kind, with bay eyes and yellow legs, write me. I have 200 for sale.

E. E. BOWERS, Neb. Bradshaw.

**SMITH'S LAYING STRAIN OF ROCKS.**  
Barred and White Plymouth Rocks of quality. Young and old stock at all times.  
CHAS. E. SMITH, Mayetta, R. 2, Kan.

**ROSE AND SINGLE COMB RHODE ISLAND REDS.**

Good breeding and exhibition cockerels now ready to send out. Don't wait until show time or spring and take just what you can get. We are crowded for room and are making low prices. Few S. C. Pullets in pairs, trios and pens. No R. C. hens or pullets for sale.

H. A. SIBLEY, Lawrence, Kan.

**FOR SALE—100 CHOICE GOLDEN Wyandottes;** also a few pure bred Bronze Turkeys from prize winning birds; prices reasonable. MRS. E. B. GRANT, Emporia, Kansas.

**FOR SALE.**  
Pure bred White Wyandotte cockerels, \$1 each.  
MRS. H. S. ADAMS, Wichita, R. R. 8, Kan.

**FOR SALE 50 CHOICE BUFF ORPINGTON COCKERELS.**

These birds are extra good; all from my prize winning pens. We guarantee every one to be first class. Prices reasonable.  
WHITE BROS., Buffalo, Kan.

**BUFF ORPINGTONS** — Chks, pens, baby chicks, eggs. More first prize State Fairs and State Shows than all other Breeders. My **POULTRY BOOK**, containing information worth hundreds of dollars to farmers sent for 10 cents. W. H. MAXWELL, R. 95, Topeka, Kan.

## LET US TAN YOUR HIDE.

Mr. Stockman, what difference does it make to you when you send your hides away to be tanned and made up into coats, robes and rugs, whether the distance is less or more, so long as "Crosby pays the freight" both ways when three or more cow, steer or horse hides are sent in one shipment? Why not send them to the oldest and largest establishment of the kind, where you will be sure of good results! In that way you can get better and cheaper fur goods than you can buy. Figure on it and get our illustrated catalog, which gives prices and a lot of other useful information. Address **The Crosby Fur Company, Rochester, N. Y.**

**It Will Pay You To Ship Us Your HIDES**

YOU can have a warm, serviceable fur coat made from your cow or horse hide that will wear you for years. We tan and make them up into soft and pliable coats, robes and rugs; moth and waterproof and guarantee the work. Write us today for our **FREE BOOKLET** It tells you all about hides. **Des Moines Tanning Co., Dept. F Des Moines, Iowa.**

**HIDES TANNED FOR COATS AND ROBES**

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

The great savings we make our customers, which makes every customer a pleased one, has built us up the largest custom tanning business in the country. No name is so well and favorably known to farmers and stockmen as the name **COWNIE**, which for fifty years has stood for fair and square dealings.

We will be pleased to send you an attractive booklet giving prices for doing our work, and showing the saving we can make you; also, telling you how to care for hides, how to ship, and much other valuable information. Sent Free. Write today **COWNIE TANNING CO., DES MOINES, IA.**

**SHIP YOUR HIDES & FURS**

direct to Biggs & Koch and you will get the highest prices and save all commissions. A square deal and quick returns. Full weights and honest grading. One hide, one skin or a car load. No matter whether you are a trader or trapper, farmer or dealer we can do you good and make you money. It will pay you to write us for price list and **FREE** shipping tags. Fur shipments held separate on request, and your furs back if our returns are not O. K. "Trappers Guide" free to shippers. Write today for catalogue of Trappers Supplies. **BIGGS & KOCH, 987 Liberty St., Kansas City, Mo.** Largest hide and fur house in Southwest. Estab. 1859

**THOMAS OWEN**  
Topeka, Sta. B, Kansas  
Breeder of  
**WHITE PLYMOUTH ROCKS**  
Exclusively.  
A few good cockerels for sale.

longer than that will usually mean that the egg yield at average prices of eggs and poultry feed will not be profitable. In renewing the flock, however, the object will be defeated unless the health and vigor of the old flock be transmitted to the new. Failure in this respect will very soon manifest itself because of the rapidity with which one generation of fowls follows another. Susceptibility to diseases, decrease in egg yield, decrease in size of fowl, lessened fertility and hatchability of the eggs are the usual symptoms of deterioration in the flock. The failure of many poultry enterprises can be traced to a loss of constitutional vigor in the stock.

Artificial incubation in recent years has assumed large proportions. Large numbers of incubators and brooders are purchased in every community, entailing in the aggregate a large investment of capital. It is admitted that there are great losses in the artificial incubation of eggs and brooding of chicks, and many explanations are given as to the cause. The complaint is that the chicks either fail to hatch, or, hatching, they fail to live. Why the embryo should live through the incubation period and die before hatching is a problem that both the incubator operator more probably than any other. It is a keen disappointment to the incubator user to find after the eggs apparently have progressed satisfactorily up to the time of hatching that 25 per cent of them, more or less, have failed to hatch. This means a large loss to the poultryman, and if there were no other problem involved in incubation than that of the chicks dying in the shell it would warrant extended investigation.

SUMMARY OF EXPERIMENTS.

1. From 879 eggs set, incubators hatched 533 chicks, or 60.6 per cent.
2. From 279 eggs, hens hatched 219 chicks, or 78.8 per cent.
3. Eliminating eggs broken in nests, the hens hatched 88.2 per cent of eggs set.
4. The incubators hatched 78.5 per cent of "fertile" eggs, and the hens hatched 96.5 per cent.
5. Eggs incubated artificially

tested out 22.7 per cent as infertile, while those incubated by hens tested out 11.8 per cent.

6. The incubators showed 16.6 per cent of chicks "dead in the shell," and the hens 2.8 per cent.

7. Chicks hatched under hens weighed heavier than chicks hatched in incubators.

8. The mortality of hen-hatched chicks brooded in brooders was 10.8 per cent in four weeks, and of incubator-hatched chicks 33.5 per cent.

9. The mortality in hen-hatched chicks brooded under hens was 2.2 per cent, and of incubator chicks 49.2 per cent.

10. In other tests the mortality was 46.5 per cent for incubator chicks brooded by hens and 58.4 brooded in brooders.

11. Hen-hatched chicks made greater gain in weight than incubator chicks, whether brooded by hens or brooders.

12. There was an increase in number of chicks hatched of 32.6 per cent by using moisture in incubators.

13. Both a medium and a maximum amount of moisture gave better results than no moisture.

14. Climatic conditions as to humidity have apparently no effects on hatching in the case of non-moisture incubators.

15. In the case of moisture machines less moisture will be required in a moist climate than in a dry one.

16. The wet-bulb thermometer may be used to advantage as an indicator of the proper degree of humidity in the incubator.

17. An average wet-bulb temperature of 87.6 gave 32.6 per cent better hatches than one of 84.5, and slightly better than one of 91.

18. The average loss in weight of eggs incubated under hens in a dry nest was 14.87 per cent in 18 days.

19. Eggs in non-moisture incubators lost 16.64 per cent of their weight, in medium moisture incubators 12.76 and in maximum incubators 10.8 per cent.

20. The chicks from the moisture machines were heavier than from the dry machines, but it has not yet been demonstrated what relation moisture in incubation has to vitality in the chick.

21. The lack of moisture does not alone explain the great mortality in incubator chicks, but it is responsible for a large percentage of the losses in hatching.

22. Chemical tests showed the presence of oil on egg shells. There was a very small quantity on fresh eggs and in incubator eggs, but a relatively large amount on hen-hatched eggs. The function of this oil or fat, whatever it may be, has not been determined.

## Poultry Facts

**YOU** can't shut a laying hen in a closed coop; limit your responsibility to a few handfuls of grain a day, and continue (for long) to collect eggs. You can't leave growing chicks to dew, and wet and sour feed and count them *all* next winter. But you *can*—by practicing "The Dr. Hess Idea" of poultry feeding—keep the hen laying and the chick growing, even under most discouraging conditions. A little of

# DR. HESS Poultry PAN-A-CE-A

fed once a day in soft feed to hens and chickens, works wonders for both. Poultry Pan-a-ce-a is a tonic; it aids digestion and assimilation, so that the hen gets the greatest benefit from her feed. It goes far toward restoring natural conditions to the shut-up fowl and thus—feeling natural and being well nourished—she lays abundance of eggs. In the same way, by aiding digestion, it helps the chick and all other fowls receiving it. It also cures Gapes, Cholera, Roup, etc. Poultry Pan-a-ce-a gives vitality to resist disease and, where consistently given, adds immensely to the profits in the poultry business. A penny's worth feeds 30 fowls one day. Sold on a written guarantee.

**1 1/2 lbs. 25c; mail or express 40c; 5 lbs. 60c; 12 lbs. \$1.25; 25 lb. pail \$2.50.**  
Except in Canada and extreme West and South.  
**DR. HESS & CLARK, Ashland, Ohio.**  
Send 2 cents for Dr. Hess 48-page Poultry Book, free.

## DR. HESS STOCK FOOD

Stock raisers often face a serious problem. Cows shrink in milk and "feeders" are slow about fattening. Usually the trouble is over-taxed digestive organs. When cow or steer seems to be "off feed" and doing poorly, give a small portion, twice a day, of Dr. Hess Stock Food. That will restore appetite and give tone to every organ. Then if the same simple practice is followed out consistently, the profits at both pail and scale will be more satisfactory. Sold on a written guarantee.

**100 lbs. \$5.00. 25 lb. pail \$1.60.** Except in Canada and extreme West and South.  
Smaller quantities at a slight advance.  
Send 2c for Dr. Hess Stock Book, Free.

## INSTANT LOUSE KILLER KILLS LICE



### WELLS' SHOES are Made for the Entire Family

They are ALL LEATHER—no substitute. That is the reason they are the strongest and wear the longest. Years were spent in perfecting them. They are the masterpiece of the shoe-making art. You might pay more for shoes than you would for WELLS but no matter how much you pay, you could get no better shoes.

**If shod in WELLS' SHOES, you are "well shod."**

**FREE** We have laid aside a very interesting booklet for every reader of this paper, entitled "Mother, Father and the Children." Yours is waiting for you. Send for it today.

The next time you buy shoes and want a pair that look better, feel better and wear longer, insist on WELLS. You will find the name of M. D. Wells Company on the sole of all genuine. If your dealer cannot supply you, you will be rewarded by writing to

**M. D. WELLS COMPANY**  
CHICAGO

## CORN BELT MILL

This mill is strongly constructed, and takes less power than any other mill of its capacity. The lathe-centered burrs insure fine, even grinding. The new feed regulator gives perfect regulation on ear corn as well as small grain. The burrs may be changed in three minutes. This feature is worth the price of the mill to a good many.

**Try it 20 days FREE**

We would like to have you test a Corn Belt Mill on your farm for 20 days. If it doesn't do its work better than any mill you ever used, send it back at our expense. Learn more about this mill. Write for booklet to-day.

**SPARTAN MANUFACTURING CO.**  
DEPT. 65 PONTIAC, ILL.

GOES LIKE SIXTY  
SELLS LIKE SIXTY  
SEES LIKE SIXTY

## \$60

### GILSON Gasoline ENGINE

For Pumping  
Cream Separators, Churns, Wash Machines, etc. Free Trial. 16 1/2 Horse Power. Ask for Catalog.

**GILSON MFG. CO. 907 Park St. Port Washington, W.**

**BALL BEARING AUTOMATIC GATE**

**IF NOT THE BEST AUTOMATIC GATE ON THE MARKET SEND IT BACK**

I GUARANTEE THE SWIFTEST AND STRONGEST AND EASIEST OPERATING AUTOMATIC GATE ON THE MARKET.

MONEY REFUNDED IF NOT SATISFACTORY IN EVERY WAY.

**ADAMS GATE CO.**  
1030 N. W. Ave., Topeka, Kan.

## LEARN to MOUNT Birds and Animals

We can teach you by mail at home during your spare hours to stuff and mount all kinds of birds, animals, game heads, etc. Also taxidermy and make your own taxidermist. Decorate your home with your beautiful trophies; become a professional taxidermist and earn big income. Quickly learned by men and women. Thousands of successful students. Write for Book "How to Learn to Mount Birds and Animals" sent absolutely FREE.

**E. W. School of Taxidermy, 118, Kiwood Bldg., Omaha, Neb.**

## BOWSER SWEEP MILLS

Different from all others, 4 or 2 horses. Geared 10 to 1 or 7 to 1. Grind Oats with shucks or without. And all small grains including Oats and Wheat. (Also make 8 size belt mills.)

**C. N. F. Bowser Co., South Bend, Ind.**

## Which One Will You Test on Your Farm for Ninety Days? Freight Prepaid

Which will you try, 30 Days' Free or 90 Days' Approval Test?

—Any capacity from 200 to 950 pounds per hour, according to your needs, and I'll save you from \$25.00 to \$50.00 on the price.

—The only Separator whose gearing runs in a "Bath of Oil" like a \$5,000 automobile—Feature worth \$50.00 alone.

—Automatically oils itself—Pour oil at the top, once a month from your oil jug or can—No danger of running dry, or ruining it like others—No oil cups to remember to fill or turn up twice a day.

—Dust-proof—Danger-proof—All gears enclosed—simple but standard built and absolutely dependable.

### GALLOWAY'S New "Bath in Oil"

#### HIGH GRADE STANDARD DREAM SEPARATORS

—Let me send you my Big New Separator Book—post paid—Free, so you and your wife and the boys and girls can talk it over and then try one of my separators under my easy plan for you to do it.

You'll call it the best if you test it alongside any of the highest priced \$85.00 and \$100.00 separators sold by anybody today—makers—catalog houses—dealers—jobbers or anybody else. Write me today.

**Wm. Galloway, Pres. WM. GALLOWAY COMPANY 383 Galloway Sta., Waterloo, Ia.**

## BROWN FENCE

Strongest, most durable fence made. Heaviest, closest wires. Double galvanized. Practically indestructible. Stock strong. Chicken tight. 15 to 35 per rod. Sample free. Wepay frt.

**The Brown Fence & Wire Co., Dept. , Cleveland, Ohio**

## 15 Cents a Rod

For a 22-inch Hog Fence; 16c for 24-inch; 19c for 31-inch; 21 1/2c for 34-inch; 27c for a 47-inch Farm Fence. 50-inch Poultry Fence 37c. Lowest prices ever made. Sold on 30 days trial. Catalog free. Write for it today.

**KITSELMAN BROS., Box 61 MUNCIE, IND.**

## DEAN EAR CORN CUTTER.

In 1, 2 and 4 hole size; Slices corn from 1/2 to 2 in.; does it rapidly; just the machine to prepare corn for calves, stock or fat cattle; no waste, they eat it all. Cutter returned at our expense if not satisfactory. Circulars free; write today.

**Enterprise Wind Mill Co., Dept. 28 Sandwich, Ill.**

## FENCE STRONGEST MADE.

Bull-tight Sold to the user at Wholesale Prices. We Pay Freight. Catalogue free.

**COILED SPRING FENCE CO., Box 255 Winchester, Indiana.**

# Daily Farm Losses

### THREE KANSANS VIEWS---FARMERS ATTEMPT TOO MUCH---NOT ENOUGH GOOD MACHINERY---TOO LITTLE LIVE STOCK THE REASONS

The greatest daily losses on the farm in this part of the state are caused by the farmers undertaking more than they can do, or do at the proper time. In many instances the farmers are compelled to let the first cutting of alfalfa stand until the second cutting should have been ready, thus losing one crop and putting up one poor crop where they might have had two good crops. They leave their corn at a time when work is most important in order to harvest their wheat. Then they find it impossible to get their plowing done at the right time.

They also neglect their live stock during the rush of the season, which results in another heavy loss. I would suggest as a remedy for this that each farmer that finds he has more farm land than he can properly handle, sow part of this land to some kind of tame grass and pasture it with some kind of live stock. Alfalfa makes an excellent pasture for horses and swine, while Bromus Inermis and English blue-grass will do for cattle and sheep. By doing this the farmer would get the profit from the live stock and a better price for what wheat he raised. As quick as the acreage of wheat is known the speculator is able to figure within a very few cents of what the crop will sell for. To reduce the acreage would increase the price. The average farmer pays no attention to this, but goes ahead and puts out all the wheat he can, and then complains that there is no money in wheat. The handling of live stock on too many of our farms is considered a kind of side line. The farmers do not get down to business and use the proper methods of feeding and caring for live stock. The feeder of today must feed high priced feed, and in order to make the most profit he must feed a good grade of stock. It has been shown by testing the cows on some of the dairy farms that one-half of the herd was losing money while the other half was making a good profit. The same thing happens a great many times in the feed lot with both cattle and hogs. One-half the bunch loses what the other half makes. By growing live stock the farmer is able to keep up the fertility of the soil, while the wheat farm is constantly growing poorer.

If the average farmer would farm fewer acres, be more careful in selecting his seed and preparing his land, grow better live stock and take better care of it, he would stop the greatest losses on the farms in this part of the state.—E. C. Logan, Beloit, Kan.

The greatest loss in handling wheat and oats this year is caused by the farmer who has let his grain stand in shock, waiting to thrash out of the

shock. The black-birds have cleaned the top of the shocks off until they are bare and it certainly will make a big difference in the yield, and the straw will be worthless for feed, too.

The farmer who tries to get all his help by exchanging work with his neighbors is certainly working at a great disadvantage a year like this when it rains so much. Plenty of alfalfa has stood, waiting for help that will be very poor hay. And that is the biggest waste on all western farms; they all try to do too much. So many try to farm all they possibly can. If the weather is right they work six days in the week, and if it happens to rain like it has this year they overwork themselves and their horses, and everything has to be neglected so the crop can be half tended. Do less and do it better would certainly stop one great waste on our farms.

The average farmer thinks he has not time to tend a garden and thinks he can buy his living cheaper than he can raise it, and the family is starved for fresh vegetables. He thinks if he plows a corner for a garden the rest will come easy for the women and the children, while he could not make money faster than by having a good garden.

The greatest loss on farm machinery comes because the farmer is usually driven with work and doesn't take time to clean up and put away each tool as he is through with it. And this waste comes from trying to do too much. "Do less, and do it better," would be a good motto.—Mrs. J. A. Swenson, Belleville, Kan.

The losses on most western farms are many and varied, and what is A's loss is not always B's, but I believe we can find losses that are common to both A and B, and I shall confine these remarks to a loss that is common to most farmers, and that loss is "time."

Many farmers lose time by not getting out early in the morning. I do not believe in using the lantern much, but a farmer should rise with the sun and when he gets up should move about in a manner that would indicate that he meant business. Men who are not strong physically cannot do this, and, of course, are not able to make good farmers. Good health is the foundation for success in any business.

After one has done the chores he should do the work that needs to be done the worst, and this work should be done as well as he knows how. It is not how much we do, but how well.

We should not take up our neighbors' time in long conversations during week days, or Sundays either for that matter, but should consider that we always have work of our own to do and so has our neighbor. We never need to say that we have nothing to



## GALLOWAY SAVES YOU \$50 to \$300

### If You Answer This Ad

Cut or tear out this coupon—or write a postal or letter—and send your name to me before you buy any kind of a gasoline engine—keep \$50 to \$300 cash in your own pocket, in savings, and get a better engine—you be the judge and jury. I promptly quote you prices direct from my factory to you—also send you my big, free engine book and special proposition. Address

**William Galloway Company, of America**  
385 Galloway Station, Waterloo, Ia.

Name.....

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

This small advertisement will make you big money if you send me your name. I can only tell you a few words here, but the Farmers of America know that what I say I will do—**I DO.**

**William Galloway, President**

## I Promise You—

The best—most practical—not complicated like others, but most simple, dependable and easiest to operate gasoline engine, of 2 to 22-H.P., in the market today. Only 4 quick, simple operations to start instantly. Comes complete to start working—(1) turn the gasoline on—(2) turn on oil—(3) turn on battery—(4) give fly-wheel a whirl—that's all. She's started. Ready to work day and night. Stops by twist of your thumb. No smoke. No steam. No soot, cinders, fire or flame. Perfectly safe. Women, boys or girls can run it. Just investigate

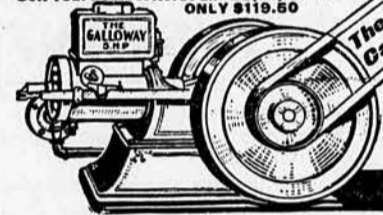
# GALLOWAY GASOLINE ENGINES 2 TO 22-H. P.

**5 Years' Guarantee—30 Days' Free Trial—Highest Quality—Interchangeable Parts—All-Steel Heavy Crank Shaft—All-Steel Connecting Rod—Hard-Oil Cups, etc. See Free Catalog.**

Save all dealers, jobbers and supply-house profits. We turn them out in such tremendous quantities, all alike, by automatic machinery, that we can sell you any Galloway engine, direct, at less money than merchants, dealers, jobbers, etc., can buy inferior or similar engines for, in car-load lots for spot cash. Buying from us you get the material at actual cost, labor at just what we pay on pay-roll and one very small profit, based on our tremendous output.

You do not think anything of buying a horse. Be practical, then, and join the Galloway crowd of practical farmers (over 10,000 strong) and let me send you, for only \$119.50, the best all-around 5-H. P. gasoline engine made on the American Continent. I recommend my 5-H. P. Do not make the mistake of buying too small an engine. Never buy a cheap-built engine. I can send thousands of testimonials. Here is one:

A. G. Anderson, Spencer, Ia., wrote me Aug. 15—  
"My Galloway 5-H. P. will do any farmer's work—would rather have it than other makes that cost \$240 for same power, as it is so simple, not so many trinkets to get out of order, like others.  
Sell Your Poorest Horse and Buy My 5-H.P.  
ONLY \$119.50



The Way to Big Profits—You Can Make \$5 to \$10 Per Day

**Get Galloway's Biggest and Best FREE GASOLINE ENGINE BOOK**

Write today for my beautiful, new, 50-page engine book in 4 colors, nothing like it ever printed before, full of information, showing how I make them and how you can make more money with a Galloway gasoline engine on your farm. Write—

**Wm. Galloway, President**  
**THE WILLIAM GALLOWAY COMPANY, OF AMERICA**  
Capital \$3,500,000.00  
385 Galloway Station, Waterloo, Iowa



### Anti-Friction 4-Burr Mills Double the Capacity of Geared Mills.

Two-horse mill has 24 ft. grinding burrs, (two set) all grinding at once, and grinds from 25 to 50 bu. per hour. Four-horse mill grinds from 50 to 80 bu. per hour.—30,000 Bu. WITH ONE SET OF BURRS: I have ground with one set of burrs more than 30,000 bushels of corn with my Mogul No. 1 mill and the burrs are still in good condition.—F. F. Craig, Mt. Carroll, Ill.

Two complete mills in one, has double the capacity and double the durability. ABSOLUTELY NO FRICTION OR GEARING. Will earn cost price in three days. The largest ears of corn to these mills are like popcorn to other mills. We manufacture the most durable and fastest grinding line of mills sold, including our FAMOUS IOWA NO. 2 for \$12.50. Send for our free Catalog. **Rovee Grinder & Furnace Works, 114-116 St., Waterloo, Iowa**

do; there is always work on the farm. I do not mean that we should never leave our farm, for we should. We should visit other farms and learn new points. Make preparations to visit, and while you visit do and get all the good you can.

One way we have daily farm losses is not having labor-saving machinery and farm devices. The man who follows a 14-inch walking plow does not feel able to milk five or six cows, turn a cream separator, and feed a few calves and pigs. He needs rest. But the man who rides a gang-plow and drives four good horses, and has

plowed twice as much as the man with the walking plow, is not tired and worn out when he has completed his day's plowing and chores. The farmer needs labor-saving machinery and so does his wife, that they may accomplish more work and do it easier. We should do today what needs to be done and not wait till tomorrow.—C. S. Moyer, Nortonville, Kan.

### Value of Better Seed Oats.

While it is a little early to write about the seed for next spring, there are so many things to say and think about before seeding time it is well enough to begin figuring now. Poor seed carelessly planted is the direct cause of many loss yields. Can't we decide now—right now—to use better seed of all kinds and plant more carefully?

It is by no means an uncommon thing to find that the oats used for seed purposes were taken directly from the oat bin without any special care or attention being given before they were sown. Every farmer certainly appreciates the fact that small or light and immature seed can by no means be expected to produce as strong and vigorous plants as will the large, plump grains. This has been so thoroughly demonstrated and requiring as it does so little amount of time to properly prepare the seed that no one can be excused for not giving this matter his most careful attention.

The benefits derived from fanning and grading the seed are indeed very marked. By so doing, the light, chaffy grains, which are much less valuable for seed purposes, will be removed. Likewise, the weed seed may be eliminated. This is an especially important factor in some localities where weeds such as mustard and others common to our oat crop are so plentiful. Again, not only will the weed seeds and light, inferior seed oats be removed but the large, plump oat grains may be separated from the smaller, lighter ones. This is all important. The

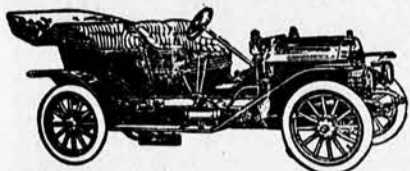


ROAN JESSIE 2d.

Roan Jessie 2d, owned by H. F. Holmes, Great Bend, Barton County, Kan.

# COLE 30

A Car of Superb and Silent Service



A \$2,500 QUALITY CAR FOR \$1,500

A light, powerful 5-passenger car; 4-cylinder; unit power plant, enclosed in an aluminum dust and dirt proof case; special safety devices; highest grade material and construction throughout; a car classy in size and appearance, not a one year proposition, but a thoroughly capable, durable, serviceable car; a car with such perfect mechanical adjustment that its operation is as silent as an electric. A CAR WITH THE TROUBLE LEFT OUT. A car your friends will admire and you will be proud to possess. THE SECRET OF THE WONDERFUL VALUE IN THE COLE 30 is the fact that it is sold upon the principle "OF SMALL PROFITS AND BIG SALES." Don't buy a car at any price until you see the full and complete specifications of the COLE 30. A Marvelous Car at a Marvelously Low Price. Dealers write us regarding our 1910 contract. Immediate delivery, 1910 cars. Catalogue and specifications free.

MONARCH MOTOR CAR CO.  
31 Monarch Bldg., 1625 Grand, KANSAS CITY, MO.



## REVOLVER and PISTOL CARTRIDGES

THEY are accurate and never fail to fire. The police rely on them.

The men of the plains prefer them. The leading experts of the world choose them. The American Revolver Team which won the International Revolver Championship of the World in the 1908 Olympic matches shot UMC cartridges to a man.

It doesn't make any difference what kind of a revolver or pistol you own. There is a UMC cartridge made for it and tested in it. Get that UMC cartridge to get best results. The round red trade mark is on each box.

Targets Free.

The UNION METALLIC CARTRIDGE COMPANY, Bridgeport, Conn.  
Agency, 315 Broadway, New York City

### THE TOPEKA PACKER

It will enable you to get the full yield of your soil, and the difference in one season's crop will more than pay for the machine. A card today, asking for TOPEKA PACKER BOOK-LET No. 1, will bring prices and full description. THE TOPEKA FOUNDRY & MACHINE CO., Topeka, Kansas

#### FOR DRY FARMING

## THE LARGEST AND BEST LINE OF WELL DRILLING MACHINERY

In America. We have been making it for over 20 years. Do not buy until you see our new illustrated Catalog No. 41. Send for it now. It is free.

Austin Manufacturing Co., Chicago

\$\$\$ FOR YOUR IDEAS \$\$\$  
Guide Book on Patents and What to Invent sent Free. G. PAGE JONES & CO., 708 9th St., Washington, D. C.

### GROW CATALPA FOR PROFIT

\$1000.00 and more profit per acre. Send for illustrated booklet telling how to grow this wonderful tree. Makes fence posts in 4 to 5 years. Telephone poles in 8 to 10 years. Booklet also describes Black Locust, Maple, Oak, Elm, Larch trees. A postal will bring complete information.

D. HILL, Evergreen Specialist, Dundee, Illinois, Box 54

last couple of seasons have not been favorable for oats, resulting in a large amount of light grains. Especially has this been true with those varieties which are not so well adapted to our conditions. In general, we find that the early oats have been much better yielders than have the late oats. In all cases, however, we find even in desirable seasons that all the grains are not equally plump or equally large, but on careful examination a very large part, in fact 30 to 50 per cent, will be found to be either small or not sufficiently filled.

In seasons when the oats run light in weight, such as last year when many of them were weighing from 18 to 24 pounds per bushel, it will be found that if the oats are thoroughly fanned and screened, in many instances it will be hard to save more than 15 to 20 per cent. The importance of fanning and screening oats cannot be too forcibly impressed. Experiments at the Iowa Experiment Station covering a period of seven years, showing that the large, plump grains produced 14.6 per cent more than the medium-sized plump grains of the same variety; while the small, plump grains yielded 33.04 per cent less than the large, well-filled ones. Running through the machine once is seldom sufficient, it may be necessary to put them through two or three times before the work is thoroughly done. Many of the elevators throughout the state are co-operating with the farmers in this important work.

#### Profit in Grading Seed Corn.

The Department of Agriculture has been a tremendous factor in showing the American farmer how to increase the value of his crops. One of the most notable of recent suggestions was officially made by D. N. Barrow. The experiment of persistently using selected corn for seeding shows remarkable results. An increased yield of from three to five bushels per acre was noted the first year and crops improved largely each year thereafter. The results of these experiments are so gratifying that the government urges the use of only the best seed and uniform planting. The only way to insure stands of uniform size and the proper distance apart is to have the seed graded. You can't plant irregularly shined corn and then drop only the perfect grains. This is the secret of profitable corn raising. The farmer who pays attention to the grading of his corn as well as to the choice of seed is the one who will enjoy the bumper crops of the future.

#### Inspector for Live Stock Board.

Dr. J. H. Burt, of Buffalo, N. Y., has arrived at the Kansas State Agricultural College, and entered upon his duties as inspector for the live stock registry board, which is to see that the law passed by the last legislature relating to the registration of stallions is enforced. Doctor Burt, before accepting the position here, was in the service of the government bureau of animal industry. He was detailed to have charge of the work of investigating and eradicating the foot-and-mouth disease of cattle in New York State. His Kansas headquarters will be at Manhattan, which is also the headquarters of the registry board composed of Director Ed. H. Webster, dean of agriculture at the college; Prof. R. J. Kinzer, head of the animal husbandry department, and Dr. F. S. Schoenleber, state veterinarian.

#### Demand for Agricultural Expert.

An idea of how widely known the work of the Kansas State Agricultural College is, may be gained from a communication recently received from New Zealand by President Waters, says the Industrialist. The board of education of South Canterbury, Timaru, New Zealand, have made application to him for a graduate from the college who could take the position of supervisor of agricultural instruction among high schools and rural schools of that province. The board offers a salary of 400 pounds per annum and 40 pounds additional for passage from the United States. Nineteen years ago the province of Queensland, Australia, elected Prof. E. M. Shelton, of the chair of agriculture of this college, president of their newly founded agricultural college.

#### The Oats Yield.

When the oats yield falls to 30 and 40 bushels per acre on good land it is



## Intensive farming in the Ozarks pays better than extensive farming elsewhere

Why tackle a big proposition when a small one pays better? Why have big expenses and a big investment when small expenses and a small investment will pay a bigger net profit. Why seek hard work and big responsibilities when easier work and less responsibility will accomplish more?

A small farm in the Ozarks is a better money maker than a big one elsewhere.

Such a farm can easily be made to pay \$100 an acre profit, each year. It is simply a matter of proper and intelligent handling. To begin with, land costs only \$5 to \$25 an acre. Don't think this is even prairie land like that in Central Illinois, for it isn't; neither is it low lands, but it is high rolling plateau land.

You would not make a big success with corn and wheat—you can grow both, but other things pay better.

The Ozarks are pre-eminently a dairy, poultry, live stock, fruit and vegetable country.

Grasses, clover, and forage crops grow admirably. There are hardly ten days all winter when stock can't feed on green pastures. With pure mountain water and the timber shelter, and with all the cheap feeds, butter fat can be produced in the Ozarks cheaper than in any other part of the United States.

Mules can be grown to two years of age at a cost of not over \$30. They sell for \$50 to \$150. Young

mules, while growing and before put to service need very little grain. Hogs can be grown in the Ozarks to weigh 300 pounds without ever having had 3 bushels of corn. The cost will not exceed 2½ to 3c a lb. The Ozarks is the ideal sheep country of the United States. The sheep are always healthy, free from foot rot, head grubs and stomach worms. A good ewe will give 7 lbs. of wool worth 25c to 30c a pound, a lamb worth \$5 and fertilizer worth \$3 a year—a clear profit of \$9 or \$10 per sheep.

The Ozarks produce more and better poultry than any other section of our country. The conditions are ideal for poultry raising—especially chickens and turkeys. The abundance of cheap feeds which could be grown in the Ozarks makes poultry raising very profitable.

With proper care 500 boxes of apples per acre may be gathered from 8 year old trees. They would readily sell for \$2 a box. Small fruits pay from \$50 to \$300 an acre. Vegetables of all kinds succeed and make as high as \$300 an acre.

These are only a few suggestions of what can be done in the Ozarks. If you will get a small farm in the Ozarks, set out an orchard of well selected varieties, lay out a vegetable garden and berry patch, stock the farm with poultry, cows, pigs, sheep and mules, grow the feeds and grasses you need for them, you will realize a greater profit than you possibly could make on a big grain farm elsewhere.

Furthermore you would live in a beautiful country, in healthful surroundings, free from malaria and away from severe cold and snow. You would be within a few hours of three large markets—St. Louis, Kansas City and Memphis and would have advantage of good local markets, schools, churches, etc.

It will be worth your while to look farther into this. We have some attractive books full of plain facts about the Ozarks. They will interest you. Write for free copies today.

John Sebastian, Passr. Traffic Manager 1510 Frisco Bldg., St. Louis

Rock-Island Frisco Lines

time to consider the kind of seed used. There are two or three varieties of oats that have been brought to this country, a variety of Swedish seed being one that has yielded about double that of our common seed. The United States department of agriculture is looking into this question of better oats for seed, and a variety grown in China is to be considered in this connection.

At Naperville, Ill., some extensive experiments have been made in growing seed oats of a kind that yields 80 bushels and more per acre, on fairly good corn land. Missouri is also

growing a quality of oats that yields as well as this, or better.

#### Much Said in Little.

The Farm Journal, a paper with a reputation for stating important things briefly—in many cases too briefly—says: "Capital for a successful farmer: Money, 25 per cent, brains, 75 per cent."



Send for Booklet Horse Trouble

DEATH TO HEAVEN  
Newton's Hoars, Cough & Newton's Distemper Cure  
Guaranteed or Money Back.  
\$1.00 per can, at dealers, or  
Express Paid, 18 Tr's Sale.  
THE NEWTON REMEDY CO.  
Totowa, N. J.

# Overland

Can You Beat it for Beauty?

Can you beat it for value? Can you beat it for service and economy? You Cannot

If you are thinking of buying a motor car read the following offer. Can you think of a better way to determine what car you want for your own use? This is what we propose:

Either look up the nearest Overland dealer, or write us direct to have him communicate with you.

Make an appointment with him to visit you early some morning with an Overland car. Have him drive you about on your own roads, all around the country and to town and back, over every side road and up every hill you ever expect to traverse. Make the test as hard as you like. Have him give you a sample of what the Overland will do in any emergency under the conditions of your own kind of service.

Then ask the dealers in any other car or cars you have in mind to come out and do the same thing. If they will go through the test, compare their demonstrations with that of the Overland.

Then make your selection, on merit, according to your own judgment. Write or look up your Overland dealer at the earliest possible time. Waiting may mean that you will have to take the car that makes the poorer showing.

**MODEL 38**

25 Horsepower. Planetary transmission, 2 speeds forward, 1 reverse. Roadster body, Single or double bucket, seats or Tonneau extra. Price \$1000.

**MODEL 41**

40 Horsepower. Planetary transmission, 3 speeds forward, 1 reverse. Close coupled body, or 5 passenger touring, 4 or 5 passengers. Price \$1400.

**MODEL 40**

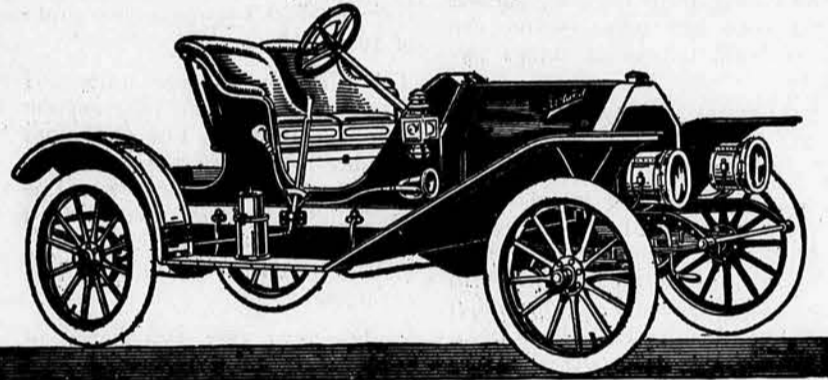
40 Horsepower. Planetary transmission, 2 speeds forward, 1 reverse. Roadster body, Single or double bucket seats extra. Price \$1250.

**MODEL 42**

40 Horsepower. Sliding gear transmission, 3 speeds forward, 1 reverse. Close coupled body, or 5 passenger touring, 4 or 5 passengers. Price \$1500.

Look up the Overland dealer now or write us today for his address

OVERLAND AUTOMOBILE COMPANY, Member A. L. A. M. INDIANAPOLIS, IND. TOLEDO, OHIO  
(Licensed Under Selden Patent)



**YOUR WATER SUPPLY**

Pumps and their Possibilities

## "Your Water Supply"

WRITE for this free booklet—it treats of pumps and pump possibilities—it contains a lot of information valuable to you. You will be surprised to learn the difference between ordinary pumps and the up-to-date double acting force pumps sold under our sterling trade mark.

### DOUBLE ACTING Red Jacket FORCE PUMPS

Are pumps of quality—built on scientific principles—of the best materials—adapted to your special pump requirements. They cost but little more than common lift pumps—they will throw a solid, steady stream to the top of a tall building. To replace leathers or make other repairs, you don't have to tear up platform or disturb pipe—a monkey wrench, two hands and a few minutes' time will do the work.

The patented Red Jacket Cylinder has been endorsed by leading hydraulic engineers as the one absolutely perfect cylinder—it's the cylinder that makes the pump.

No mere advertisement can give the many superior points of Red Jacket construction.

Red Jacket pumps are sold by leading pump dealers. Write today, giving name and address of your dealer, and we will mail you an interesting booklet, "Your Water Supply."

**Red Jacket Mfg. Company, Davenport, Iowa**  
Largest exclusive manufacturer of pumps in the world.



**WHEN BUYING A CORN SHELLER.**

Insist on Clean Shelling, Thorough Separation, Large Capacity and Lasting Qualities. These are Distinctive Features of

### The NEW HERO

2-hole and 4-hole Custom and 2-hole Farmers' Positive Force-Feed Shellers

They have Chilled Working Parts and other points of strength and convenience. We make Horse Powers, Wood Saws, Huskers, Farm Trucks, Manure Spreaders, etc. We guarantee our Goodhue Wind Mills for five years.

**APPLETON MFG. CO.,**  
19 Fargo Street Batavia, Ill., U. S. A.

Write to-day for Free Catalogue.



# LIVE STOCK



**Fifty-Cent Corn and Six-Cent Hogs.**

Even when corn is high the relative price for pork frequently makes it the cheapest feed for finishing; 50-cent corn is not expensive feed for six-cent hogs. Up to the last six weeks of feeding, wheat, rye or other cheaper substitutes may be used with grass, but in the ordinary course corn will be the best dependence for the close of the fattening period.—From Coburn's "Swine in America."

**Tonic for Sheep.**

A mixture of copperas sulfur and salt makes a good tonic for sheep; one which many no doubt will need at this season of the year. It tends to purify the blood and to help the animal in its fight against worms and other troublesome parasites. About six parts of salt to one each of copperas or sulfur makes the right proportion. If this is kept constantly before the sheep, inside the barn, where moisture can not reach it they will eat freely of it, and will undoubtedly be greatly benefitted by it. It seems to tone up their condition generally.

**Feeding Beef Cattle.**

Beef cattle should be marketed when in prime condition and not finished for show animals says Drovers Journal. Extreme finish is expensive and often reduces the profits of feeding operations and should not be attempted in commercial fattening for the general market. Yet, the last 100 pounds up to a certain point is the cheapest beef put on the animal. The trained feeder knows when it no longer pays to feed. There are many fine points even in feeding beef cattle and that is the reason the scrub feeder so often loses money.

**No More Old Time Neighborly Feeling.**

The feeling of neighborhood friendship does not seem to be as strong as in years gone by. Possibly this is due to the improved facilities for carrying on farm work. It used to be a common thing and a pleasure to "change works" back and forth. It is unfortunate that we do not know more about each other and have stronger friendships in the neighborhood. Country neighbors do not visit back and forth as they did in years when neighbors were fewer. City folks are getting a bit more selfish and less friendly as the years pass and country folks are no exception.

**Cement Feeding Floors.**

Swine growers seem to have pretty generally recognized the necessity of feed floors. The concrete floor is the most easily cleaned and most durable. Any farmer can if he will make such floor. It should be laid upon a deep foundation or it might be subject to cracking or crumbling at the edges and break where the water and frost get a place into it. The mixture is sometimes so porous that it admits water and when it freezes opens it and hogs and even sparrows and chickens will eat out the lime or cement; but where it is properly toned down with a good foundation there is no trouble about its lasting continuously.

**Feeding Range Cattle.**

An Illinois feeder a year ago last October bought range steers averaging 730 pounds and he paid \$4 per hundred for them, and he sold them in Chicago a few days ago averaging 1,500 pounds, at \$9 per hundred, and they dressed out 62.2 per cent of live weight. Later on the steers were run in stalk fields and fed some clover hay, and last April a medium corn ration was given. Then the first of September he put them on a full feed of crushed corn and oats and dry fodder for roughness and blue-grass pasture. He said he fattened them on less corn than in all his previous experience. The whole lot 18 head brought a little over \$135 per head, or \$2,352.70 in all. This was profitable cattle feeding.

**Examining Sick Animals.**

First, take the temperature of the animal by placing a fever thermometer into the rectum allowing it to remain there from three to five minutes. The normal temperature of a cow is 101 degrees (Fahrenheit). The normal temperature of a horse is 100 degrees; sheep, 101 degrees.

Second, take the pulse of the animal, which can be found at the angle of the lower jaw bone. The normal beats of a cow's pulse are from 40, to 50 per minute, and that of a horse from 33 to 40 per minute.

Third, count the respiration of the animal, or number of times it breathes, by watching the sides of flanks, or by pressing the ear to the side. The normal respiration of the cow is from 15 to 20 per minute, and that of a horse from 12 to 15 per minute while resting. If the temperature, pulse or respirations are found to be higher or faster than above described, you will know that the animal is ailing.

**Bred the Spots Off.**

It may not be generally known but the fact remains the same that the Poland Chinas in the early 70's was a breed of spotted hogs. The present color of Polands was the result of breeding to Tom Corwin 2d, a black hog with white points. He copied the color of the Berkshire so closely that some people intimated that there had been an introduction of Berkshire blood, but this has been positively denied and the purity of his breeding vindicated by the best of evidence. But there is no doubt that the breeding from Tom Corwin's blood is what knocked the spots off the Poland Chinas. There was a great contest at the time and breeders were Corwin and anti-Corwin, but the Corwins were winners, as he was a distinct improvement over the previous Poland China breeding. As some have said, he was the salvation of the breed not only in color, but in his great quality and stylish, well-built form. His career was an epoch in Poland China history.

**What to Think of in Swine Husbandry.**

Some of the things that the farmer anxious to produce pork cheaply will do well to think about are set out by Farm, Stock and Home:

Pasture crops for the spring, summer and fall.

Production of cheap feeds for winter use.

How to fence the most pasture with the least number of rods of fence.

Putting up fences that will last. Arranging pastures so as to make labor easy.

Easy but effectual methods of feeding and watering.

Cheap but suitable protection for hogs in the pasture, Inexpensive, lasting and convenient hog buildings.

Means of avoiding loss from lice, worms and disease.

How to raise the per cent of yield in pigs for each sow kept.

In general, how to reduce the cost for feed and labor.

**Silage-Fed Beef Cattle.**

Indiana and Ohio set the pace for feeding corn silage to beef cattle. The stimulus given to this kind of feeding has greatly increased the number of silos in this state, and a greater number will be put in next season than in any previous year. Farmers find that as all kinds of live stock can be fed corn silage profitably, and such feeding saves the 40 per cent of the corn crop fodder which goes to waste in the field. The Breeder's Gazette of Chicago says:

"Indiana feeders who have demonstrated to their own satisfaction that silage is valuable for beef production are expanding their operations this season, and have been liberal buyers at Chicago, Omaha and Kansas City. Southern Michigan will feed an unusually large number of cattle, owing to scarcity of lambs. Illinois has been a heavy purchaser both at Kansas City and Omaha, and Chicago could have sent five good feeding steers into



nearby territory where one has been available.

"Continued high prices have encouraged cattle feeding in sections where, according to confident prophecy, the industry was on the wane."

**Why He Likes the Mule.**

An Indiana farmer likes the mule because he is the most tireless worker on the farm. He never gets excited in a heavy pull. He eats less than a horse, but does more work. He is always as good as cash in the bank. He never falls through a hole in a bridge, and generally keeps out of danger. He is an excellent saddle animal if you know how to saddle him. His feet stand hard roads better than those of a horse. He is more intelligent than a horse. He is never in love, but attends strictly to business all the time. He is never sick but once, and then he dies. But who ever saw a dead mule since the war? He never stops to fight flies as a horse does, because his hide is tougher. He is just as gentle as a horse if he has not been spoiled in breaking. His age cuts little figure in a sale; nobody cares much how old a mule is. He will bring from \$150 to \$250 when he is full grown if he is big and smooth and strong.

**Winn's Experience With Alfalfa.**

Frank D. Winn, Randolph, Mo., breeder of Poland Chinas and one of the successful exhibitors, recently stated that the best way of feeding alfalfa in the winter time was to throw the hay to the hogs. Usually the last cutting would cure quite green looking, the hogs and pigs would eat this up clean, not leave a stem, relishing it and seemed to get great good out of it. That he found in running alfalfa through a cutting box and mixing it with a swill composed of a mixture of shorts and corn that the little pigs would not eat it readily, they seemed to want to separate the alfalfa from the mixture and spit it out. This would not occur with the old hogs, like it did with the growing pigs, and he felt inasmuch as they did not relish it like they did when thrown to them in the hay form and the work was so much less, that he believed it as an advantage to feed the alfalfa in the original hay condition instead of preparing it for a mixture in ground feed. He valued it very much as a feed for brood sows.

**Feeding Value of Soy-Beans for Sheep.**

The Wisconsin Experiment Station has tested the value of soy-bean seed for fattening lambs. In one experiment two lots of 10 lambs each were fed the same roughage. One lot received shelled corn and whole soy-beans in equal proportions, while the other received the same quantities of shelled corn and whole oats. The average gain of each lamb during a period of twelve weeks was 16.3 pounds when soy-beans constituted a part of the ration and but 13.7 pounds when oats were used. A pound of gain was produced on 6.11 pounds of grain and 8.62 pounds of roughage were required on the oats ration.

In another experiment the same rations were fed for 12 weeks to two lots of nine lambs each. The lot receiving the soy-bean ration gained 119 pounds in weight and produced 95.1 pounds of wool, against 71 pounds increase in weight and a production of 81.3 pounds of wool for the lot receiving the oat ration. The second lot also consumed more feed per pound of gain.

**Top Dressing for Alfalfa.**

A light top-dressing of manure after sowing, or, in case of fall sowing, any time during the winter, helps to conserve moisture as well as to give the growing plants some nitrogenous food. Applying a top-dressing of stable manure at least every second or third winter is certain to prove profitable. If it contains coarse straw or other litter, this should be raked and hauled off later, but before the alfalfa grows too high, especially if the hay is intended for the city market. Many successful growers in Kansas, who claim to cut from five to seven tons of alfalfa hay per acre in a season apply a top-dressing of manure every winter. The highest yields reported from eastern states are where this practice is followed. Some experiment station men believe that where this is not done the crop will after eight or ten years tend to impoverish the land instead of further improving it.—From Coburn's "The Book on Alfalfa."

**Movement of Water in Soils.**

Movements of water in soils are two: They first a downward movement, occasioned by the force of gravity, tends to rid the soil of superfluous water by drainage and while necessary in humid climates it is the occasion of some loss of soluble plant food. In the arid regions, without irrigation, this movement may be disregarded.

The second or capillary movement is caused by the physical force of surface tension or capillarity, where each drop attracts and draws to itself other drops in the zone of its influence. It is the force which causes oil to rise in the wick, or water to run over the edge of a basin through a wet towel. Practically this movement is upwards in soils because of the attraction of the water which is being transpired by plants or dispersed in the air by evaporation. Water is constantly drawn upward to replace that which has gone off in vapor. Capillarity is most active when the soil is moist and on a perfectly dry surface, rains will often run off without wetting the soil to any great depth.

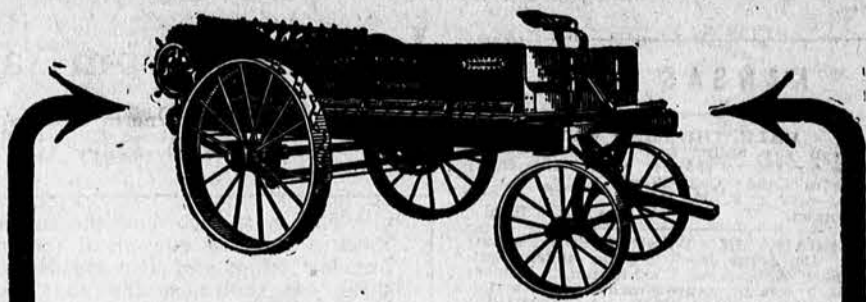
**Fodder as a Silage.**

Frequently one hears the complaint that the hard work incident to filling the silo far outbalances the superiority of ensilage over dry fodder. They claim that the dry fodder is good enough and that although the cattle do not eat all of it they eat that which contains the most nourishment. It is a readily conceded fact that there will be waste in connection with dry fodder even in its best form. The Indiana Experiment Station has shown that this waste varies from 20 to 35 per cent. The same authority tells us that cattle will consume all of the silage if it is not fed in excessive quantities. Further than this, the silage goes to them in the shape that provides a succulent feed most nearly supplementing the condition of pasture. It is generally accepted that the dairy cow does best when upon fresh grass. Granted that this is the case the more nearly you can reproduce fresh grass conditions the better will be your returns and the more profitable dairying will be. After all, when you come to figure the work of shocking the corn, drawing it to the shredder, putting the grain in the crib and the shredded fodder in the mow, there is little difference between the work necessary for filling the silo and getting the dry feed ready for feeding.

There is another point to be taken into consideration and that is the fact that the grain in the silage is all ready for feeding without grinding. If the grain is to be fed in connection with the shredded fodder, it will be necessary to grind or chop it at least. This work is saved by the silo.

"The object of good farming is not primarily to make money, but to make a home, and develop character in the children who are to carry on the business after their parents have been laid in their last resting place. Therefore, the life of the farmer and his wife who fail to educate their children properly is a failure, no matter how many acres of land they may own, or how much money they have in the bank."

The farmer who has brought himself to the point of introducing alfalfa upon his land should be extremely careful in the selection of seed. In the first place it is important that he should sow seed produced in about the same latitude as his farm and from a region of about the same rainfall, thus keeping in a line of acclimation, and with habits and habitat, as it were, of what he is seeking to raise. Next, he should not sow seed raised under irrigation if he is in a non-irrigating region. A Michigan farmer, for example, should sow seed grown as near to his latitude as possible, say from Wisconsin, Minnesota or the Dakotas, or not south of Nebraska or Kansas. It is questionable at present, whether it is wise or profitable to attempt raising alfalfa seed in the more humid districts of the eastern and southern parts of the United States. It may be economy to leave the raising of seed to those regions with the least summer rainfall, keeping always in mind the securing of seed grown under conditions nearly like those to which the seed is to be introduced.—From Coburn's "The Book of Alfalfa."



**Barnyard Manure is the ONE PERFECT FERTILIZER**

**B**ARNYARD manure contains all the elements of plant food. Every ton of stable manure is worth from \$2.00 to \$4.00 or more, based on the commercial value of its fertilizing content. But, based on the increased crop yield, it is worth much more—just how much depends upon how you care for it and spread it over your land.

Get full value—not half value—out of the manure. There is only one way. Spread it with a machine which pulverizes all of it, and spreads it uniformly, and as you want it, broadcast over the land or in rows.

Your farm will maintain its own fertility if you give it a chance. You don't need patent fertilizer which only contains a few of the necessary plant elements. Save the manure and spread it with an

**I. H. C. Spreader**

You make the wisest possible investment when you purchase a Kemp 20th Century, a Cloverleaf or a Corn King spreader.

These machines differ in many features of construction and operation, but they are all right-working, and that is the essential point. They all avoid the waste of manure, greatly reduce the time and labor of handling, and rob manure spreading of its disagreeable features.

You may have a large farm; you may have a small farm. No matter what the size, you will find an I. H. C. spreader to suit your requirements.

Join the ranks of Soil-Builders. It will pay you big money.

Call on the International local agent—see him about a spreader for your own use. He will cheerfully give you catalogues and complete information; or, if you prefer, write us for further information.



**INTERNATIONAL HARVESTER COMPANY OF AMERICA**  
(INCORPORATED)  
CHICAGO, U. S. A.



Look for the Trade-Mark. It is a Seal of Excellence and a Guarantee of Quality.

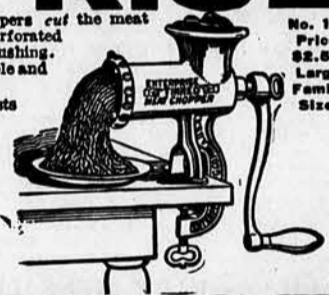
**ENTERPRISE**

**Meat and Food Chopper**

"Enterprise" Meat and Food Choppers cut the meat with a revolving steel knife against a perforated steel cutting plate without tearing or crushing. Easily cleaned. Practically unbreakable and will last for years.

The No. 5 "Enterprise" Chopper costs only \$1.75! No. 10, shown in cut, \$2.50. They are standard family size, and not only save half the work at butchering time, but are useful in the kitchen every day in the year.

Made in 45 sizes and styles for Hand, Steam and Electric Power. We also make cheaper Food Choppers, but recommend the above for the reasons given. Illustrated catalogue free. Sold at Hardware and General Stores, etc.



No. 10  
Price  
\$2.50  
Large  
Family  
Size

**ENTERPRISE**

**Sausage Stuffer and Lard Press**

Lessens the labor at butchering time. Two machines in one. Well made and does its work quickly and surely. Cylinder is bored true and plate fits accurately. Pressure cannot cause meat to rise above the plate. The Patented Corrugated spout prevents air from entering casing, ensuring perfect filling and preservation of sausage.

Machine can be changed into a Lard Press in a minute's time. Can also be used as a Fruit Press.

Your dealer will be able to supply you with the "Enterprise" Sausage Stuffer and Lard Press.



No. 25—4 quart  
Japanned  
Price \$5.50  
4 sizes  
Tinned and  
Japanned

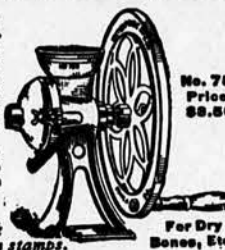
**ENTERPRISE**

**Bone, Shell and Corn Mill**

The "Enterprise" Bone, Shell and Corn Mill is a good all-round mill for farmers, poultrymen, etc. and for compactness, strength and durability is unexcelled. Handy for grinding poultry food and making bone meal fertilizer. Mill shown in cut \$3.50, weight 60 lbs., grinds 1 1/4 bu. corn per hour. Look for the name "Enterprise" on the machine you buy. Grind up dry bones, oyster and other shells, corn, etc., for your hens and watch results.

Other famous "Enterprise" household specialties are: Coffee Mills; Raisin Seeders; Fruit, Wine and Jelly Presses; Cherry Stoners; Cold Hand Saws; Etc., Etc.

Sold at Hardware and General Stores, etc. Write for "The Enterprising Housekeeper," a book of 200 choice recipes and kitchen helps. Sent for 4c. in stamps.



No. 750  
Price  
\$3.50

THE ENTERPRISE MFG CO. 91 PA., Dept. 36 Philadelphia, Pa.

KANSAS LAND

HALE, THE LAND MAN, can sell you Saline and Dickinson county farms for \$30 to \$95 per acre. Also cheap farms in Caddo Co., Okla.

T. E. HALE, Solomon, Kan.

BARGAIN IN WASHINGTON county land. 430 acres creek bottom under cultivation, 4 miles from Washington, 1 mile to school, 2 sets of improvements, good water. Price \$55 per acre.

CO. HIGH SCHOOL PRIVILEGES FREE with our farms. We have farms of all sizes, improvements to suit. Some we can sell on small cash payment.

QUICK BARGAIN. \$20 near station on Santa Fe, all fine tillable upland, fair set of improvements, well worth the price, \$40.

MONTGOMERY COUNTY FARMS. Montgomery county is second in population and 5th in wealth in Kansas.

EASTERN KANSAS FARM BARGAIN. 166 a., 3/4 miles from town, 75 a. cultivation, 2 a. orchard, balance native grass, 5-room house, good cellar.

CORN, ALFALFA AND WHEAT LAND. 160 acre farm in Republic, banner corn and alfalfa county of Kansas, only 1 1/4 miles from Belleville.

SPLENDID FARM IN WILSON Co. Within a few miles of city, 142 acres of first class land, 2 sets of improvements.

Bargain Near Ottawa

120 acres, very fine soil and well improved, natural gas in house, plenty of water, 4 mi. to Ottawa, rural route and telephone.

MANSFIELD LAND CO., Ottawa, Kan.

Good Bargains

Six room house. Eighty acres of valley land, balance good mow land and good pasture and orchard for family use.

OTTAWA COUNTY FARM BARGAINS. Nice little 80 acres, 6 miles out, \$2,600. Fine 120 acres 4 miles out, fair improvements, mostly smooth, black soil at 5,000.

AN IDEAL FARM FOR SALE. Kansas farm of 300 acres, adjoining a flourishing railroad town, forty miles west of St. Joseph, Mo.

WICHITA BARGAINS. 146 acres, well improved, 4 1/4 miles out in the splendid bottoms. All smooth except a little near river.

I. B. CASE & CO., Over 103 W. Douglas, Wichita, Kan.

GOOD HOME, CHICKEN AND GARDEN RANCH. 20 acres in city of Wichita, 1/2 mile south of the packing houses and stock yards.

THE NELSON REAL ESTATE & IM. CO., 137 N. Main St., Wichita, Kan.

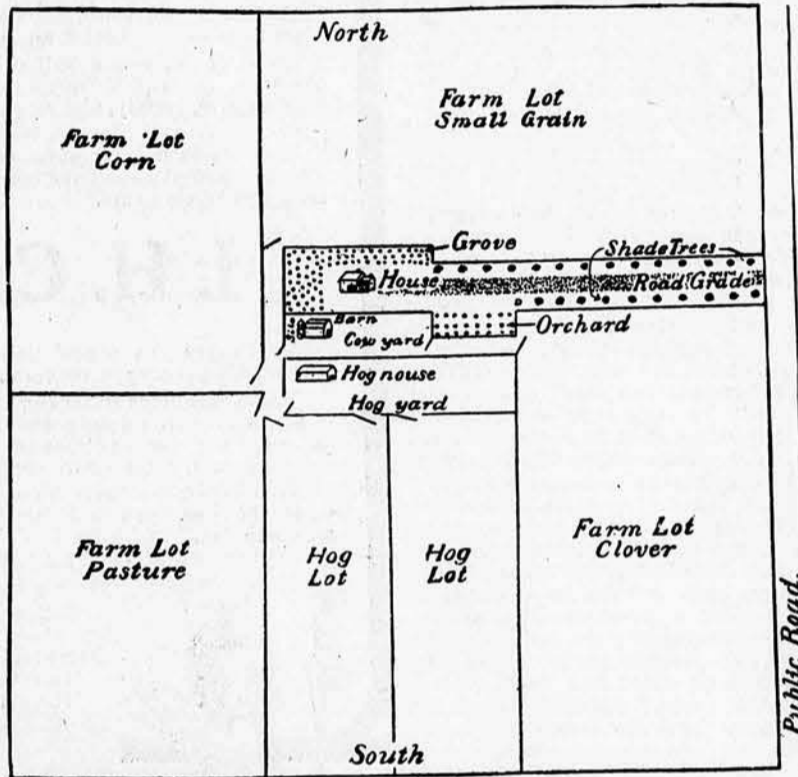
Income From a 40-Acre Farm

This One in Minnesota Has Annual Income \$2,500--Dairy Cows, Hogs and Poultry.

This is the third of the series of articles printed by KANSAS FARMER showing how small tracks of land well farmed are making comfortable livings and some besides for the families living thereon.

There are such farms owned and farmed by KANSAS FARMER FOLKS and we want to hear from those who are farming 20 acres to 80 acres.

For the best showing from a small farm KANSAS FARMER editor will give \$5; for second best \$3 and for the third and fourth best \$1 each.



PLAT OF A FORTY-ACRE FARM.

This 40-acre farm is situated two miles from the city of Fairmont, Martin county, Minnesota. There is a very good market for milk.

Surplus eggs, other than those sold and used for hatching, and consumed in family are shipped to grocery firms in St. Paul.

I keep from 10 to 12 grade and full blood Holstein cows and heifers, and as many young cattle of the same breed.

The income during the last year was: Hogs \$52.50, Milk \$975.19, Eggs \$330.91, Poultry \$49.72, Beef and hides \$80.36, Calves and yearling dairy heifers \$128.60, One milk cow \$35.00, One bull \$75.00, Premiums on cattle at county fair \$28.00.

Not all of the cattle that were sold from the farm were produced on the place this year but hogs, poultry, eggs, milk and calves were.

But to be fair it is no more than right that the other side of the ledger should be shown.

The farming land is divided into 4 equal parts of about 7 1/2 acres in a lot which comprise what is known as the "farm crop rotation lots."

The place also furnished the wood for the year for the cook stove, used in baking at least 1,400 pounds of flour into bread, and the other necessary articles of food.

The farm produces all the rough feed for stock, pasturage, etc., but grain feeds are bought except feed for horses which is usually raised on a small grain lot.

The debit side of the ledger stands as follows, amount paid out: For cows \$490.00, Hogs and pigs bought \$490.00, Corn, oats, shorts, oil meal, bran, buttermilk, salt, straw, etc. \$787.17.

This represents the net profit for work besides what was taken from the farm in the shape of eatables for the family living.

The farm is composed of a square 40 acres of land part of which is rolling and the balance flat.

The farming land is divided into 4 equal parts of about 7 1/2 acres in a lot which comprise what is known as the "farm crop rotation lots."

A complete 4-year rotation is followed: Corn, small grain, clover hay, and pasture, using the clover land for pasture, the next season, after giving it a good coat of stable manure.

Late the next fall when through with the pasture and the moth has laid the egg that produces the cut

KANSAS LAND

MARION, MORRIS AND DICKINSON county, Kansas, lands. Bargains in improved farms at prices ranging from \$45 to \$80 per acre.

COWLEY COUNTY FARM. 160 acres, good six room house, about 80 acres bottom, never falling water, 12 acres alfalfa, 40 acres corn, close to school and church.

BUY A HOME CHEAP. We are showing lands in the Lost Mountain section of Canada at prices ranging from \$10 to \$20.

A 30 DAY BARGAIN. 42 acres, adjoins Baldwin, the home of Baker University, 400 bearing apple trees, balance good farm land.

200 ACRES IN Marshall County, Kan., three-fourths mile from town, 100 acres in second bottom land, 160 acres in cultivation, balance pasture, 7-room house, cellar, small barn, cattle shed, hog house, orchard, well and windmill.

REPUBLIC COUNTY LAND. 25 farms in this county for sale, ranging in prices from \$50 to \$75 per acre.

44,000 ACRES. Just put on the market in Texas close to the Simmons property, lays fine and a black sandy loam.

160 acres, 2 miles from a good town in McPherson county, Kansas, well improved, 100 acres under cultivation.

BARGAINS For CASH or TRADE. Of all kinds direct from owners of farms; ranches, mds., hardware, hotels, livery barns.

BUY A CHEAP FARM. 480 acres of good corn land, northwest of Burton, Kan., 8-room house, barn 30x40, basement 30x40, cow sheds and other buildings, 3 wind pumps, orchard, groves, fenced and cross fenced, all good land.

BEST FARM IN KANSAS. 560 acres bottom valley land, all smooth, fine black sandy loam, no waste land, small orchard, 20 acres fine alfalfa land, new 10-room house, hot and cold water, lighted with acetylene gas, bath and toilet, 500-barrel cistern, sewer system, R. F. D., telephone, 5 1/2 miles to two railroad towns.

MR. TENANT. QUIT PAYING RENT! 160 a. located 8 miles east of Independence, 2 miles from street car line.

ROSS DEFENBAUGH, Independence, Kan. BARGAIN. 160 acres, 100 acres in cultivation, 10 acres hog tight, balance grass; timber for wood and posts; 7 room house; barn 20x60; wagon, implement and cattle sheds; corn cribs; well and cistern; nice shade; 6 1/2 miles from Climax; school 1/2 mile; R. F. D. Price \$30 per acre, worth \$40; can carry \$2,500.

BOURBON COUNTY FARM BARGAINS. 160 acres, 4 miles north of Fort Scott, Kan. 65 acres in cultivation, 40 acres wild and tame meadow, 55 acres pasture, practically all tillable, good 5 room house, barn, abundance of water, near school and R. F. D., telephone. Small orchard and grove \$50 per acre. We have others. Write for list.

AN EXTRA FINE FARM. 240 acres, 1 1/2 miles from shipping station, 5 miles from good town, on R. F. D. and telephones, 140 acres under cultivation, 100 acres in pasture, land in extra fine condition.

TWO REPUBLIC COUNTY SNAPS. 800 acres, 3 1/2 miles from Wayne, 9 mi. county seat, 1/2 good farm land, balance pasture, 200 a. cultivated, fair house, 2 good barns, 75 a. alfalfa, 60 a. hog tight, timber, running water. Price \$45 per acre.

Let me know your wants. Choice bargains and money makers. Make a specialty of exchanges in land and merchandise. What kind of a proposition have you got? Let me hear from you.

CARL G. ANDERSON, Athol, Kan.

**KANSAS LAND**

**CLAY COUNTY, KANSAS FARMS**  
are my specialty. Own a farm where good things abound. Call or write for my list before you buy. Tell me what you want. I can get it for you.  
**GEO. A. BIGLER, Clay Center, Kan.**

**800 ACRE BARGAIN IN NESS COUNTY, KANSAS.**  
Only 1 1/4 miles from Ness City, all in cultivation and will all be sown to wheat and 1-4 crop goes to purchaser. Price for a short time \$25 per acre. Look this up, a genuine bargain. Let us send you our land list. **KIRBEEG & MILLER, Ness City, Kan.**

**100 FARMS FOR SALE.**  
200 acres adjoining Horton, one of the best locations in eastern Kansas. \$80 per acre. This is a real bargain. Write for complete description.  
**McCORMACK & FRIEND, Horton, Kansas.**

**A 240 ACRE BARGAIN.**  
Anderson county, Kansas. 7-room house, telephone, R. F. D., 1/4 mile from Kincaid, good orchard, abundance of good water. All tillable, all fenced and cross fenced. Price \$50 per acre.  
**V. C. ARCHER, Colony, Kansas.**

**FARMERS, BUY LAND WHERE IT PAYS RETURNS.**  
640 acres, 11 miles from town in famous Cheyenne Valley, perfectly smooth, choice land. This section will sell for \$20.00 per acre within 12 months. Get busy if you want it at \$13.00 per acre. Cash.  
**W. O. FALLIS, St. Francis, Kansas.**

**ARE YOU LOOKING FOR A HOME?**  
No farmer should think of buying a home before seeing a copy of THE FARM AND REAL ESTATE JOURNAL. It contains the largest list of farm lands, city property and stocks of goods of any paper published west of Chicago. It reaches 50,000 readers each issue, 80 per cent of whom are farmers. Every one who has any property they wish to advertise will find this journal one of the best advertising mediums published. Advertising rates 2c per word each insertion. Send 75c and we will mail you the Journal for one year, or for 10c in silver or stamps we will send it for two months on trial and stop it at the end of the two months unless you renew your subscription. **FARM AND REAL ESTATE JOURNAL, Traer, Iowa.**

**DOES THIS SUIT YOU?**  
200 acres, Cherokee Co., Kan., 12 miles west of Joplin, splendid roads; 75 acres in pasture and grass, 5 acres in orchard, yard and stock lots, 80 acres in cultivation; 40 acres sown to grass last spring; hedge and wire fence, every foot tillable, no rock or waste land; very fine; good bearing orchard; good 6-room house, cellar, smoke and chicken houses, corn cribs, hog sheds, barn 24x48. An ideal home in a good community and a rich country. The price is only \$50 per acre; half cash, balance on liberal terms if desired. The owner has made enough money to retire.  
**SHARP REALTY CO., Wichita, Kansas.**

**KINGMAN COUNTY LANDS**  
Banner wheat and corn county of the state. Write for selected list.  
**Brown Real Estate Co., Kingman, Kan.**

**Hodgeman County Lands.**  
Choice wheat and ranch lands. Write for price list and country map.  
**F. M. PETERSON, Jetmore, Kansas.**

**COWLEY COUNTY FARM**  
440 acres, 11 ml. from Winfield, 5 miles from Townsend. 160 acres cultivated, balance blue stem pasture, living water, good buildings, orchard; alfalfa, prairie hay, fine grain and stock farm. Price \$13,500, good terms.  
**CHAS. N. PAYNE, Hutchinson, Kan.**

**HOMESEEEKERS**  
Send for a copy of the southeastern Kansas Homeseeker, the best land journal published. It's free to those wanting homes or investments. We make a specialty of lands on small payments and easy terms. Address:  
**THE ALLEN COUNTY INVESTMENT CO., Longton, Kan.**

**NESS COUNTY LAND.**  
\$4,000 will buy a quarter section of fine smooth land 1/4 mile from center of Ness City, all fenced and in cultivation. 50 acres in wheat. Other good corn, alfalfa, and wheat land at \$15 to \$35 per acre. Write for information.  
**J. C. LOHNES & SON, Ness City, Kansas.**

**STOCK RANCH.**  
Five thousand acres, two hundred and fifty in cultivation, ten room house, large barn, good out buildings, living water. Fenced and cross fenced. \$20 per acre.  
**APPLING HORTON & MEEK, 123 N. Lawrence Ave., Wichita, Kan.**

**\$3,000!**  
Will buy 80 acres in Anderson county, Kansas, three miles from Mont Ida, three and one-half miles from Welda and six miles from Colony. All second bottom land, no overflow. A good 4-room cottage. Will need a little repair. Part down and terms on balance. We have land ranging in price from \$20 to \$60 per acre. Write  
**HERBERT C. SIMON, Garnett, Kan.**

**160 Acres—\$50 Per A.**  
160 acres well improved, 100 acres in cultivation, 30 acres pasture, balance mow land and timber. 1/4 mile from school on R. F. D., two good wells, creek runs on land. Price \$50 per acre. Write the owner.  
**Box 315, Neodesha, Kan.**

worm, this sod land is plowed good for the next year's corn crop. This land is thoroughly disked, dragged and worked in the early spring to retain the soil moisture, and later on in May I plant fodder corn for silage, planting in drills north and south, raising about three-fourths to one bushel of good home grown seed corn to the acre. With thorough, shallow cultivation this fodder corn will yield from 11 to 16 tons of green silage corn to the acre and will help to fill my 100-ton silo and provide that succulent feed needed to keep cows in good flow of milk.

After silage corn is removed the corn ground is either sown to rye or let lay until the next year for the crop of small grain. Rye is the best small grain one can use as a nurse crop for clover seed. Barley is good, flax is good if sown early, wheat will do but oats is the poorest as it takes considerably more moisture in growth and shades the ground worse than the other grains.

Sow small grain early in the spring and just before the last harrowing sow clover and timothy seed. I use 4 quarts of medium red, one quart alsike and one quart timothy to one acre.

Cut grain with a high stubble and keep all stock off of the young clover the first fall and winter, this thick stubble with the young clover's own growth the first year will give it a nice protection the first winter, then the next season two crops of splendid clover can be cut. Care is always taken to have the clover cut before the heads commence to turn brown, as at this stage the juices leave the stalk and it turns to woody fibre.

If the season is favorable for rain late in the fall the third crop usually comes on in good condition and gives a good late fall feed. Then begin with the stable, manure again late in the fall and commence the rotation once more.

This system of handling the soil will bring bigger crops than any that I know of. This was a poor year in this part of the state but this 40-acre farm produced 46 loads of clover and timothy hay on one lot; 150 bushels of oats and 7 loads of straw and 2 loads of buckwheat, which was used for chickens to scratch out, on the small grain lot; on the pasture lot was kept never less than 12 head of matured stock and as high as 18 part of the time, all summer. On the corn lot was raised 75 tons of corn, leaf silage.

Besides I secured 90 bushels of fine potatoes and vegetables from the garden. On one of the two 3-acre hog lots 35 bushels of flax and 6 or 7 loads of flax straw was produced.

Besides the four farm lots there is a hog lot of 6 acres divided with a woven wire hog fence in the center, this is used alternately to pasture hogs one year and the other field used for corn, which is seeded to clover at the last cultivation, about June 20. This corn is planted thinly enough so the clover will receive some sun light and it is cut off the last of August at the same time the other silage corn is cut and is put into the silo with the corn from the corn lot. This year one of the hog lots was used for flax instead of corn.

This system of changing the hog pasture each year is a good one as it tends to keep swine more healthy than when confined to a permanent pasture lot year after year. I raised 36 fine full blood Poland China pigs on the grass from one of these acre hog lots, with the assistance of the nurse from the 4 mother sows and a small amount of corn, buttermilk and shorts. At the age of 6 months they weighed better than 125 lbs. each and had cost but little money. Four or five weeks' heavy feeding finished them for the market.

I want to say to the fathers that a great deal of the success that has come to me must be credited to a good boy who stays by the old home and the farm. I have taken him into partnership with me and each month he gets a regular share of the gross receipts, this arrangement tends to encourage him and keeps him on the farm. I hardly think that farming, no matter how well it is managed will justify the hiring of help at anywhere near as high wages as men in the different line of commerce can pay, but to the young man who will stick to the farm, be steady, honorable and saving, success will surely come.—Lucien A. Sweet in 'Farm, Stock and Home.'

**As to Denatured Alcohol.**  
The results of the government's recent exhaustive investigations into the cost and efficiency of denatured alcohol are rightly satisfactory to those who see in the fuel possibilities of this product a solution to a pressing industrial problem. When Congressman Murdock interested himself in the subject of denatured alcohol he had little reliable data upon which to depend. It was not unnatural, therefore, that his bill which was intended to benefit the farmers and permit anyone to make denatured alcohol should have been seriously defective. There are practically no private stills in the country and the farmers find that they are so seriously handicapped in the cumbersome and needless system of government inspection that they cannot make alcohol profitably, says the Kansas City Journal in a recent editorial.

There is no good reason why all restrictions should not be taken off the manufacture of denatured alcohol. A simple affidavit declaring that the distiller has complied with government requirements in treating his alcohol product should be sufficient. There is no special inducement to the man who does not denature his product. Alcohol made from farm waste is not fit for use as a beverage in any event and the cost of having a government inspector visit every farm still and examine the product before it is sold is so high that it reduces the profits below a reasonable limit. The benefit to the farmer of the Murdock bill is wiped out by the failure of the bill to exempt the farmer from inspection.

There is always tremendous waste upon the farms of this country. The farmers destroy vast quantities of unsaleable stuff that could be made into alcohol. Musty grain, rotting potatoes, cornstalks, straw and, in fact, practically all of the farm waste could be utilized in this way. In the cities also there is much that is now thrown away that could be converted into alcohol for fuel purposes. It is only a matter of time when gasoline will be scarce and the price prohibitive to many everyday users. Alcohol answers all the purposes of gasoline in engines. This has been demonstrated in the government tests. Congress should rectify its error and make the manufacture of denatured alcohol free and untrammelled. Here is an industrial field that has been practically untouched. Denatured alcohol may become the fuel of the future and at least it will furnish practically unlimited resources for those who use internal combustion engines.

**Small Mules on a Decrease.**  
While there are many small and undersized mules, the average size is gradually and steadily increasing, due to better care in breeding and to better food and housing when they are young and growing. It studded early in life, no amount of after care and food will remedy the neglect or inattention. While extreme size is unusual and generally undesirable, good, strong, able-bodied and above medium sized animals are the only kind to raise, those from 15 to 15 1/2 or even 15 3/4 hands always being in good, paying demand, other qualities being in keeping. Those little 14-hand fellows may do some classes of work, and may find buyers in some sections, but why not breed fine, large ones which will sell for twice as much when it takes no longer to bring them to a saleable age than it does the former.

**Farms in Alaska.**  
"The prospects today for successful agriculture in Alaska are infinitely better than they appeared to be 11 years ago, when I began work there," says Professor Georgeson, formerly of Kansas, now representing the United States Department of Agriculture in Alaska. "Alaska will some day become the home of prosperous and successful farmers, but the farmers will probably come from the Scandinavian peninsula and from Finland, because they have been brought up under similar climatic conditions and have been reared in many instances under conditions less favorable to agriculture than Alaska affords. The word agriculture is meant to include the production of anything useful which comes from the soil, not only the growing of grain and the rearing of live stock, but also vegetables, fruit and flowers and dstrying."

**KANSAS LAND**

**WHY NOT BUY LAND OF THE OWNER AND SAVE FROM \$5 TO \$10 ON THE ACRE?** Land of all descriptions from \$2.50 per acre up. Send for circular and come and see us. **G. N. DAVIS & CO., Cimarron, Gray Co., Kan.**

**SUMNER COUNTY BARGAIN.**  
240 acres, 125 in cultivation, balance pasture, good living water, 6-room house; price \$45 per acre. Write  
**APPLING, HORTON & MEEK, Wichita, Kansas.**

**BEST FARM IN JACKSON COUNTY,** for the money. 297 acres, 200 under plow, 225 acres alfalfa, rest pasture, \$10,000 worth of improvements, half mile from town. Price \$30.00 per acre.  
**Holton, MANVILLE & BAILEY, Kansas.**

**NESS COUNTY KANSAS LAND.**  
Good soil as any in the state \$10 to \$15 per acre, well improved land \$15 to \$25 per acre. Partly rough at \$5 to \$8 per acre. Come before the new railroad gets here or write  
**J. G. COLLINS, Ness City, Kan.**

**80 ACRES NEAR HALSTEAD, KANSAS.**  
72 acres now in wheat, excellent alfalfa land, fair improvements, R. F. D., telephone, new school and church. Price \$4,500. Write  
**McDERMED & GETTER, Hutchinson, Kansas.**

**SHARON VALLEY ALFALFA FARMS.**  
Choice corn and alfalfa farms for sale in Barber county, Kansas. Crop failures unknown. Write for particulars and list. Address  
**WILLIAM PALMER, Medicine Lodge, Kansas.**

**THE BEST TOWN TO LIVE IN.**  
If you would like to live in the most beautiful city in the West, with unsurpassed education, business and religious advantages, in a city clean, progressive where real estate values are low, but steadily advancing, where living expenses are reasonable, a city with natural gas at lowest prices, address the Secretary of the Commercial Club, Topeka, Kan.

160 acre farm, good improvements, house worth \$4,500; best orchard, 1 1/2 miles from good town, high school. Smooth, rich corn and alfalfa land, corn is making 50 and 60 bushels this year. Good terms. Price \$94 an acre. Write to  
**V. J. BOSH, Marion, Kansas.**

**NESS COUNTY LAND.**  
320 acres 10 miles from Ness City, 100 acres in cultivation, 4 room frame house, barn, well and windmill, some good alfalfa land, place is all fenced, land lays good and in good locality. Price \$15.00 per acre; \$2,000 cash, three to five years time on balance.  
**LOHNES & CASON, Ness City, Kansas.**

**SCHUTTE & SHINEY,** the Rush county Kan. real estate hustlers; 30 years in the same old place. Good farmers raised from 25 to 47 1/2 bushels of wheat per acre here last season. We can sell this land at from \$20 to \$35 per acre. Good improved ranch land, 1/4 good farm land, at \$15 per acre. Good bottom land not over 5 miles from market at \$25 to \$35 per acre. Well improved and running water, plenty of timber. See us, or write us at La Crosse, Kan.

**SOLOMON VALLEY LAND.**  
We have farms for sale in Ottawa and adjoining counties, good upland improved, at from \$25 to \$50 per acre. Bottom land improved at from \$60 to \$125 per acre. You have not seen the best till you see the Solomon Valley.  
**A. E. ROBINSON LAND CO., Minneapolis, Kansas.**

**Sumner Co. Kansas Land for Sale**  
Wheat, oats, corn, alfalfa and hogs. All kinds of fruit and berries. So fine. Abundance of water. Fine climate. Farmers get rich here; so will you. Prices \$30 and up. Write us, information free. List your stock of merchandise for exchange.  
**H. H. STEWART & SONS, Wellington, Kansas.**

**BARGAINS IN ANDERSON COUNTY.**  
187 acre farm in Anderson Co., Kan. 100 acres of choice creek bottom land in cultivation, 45 timothy and clover 25 timber, balance pasture, 7-room house, stable 16x24, corn crib, granary, 1 mile to school, rural mail, price \$37.50 per acre.  
360 acres, Anderson county, Kan., 4 miles from Welda and Colony. 200 acres in cultivation, balance meadow and pasture, nice 7-room house, good barn, fine orchard rural mail, telephone, price \$35 per acre. This is a splendid stock farm. Let us show them to you.  
**SPOHN BROS., Garnett, Kan.**

**HERE IS THE BIGGEST SNAP OUT.**  
160 acres, 3 1/4 miles northeast of Fredonia, Kan. Good 1 1/2 story farm house with 5 rooms Good barn 24 by 30. Land well fenced with hedge and wire. Two acres orchard. 35 acres in cultivation. 70 acres pasture. Balance is meadow, part of which is tame grass. Land is well watered by two branches, 3 wells and one cistern. Land slightly rolling and one of the best bargains in Wilson county at \$35 per acre. It is a splendid home and nicely located. Write me about this.  
**C. R. CANTRALL, Fredonia, Kansas.**

**EASTERN KANSAS FARM BARGAINS**  
160 acres Dickinson county, near Solomon and Abilene, guaranteed perfectly smooth rich land, 7-room house, barn 28 by 48, 52 a wheat, one-third to purchaser, \$12,000—160 a. 17 mil Topeka, 5 mi. town. 40 a clover, all in cult., good 6-room house, barn 48 by 60, extra fine farm, only \$9,000; 80 a 17 miles Topeka, 75 a in cult., no waste land, new 5-room house, small barn, spring water, \$5,000. Write for list stating what you want, and we make specialty of selling farms worth the money.  
**WINGETT LAND CO., Stormont Bldg., 109 West 6th. A. J. WHITE, Farm Salesman.**

# ONLY \$91.25.

## For My High Quality, Guaranteed 4½ H. P. Gasoline Engine

I AM making a specialty of a 4½ H. P. gasoline engine which is best suited for vumping water, grinding feed, sawing wood, shelling corn, operating cream separators, churning and for general farm work.

**The Sensation of the Season is the Caldwell Special Gasoline Engine**

I challenge the world to produce an engine of equal merit to my **Caldwell Special** that can be bought for the price I offer you my engine. Give me a chance and I will prove to your satisfaction that the **Caldwell Special** is the engine for you to buy, because I can give you better value for your money than any one else. I sell my engine direct from factory and can save you the dealers', jobbers' and catalogue house profit. If this money is as good to you as to the other fellow, write me and I will prove to you all that I say.

All I ask is for you to take the engine, try it free for sixty days on your own farm and if you are not fully satisfied with the engine and convinced that I have saved you money, return the engine to me and I will pay freight charges both ways and it will not cost you one single cent to secure the proof I offer.

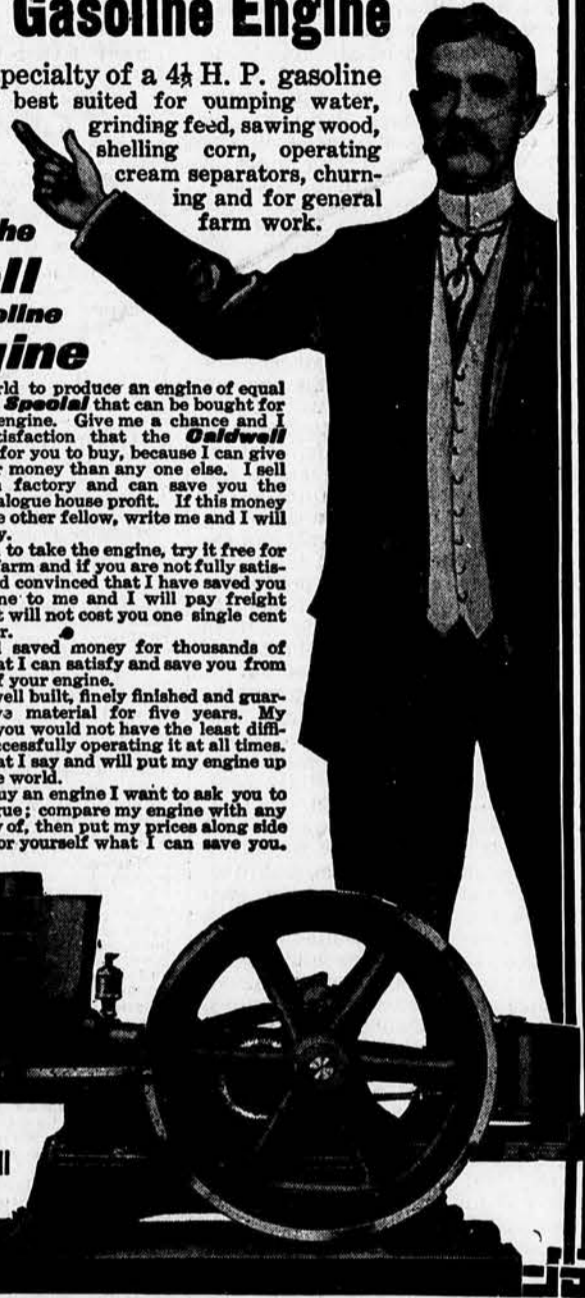
I have satisfied and saved money for thousands of purchasers and know that I can satisfy and save you from \$25 to \$100 on the price of your engine.

All my engines are well built, finely finished and guaranteed against defective material for five years. My engine is so simple that you would not have the least difficulty in starting and successfully operating it at all times. I mean just exactly what I say and will put my engine up against any engine in the world.

If you are going to buy an engine I want to ask you to write for my free catalogue; compare my engine with any or all engines you know of, then put my prices along side those of others and see for yourself what I can save you.

Write without fail for catalogue and price list.

J. D. Caldwell, Pres.  
The Caldwell-Hallowell Mfg. Co.  
506 Commercial St.  
Waterloo, Iowa.



# Western Printing Company

TOPEKA, KANSAS

(Printing Department of Kansas Farmer Co.)

We are making an offer which every user of printed matter should take advantage of.

Letter heads, envelopes and cards with your name and business printed on them.

500 Printed Letter Heads	- - -	\$2.00
500 Printed Envelopes	- - -	\$1.50
500 Business Cards	- - -	\$1.50
One Year's Sub. to Kansas Farmer		\$1.00
<b>Total - -</b>		<b>\$6.00</b>

WRITE US TODAY AND SECURE THIS

**\$6.00 Offer for \$5.00**

We also produce stock catalogs, folders, booklets and general commercial printing. Please allow us to submit samples and bid upon your work.

**\$10.00** Sweep Feed Grinder. **\$14.00** Galvanized Steel Wind Mill.

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

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

**GALVANIZED STEEL \$12.75 WINDMILL**

Sold direct from factory to user at wholesale price. Strongest guaranty. Send for catalogue. Prices will surprise you.

**THE OTTAWA MFG CO.**  
723 King St., Ottawa, Kansas

# HOME CIRCLE



### How Laddie Paid His Debt.

Little Betsy Baker sat on the porch-steps of her father's house and watched the people passing up and down the village street. It was the 20th of June and her seventh birthday. She held in her arms a big doll which was her mother's birthday present to her; and in her apron pocket was a cunning little purse with several compartments which was her father's gift. Now and then Betsy took it out and shook it, and something inside made a lovely, jingling sound.

Betsy's parents were poor and so the little girl had few toys and seldom any money of her own to spend; therefore, a new curly-haired doll and a purse with fifty cents in it made this seventh birthday of hers a very happy and wonderful occasion.

Presently the rural postman came in sight driving his gray horse hitched to the funny little blue cart. He was on his way to deliver the daily mail to the people out in the country.

The postman was a great friend of Betsy's. He was an old man with twinkling blue eyes and a cherry voice. He came by at this hour every day and Betsy was almost always on the step watching for him. When there were no letters he would wave his hand to her, but when there was mail for the house he would come into the yard and give the letters into her own hands. He was always jolly. Today, as he came up the walk, he sang a funny little rhyme to her which made Betsy laugh—

"Little Betsy Baker—  
Take her up and shake her!"

The postman's name was Gerry.

After he had driven on down the road, Betsy heard a great noise at the other end of the street. Then she saw quite a lot of boys running that way, and presently a wagon with a body made of slats came in sight, followed by a policeman and several rough-looking men. Each of these men carried long poles with strong nets attached to them. In the wagon, behind the wooden slats, which made a sort of cage, were a number of dogs, some yapping and barking, some howling piteously.

Betsy ran down to the gate. By and by a man came along, and she asked him what it all meant.

"The dog-catchers are out today," said he, "and every dog that is not wearing a collar to show that his tax has been paid, will be taken up by these men and carried to a place called the 'pound.' If not claimed and the tax paid within three days the dogs are all killed."

This seemed very cruel to Betsy, and she watched them as they came down the street with two bright red spots in her cheeks.

Just as they reached the corner of her yard a beautiful Scotch collie came through the alleyway. He wore no collar, but his lovely, yellow-brown coat glistened in the sunshine.

Immediately the men approached, and, throwing the net over the unsuspecting collie, he was hauled into the wagon and shut up with the other dog prisoners.

"Oh, please, please don't take him!" cried Betsy, running into the street and grabbing the policeman's coat.

"It is a shame to put him in jail for nothing, and to kill him because he hasn't any money to pay his tax!" And big tears rolled down the child's cheeks.

The policeman patted her head and said:

"It can't be helped, little girl. If somebody can raise one dollar and twenty-five cents for him between now and Saturday morning, he can be bailed out of the 'pound' and will belong to the person who pays his tax."

Betsy went slowly back to the porch steps. All the brightness seemed to have gone suddenly out of the June sunshine.

Presently her cousin Tom came along. Seeing Betsy on the steps, he called out:

"Hello, Betsy!"

Instead of answering and running

down to the gate to talk as she usually did, Betsy only waved her hand. So her big cousin (Tom as twelve years old) knew that something must be wrong with the little girl.

"What is the matter, Betsy?" he asked, as he sat down by her side.

"Somebody's in jail," announced Betsy solemnly.

"In jail?" exclaimed Tom.

"Yes, and going to be killed on Saturday if I can't get a dollar and a quarter before then," continued she.

Then she told him all about the cruel dog-catchers and the pretty collie that they had carried off a prisoner.

When she had finished her story, she asked:

"Tom, if I were in jail what would you do?"

"Get you out," promptly answered the boy.

"Then will you help me get that poor collie out? He has no cousin nor anybody, and he cannot speak a word, but looked at me so pitifully!"

And Betsy's eyes filled with tears as she put her little birthday purse in Tom's hand and said:

"There is my birthday money, but it isn't even half enough. What shall we do?"

Tom thought a while, then a sudden idea occurred to him.

"We will make the money!" he cried.

"I know a way. We will have a store and sell ice-cream and lemonade to people passing by the gate."

So they began work at once.

The hired man helped Tom drag a big wooden box down to the gate to be used as a counter. This was covered with a white cloth. Two Japanese lanterns were hung to the branches of the tree just over the counter.

Tom's mother made a freezer of delicious strawberry ice-cream, and Betsy's mother gave the lemonade and loaned her very best tall glass pitcher.

Such fun as they had getting everything ready!

After supper Tom came over, and he and Betsy opened store, both standing smiling behind the counter.

Gerry, the postman was the first to stop. He said he was never so thirsty and bought four glasses of lemonade. When he heard Betsy's story of the dog in the "pound," he bought forty cents' worth of ice-cream and carried it home in a paper box.

Then all the children in the neighborhood came and one or two of the grown people. And they all heard the poor dog's story, and each bought something at the children's store.

By nine o'clock Tom and Betsy were "sold out," and had nearly four dollars. So Betsy came to her house leading the pretty collie, now released from the "pound," by a string. He was Betsy's dog now for good and all, and she named him "Laddie."

A year passed, and Betsy grew to love Laddie very dearly, and the faithful dog followed her everywhere.

She had no brothers nor sisters of her own, so Laddie was her sole companion and greatest friend.

One day she went out to look for wild strawberries on the hillside near where the Wabash Railroad spans a narrow stream by means of a high trestle. Thinking that she might find finer berries on the other side of the stream, she resolved to walk across the trestle. She was about half-way across when she slipped and was caught fast between two ties! In vain she struggled to free herself. In vain she cried for help. Laddie barking and pulling at her dress with his teeth.

Weak from her efforts to extricate herself, she finally fell exhausted upon the track, giving now and then a piteous moan!

In the meantime Gerry, the postman, was returning to the village after delivering his daily mail. Passing along the road under the high trestle his attention was attracted by the distressed barking of a dog. Looking up, he saw at the top of the embankment Betsy's dog Laddie.

He called to him. The dog would not come, but continued to run back and forth from the trestle to the side of the embankment barking and

whining and gazing constantly toward the track.

Leaving his horse standing in the road, Gerry swiftly climbed the embankment. There, caught fast in the middle of the track, was poor little Betsy Baker!

Far off beyond the bend he heard the rumble of an on-coming train!

Swiftly he extricated the now unconscious child from her perilous situation and ran with her in his arms across the trestle, Laddie, wild with joy, leaped at his heels. Hardly had he reached the safety of the bank when the fast express dashed past!

Gerry drove up to Betsy's father's house with the little girl in his lap and Laddie sitting proudly beside them on the seat.

Before night all the town knew how Laddie had paid his debt of gratitude to Betsy Baker.—Mary Miner Lewis, in Farm and Fireside.

SOUP RECIPES.

SOUP STOCK.

For four pounds of lean beef from shank, allow four quarts of cold water, two small onions, one small teaspoon mixed whole clover, allspice berries, celery seed and pepper corns, one bay leaf, one cup diced vegetables (turnips carrots, celery and parsley) one tablespoon salt. Cut the meat small, cut the bones. But all except the onions and one-third of meat into the soup kettle and pour cold water. Brown the onions in the beef fat and marrow and fry meat well. Put all in the soup kettle and bring slowly to boil. Simmer closely covered until meat is in rags. Strain through a cheese cloth into a large bowl. When cold remove the fat. Clarify with the white of an egg and shell if desired. This foundation may be used for a great variety of soups.

CREAM OF CORN SOUP.

Remove corn from one can, cover with cups water and simmer one-half hour. Press through a sieve. Scald three cups milk, add one tablespoon butter, and one-half cup cream. Season with salt, pepper and celery salt. Stir until heated. Take from the fire and add the beaten yolk of one egg.

PEA SOUP.

One can peas, one teaspoon sugar, one pint cold water, one pint milk, one slice onion, two tablespoons butter, two tablespoons flour, one teaspoon salt, one-eighth teaspoon pepper. Simmer peas, sugar and water twenty minutes. Put through a sieve, re-heat, and thicken with butter and flour cooked together. Scald milk with onion, remove onion, and add milk to pea mixture. Season and serve hot.

CREAM OF TOMATO SOUP.

Stew one pint of tomatoes ten minutes, with one slice onion and one bay leaf. Put through a sieve. Heat one quart milk. Cook together one tablespoon butter and one tablespoon flour. Add gradually the hot milk and cook until smooth. Add to the tomato pulp one teaspoon soda-level, one teaspoon sugar. Stir into the milk. Season and serve hot.

Our Many Selves.

The organization of the human mind is fully as complex as the organization of an army, so various are the moods, so multifarious the characters under which each individual may show himself, so hard is it to insure action as a unit, so great is the danger of disruption and dissociation into inharmonious elements.

"Within my earthly temple there's a crowd;

There's one of us that's humble, one that's proud;

There's one that's broken-hearted at his sins,

And one that, unrepentant, sits and grins;

There's one that loves his neighbor as himself,

And one that cares for naught but fame and pelf.

From much corroding care should I be free,

If once I could determine 'which is me.'

Nervous breakdown is one of the results of not knowing "which is me," or how "I" in a given emergency may act, writes Dr. J. J. Putnam in Good Housekeeping Magazine.

Send For Our Big Free Book

Established 1884. 900 students last year. Graduates take highest rank. No saloons, no better advantages or finer school atmosphere anywhere. We have many openings with high salaries for our well trained graduates. Write for fine free prospectus. LINCOLN BUSINESS COLLEGE, 11 North 13th St., Lincoln, Neb.



NUT DAINTIES.

Nuts possess so many excellent food qualities that it is worth while trying some new and dainty ways of preparing them occasionally. Grown people as well as children generally like cakes containing nuts. Following are a few choice and tested recipes:

PEANUT COOKIES.

Cream 1/2 cup butter, add 1 cup sugar, 4 eggs, well-beaten, and 1/2 cup milk. Sift and mix together 2 cups flour, 1 teaspoonful salt and 4 level teaspoonfuls baking powder. Add 1 tablespoonful lemon juice and 2 cups chopped peanuts. Beat up and drop from a teaspoon in buttered paper or well-greased pans, at least 1 in apart. Place a half peanut on each cake and bake in a moderate oven until light brown. If you do not care for many of these cookies at a time, just take half of all the ingredients called for. Hickory nut cookies can be made in the same way; but if walnuts are used, take a little less butter since walnuts are rich in oil.

CREAM NUT FUDGE.

This makes a nice change for chocolate fudge. Take 2 cups granulated sugar and scant 3/4 cup milk, bring to the boiling point, and boil until a soft ball can be formed by dropping a little in cold water, then add 1 tablespoonful butter. Remove from the fire and add 1 cup chopped nut meats and vanilla to taste. Stir until smooth; then pour into buttered pans to the depth of about 1 inch, and cut into squares.

NUT STUFFED FRUIT.

Nut stuffed dates, prunes or raisins are nice and make a wholesome confection for the children. Mix the chopped nuts with "fondant" and add a few drops of flavoring. Remove the stones from dates or prunes and fill the cavity with the nut mixture. The fruit can then be dipped in melted fondant or in sugar.

NUT PUDDING.

This is worth trying: Cream 1/2 cup butter, add 1/2 cup sugar, 2 eggs, well-beaten, and 3/4 cup cold water. Sift 3 teaspoonfuls baking powder with 1 1/2 cups flour and add to the creamed mixture; then add 1/2 cup nut meats, chopped and dredged with flour. Bake in a moderate oven 1/2 hour. Serve with some nice sauce.

NUT MARGUERITES.

These are nice served with light refreshments: Put in a saucepan 1 cup sugar, 1 tablespoonful water and 1 teaspoonful vinegar. Beat the whites of 2 eggs to a stiff froth, and have ready 1/2 cup chopped walnuts, almonds or hickory nuts, as preferred. When the sugar syrup makes a hard ball when dropped in cold water, or spins a thread when dropped from a spoon, add the nut meats and 1 teaspoonful vanilla. Pour this over the whites of eggs and beat until light and foamy and just stiff enough to spread nicely. Drop on oblong crackers and spread. Place in the oven a few moments to glaze. A filling for any plain cake can be made in the same manner; and nut and raisins are nice combined for this purpose.

PEANUT JUMBLES.

Cream 2 tablespoonfuls butter, add 1 cup sugar and 1 well-beaten egg. Dissolve 1/2 teaspoonful soda and 1 teaspoonful cream-tartar in 1 tablespoonful milk and add enough flour to make a soft dough. Roll out thin on a floured board and cut with a jumble cutter. Brush each cake over with the beaten white of egg and then sprinkle with chopped peanuts. Sprinkle with sugar and bake a delicate brown.

Roup is apt to be prevalent at this time of year and as prevention is much better than a cure, see that the quarters of the chickens are perfectly dry and that no draft can blow on them in their roosting places.

Cheaper Cuts Have Greater Food Value.

A Colorado Agricultural College bulletin in referring to selection of beef cuts says that the most expensive cuts of meat comes from the parts of the animal where the muscles are little used. These cuts are tender, fine grained and of a good flavor. On the other hand, those parts much used produce tougher cuts, but they are often very juicy and of fine flavor if properly cooked. The tough meat forms more than half of the animal, but is just as nutritious as tender meat. While, in many cases, the tender cuts are desirable and preferable for people who have a large income, the cheaper cuts may be used to better advantage if well cooked.

Mitchell County Breeders' Association

C. B. Kern, President.

J. F. Howard, Secretary.

Nothing but first class animals offered for sale for breeding purposes.

SHORTHORN CATTLE.

SHORTHORN CATTLE—50 head registered cattle. Herd headed by Royal Goods 298325, by Select Goods, by Choice Goods. Young bulls ready for service, for sale. MEALL BROS., Cawker City, Kan.

SCOTCH AND SCOTCH TOPPED Shorthorns. 40 head. Herd Headed by Popular Knight, by Gallant Knight. Some choice bull calves of fancy breeding for sale. JOHN STROH, Cawker City, Kan.

ELMVALE STOCK FARM, Shorthorn cattle. Herd headed by the Scotch bull, Highland Laddy 243179 by Brave Knight by Gallant Knight dam Daisy Bell by Imp. Lord Haddo. Young stock for sale. For information address Frank P. Cooke, Beloit, Kan.

DUKE OF DUNDEE 285352, by Archer 205740, dam by Gallant Knight is at the head of my herd. 6 cows by Rose Duke and some by Scotchman. Inspection invited. CHAS. S. McCLEARY, Beloit, Kan.

UPLAND HERD OF SHORTHORNS. Headed by the Scotch Duchess of Gloucester bull Dreadnaught. 1 red bull 30 months old out of a Lord Mayor dam for sale. GEO. W. BEEMIS, Cawker City, Kan.

LOUCST GROVE SHORTHORNS—Herd Headed by the pure Scotch bull Goster's Model 287840. Three Scotch topped yearling bulls for sale. Also a few cows with calves at side. ELMER C. CRETZ, Beloit, Kan.

A YOUNG HERD of up-to-date breeding. Everything recorded. Our herd bull Alfonso by Magnet has produced us some great calves this season. BRINEY & BRINEY, Beloit, Kan.

BOOKDELL STOCK FARM. Shorthorn cattle, Poland China hogs, Silver Laced Wyandottes.

E. E. BOOKER & SON, Beloit, Kan.

JENNINGS' SHORTHORNS — Some young bulls for sale by Senator by Hedgewood. Also a few got by Spartan Viscount. Prices right. 2 miles north of Simpson, Kan. S. G. JENNINGS, Simpson, Kan.

FOR SALE—A few young Shorthorn cows and some young bulls ready for service. Best of breeding. Write for information and prices. VINTON A. FLYMAT, Bernard, Kan.

HEREFORD CATTLE.

HEREFORD BULL CALVES for sale. Berkshire boars for sale. Spring farrow. Will trade 2 or 3 for gilts. Boars by Commander out of dam by Speculation; grand dam, Alice Majestic, champion sow at Kansas City Royal. W. B. & J. M. Rodgers, Beloit, Kan.

50 HEREFORD CATTLE comprising the H. B. Woodburg herd. Some famous cows in this herd. 5 young bulls of serviceable age for sale. 4 miles from Tipton, Kan. 3 from Cawker City. JOHN SCHMIDT & SONS, Tipton, Kan.

100 HEAD OF HEREFORDS. The home of Caster 259475, the winner in every big show he was ever in. A few choice young heifers and cows for sale. F. L. BROWN & Co., Sylvan Grove, Kan.

ANGUS CATTLE.

ABERDEEN-ANGUS CATTLE — A young but fashionably bred herd. Some fine spring calves to price later. BOY C. BIRT, Beloit, Kan.

ANGUS CATTLE, the feed yard and show yard type. Young bulls for sale this winter. Inspection invited. HARRY BARNES, Beloit, Kan.

PERCHERON HORSES.

REGISTERED PERCHERONS — The home of Vidoque (Imp.) 40403, also the brood mare Risetta (Imp.) 51115. Inspection invited. Farm adjoins town. E. N. WOODBURY, Cawker City, Kan.

REGISTERED PERCHERON HORSES — In stud: Imported Rabelais 42529 by Cosaque by Theidus, who sired Callipo and Casino. Visitors welcome. C. J. JOHNSON, Solomon Rapids, Kan.

THE HOME OF JACQUE W. 41659 by Tlatrey, dam Imported Risetta. Inspection of my Percherons invited. RALPH G. MCKINNIE, Glen Elder, Kan.

COLEDALE STOCK FARM—The home of three first prize winners at the International. Nothing but the best in this herd. Come and see us. FRANK A. COLE, Bernard, Kan.

GRANITE CREEK STOCK FARM. Percheron and Standard-bred horses. Make known your wants to M. A. SMITH, Supt., Cawker City, Kansas.

COACH HORSES.

LAWDALE STOCK FARM — Oldenburg German Coach horses. International prize winning stock. A tried stallion for sale. Inspection invited. JOSEPH WEAR & SONS, Bernard, Kan.

POLAND CHINAS.

EUREKA HERD POLANDS — Durocs. I breed both and have a nice lot of serviceable boars of both breeds for sale and a few choice gilts. Priced right. W. H. SALES, Simpson, Kan.

LEBAN CREEK STOCK FARM—Poland Chinas. 100 spring pigs both sexes, for sale at private treaty. Also a few yearling sows bred for October farrow. LOGAN & GREGORY, Beloit, Kan.

DUROC JERSEYS.

GOLDEN RULE STOCK FARM—Gilt edged Duroc Jerseys. 40 spring pigs, both sexes for sale at private treaty. Farm adjoins town. LEON CARTER, Asherville, Kan.

ALFALFA STOCK FARM. The home of the best in Duroc Jerseys. Choice boars, fall sows, in fact, most anything you want. PEARL H. PAGETT, Beloit, Kan.

HAMPSHIRE.

HAMPSHIRE HOGS. 40 spring pigs, both sexes, for sale. Write for prices. A. B. DOYLE, Rural Route 1, Beloit, Kan.

OHIO IMPROVED CHESTERS. O. I. C. SWINE tracing to the famous Kerr families and the Big Mary family. Pigs of both sexes for sale. Write T. C. WRENCH, Beloit, Kan.

AUCTIONEERS.

COL. H. H. VANAMBURG, General and Live Stock Auctioneer. Phone 434. BELOIT, KAN.

COL. F. L. SMITH, General and Live Stock Auctioneer. Phone 943. BELOIT, KANSAS.

THE NATIONAL AUCTIONEERING SCHOOL OF AMERICA

Endorsed by the Peer Auctioneers of the world. Greatest opportunity ever offered to young men of every station of life at minimum cost. A three month's scientific instruction by mail, which is absolute and positive, by which ambitious young men can learn art and science of conducting a public sale, thereby fitting himself for the rich earnings of from \$15 to \$100 per day. Write at once for free catalog explaining thoroughly the possibilities in store for you.

THE NATIONAL AUCTIONEERING SCHOOL OF AMERICA. Room 303, F. & M. Bldg., Lincoln Nebraska.

YOUNG MEN and WOMEN

Earn part of your tuition and expenses, while securing your education. An old established school, new equipment, thorough training, and a position is secured for all graduates. Write for catalog. Address Independence Business College P. O. Bldg., Independence, Kan.

Independence Business College

P. O. Bldg., Independence, Kan.

LEARN TELEGRAPHY

And earn from \$52.00 to \$125.00 per month. We have railroad wires giving actual experience. Owned and operated by the A. T. & S. F. Ry. Write for illustrated catalog. Desk F., SANTA FE TELEGRAPH SCHOOL, Topeka, Kansas.

SANTA FE TELEGRAPH SCHOOL, Topeka, Kansas.

IF YOU WANT A Business Education

and a money making Business Position, write to

Business Colleges

Box 353 F. Hutchinson, Kan. Largest in Kansas. Students come from fifteen states.

PENMANSHIP BY MAIL

Beautiful Book, containing more than 70 fine specimens of Penwork. FREE to all who wish to improve their Penmanship. Address

THE HAUSAM SCHOOL, Box 255 M, Hutchinson, Kan.

# DE CLOW'S Fourth Blue Ribbon Sale

OF IMPORTED

## PERCHERON AND BELGIAN MARES

WILL BE HELD AT

Cedar Rapids, Ia., Thursday, Dec. 9



### 50 HIGH CLASS MARES 50

A top offering from 172 head imported this year, and comprising the finest line of imported Percheron and Belgian Mares in the United States.

### 40 PERCHERON & 10 BELGIAN MARES

will be offered on their merits at this time. They are big, smooth, and good boned. Among them are show mares and fine match teams. All are a good, useful lot of young mares, and they are bred to the

best of stallions.

Do not miss this great and last opportunity of the year to secure money-making brood mares from the largest and best collection of mares imported this year.

The sale will be held at the barns, located on the street-car line between Cedar Rapids and Marion.

Write for the sale catalog, mentioning Kansas Farmer.

**W. L. De CLOW, - CEDAR RAPIDS, IOWA**  
COL. CAREY M. JONES, Auctioneer.

# Shorthorns, Percherons AND Poland Chinas



Lancaster, Kan.,

Wednesday, Dec. 8

In the sale will be 20 cows bred to Moorish Duke, by Imported Royal Pride, and Victor Archer, by Victor. Five Victor Archer bulls, one by Scotchman and two by Moorish Duke, and eleven 2-year-old heifers by Moorish Duke.

15 head Percherons include two 3-year-old stallions, two 2-year-old stallions and a big yearling and one suckling stallion colt. Balance are mares, all ages. The Percheron horses are the property of W. H. Graner.

50 head Poland Chinas—10 tried. Sows bred to Guy's Monarch, On the Watch, Big Chief, etc. Write today for catalog.

**H. C. GRANER,**  
LANCASTER, KAN.

JAMES W. SPAKRS, Auct. JESSE JOHNSON, Fieldman

## FIELD NOTES

### FIELD MEN.

O. W. Devine.....Topeka, Kan.  
Jesse R. Johnson.....Clay Center, Kan.  
J. W. Johnson.....Beloit, Kan.

### PURE BRED STOCK SALES.

Feb. 8-9, Lakewood Percherons, H. C. McWilliams & Son, Sioux City, Iowa.  
Feb. 15, Whitewater Falls Percherons at Wichita, Kan., J. C. Robison, Towanda, Kan.

### Draft Horses.

Feb. 1, 2, 3, 4—Percherons, Belgians, French Draft, Shires, Clydes, Trappers, at Bloomington, Ill. C. W. Hurt, manager, Arrowsmith, Ill.

### Jacks and Jennets.

March 1st and 2d—Monsees & Son, Smithton, Mo.  
March 1st and 2d—L. M. Monsees & Son, Smithton, Mo.

### Jersey Cattle.

Feb. 15—O. P. Dovel, Auburn, Neb.

### Sherborns.

Dec. 8—H. C. Graner, Lancaster, Kan.  
Feb. 24—Glover & McGlynn, Grandview, Mo.

### Holstein-Friesians.

Feb. 8-10—Henry C. Glissman, Station B, Omaha, at South Omaha, Neb.

### Poland Chinas.

Dec. 8—H. C. Graner, Lancaster, Kan.  
Dec. 11—H. N. Holdeman, Meade, Kan., at Pratt, Kan.  
Dec. 11—H. N. Holdeman, Meade, Kan., sale at Pratt, Kan.  
Jan. 7—B. M. Bell, Beattie, Kan.  
Jan. 22—H. B. Vanhooser bred sow sale, Eldon, Mo.  
Jan. 26—W. W. Martin, Anthony, Kan.  
Jan. 27—F. G. Nies & Son, Goddard, Kan., sale at Clearwater, Kan.  
Feb. 12—D. A. Wolfersperger, Lindsay, Kan.  
Feb. 15—C. H. Pilcher, Glasco, Kan., at Concordia, Kan.  
Feb. 16—J. H. Harter, Westmoreland, Kan.  
Feb. 23—G. S. Hamaker, Pawnee City, Neb.  
Feb. 25—Chas. O. Parsons, Clearwater, Kan.  
Feb. 25—Lee Gross, Nelson, Neb., and John Barnard, Angus, Neb., at Nelson, Neb.

### Durocs

Jan. 6, H. E. Fisher, Danville, Kan.  
Jan. 11—W. M. Puttman, Tecumseh, Neb.  
Jan. 24—W. L. Addy & Son, Parnell, Mo.  
Jan. 27—Thompson Bros., Garrison, Kan.  
Jan. 31—J. E. Jones, Clyde, Kan.  
Feb. 1—Pearl H. Pagett, Beloit, Kan., and R. G. Sollenbarger, Woodston, Kan. Combination sale at Concordia, Kan.  
Feb. 2—E. M. Myers, Burr Oak, Kan.  
Feb. 3—Rinehart & Slagle, Smith Center, Kan.  
Feb. 4—W. C. Whitney, Agra, Kan.  
Feb. 8—Samuelson Bros., Manhattan, Kan.  
Feb. 9—Samuelson Bros., Cleburne, Kan.  
Feb. 9—Miner & Cross, Guide Rock, Neb., at Superior, Neb.  
Feb. 10—Samuelson Bros., Blain, Kan.  
Feb. 14—R. B. Marshall, Willard, Kan.  
Feb. 17—Frank Elder, Green, Kan. Sale at Clay Center, Kan.  
Feb. 18—E. Goethe, Leonardville, Kan.  
Feb. 21—F. T. Fitch, Minneapolis, Kan.  
Feb. 23—Pearl H. Pagett, Beloit, Kan.  
Feb. 23—R. G. Sollenbarger, Woodston, Kan.

### Berkshires.

Feb. 15—F. T. Hadachek, Wayne, Kan.

### Combination Sales.

Dec. 11-12—Enid Fine Stock Show and Sale, F. S. Kirk, Manager, Enid, Okla.  
Feb. 16, 17, 18—Mitchell County Breeders' Association, Beloit, Kan.

E. S. Myers of Chanute, Kan., makes a change in his advertisement this week and announces four specially fine Shorthorn bull calves for sale. They are bred in the purple and their dams are of the broad backed, heavy milking kind. This is the kind that makes money. These cows are used as dairy cows so that tells the story. Write Mr. Myers about these calves and mention Kansas Farmer.

McLaughlin Bros. of Columbus and Kansas City write: "In the regular Percheron classes at the New York Horse Show, which closed Saturday night, we won two firsts, two seconds, three thirds, one fourth prize and reserve championship; in all we won \$650 in prizes. This is more than was won by any other Percheron exhibitor. We only exhibited nine horses and think that this is an extraordinary record." So do we.

Secretary F. A. Erick of the Southwest Kansas Poultry Association announces that the 6th annual poultry show will be held at Spearville, Kan., this year on December 14-18, and that they have the most liberal premium list yet offered. They offer \$4 for pen, \$1.50 for first in class and \$5 for sweepstakes. Other prizes in proportion. Address the secretary at Dodge City, Kan., until show week.

Enclosed find change of copy for my Shorthorn ad. I wish to thank you for the good results I have had in the four months the one-inch card has run. I have sold at good average prices the following cattle to E. E. Petosie, Ness City, Kan., two cows, one heifer and one bull; to D. O. Cockran, Westmoreland, Kan., one bull and one heifer; Geo. W. Vick, Junction City, Kan., one bull. All these cattle brought good prices and I am well pleased with results. All sold through my ad in Kansas Farmer.—D. H. Forbes & Son, R. D. S. Topeka, Kan.

"Popular Fruit Growing" (Just off the press), is the title of the latest book published by the Webb Publishing Company, St. Paul, Minn. It is one of the best works of Professor Samuel B. Green, of the Minnesota Agricultural School, College and Experimental Station. Like all of this author's books, this one is intensely practical. It is so copiously illustrated, and its directions are so plainly and tersely given, that with a copy at hand, there need not be an unabsorbent ignorance of the art and its requirements. Contains lists of fruits recommended for each state, etc. The Book is substantially bound, contains 300 pages, size 5 1/2 x 7 1/2 inches. Price, \$1.00.

In a recent letter to Kansas Farmer, Henry C. Glissman, owner of the Rock

Brook herd of Holstein-Frisian cattle, Station B, Omaha, Neb., writes: "One of my best sales was made recently to H. E. Bullock of Glasco, Kan., who through my ad in your paper bought five head of fine three-year-old heifers and a yearling bull. These were all selected from the three carloads which I brought from New York state last spring, and were strong in breeding and individuality. Among other recent sales was that of a fine yearling bull to Geo. E. Briggs of Belvue, Colo.; a bull calf to J. H. McNeely of Aron, S. D.; eight cows and a bull to Smith Bros. of Plainview, Neb., and a number of other good ones which went to neighboring states. In a few days I shall ship to A. Michaelson of Clay Center, Kan., two of the finest cows that ever left our farm. One cow, Cora Posie, is eight years old, and has for the past three years given an average of 14,000 pounds of milk per year. I still have on hand about 120 head of all ages, among them some fine bull calves and some young bulls ready for service. My sales during the past season were the best of any since Rock Brook herd was established some 32 years ago."

The importers and breeders of central Nebraska are very optimistic over the prospects for a record breaking sale season in the line of draft stallions and mares as the amount of inquiries which are being received by the different dealers would indicate that the supply will be even more limited this year than it was last season and all the reliable importers and breeders were sold up very close early in the spring. Messrs. North & Robinson of Grand Island, Neb., claim they could have made at least 40 more sales of stallions if they had been equipped with the big ones of suitable age to go into heavy breeding. This firm with the big ones of suitable age to go into heavy breeding. This firm have made calculations on being ready for any such emergency that may arise the coming season by importing a great many stallions and mares and have them ready for market early. They claim they can save the purchaser a great deal of money if they can sell them before the season has advanced and a great amount has been spent on the horses in getting them in shape to show at their best. Why wouldn't it be a profitable move for the purchaser to buy one of these big imported or home bred colts in the rough and put them in proper condition themselves thus saving this extra expense and assisting to stock the farm with registered draft horses at a nominal figure. Any one who wishes to consider this proposition and will send a postal card to Messrs. North and Robinson will receive one of their large illustrated 1910 catalogs free and it will contain a fine line up of Percheron, Belgian and Shire stallions and mares. Any one who can call on them at their mammoth barns at Grand Island, Neb., will be cordially received and if any transactions are made the purchaser is assured of complete protection as the reputation and standing of this firm is gilt edged and as to the quality of their horses, the recent state fairs and horse shows awarded them 59 ribbons, twenty-nine of them firsts and sweepstakes besides several gold medals and the silver cup awarded by the Percheron Society of America. Send for their catalog.

### Wiley's Big Boned Boars.

W. E. Wiley, Steele City, Neb., announces that he will sell two Poland China herd boars that are worth while. He can not use them any longer in his herd. They are both good and sure breeders and of the big boned Nebraska kind. If your herd boar has quit or if you want some new blood in your herd buy one of these Expansion boars. They will be a credit to any man's herd. Get busy as this advertisement will not appear again.

### The Highland Herd of Duroc-Jerseys.

Frank Elder, owner of the Highland herd of Duroc Jerseys at Green, Kan., writes as follows: "I am selling quite a number of my boars and am getting lots of inquiries for gilts and sows. I just sold three King of Coles, Ill. pigs to go to J. B. Walker, Lathrop, Mo., Ford & Smeltz, Enterprise, Kan., and J. B. Glitzen, Columbus, Neb., so you see they are moving some. Now the Kansas Farmer is doing its share for me for which please accept my thanks. Your fieldman, Mr. Jesse Johnson, looked over my spring pigs and pronounced them an extra good bunch."

### A Good Seed Grader.

The Chattam Fanning Mill Seeder and Grader is made by the Manson Campbell Co., of Detroit, Mich., and is a marvel of efficiency. It cleans and grades all kinds of seeds or grains, from corn and beans to timothy, alfalfa, etc. is remarkably easy to operate and will give a man a life time of service. As a matter of fact, seeing an unusually liberal offer on this mill is what suggested this article. The manufacturers seem determined that every farmer shall have one or try one at least, because they offer to pay the freight on one in advance to anybody, anywhere and give a free trial of 30 days without asking money down or deposit in advance. Also Mr. Campbell offers to let a buyer have a year in which to pay for it. As this firm sells direct from the factory, it is possible for them to make low prices, and it goes without saying that anything from the Manson Campbell factory is as good as it can be made. They publish a fanning mill book, called Book No. 114, which is an eye opener as to

### I HAVE THE LARGEST JACKS IN THE WORLD.

In both imported and home bred. I have sold over seven hundred jacks from my farm here and they have sired and are siring the best mules in the United States. My prices are lower than any other man on earth for good first-class jacks. Let me show you before you buy.

W. L. DeCLOW,  
Cedar Rapids Jack Farm,  
Cedar Rapids, Ia.

### DUNHAMS' PERCHERONS



Fourth large importation within the year arrives November 23rd, which, added to our present stock, offers intending purchasers the finest collection in America. If you want the best horses, horses with bone, quality, size, action and best breeding stallions or mares; if you want fair and liberal treatment; if you want lowest prices consistent with good merchandise, visit Oaklawn. Catalog shows the place and the horses.

W. S., J. B. & B. Dunham, W yno. Ill.

what money makers these machines are. Their book gives facts and figures which are startling. And they are authentic, coming from the highest sources. The farmer who does not own a fanning mill will do well to read this book and get a mighty liberal offer on a machine he cannot afford to be without.

Institute Program. Program of Farmers' Institute, Great Bend, Kan., December 6 and 7: MONDAY MORNING. 9:30. Placing Exhibits. 10:30. Experiences with disking before plowing or listing. James W. Clarke, James MONDAY AFTERNOON. 1:30. The Live Stock Interest: "Feeding Cattle on High Priced Feeds," Thomas Clayton; "More and Better Hogs," Will Merritt; "Sheep on the Farm," Mat Towers; "The Farm Horse," N. L. Duscheene; "Winter or Summer Feeding," G. C. Wheeler. TUESDAY MORNING. 10:30. Pasture and Forage Interest: "Some Alfalfa Problems," E. E. Russell; "Will Clover Succeed in Barton Co.," Robt. Doonan; "Experiences With Grasses," F. C. McKinney. 11:15. "Improving Our Forage Crops," H. T. Neilsen. TUESDAY AFTERNOON. 1:00. Business Meeting. 1:30. "Farm Dairying," Prof. Andrew Logan. General Discussion. 2:00. "Poultry for Profit on the Farm," Mrs. Henry Harper. 2:30. "Improving the Farm Home," Mrs. Theo. Hartman. 3:00. "Better Farm Management," G. C. Wheeler.

The Hendershot Percherons and Jacks. O. P. Hendershot, Hebron, Neb., who is well and favorably known to Kansas farmers as the Percheron horse and jack man, was visited recently by a Kansas Farmer fieldman. We were invited to drive over to the breeding establishment which is now located on Mr. Hendershot's fine farm just across the river from Hebron. We went and were glad we went. We were shown 135 Percheron stallions and mares that constituted the finest horse show we ever had the pleasure of looking at. Ten head of the stallions will weigh over 2,000. Big beautiful fellows and sound as a dollar and guaranteed by Mr. Hendershot in his usual highly satisfactory way. The mares many of them right up around the 1,700 mark are the wonder of this Percheron herd. There are 10 match teams among them and several are bred to Casino and all are with foal. A few are imported but most of them are American bred. The farmer or breeder who is going to buy Percherons this winter will make a big mistake if he does not go at once to Hebron and investigate this offering of Mr. Hendershot. Mr. Hendershot makes the statement that his barns at the present time contain more good mares, the breediest, best feed and bone and size than any other barn in America. He also makes this statement in the form of an offer to Kansas Farmer readers that if you do not find the best lot of mares and stallions you ever saw in one place before, he will pay your expenses. Mr. Hendershot certainly has an extra large number of high-class Percherons that you should see before buying. Hebron, Neb., is easily reached by going to Fairbury, Neb. You can leave there early in the morning returning that evening. Write O. P. Hendershot, Hebron, Neb., for further information. Mention Kansas Farmer when writing.

Mitchell County Breeders' Notes. Mitchell county is recognized as one of the fine stock centers of the west. Her breeders' association with over 100 active members is one of the biggest and most active associations of the kind in the west. During the month of November almost \$10,000 worth of registered Percheron horses have been brought into the county. Many of them show animals and not a single one that is not above the average. During the month of November almost worth of high-class Shorthorn cattle have been purchased by Mitchell county breeders and added to their herds. If there is a better place anywhere for the prospective buyer of breeding animals of any kind the writer does not know where it is. The Mitchell County Breeders' Association is an organization of breeders in that county who expect to stay in the business and was organized for their own protection and the protection advantage of buyers who visit Mitchell county. The associations advertising section is always to be found in Kansas Farmer.

J. T. Schmidt, Tipton, Kan. was very much in evidence at the J. W. Robison Percheron sale at Towanda, Kan., recently. He topped the mare sale paying \$1,650 for Della, a six-year-old mare sired by Lorin and one of the famous Whitewater show mares. He also bought Naxarin, a great two-year-old stallion sired by Casino for which he paid \$1,750 and which was the top price paid for a stallion. Several other valuable mares were purchased by Mr. Schmidt and brought to his Mitchell county farm. Mr. Schmidt is one of the wealthy farmers of Mitchell county and one of the successful breeders of Percheron horses and Hereford cattle. At the Mitchell County Fair this season his exhibit was one of the best made and many of the prized blue ribbons were tied on his stock. His Herefords are, many of them, direct descendants of famous dams and sires, Tipton, Kan., is an inland town 10 miles south of Cawker City which is on the Central Branch of the Missouri Pacific. Mr. Schmidt would price reasonably some choice young Herefords. Address John Schmidt & Sons, Tipton, Kan.

One of the great herds of Hereford cattle in the state is the one owned by F. L. Brown & Co., Sylvan Grove, Kan. This herd numbers over 100 head and is headed by Castor 259475 and Armour Cavalier 173405 both herd bulls with reputations and are backed up with ability as producers. Castor was one of the most talked of Herefords last season winning at the International and the American Royal and in fact every place he was shown everything that was to be won. At the Mitchell County Fair where he was shown along with the balance of their show herd he was pronounced by competent judges as was Armour Cavalier, great bulls. Mr. Brown reports a good demand for bulls this season and states that they are being taken earlier this season than usual which is a good thing for both the buyer and seller. The writer has visited this herd and is sure that there are very few herds anywhere in the west that should be placed ahead of it. Remember this

herd when looking for breeding animals. You will find prices right, not cheap but just good honest prices. For information address, F. M. Brown & Co., Sylvan Grove, Kan.

Frank P. Cooke, proprietor of Elmdale Stock Farm and one of the best known Shorthorn breeders in Mitchell county at least, attended the Wales-Noffsinger sale at Osborne last week and made an addition to his herd that probably was one of the best he ever made, and he has made a number. Mr. Noffsinger, who is a well known Shorthorn breeder, consigned a few choice bulls to Mr. Wales' dispersion sale and the Scotch herd bull, Highland Laddy by Brave Knight by Gallant Knight, dam Daisy Bell by Imp. Lord Haddo was one of the attractions in this consignment. Mr. Cooke secured him at \$200 which he considers a bargain price. Mr. Cooke's herd of Shorthorns is one of the oldest in Mitchell county and is growing stronger every year. Mr. Cooke is a good judge of cattle and has never been known to hesitate in buying animals that he thought would add strength to his herd. It is this spirit that has caused his herd to take rank with the real good herds over the country.

Geo. W. Beemis, proprietor of the Upland herd of Shorthorn cattle, Cawker City, Kan., was a buyer at the Wm. Wales' dispersion sale at Osborne last week. He bought the famous two-year-old cow, Bell of Osborne, which will be a nice addition to his already fine herd. Mr. Beemis is building up one of the good herds in Mitchell county. His herd is small but very choice and is being handled with judgment and is sure to be found close to the top and that very soon.

C. E. McKinley, of Beloit, was another Shorthorn breeder to attend the Wales' dispersion sale last week. Mr. McKinley maintained the reputation which Mitchell county breeders have established for themselves of buying the best by buying both of the "Josephine" cows, paying for them \$140 and \$120 respectively, \$140 being the top of the cow offering. Both of these great cows trace to Imp. Josephine and were desirable. Mr. McKinley is a brother to Ralph McKinley, the well known Percheron breeder of Glen Elder, Kan. His herd of Shorthorns is young but nothing common is being added to it. Logan & Gregory, of Beloit, have recently purchased a one-half interest in Glasco Chief, Glasco Chief is the great herd boar that has done so much to make the C. H. Pilcher herd famous. He has sired practically all of the show stuff that Mr. Pilcher has won on repeatedly and is considered by a large number of breeders who know him and his reputation as a sire to be one of the really great sires of the breed. Logan & Gregory were indeed fortunate in securing him as sows bred to him will undoubtedly prove attractions in their coming sale. A date has not been claimed yet for their dissolution sale but the sale will be held probably the last of January or the first of February. Mr. Gregory is leaving the state and Mr. Logan will continue the business but in order to settle their affairs it was thought best to disperse their herd of Polands. The sows in this herd are well known to many breeders and it would be hard indeed to duplicate the lot and bred as they will be to old Glasco Chief will make them very desirable. Kansas Farmer will have further information about this coming sale in a short time.

K. S. A. C. Band Serenades the Kansas Farmer.

Long custom has made Thanksgiving day the time for a battle royal between the football teams of the Kansas State Agricultural College and Washburn College. Custom also fixes the place for this battle on the Washburn Athletic grounds and brings a large number of K. S. A. C. students to the capital city to watch it. Last Thursday there were perhaps 1000 representatives of the greatest Agricultural College on earth in Topeka and they were headed by the College band. Preliminary to the game this excellent band marched to the front of the Kansas Farmer building and gave us a delightful serenade.

That this excellent music by these trained musicians was appreciated goes without saying but the significance of the act is of greater import. For 47 years the KANSAS FARMER has gone to the homes of these and thousands of other Kansans and in that time its weekly visits have carried words of strength and encouragement to the pioneer; facts and suggestions to the progressive farmer and new ideas to all. It has helped in no small degree, to conquer the wilderness; make of Kansas the wealthiest and most progressive agricultural state in America and create the conditions which made the college possible. It has been the friend of the college always and regards its students as friends and, in view of the fact that the score was 40 to 0 in favor of the Agricultural College, we doff our cap to our friends.

The grain fields are being divided into farms, the beef herds are giving place to a more progressive and prosperous appearance incident to general farming and dairying. Creameries are being established where farms are small enough to make them practical. Where this is not the case the shipping station takes care of the product, delivering it at the large creameries in the nearby cities. These industries have made a market for cream at practically every railroad station in the country. The better facilities for handling dairy products, the constant demand, the flattering prices for butter and cheese and the need of preserving the fertility of the soil all work together in the interests of this greatest of all the agricultural industries.

Send for Sample of PAGE WOVEN WIRE FENCE. We offer to send, free of charge, an actual sample of Page Woven Wire Fence, just as it comes from the big looms. Each one is "a sermon in steel." The tremendous success of Page Fence which is now on its Quarter Centennial Year, is due to the fact that its makers have always given full measure of honest value. It is the old reliable time-tried wire fence that outlasts them all. Admitted to be the strongest wire fence in existence. Send today! See the real Page Wire! Get next to the "Page Knot!" Get the great Quarter Centennial Edition of the Page Fence Catalog and learn the difference between Page Fence and the ordinary kind. Find what Page Fence means in economy. Write at once and both the free sample of Page Fence and the big Catalog will be sent promptly. Address Page Woven Wire Fence Co., Adrian, Mich. Box 276K

Early Buyers Save Dollars. We are making a special low price on Sure Hatch Incubators and Brooders during December. You can get early hatches and save several dollars on machines by accepting our offer now. The Sure Hatch Incubator is built for early spring hatching, with double walls with dead air space between. Heat is supplied by our Water Thermostat that responds to the slightest change of temperature in the egg chamber. Five year guarantee. 60 days FREE TRIAL if you wish. Write now and make a big saving. Address The Sure Hatch Incubator Co., Box 428, Fremont, Neb.



We want to give all our readers a bit of good news that proved mighty interesting to the thousands of farmers who attended the Michigan and Illinois State Fairs. At these fairs the American Harrow Company of Detroit, Michigan (well known to farmers of America for over a quarter of a century), exhibited an improved and simplified manure spreader that completely captured the approval of every farmer who examined it. And, best of all, every man was quietly told that in spite of all these great improvements in their spreaders, they were going to be able to make a cut of many dollars in the price of every size. The drop in price is due to improved factory facilities; the development of this factory has been wonderful. It has grown simply because they have turned out machines that are right, have sold direct at small profit over actual cost, and have followed a remarkably liberal policy in their dealings. For instance, they give credit to any farmer that a dealer would trust. But to return to the improved Spreader: This is the latest pattern of the "American" Spreader, that has been a leader ever since spreaders came into use. This year it is

called the "Detroit-American," the new name adopted by the manufacturers for all their products—Spreaders, Tongueless Dics and Cultivators. The company explains this change of name in their new, large and interesting free book. Some of the big advantages of their improved spreader are these: more steel is used than in any other; cylinder or beater is all steel—and so is rake, which also serves as end gate. It has the only direct chain drive used on a spreader—no gears to break or cause needless draft. The feed mechanism is wonderfully simple and effective, and six changes are possible without leaving seat or stopping horses. The roller bottom equipped with force feed is a splendid feature. Altogether, the manufacturers point out 19 improved features of importance, all found on no other spreader. We are sure every one of our readers who considers the purchase of a manure spreader this season would be greatly interested in this company's new book and their cut prices, freight paid. Address a card to American Harrow Co., 1012A, Hastings St., Detroit, Mich., and they will be pleased to send the book and complete price-list.

Something New! AUTOMATIC EGG BEATER. Is Operated With only One Hand. No Wheels. No Crank. No Cogs. Is Practically Automatic. Can Operate in Any Dish or Bowl. Guaranteed to Give Satisfaction. By Short Up and Down Stroke of the Handle. Simple. Sanitary. Durable. Built to Last Long. A Wonderful Labor Saver. Cut One-Fourth Size. The accompanying cuts only give you a faint idea of this wonderful spiral spring egg beater, cream whip and mayonnaise mixer, the latest and most useful kitchen utensil invented. How to Get This Egg Beater Free. Send us the names of five of your friends for a ten weeks' trial subscription to KANSAS FARMER at 10c each (50 cents in all) and we will send you one of these egg beaters for your trouble. That is all there is to it! You can get the subscriptions in a few moments if you will only try. If you wish to make a present to some of your friends what could you get for 10 cents that would equal a 10 weeks' subscription to KANSAS FARMER. Address, CIRCULATION DEPT., KANSAS FARMER, Topeka, Kansas.



## THE ABOVE CUT

Shows you the photograph taken of some of our PERCHERON and BELGIAN STALLIONS now in our stables. These are the low-down, heavy-boned, thick-quartered kind with lots of quality. 100 head now in our stables consisting of Percherons, Shires and Belgians. All our horses were selected from the best breeders in the OLD COUNTRY. We invite inspection. Write for our new catalog.

**WATSON, WOODS BROS. & ELLY CO., - - - Lincoln, Neb.**



### L. R. Wiley & Sons, Elmdale, Kan.

IMPORTERS AND BREEDERS OF

#### Percherons, French Draft, Shires and Coachers

We have just landed 25 more stallions of the ton kind on our ranch. And just one word with you, Mr. Buyer, if you want a first-class stallion or mare either imported or American bred and will come and inspect our horses, if you don't think you have found the best bunch of horses in the state of Kansas and our prices the lowest considering quality, you are getting, we will pay your expenses here and back to your city. All of our horses are bought and personally selected by us and we can save you big money; you to be the judge. Write for our prices and terms before buying elsewhere.

## 125 PERCHERON 125

Imported, Home Bred Stallions and Mares

### Mammoth Jacks and Jennets

My brood mares are breeders. My ton stallions weigh 2,000 lbs. If you want something really first class in a drafter, with extra heavy bone, you will find it at my barns. My prices and guarantee will please you.

**O. P. HENDERSHOT, Hebron, Neb.**

## ROBISON'S PERCHERONS



—FOR SALE NOW—

Several good young stallions and mares.

**J. C. ROBISON, - - - Towanda, Kansas**

## Draft Stallions and Mares

Imported and Home Bred Registered Percherons, Belgians and Shires.

We have over 200 young stallions and mares. All will make ton horses and we will guarantee satisfaction in quality and price. 60 per cent guarantee on stallions and mares guaranteed breeders. Come and see. Send for catalog.



**NORTH & ROBISON, Grand Island, Neb.,**

## HOLLAND STOCK FARM

IMPORTERS AND BREEDERS OF

### Percheron and German Coach Stallions and Mares

100 head as good as grows and the best lot of stallions and mares west of the Mississippi. All in excellent condition and will be sold at exceptionally low prices if you wish quality and finish in imported or American-bred stallion or mare or young registered stock produced from the most select herd of imported mares in America, we will supply you for less money than others. Mares are all acclimated and bred. Come and see for yourself. Don't fail to see our consignment of 10 head of imported Percheron stallions and mares at the Enid Fair and Live Stock Assn.'s sale, Enid, Okla., December 11 to 18. The best Percheron stallions and mares. The best German Coach stallions and mares.

CHAS. HOLLAND, Proprietor.

Springfield, Missouri.



### Imported Percheron Mares and Stallions

For sale, several nicely matched teams of two and three year old Imported Percheron mares, bred, black and grays. Several extra good two and three year old Imported stallions. We handle only the best. Come and see us.

**J. A. FEE & SONS, STAFFORD, KAN.**

**BEST IMPORTED PERCHERON, BELGIAN, English Shire, Suffolk Punch and German Coach Stallions.** \$800 to \$1,000 your choice. Imported mares, home-bred horses, \$250 to \$6,500.  
**A. LATIMER WILSON, Creston, Iowa.**

Frank L. Stream, of Creston, Iowa, is selling young, choice imported Belgian, Percheron, English Shire, Suffolk Punch and German Coach Stallions at \$1,000. Home bred registered draft stallions, \$300 to \$600.

### PERCHERON HORSES, HOLSTEIN-FRIESIAN CATTLE.

Up-to-date Poland China hogs. Write your wants.

**H. N. HOLDEMAN, Meade, Kansas.**

### SPRING VALLEY FARM

—Headquarters For—  
Big Stylish Mammoth Jacks. Some extra good ones of serviceable age for immediate sale. Prices consistent with quality.

**I. T. SUTER, Box 52, Palmyria, Mo.**

## JACKS FOR SALE

WE have at all times a good supply of Jacks from 14 1/2 to 16 hands high. Buy one this fall and save money. Thirty head to select from All Guaranteed.

**PETTY BROS., SEDALIA, MISSOURI**

**STALLIONS AND JACKS.**  
One 4 year old Belgian stallion.  
One Percheron stallion.  
One Standard bred stallion.  
One eight-year-old extra good black jack, mealy points, guaranteed all right and a good breeder. All these stallions are registered and will be sold at a bargain if sold soon. Will trade for good land. Come and see me.  
**L. H. HEDGER, Chaco, Kan.**

### FAIRVIEW JACK AND JENNET FARM

Registered Mammoth Jacks and Jennets for sale cheap, at all times quality considered. They have big bones, big heads and ears, and breed, big mules. They are Missouri jacks—the best that grow—14 1/2 to 16 hands high. A big lot to select from. Everything guaranteed as represented. Established 1892.

**J. C. HUCKSTEP, Proprietor, EOLIA, MO.**

### 75 HEAD JACKS AND JENNETS

All ages up to seven years old. Guaranteed and priced reasonable. Special Prices for fall trade. Come and see me.  
**PHIL WALKER, Moline, Elk County, KANSAS**

### 35 Jacks & Jennets 35

Few good Percheron and Saddle Stallions. Jacks 14 1/2 to 16 hands and the very largest that can be found. 40 miles K. C. on U. P. and Santa Fe. Long distance phone.  
**AL E. SMITH, Lawrence, Kan.**

### LEARN TO RUN AND REPAIR AUTOMOBILES

Demand for Trained Men far exceeds the supply. Work pleasant. You can learn all in six weeks. Every man wanting to own an Automobile, become a chauffeur, expert repairer, agent or desiring to learn any branch of the Automobile business should take our practical course. Splendid opportunities for young men. Splendid opportunity for young men. Write today for our Free Catalog.  
**KANSAS CITY AUTO MOBILE SCHOOL, 2109 E. 15th St., Kansas City, Mo.**

When writing advertisers please mention Kansas Farmer.

"I predict that present conditions will change men and methods in the cattle business in the near future," said a prominent breeder at a public sale of beef cattle recently, "we hear a great deal about dairying and the money that is to be made in it but I tell you that the average farmer does not like to be tied to the milk pail 14 times a week. Beef cattle are scarce all over the corn belt and, unless the farmers get busy with breeding operations we shall be up again in good and hard and that right soon. The farmer who breeds beef cattle from now on can watch them grow into gold without the drudgery of the milk stool and he would rather do it." What do you think about it?

"Hog sales started out this season with a general average of about \$30 but they have been getting better every day," said a fieldman recently. "Farmers are becoming alive to the fact that there is a scarcity of hogs, threatened if not actual, and they are buying all over my territory to the extent of raising the general average of pure bred sales at least \$10 per head." The packers have acknowledged, for months past, that their cellars were practically empty and their increasing prices have served to flood the markets with thin and undergrown stuff. This fact together with the ravages of disease in some parts, has served to create a condition that is unusual to say the least. The man with hogs will be the man with the money shortly.

**Kansas Live Stock at International.**  
Kansas breeders will be represented at the International Live Stock Show at Chicago by the following entries of live stock. In Shorthorns, the State Agricultural College, Manhattan; J. F. Stodder, Burden; T. K. Tomson & Sons, Dover. In Aberdeen-Angus, State Agricultural College, Chas. E. Sutton, Lawrence, Parker Parish & Co., Hudson. In Herefords—State Agricultural College. In Galloways—State Agricultural College. In Berkshires, C. E. Sutton. The entries show a total of 1,085 breeding and 174 fat cattle; 559 breeding and 211 fat hogs; 913 breeding and 289 fat sheep besides 676 horses. A grand total of 3,907 head.

**Uncle Sam Can't Help Kansas.**  
Last week KANSAS FARMER stated that the United States Department of Agriculture would be able to supply hog cholera serum to Kansas farmers through the Kansas Experiment Station. It now appears that Uncle Sam

himself is short and Kansas swine growers can expect no immediate aid. Governor Stubbs recently received a message from Secretary Wilson who said the department had no serum on hand and that it could be made as quickly in Kansas as anywhere else. Governor Stubbs immediately got into communication with President Waters of the State Agricultural College and the result was a second telegram to Secretary Wilson. In this latter telegram the Governor asks that the government department furnish Kansas with an expert in the serum manufacturing line who could be put in charge of the state plant at Manhattan. No reply to this telegram has been received.

"I think this is one of the most important things we have to deal with in Kansas at the present time," said Governor Stubbs recently. "Farmers are losing heavily because of hog cholera and there is an absolute preventive for making it is slow. We are now at work upon a plant at the State Agricultural College. When it is completed I suppose we will be able to furnish the farmers with all the serum they need, but they need it at once. If we can get an expert who has had experience we will get results much quicker and we will be certain of success. That is my reason for asking Secretary Wilson for a man."

The telegram sent by the governor to Secretary Wilson was as follows: "Your wire stating that you cannot furnish hog cholera serum received. Can you not arrange for Dr. Greeder of your department at Ames, Ia., to supervise the establishment of our hog cholera serum plant at Kansas State Agricultural College, Manhattan? We appreciate very much what you have already done and thank you in advance for favorable consideration of this matter. We regret that the epidemic form of this disease makes this request imperative."

Dry leaves make a very good litter for the hens to scratch in and should be gathered up and preserved in barrels or boxes and used in the poultry house as required.

**For Sale**  
27 Missouri Mammoth Jacks and Jennets, 3 stallions and Hereford cattle.  
**J. T. Watson, New London, Ralls Co., Mo.**





COLORADO LAND

COLORADO LAND

COLORADO LAND

COLORADO LAND

# Why Pay Rent

At from \$3.00 to \$5.00 per acre when you can buy land from \$8.00 to \$15.00 per acre that has produced 20 bushels of No. 1 wheat from land that was broken the previous winter. Same land has produced 30 bushels of good corn on spring breaking. On old land as much as 50 bushels of corn per acre. Over \$80.00 per acre realized from crop of potatoes on 15.00 land. \$50.00 per acre from crop of broom corn raised on new breaking. Alfalfa successfully raised. I have thousands of acres for sale in Lincoln county, Colorado. Hugo is the county seat. This is the finest body of good agricultural land in America now for sale at low prices. Excellent markets. The best of water at a depth of from 10 to 50 feet.

DO YOU KNOW OF ANY SAFER INVESTMENT

or one that will bring greater returns on the money invested than the lands I offer? For further particulars call on or write

**A. S. Mitchell, the Land Man,**  
Hugo, - - - Colorado

# Colorado Land Snaps

Colorado is strictly in the limelight. Now is the time to buy for the certain rise in prices. We quote:

4,600 acres, fair ranch improvements; running streams; shallow water for domestic use or irrigation by pumping; level land; excellent soil; at only \$8 per acre; half cash. Better investigate this if you want a big buy.

3,400 acres, sub-irrigated; water shallow and easily raised to the surface for ditch irrigation, and plenty of it; level land and good soil; only 25 miles from Denver; \$15 per acre.

1,280 acres, nice level land; 2 1/2 miles from main line railroad station; \$8.50 an acre; easy terms. This will sell for double in two years.

320 acres, six miles from Denver, and 160 acres four miles from Denver, at \$15 an acre. Better investigate these.

160 acres, four miles out; level, sandy loam; fenced one side; a great big bargain at \$15 per acre; won't last long.

170-acre improved valley farm, \$6,500.

470-acre improved mountain farm, \$2,000.

Three fruit farms in the justly celebrated Paonia section of Delta county, Colorado; sure crops of the finest fruit raised anywhere in the world; frost does not bother; water rights A-1; fair improvements. One man owns all these three places; is getting old and wants to sell, and in order to do so makes prices just one-half less than neighboring places are selling for. Eighty acres, 1,000 four-year-old Jonathan apple trees; 700 Elberta peaches, apricots, cherries; besides some old orchard in full bearing; berries, grapes, currants, gooseberries; 18 acres alfalfa; 13 acres grain land; oak grove around house; running spring that supplies kitchen and milk-house; price, \$10,000; half cash; balance, easy. Eighty acres, 350 Elberta peaches and 125 Jonathan apples, 3 years old; 487 winter variety full-bearing apple orchard; 3 acres alfalfa; price, \$6,000. One hundred and sixty acre ranch, 1,500 apple trees—mostly Jonathans; over one thousand Elberta peaches; various other kinds of fruit and berries, alfalfa, etc.; 2 sets farm improvements; some live stock and farm implements with this place; price, \$15,000, which is less than \$100 per acre. Unimproved land, under water, in this section is worth \$150 to \$200. If you want a fruit farm investigate these quickly. Write or call on

**IRVIN L. RICHARDS**

405 QUINCY BUILDING

DENVER, COLO.

**320 a. Homesteads** Choice farm and ranch land, bargains in Washington Co. Write or see Sigel Johnson, Akron, Colo.

**IRRIGATED FARMS.**

Prowers county, Colorado, offers the best opportunities to the homeseeker of moderate means. Write for information and prices of farms.

**J. B. TRAXLER, LAMAR, COLO.**

**320 ACRES DEEDED LAND.**

Perfect title; under one of the largest storage irrigation projects in Colorado, near good town, land is very smooth, and soil of great depth. Price \$40.50 per acre, with good water right. Easy terms.

**BELL & WHITE.**

Lamar, Colo. Civil and Irrigation Eng'rs.

**WE SELL THE BEST IRRIGATED LANDS.**

At \$40 to \$80 an acre up according to improvements, within 2 to 4 miles of shipping point, these prices include perpetual irrigation water rights deeded with the land, good title to both land and water or no sale. For further particulars write or see

**THE GEO. A. WATSON LAND CO.,**  
Lamar, (Established 1886) Colo.

**ROCKY FORD BARGAIN.**

160 acres irrigated farm, 2 miles from Rocky Ford, good soil, easily cultivated, all in crop, 40 acres alfalfa, new 8-room house, complete outbuildings, R. F. D., telephone. Price, \$135 per acre. Good terms. Write or see

**THE ROCKY FORD REALTY CO.,**  
208 S. Main St., Rocky Ford, Colo.

**WHERE THE GOOD CROPS GROW.**

320 acres, 9 miles northwest of Yuma, all level, good soil and no waste land. Price only \$12.50 per acre. This is only one of the many attractive bargains we have and offer in choice, smooth rich and production farm lands in Yuma county, the Queen of eastern Colorado. Where large crops of corn and small grains grow and where scientific farming is an established success, without irrigation. Come let us show you or write for information to

**J. L. Miller & Co.,** Yuma, Colo.

**TWO GREAT LAND BARGAINS IN YUMA COUNTY, COLO.**

Famous for corn and wheat yields—320 acres, 2 ml. from Wray, Colo.; fair improvements, 225 a. cultivated, bal. pasture, \$25 per a. 160 a. 5 miles from Vernon, Colo., 80 a. cultivated. Sell or trade, at \$20 per acre.

Other attractive bargains in choice farms and tracts of land, ranches, etc. Write for information concerning opportunities for investment, where the country's greatest yields of wheat are recorded.

**YUMA COUNTY REAL ESTATE CO.,**  
Wray, Colorado.

**IRRIGATED LANDS** in the famous South Platte Valley of Colorado. Fine 160 under the old ditch. Price \$160.00 per acre. Owner will guarantee \$15.00 per acre cash rent. Fine 160, all in alfalfa, \$100.00 per acre. Will rent for \$10.00. Fine one-half section at \$75.00 per acre. We have a number of good quarters from \$30.00 to \$40.00. We have some fine propositions for exchange, for business blocks or general merchandise. We also have some fine tracts of cheap land, ranging in price from \$10.00 to \$20.00 per acre for colonizing. Raise fine crops under the Campbell system of farming. Write us for prices and literature.

**CASTLE & WYCKOFF LAND CO.,**

Fort Morgan, Colorado.

**DO YOU WANT A HOME?**

Buy now in Washington county, Colo. Where choice land, with best of soil can be had; where good farmers raise from 20 to 45 bu wheat per acre, and oats, barley, corn, spetz potatoes and alfalfa, grow abundantly on up land, without irrigation; in a county rapidly settling and being improved by good thrifty farmers. We have many tracts of choice, smooth, fertile farm lands, with healthful climate and abundance of good water, at prices ranging from \$8 to \$15 per acre. If you are looking for good investments, write or see

**VANDERHOOF & MacDONALD, Otis, Colo.**

# Colorado Irrigated Land

22,000 acres of irrigated government land in south eastern Colorado has recently been opened for entry under the provisions of the Carey act. The State of Colorado has contracted with the Two Buttes Irrigation & Reservoir Company to construct the irrigation land, which is located in Baca and Powers counties, close to Rocky Ford and other priority and title to land comes direct from the state.

Price of land 50 cents per acre;  
Perpetual water right \$35 per acre.

Payable \$5 cash, balance in ten annual payments. The tract is nearer any other Kansas City and Mississippi Valley markets than any other Carey Act project. Land free from brush and stone and soil will average 50 feet in depth. Altitude 4,050 feet; climate best in state; rainfall 16 inches; crops, all grains, alfalfa, sugar beets, vegetables, and fruit. No alkali. Local markets for everything. No agents employed and no commissions paid. Farmers wanted; no speculators. For particulars write,

**THE TWO BUTTES IRRIGATION & RESERVOIR CO.,**  
Lamar, Colorado.

# Big Crops

## GROWN ON EASTERN COLORADO LAND

1500 farmers settled in Cheyenne county recently. The county is fast settling up. The investor should buy now. The homeseeker should secure a home while LAND CAN BE BOUGHT AT

**\$10 to \$15 an Acre on Easy Terms.**

**Modern School Facilities.  
High School and Manual Training.**

Cheyenne Wells, the county seat of Cheyenne county, is keeping pace with the development of the county. Just completed a \$30,000 court house and a \$15,000 high school without bonding the county.

**Telephone System.  
Rural Free Mail Delivery.**

A County Agricultural Society was formed last spring and a very successful fair was held this fall.

Come and see the crops grown on this cheap land.

A trip to Eastern Colorado is always pleasant, especially so in winter. Delightful weather, pure water.

Land is selling rapidly and prices will advance fast. For further information write

# The Cheyenne County Land Co.,

CHEYENNE WELLS, COLORADO.

## Colorado Lands and Sunshine

If you are looking for a home, investment or health, where the climate is perfect, where there is best class of people, churches, schools and no saloons, where there are thousands of acres of choice land coming under irrigation and selling very cheap, you will do well to write us for new printed matter on Morgan county, Colo. Address

**THE B. W. JACKSON REALTY CO.,**  
Fort Morgan, Colorado.

**A FARM THAT WILL PLEASE.**

160 acre farm, 6 miles north of Cheyenne Wells the county seat of Cheyenne county. New two room house, barn 14x24, soft water, 50 foot well with windmill, 100 barrel cement tank, 50 acres well fenced, 45 acres in cultivation, 20 acres in wheat, 4 acres alfalfa, balance stubble ground for spring crop, clear of incumbrance. Price \$16 per acre. Easy terms. Address the owner.

**L. S. WILSON,**  
Cheyenne Wells, Colo.

## KANSAS LAND

**SPLENDID IMPROVED FARM.** \$8,000 will buy 78 1/2 acres of good second bottom land, 60 acres in cultivation, good new 6 room house, cellar has sand rock floor, good out buildings, close to railroad, school and church. On R. F. D., telephone and gas line. Perfect title, no incumbrance. Rents for \$400 the year. Write

**LEROY N. WALLING,**  
1007 Massachusetts St., Lawrence, Kan.

**I WANT TO OFFER AS A SPECIAL BARGAIN**

a farm 15 miles from Colby, smooth as a floor, good black loam soil, 100 acres in cultivation and seeded to winter wheat. Rural delivery running by the farm every day. All the 100 acres of wheat to go with farm. We think this one of the best bargains in the county today. And anyone wanting a quarter section in a good live neighborhood will find a bargain by getting in touch with the owner.

**IKE W. CRUMLY,**  
Colby, Kansas.

**SUMNER COUNTY BARGAIN.**

160 acres, 4 miles to good town, good improvements, 100 acres fine wheat, 30 acres corn. If sold soon all the crops and possession for only \$50.00 per acre; good terms. Owner wants to put the money in his store business. See or write

**WM. GODDY LAND & AUCTIONEERING CO.,**  
Arkansas City, Kansas.

## KANSAS LAND

**A REAL SNAP.**

120 acres Atchison County, Kansas, land. All under plow and smooth; 90 acres in wheat; 30 for corn; unimproved; 5 miles to town; easy terms; \$65 per acre.

**JOHN E. SULLIVAN,** Kansas.  
Effingham,

**RICE COUNTY FARM.**

160 acres, 5 miles Sterling, new 7-room house, barn 32X40, 20 acres alfalfa, all good corn, wheat and alfalfa land, 80 acres in wheat goes. Price \$15,000, good terms. Other bargains.

**W. W. BARRETT,** Kansas.  
Sterling,

**EASTERN KANSAS PASTURE LAND FOR SALE.**

Consisting of 480 a. all fine soil, well watered and fenced with four wire fence, in good repair. Located 4 miles Onaga, Kan. About one-third would make excellent farm land, balance the very best of pasture. For quick sale at \$25 per a. with terms.

**C. E. TINKLIN,** Kansas.  
Corning,

**FARMS ON EASY TERMS.**

Near Wichita, Sedgwick Co., Kansas. Owner in New York is closing out large holdings of fine land in 80, 160 and 320 acre farms and selling on easy terms and low prices. In addition to the above we have a large list of well improved farms. Write us what you want. We sell at owner's price.

**V. L. MOORE & CO.,** Kansas.  
Wichita,

# Farm Bargains Near Topeka

320 acres, highly improved, all tillable, \$70 per acre  
160 acres well improved, all tillable, \$60 per acre.  
160 acres fair improvements, all tillable, \$50 per acre.

80 acres highly improved, \$55 per acre.  
80 acres, fair improvements, \$55 per acre.  
40 acres, fair improvements, \$550 an acre.  
The above farms are all well located, and each is offered at a bargain. We have a fine list of farms and can fit you out. See us.

**GILLET & GILLET,**  
104 West 5th St., Topeka, Kansas.

**NEBRASKA LAND**

**CLAY COUNTY FARMS.**  
If you want a choice farm or stock ranch at prices ranging from \$25 to \$75 per acre, call on or address  
**ERNEST PINKERTON,**  
"THE PIONEER LAND MAN,"  
Clay Center, Nebraska.

**COME TO NORMAN, OKLAHOMA.**  
The educational center of Oklahoma State University and best system of schools in the new state. Fine farming lands at reasonable prices. Good water. Write for list and prices.  
**MONNET & ZINK, Norman, Okla.**

**FINE NEBRASKA FARM.**  
320 acres, 3 miles from Chester, with good improvements, good orchard and good neighborhood. Land all around it selling from \$75 to \$100 per acre. Price \$65 per acre for quick buyer. Other bargains in smaller tracts. For further information call on or address  
**R. L. WILSON, Chester, Neb.**

**DON'T MISS THESE LAND BARGAINS.**  
320 acres, choice farm, Hayes Co., Neb., 7 1/2 miles from Palsade, smooth, best of soil; 240 acres to wheat; 1-3 rental; good 4-room house, well windmill, etc. A perfect beauty, in fine neighborhood. For quick sale, \$85 per acre. 1,200 acre ranch, Lincoln Co., Neb., 5 miles from Wallace; 450 acres good bottom alfalfa and corn land; balance good pasture, timber and living water, \$20 per acre. For other good land bargains see or write us. **SMITH BROS., Palsade, Neb.**

**ALFALFA LANDS.**  
All lands in Webster county, Neb., will grow the finest alfalfa, three and four crops every year. We want to send you illustrated matter regarding this beautiful, prosperous country. We have a snap for a quick sale on a half section with 35 acres alfalfa now growing, 135 a. cultivated; finely improved. Write for particulars. **Red Cloud Real Estate Co., Red Cloud Neb.**

**TWO SPLENDID FARM BARGAINS.**  
400 acre farm in Red Willow county, Neb., 2 1/2 miles from McCook, good 8 room house, good barn and other good improvements; 160 acres choice valley alfalfa land, 55 acres now growing, 100 acres bottom and 40 acres upland cultivated, balance pasture; well watered, some timber and abundance of choice fruit trees, bearing. Actual value of land over \$20,000, but belongs to non-resident, who will take \$16,000 if sold soon—only \$40 per acre. Act quick; don't miss this.  
560 acres 12 miles from McCook, 7 miles from Troyer, Kan.; 400 acres choice, smooth farm land, balance good pasture, half cultivated, slight improvements. A splendid bargain at \$16 per acre.  
For other snaps in farm and ranch lands write or see  
**ACKERMAN & STEPHENS, McCook, Neb.**

**FOR GERMAN LUTHERANS AND OTHERS**  
320 a. smooth rich soil, 8 miles to station, Dundy Co., Neb., Ger-Lutheran settlement, 1/2 mile to church and school. "Choice of choicest." Splendid prosperous neighborhood; price, \$9,600. 160 a., same neighborhood, 10 miles S. W. Wauneta, Neb., 120 a. cultivated, 35 a. grass, 5 a. grove; school on land, fair improvements, a beauty, price \$5,250. 47 1/2 a. farm, same neighborhood, 400 a. cultivated, well improved, a magnificent farm, only \$14,000. Other tracts at bargain prices. See or write for list to **E. F. WILEY & SON, Wauneta, Neb.**

**CHASE COUNTY, NEBRASKA.**  
Farms and Ranches for Sale.  
Ranches from \$5 to \$12,500, good level farm land from \$15 to \$30 per acre, where wheat makes from 15 to 40 bushels per acre and corn from 20 to 50, hog cholera unknown, the undersigned has lived here 22 years and can prove the above statement to be facts. We have the lands for sale and automobiles with which to show it. All inquiries answered. Mention this paper and call on or address  
**BONNER & JOHNSTON, Imperial, Neb.**

262 1/2 acre farm, in Franklin Co., Neb., 1 1/2 mi. from Bloomington, Co. seat. About 100 acres choice bottom, alfalfa and corn land. 60 acres good pasture, fair improvements, fine spring, never falling water, from hill, 30 feet above level of house and barn and 45 feet above level of balance of farm land. One of the most ideal farms and best bargains to be found. Price only \$16,000. Choice 1280 a. ranch, well improved. Several quarter section and larger and smaller farms that are bargains. For information see or write  
**Wm. Anderson, Franklin, Neb.**

**OKLAHOMA LAND**

**OKLAHOMA FARMS.**  
Best county for corn, wheat, oats, alfalfa and tame grass. 80 acres \$3,500. 160 acres fair improvements, \$4,000. Write for list of bargains.  
**VOGELE & WOOD, Newkirk, Okla.**

**CORN, OATS, WHEAT**  
And alfalfa and staple crops grow to perfection here in the garden spot of Oklahoma. Prices reasonable. Write for list and descriptive literature.  
**C. E. POCHTEL, Newkirk, Okla.**

**FOR SALE—160 acres valley land, 10 miles southwest of Vinita, Okla.** This land is level, smooth bottom land, and will grow anything. It is located just a few miles from the Chelso oil fields, and it is only a matter of time, when the land will be developed. Price \$40 per acre. **Mullen & Brecker, Room 15, Turner Bldg., Wichita, Kan.**

**EASTERN OKLAHOMA FARMS FOR SALE.**  
We own and control over 50,000 acres of choice farm lands in Eastern Oklahoma, the garden spot of the new state, that will produce successfully corn, wheat, oats, timothy, clover and alfalfa. Low prices, easy payments. Perfect titles. Few farms for trade. Agents wanted. Write  
**COMMONWEALTH LAND CO., Vinita, Oklahoma. Branch Offices, Fryer Creek and Nowata, Oklahoma.**

There is a good deal of talk just now about a variety of corn new to this country, but which Uncle Sam's agents have found in China, and which it is claimed will be of much value to farmers in the semi-arid sections of the south and southwest. Many farmers from the so-called dry belt are making inquiry regarding it. First the United States Department of Agriculture will not recommend Chinese corn until its value has been demonstrated. Second, the farmers of the hot and dry sections cannot afford to await a thorough testing of the new corn under their conditions. It will require 10 years of careful work and investigation before the worth of this corn is established. The farmers of the dry section can avail themselves of varieties of corn already tested and proven valuable. There are varieties of Indian corn now well known which justify the efforts of the "dry" farmers. Those small, early maturing varieties now grown in sections will provide the dry farmer with grain for feed if his farming methods are right. These varieties are more or less known to every farmer. The old style King Phillip is as good as any and will mature in western Kansas and north and southwestern Oklahoma. Write your seed house for information.

It is this editor's observation that the farmer's troubles lie not so much in the quality of his seed, or the variety of seed, as in poor cultivation. Practically every farmer knows what good corn cultivation is and admits that his methods of cultivation are not as good as they should be. He excuses his poor corn farming on the ground that he has too much work to do. The excuse is a correct reason for so much poor farming, but is not a good reason. Time and again it has been shown, in these columns and by actual demonstration in every neighborhood, that it pays best to farm a few acres well than twice as many acres poorly. That is, it does in the long run, say for a period of 10 years. The fact that our seasons are irregular and a good crop is now and then produced, with practically no labor except the planting, is responsible for so much poor farming. There is so much in favor of good methods of cultivation that it seems farmers in general do better work.

Did you ever stop to think every sunflower growing in the corn field removes from the soil as much moisture as one stalk of corn bearing a good ear? How many ears of corn did your field yield per acre last year? How many sunflowers as tall as the tallest corn stalks grew per acre? Add the number of ears to the number of sunflowers and you will have an idea of the number of ears of corn you could have had if the field had been kept clean and good cultivation given. Would it not be worth while to keep the fields clean? Would it not have involved less labor to cultivate one acre well than to scratch over three acres? Would there not have been greater satisfaction in the work? Would it not have helped solve the labor problem when hired men were not obtainable? Wouldn't it have been better for the land to have yielded one acre of good corn and allowed the other two acres to either lie idle or produce some leguminous crop which would not have sapped the soil of its vitality?

The sunflower not only uses as much water as a stalk of corn, but takes from the soil a quantity of vitality, the loss of which, while never figured, cannot help but force itself upon the thinking farmer with astonishment. It is wonderful what we expect of our soil. We expect it to produce abundantly year after year. We take from it, but never give a thing back. We work our horse, he gives of his strength and we give him feed according to his strength. The example of the horse and the soil are parallel. Do

**"SNAPS" IN GRANT CO., OKLA.**  
160 a. 7 1/2 miles of county seat, 6 1/2 miles of railroad town, 110 a. in cultivation, balance pasture and meadow, 30 a. wheat with farm, 5 room house and shed barn, granary, good water, 1 1/2 miles of school, good soil, R. F. D.  
Price, \$5,000 for 30 days.  
**BATTEN REALTY CO., Medford, Oklahoma.**

**800 BUSHELS CORN GOES**  
with 310 acres of the very best land for stock and grain farm in Craig county, near Vinita, Oklahoma. 160 acres in cultivation; balance hay and pasture. Price \$25 per acre. For further particulars, write  
**LEFORCE & BADGETT, Vinita, Oklahoma.**

we reason about these things as we should?

But we have drifted from the corn subject. We have one variety of corn which in the hot, dry sections is to a great extent overlooked. That is Kafir corn. Our farmers do not grow one acre where they should grow 25. Kafir corn is adapted admirably to just such conditions as it is believed the Chinese corn is. Kafir corn has been tried and not found wanting. It produces abundant grain when Indian corn fails. The grain has a feeding value almost equal to Indian corn. The feeding value of the two is equal for all practical purposes. The labor involved is somewhat less than in the case of Indian corn.

It is this editor's observation and judgment that every farmer in the western two-thirds of Kansas should grow Kafir corn. Enough should be planted each year to insure plenty of feed for all the farm live stock. This is the least acreage permissible in our judgment. A surplus is a good thing. It has a market value equal to Indian corn. During the dry and uncertain years in central Kansas the acreage of Kafir corn exceeded the acreage of Indian corn. Kafir corn was grown as an insurance policy. It assured grain. The surplus acreage was planted to Indian corn for sale provided it made a crop. Kafir corn was adapted to the climate and was successful.

One thing we farmers must learn is to use crops and varieties adapted to our soils and climate. We cannot adapt climate and soils to crops. In the early days in central Kansas when farmers were farming Indian corn exclusively they were engaged in an uphill business. If Kafir corn had been known in those days farmers in that section would have been 20 years further advanced, or "20 years better off" as one farmer recently said. The farmers of that section came from the Eastern states bringing with them the large, slow maturing seed corn of their native states and it wouldn't grow in central Kansas. Farmers then did not know so well as now, but there are still many of us who do not have the "right mind" on some of these points.

Kafir corn, sorghum, milo maize, rice, corn and all kindred varieties have a reputation of being hard on the soil. They are not more exhaustive of fertility than Indian corn except in proportion to the increased yield of grain and forage per acre, which combined is as a rule in excess of Indian corn. These varieties, however, do leave the soil in a poorer physical condition. The root system of Kafir corn so thoroughly permeates the soil as to almost form a sod. The roots are hard and slow to decompose, but proper handling of the soil will overcome any objection on this account. The root system of these varieties is such as enables it to gather moisture in greater quantities than the roots of Indian corn. That is what keeps Kafir corn green when Indian corn is dried up. That is what makes Kafir corn produce a crop when Indian corn fails. The ground is consequently drier after producing a crop of Kafir than Indian corn, but this aside from the numerous roots is the only difference between the two so far as the soil is concerned.

There are numerous varieties of Kafir corn as there are of Indian corn and there is a difference in the seed. The red varieties are the earliest maturing varieties but the yield is not as heavy as of the white varieties. The red Kafir does not produce such large fodder when planted in drills. What sown for roughage the plants do not become so coarse as white. Stock prefer the white Kafir. It is sweeter than the red. But there is no difference in the seeding value. Kafir corn is a vegetable crop but it is a worthy crop. The man in localities where Indian corn is uncertain and who wants to incur feed for his live stock can do no better than to plant Kafir corn each year.

**The Green Bug and Its Natural Enemies.**

The University of Kansas has, in co-operation with the grain growers of the state, just issued an extensive report on the green bug. This report contains results of work conducted through 1907 and 1908, covering a period during which this subject was

**KANSAS LAND**

**ROOKS COUNTY LAND**

One Hundred Farms for sale. Write for lists.  
**C. H. DEWEY, -:- Stockton, Kan.**

**LIVE AGENT WANTED**  
In your locality, to assist in selling corn, wheat and alfalfa land. We own thousands of acres in Pawnee, and adjoining counties. Write us for a proposition on our own ranches.  
**FRIZELL & ELY, Iarned, Kan.**

**A HOME.**

For you at a bargain price, 320 acres fine level land. For particulars write to  
**Jetmore, Kansas. WINN REALTY CO.**

**LAND BARGAIN.**  
560 acre improved grain and stock ranch at a bargain. Located 6 miles from Colby, Kan. A snap for some one. For particulars address  
**STEVENS & RUBY, Stockton, Kansas.**

**160 ACRES**  
9 miles Healy, 40 acre good alfalfa land, 80 acres plow land, balance pasture land, no improvements, running water, a snap at \$1,600. Write for my bargains in land.  
**WARREN V. YOUNG, Dighton, Lane Co., Kan.**

**HELLO FARMERS!**

Have you read my list of GREENWOOD CO. FARMS? The best corn, alfalfa, clover cattle and hog country in the west. Fine blue stem pastures. Write for list and prices to  
**F. D. STOUTON, Madison, Kan.**

**SEDGWICK CO. FARM BARGAIN.**  
For Sale: 480 acre farm, level dark soil, 300 a. in cultivation, 180 a. in pasture. Good 11 room house, large barn 32x56 ft., also good tenant house and barn, close to good market town and 18 miles of Wichita. Price only \$24,000. \$8,000 cash will handle this, balance at 6 per cent interest 5 years.  
**BEATTY REALTY CO., Opposite Post Office, Wichita, Kan.**

**Buy Western Kansas Land.**

Should you want to buy any Western Kansas land for speculation or for a home, don't fail to write me. I am selling land throughout all counties in western Kansas. I am myself farming extensively on the kind of land I offer for sale. I can sell you land that will make you money. Write me at once for prices. Address  
**EUGENE WILLIAMS, Minneola, Kansas.**

**Can You See Ahead?**

160 acres, creek bottom land, good alfalfa farm living water, new house, stable, well, pasture, fenced, smooth and level, for a quick sale only \$21 per acre; 3 1/2 miles of Spearville. Address  
**STINSON & WEYAND, Spearville, Kansas.**

**7 ACRES ALFALFA ON THIS EIGHTY \$3200.**  
We sold four farms in four days, other sales pending Nov. 25th. Nos. 2 and 3 adv. 2 weeks ago sold. If you want land here before prices advance, hurry. This week we offer a nice 80 improved, 2 miles to station, all tillable, 7 acres alfalfa, nice, been in 2 years. \$3,200, write for list of other bargains, they won't last.  
**DONAHUE & WALLINGFORD, Mound Valley, Kansas.**

**DAIRY FARM.**  
80 acres, 30 under cultivation. Balance fine blue stem pasture; 14 of alfalfa; living water; timber; fruit of all kinds; good improvements; 1 1/2 miles from Manhattan. A town of 8000 people and location of the K. S. A. C. A. bargain. Price \$6,500.00. Good terms. Address,  
**BARDWELL & BARDWELL, Manhattan, Kansas.**

**Every Man is Entitled to a Slice of This Good Old Earth.**

Some Are Getting It; Some Are Not. Are you one that is not? You can get a slice from \$10 to \$20 per acre in the wheat belt, where they have fine soil, fine climate and plenty of water if you will write **TEED & ORBISON, Jetmore, Kan.**, for their list of farm lands. They have something good.

**FOR SALE—FINEST FARM IN SALINE COUNTY.**  
225 acres first bottom adjacent to city limits of Salina. Improvements, first class, consisting of 8 room house, large barn, splendid orchard, all necessary outbuildings. Fine home, best land in Kansas, absolutely O. K. Only 10 minutes ride from Salina. O. O. Price and terms right. For particulars write.  
**R. P. CRAVENS, Salina, Kansas.**

**FARM BARGAIN.**  
640 acres finely improved all tillable, new fencing, 250 acres in cultivation, 160 acres of meadow balance pasture, 8-room house, barn 51x66 all white pine, must be seen to be appreciated, a snap at \$40 per acre must be sold, don't wait to write, come at once and look this over.  
**SEWELL LAND CO., Garnett, Kansas.**

**A SNAP**

160 acres, 5 miles of Ponca City; 110 acres in cultivation. \$6,000 if sold in 30 days.  
**TRUMBLY & BARRETT, Ponca, City, Oklahoma.**

of great interest to the producers of small grain. This work was begun by the university, and the grain growers, noting the beneficial results, raised a fund to conduct it on a much larger scale. As many of our readers recall, the plan was to introduce the parasite into the fields where the green bug was at work. The evidence shows that this is a practical and effective means of repelling the advances of the green bug.

This report discusses, first, the development of the work, and then gives in detail the life history and behavior of both the green bug, an Italian insect, and its arch enemy, the parasite. The progeny of one green bug for a season runs up in the sextillions. A single parasite with its offspring will reproduce much faster, and soon checks the increase of the insect hostile to growing grains.

The book contains 220 pages, and there are many beautiful and helpful illustrations to enable the farmer to distinguish his friends from foes in the insect tribe. The best methods of wheat culture are also emphasized. A copy of this report may be had free by addressing the Chancellor of the University, at Lawrence, Kan.

**Chinese Corn.**

The peculiar value of Chinese corn is that the erect arrangement of the leaves on one side of the stalk and the appearance of the silks in the angle where the leaf blade joins the sheath offer a protected place in which pollen can settle and fertilize the silks before the latter are ever exposed to the air. This, says the department, is an excellent arrangement for preventing the drying out of the silks before pollination. It remains to be seen, though, if the leaves would stand erect and if the appearance of the silks in the angle of the leaf blade and sheath would be the same when the twenty-mile-an-hour blistering breezes come up from Arizona and blow across these western prairies.

Like all things that are heralded with glowing advance notices, this new corn has its disadvantages. For instance, the plants raised in the test averaged less than six feet in height, which would put out of business a vast lot of stepladders and high-corn stories that have been used in harvesting the crop in the west. The ears, too, averaged only 5½ inches in length and 4¼ inches in greatest circumference, with only 16 to 18 rows of small grains. The department believes that by cross breeding with some of the larger specimens in the United States the size of the Chinese species can be enlarged without impairing its peculiar value as to pollination. No doubt the department will conduct its experiments along this line at the western experiment stations, since the bulk of the corn grown in this country is subject to the climatological conditions to which the new plant seems to be impervious.

The Stock Breeder' Biennial of 1908-9 is a book which should be in the hands of corn breeder and keeper of live stock in Kansas, or of any other state. The book is the proceedings of the twentieth annual meeting of the Kansas Improved Stock Breeders' Association. It is compiled by I. D. Graham, secretary and treasurer of the association. Besides containing the addresses before the annual meeting and the discussions pertaining to those addresses Mr. Graham has added an appendix of great value. The appendix contains an exploration of the Kansas feeding stuffs law by Director Webster of the Kansas Experiment Station; the new stallion law of Kansas; and dates of all known fairs; a plea for a Kansas State Fair which plea is founded on indisputable facts; a directory of the officers of all the live stock breeders and kindred associations in Kansas; and most important of all a directory of all breeders engaged in the making of improved horses, cattle, swine, jacks and mules, sheep and poultry. Membership in the Kansas Improved Live Stock Breeders' Association cost \$1 per year and such a report is issued each year. The book is worth the money. Every keeper of live stock should become a member and be sure of getting the report. Some of the best things ever written on the various subjects are contained in the addresses given in the annual report and following are a few samples:

G. W. Berry in president's address: Conservation of the soil is the most vital agricultural problem of the age

merits the consideration of the wisest statesmen. It is in line with preservation of the forests, a measure promulgated by President Roosevelt, world wide in its scope and one of untold importance to future generations. The farm its the farmer's bank, and the farmer who draws from his land without making deposits to restore its fertility will exhaust the resources of his land as certain as he who draws upon his bank continually without making bank deposits. Whoever sells a load of corn or wheat removes from his land a portion of its fertility, returning to deposit, and year after year his farm grows poor. Whoever sells a cow or a hog or a horse helps his bank account and has left on his land deposits that restore the fertility of the soil and year after year his farm grows better. Poor stock may be better than none. Good stock pays well and when combined with good farming leads to success and content with rural life and farming becomes a permanent occupation.

Director Webster, of Kansas Experiment Station: It seems to me that with conditions as they are, with cheap feed, I suppose you think it is pretty high this year, where there is an equitable climate for live stock work, for the breeding of beef cattle, hogs and sheep, it is something that should be taken up and pushed harder in this country than it is done. In all of these things, with the conditions as they exist here we ought to be in the forefront rather than in the rear. We have the men, we have the farmers, and what we want is ambition along the lines of improvements of all classes. It means much to Kansas to improve the grade of the stock we have on our farms, and if there could be some organized effort for bringing into the state more pure blood males of every description it would mean much for the wealth of the state. Up in Michigan the agricultural college started in about seven or eight months ago by putting a man in the field to look up farmers who had high bred animals and looking up men who wanted to improve their conditions through a better sire, and getting the men together. This man started out first with the dairy stock proposition, and after he was out only a few weeks he was simply astonished at the demand there was for good stock, by men who didn't know where to get it. This man came in and was able to place his hand on an animal where he could recommend it. He simply couldn't fill the orders that came through his hands. He didn't handle a dollar, he simply was an agent employed by the state to get the animal for the man who wanted it, from the man who had it to sell. Just how far the state ought to go in matters of that kind is a question perhaps. They tried it as an experiment but it proved such a success it almost scared them; they don't know just how far to go. It shows that what we need is to get the information to the people who want help.

Dr. O. O. Wolf, Ottawa, Kan.: In looking over the cattle of the state, one will find them composed of almost every existing breed. This promiscuous use of different breeds is largely responsible for the large percentage of inferior animals one finds distributed throughout the state. Success in any line depends largely on stability, or "stick-to-it-iveness." Little progress is made when one is constantly changing from one breed to another. Select the breed best suited for your purpose and environment and then do not be diverted by popular sentiment or public opinion. Ever remember that the longer you breed along one line the more thoroughly will the characteristics you have been trying to perpetuate, become established. This is what makes some of the older breeds more prepotent than those of recent origin. This is what gives the old country breeder an advantage over the American breeder. As a rule cross breeding has a degenerating effect if carried on for succeeding generations. It seems to set free weakness and undesirable qualities that were apparently dormant in well established breeds. Although for one generation if the animal is intended for slaughter the result is sometimes extremely profitable. It comes nearest being successful when well bred animals are used on common grades. As a rule the offspring will partake of the characteristics of the well bred animal. This is but natural as all the blood el-

# POLAND CHINA SALE

H. N. Holdeman, Meade, Kan.,  
will sell at

Pratt, Kan., Sat., Dec. 11

**50** 19 Tried Sows, 8 Fall Yearling  
Gilts, 6 Spring Boars, 1 Fall  
Yearling Boar, 26 Spg. Gilts **50**

This offering is strong in the best Poland China blood lines. They are good enough for breeders and will be cheap enough for the farmer. These tried sows and gilts will be bred for early farrow to our good herd boars—some to Greater by Spellbinder and out of White Tip, a line bred Chief Perf. 2d sire; others are bred to E. L. Mischief, a grandson of Mischief Maker, and a show prospect himself. A few special attractions in the offering will be two young boars and four gilts by Kansas Meddler by Meddler and out of Prospect E. L.; two gilts by Kansas Meddler out of Lady Mischief; one tried sow by On The Plum, another by Corrected King and out of Chief's Model Girl. Also, one gilt that was first in under year class at Pratt County Fair this season. You will find this a nice, clean offering of up-to-date Poland Chinas. Send your name today for catalog. Breeders from a distance stop at Central Hotel, Pratt. Send your bids to O. W. Devine, representing Kansas Farmer. Come and be my guest whether you buy or not. I guarantee satisfaction.

AUCTIONEER—John D. Snyder.

## H. N. HOLDEMAN,

Meade, - - - - Kansas

After December 8 Address Pratt, Kan.

ements of the pure bred run in one direction. This is what makes the well bred animal a more valuable sire than his grade brother of equal merit as an individual.

Charles E. Sutton, Lawrence, Kan.: In the first place we all want better stock. Of course I am in the pure bred business and I get a great many letters of inquiry regarding bulls and stallions. In the course of these letters man after man will say: "I don't want something fancy." Now take it in boars. They want something as a rule worth from \$15 to \$25. There is no money in selling boars worth from \$15 to \$25. Boars worth anything are worth more than \$15 to \$25. If we stand together and castrate every animal that is not worth \$25 we will get better results. Every boar that is not worth \$25 is a damage to every one of us. You cannot expect superior stock from an inferior animal. You sometimes get it, but you have no right to expect it. Another man writes: "I purchased a boar that originally came from your herd, had your blood lines represented. I don't want anything connected to that boar." There never was a greater mistake. In all the years I have been handling pure bred stock, I think in every instance where I have purchased an animal that did not carry the same blood lines I have injured my herd. The thing of picking an animal that has been bred on the one hand by mating up this and that and it coming out of such an animal as you admire, is crossed on a herd that is made up of an entirely different lot of animals. I want you to put those animals together; they go in every direction. As I said before, castration is the only salvation for our business. Mr. Elward: I would like to ask about using males in the same blood lines. For instance, we have had several Wild Tom bulls. Would you buy bulls out of that Wild Tom family? Mr. Sutton: Yes, you bet I would. That bull will give you a type. You get the benefit of all these years the breeder has spent in reproducing the blood of Wild Tom. All the crosses we have had in cattle and all the crosses we have in hogs

and horses, the best have come from this line breeding.

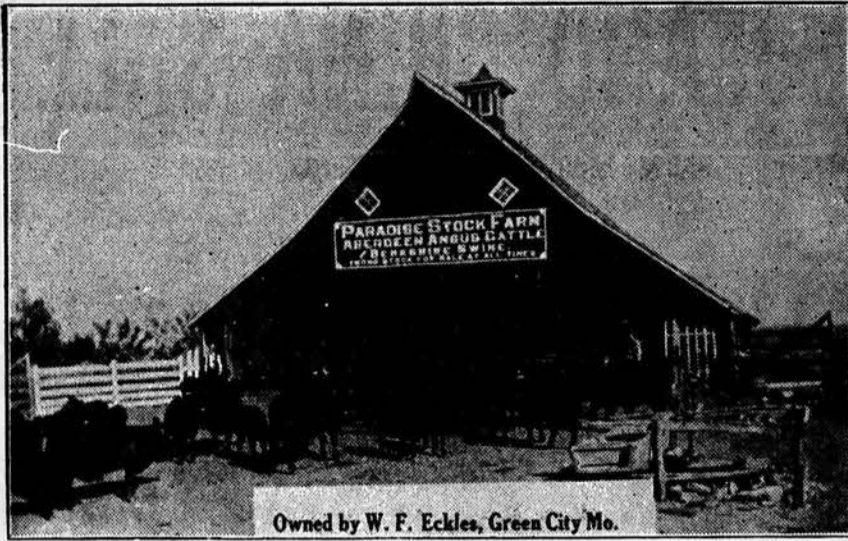
L. L. Vrooman, Topeka, Kan.: One of the requisites is to select a breed. If you fancy a certain breed there is variation enough in the type of that one breed to accommodate the most exacting. By all means breed nothing but pure bred. The price between the pure bred and the average market hog is so little it would not pay any one contemplating starting in with a breed of hogs to buy anything but pure bred hogs. It takes a little nerve on the start. We get so in the habit of thinking economy and talking economy and talking about poverty until we lose sight of the better things of life. Think larger; if you want to grow or develop you must think large. If you have been thinking in cents, think in dollars. If you have been thinking in dollars, think in hundreds. I wish there were more of the farmers would think in hundreds instead of dollars. Perhaps we breeders might be able to sell more hogs. Breed for a thick type in that breed. Have a type in view and stick to that type. If you have to propagate that type on your farm in order to get it, do it, and if you have to breed the sows closely related to some boar to fix that type, do it.

**He Didn't Much Care What the Season Was.**

We all look forward in the spring, wondering if we are to have a good season. As our land grows poorer, very much depends on the season. When we first came to Wisconsin, 52 years ago, writes ex-Governor Hoard, the land was so rich that we noticed that good crops were raised in all kinds of seasons. The same is true of the farmer who has kept up the fertility of the soil, who has made a study of soil exhaustion and what will prevent it.

Modern farming consists very largely in using methods that will help out against bad seasons. We heard a first class farmer make a suggestive remark not long since. We had asked him about his hay crop this season and this is what he said:

"I don't much care what the season is late years. I've kept my soil up, and a corn crop for the silo is almost



Owned by W. F. Eckles, Green City Mo.

a sure thing. So it doesn't matter much about hay. Indeed, I am beginning to think hay, except red clover and alfalfa, is the most expensive crop I can raise. Why, I can put the value of seven tons of timothy into a silo off of one acre of corn ground. The corn is surer than the timothy. Then, besides, the ensilage is always juicy, the cows like it winter and summer and the milk rolls out."

That man makes dollars where some farmers do quarters. He doesn't happen to be cursed with a lot of old-worn-out notions about farming that there is no money in.

**Best Type of Silo.**

"The best type of silo for cheap and quick erection as well as general durability, considering its cost, is the hoop stave silo," says Prof. C. O. Ocock of the University of Wisconsin. "Farmers frequently inquire how they can best provide themselves with a good silo and do it late in the season in time to receive the corn crop which is now approaching maturity. With good care the stave silo may last 15 to 20 years. Care is especially important since the stave silo is like a large tub and the hoops must be kept tight or the tub may fall to pieces, especially when it is empty during dry summer weather.

"The ready made silo is usually best as this can be purchased from manufacturers complete and will prove more satisfactory than when made from materials prepared at home. The grades of timber vary greatly, fir, cypress and red-wood being best and highest priced. A good 150-ton silo can be purchased at a cost of \$200 to \$500, according to the material. A cover should be provided where there is much snow and the door must be air-tight and easily removed from the outside as soon as the silage has been removed below the level of the door within."

George Crooks, the old time and successful Poland China breeder, located at Clay Center, Kan., has been making some very good sales and still has some choice boars and gilts for sale at reasonable prices.

**Spring Boars and Gilts.**

With this issue Oliver & Sons start an ad for their large, prolific Poland Chinas. Mr. Oliver has been breeding Polands for 37 years and has stuck to the one type of a large, smooth Poland. He breeds for size and quality. In this herd will be found several as good sows as the writer ever saw on any farm in the corn belt. The most of them are by Gassick's Perfection, by Chief Perf. 2nd., with an out cross of the large Teumseh strains. Write for prices and kindly mention Kansas Farmer.

**Amcoats' Making Sales.**

S. B. Amcoats, one of our regular advertisers, reports nice results from his advertising. Among recent sales is a boar to E. L. Axelson of Garrison and one to C. W. Huse of Belvue, Kan. Mr. Amcoats still has some dandies left. They are big husky fellows and will be priced low for the next two weeks. Mr. Amcoats has purchased a very large heavy boned boar from E. M. Bell of Beattie, Kan. He is a line bred Expansion and cost Mr. Amcoats quite a long price, but he is a good one and is sure to make a good nick with the sows in this good herd. If in need of a boar write at once.

**Shorthorn Bulls.**

O. A. Tiller, of Pawnee City, Neb., reports the sale of a very good Duroc Jersey boar through the advertisement in Kansas Farmer to C. C. Thomas of Webber, Kan. The boar is a Lincoln Top and out of Mr. Tiller's Farmer Burns sow. Mr. Tiller is about sold out of boars and changes his advertisement this week. He has for sale some choice Shorthorn bull calves. They were sired by Pleasant Hill Master 292836, by the great Master of the Grove. This bull is pronounced to be almost the type of his sire. The young bulls are good individuals and out of good cows. Write at once about them.

**Stockmen Will Have a Day.**  
Authorities on cattle and hog breed-

ing will make reports on the results of their investigations at the coming meeting of the American Breeders Association to be held in Omaha Dec. 8, 9 and 10, and the stockmen have the first day of the program. These are some of the reports which will be heard: "Hereford-Shorthorn Crosses," P. E. Fogle, Jefferson, N. C.; "Grade Brahm Cattle in Our Southern States," Prof. C. Willoughby, Georgia Experiment Station; "An Important Principle in Selecting for Fancy Points," Prof. W. J. Spillman, Washington, D. C.; "Cow Testing Association," Collin C. Lillie, Coopersville, Mich.; "Breeding Milking Shorthorns," Prof. Andrew Boss, St. Paul, Minn.; "Feeding the Brood Sow and Litter in Swine Breeding," William Dietrich, Urbana, Ill.

**Powers County, Colorado.**

The farmers of the Lamar territory, the county seat of Powers county, Colo., have reason to be proud of the record that they made at the St. Louis Exposition in open competition with the finest farm products of the entire world. They demonstrated the superiority of Powers county soil by receiving four gold medals. In addition to these the grand prizes awarded the state were largely due to the Powers county exhibits. This is certainly a grand county. It must be seen to be appreciated. The Geo. A. Watson Land Company of Lamar, Colo., who have been doing a real estate business since 1886, have on hand a well selected list of bargains. It will pay you to write for their list. Better still, go and see. They refer you to any bank in Lamar or Powers county. See further announcement under real estate heading in this issue.

**A Country Life.**

It seems to me I'd like to go  
Where bells don't ring, nor whistles blow  
Nor clocks don't strike, nor gongs don't sound,  
And I'd have a stillness all around—

Not real stillness, but just the trees  
Low whisperings, of the hum of bees,  
Or brooks faint babbling over stones  
In strangely, softly tangled tones.

Or maybe a cricket or katydid,  
Or the songs of birds in the hedges hid,  
Or just some such sweet sounds as these  
To fill a tired heart with ease.

If 'tweren't for sight and sound and smell  
I'd like the city pretty well;  
But when it comes to getting rest,  
I like the country lots the best

Sometimes it seems to me I must  
Just quit the city's din and dust  
And get out where the sky is blue,  
And, say, now, how does it seem to you?  
—Eugene Field.

**AN EXCEPTION BARGAIN.**

- The Kansas Farmer..... 1.00
- The Western Poultry Journal..... .50
- The Review of Reviews..... 3.00
- The Woman's Home Companion..... 1.50
- McClure's Magazine..... 1.50

Total Actual Value..... \$7.50  
Our Price..... \$4.00  
This great group of magazines is a whole library in itself. The home supplied with this literature for a year will enjoy the greatest treat in reading matter possible to secure. This offer may not appear again.

**Learn to Draw**

*The field of art probably offers greater opportunities than any of the other professions.*

**The Reid School of Art, Topeka, Kansas**

*is the oldest and most successful art school in the west. After first year students work helps to pay their tuition. Board in Topeka is cheaper than in larger cities.*

For information address  
**Reid School of Art,**  
Crawford Bldg., Topeka, Kan.

**KANSAS LAND**

**KANSAS LAND**

**A FEW SNAPS IN ABSOLUTELY LEVEL LAND.**  
320 a., perfectly level, 200 a. in wheat, 4 miles from two towns.....\$20.00 a.  
488 a., very fine, not a foot of waste.....\$12.50 a.  
160 a., 12 miles out, very fine.....\$11.00 a.  
These are special bargains. Write me. **H. D. HUGHES, McDonald, Kansas.**

**\$20 PER ACRE.**  
320 acres of perfectly level land, 160 acres in cultivation, good improvements, close to school, on telephone line and Rural Route. Terms on \$3,000.00 if desired. If interested please write for full complete description.  
**EDWIN LYMAN, McDonald, Kansas.**

**A RARE SNAP.**  
160 acres adjoining town, all in cultivation, good house, barn, granary, good orchard of all kinds of fruit, fenced and cross fenced. This is one of our best bargains, and if you are interested do not delay. (First come first served.)  
**HUNTER REALTY COMPANY (Est. 1893).** Enid, Okla.

**FARMS IN THE FAMOUS WASHITA VALLEY.**  
110 acres fine river bottom. All in cultivation. A few nice pecan trees, no gumbo, sandy loam. Produce 60 bushels of corn to the acre. Finest alfalfa land, barn, but no house. Incumbrance \$2,000; long time if sold quick. Price \$50.00 per acre. Write  
**GUARANTEE LAND & LOAN CO.** Wynewood, Okla.

**EXCHANGE FOR EASTERN KANSAS FARMS**

\$25,000 hardware stock, located in Eastern Kansas, town of over 25,000 population. Trade for stock farm in Eastern Kansas.  
\$13,000 income building, located in Topeka, Kan. Trade for stock farm.  
\$10,000 residence, well located, West Side, 3 lots, 12 large rooms, strictly modern in every respect. Finished in o.z. Want stock farm in Eastern or Central Kansas.

**GEO. M. NOBLE & CO.**

435 Kansas Ave.  
George M. Noble.

Phones 444.

Topeka, Kan.  
J. Will Kelley.

**FOR SALE AT RIVERSIDE STOCK FARM.**

5 Percheron Stallions from 2 to 5 years old, 5 Percheron mares from 15 months old to 5 years old. All colors good. All registered and breeding guaranteed.  
A fine young registered Shorthorn Herd with Royal Glosster at the head, a pure Scotch bred bull. I will trade this herd on a good farm.  
Come and see my stock or write.

**O. L. THISLER & SONS,**

Chapman,

Kan.

**LAND**

Sumner County's rich mellow soil will soon be as famous for the production of Corn and Alfalfa as it is for wheat which will send the prices soaring. Better get in on the ground floor and get a good farm while the prices are yet comparatively low. We will be pleased at any time to show you field after field of Alfalfa that cuts from 5 to 7 tons per acre. Write me now for my list of land at \$25 to \$50. per acre. Owner's price my price.

**WM. HEMBROW**

Immigration Agent Rock Island Lines.

Caldwell, Kan.

**ZIMMERMAN IRRIGATED LANDS.**

Advance \$10 Per Acre December 1, 1909.  
Forty acres in alfalfa will afford an annual income of \$2,000 per year, and more than double that amount in fruits or early vegetables. Thirty dollars down will secure you a contract for 40 acres and the balance in 10 or 20 payments, without taxes or interest, if fully paid before 1913; when a warranty deed and deed for perpetual water rights will be given.  
Write for particulars about the best investment in irrigated lands in America, to the General Selling Agents.

**THE HEATH COMPANY.**

109 West Seventh St.,

Topeka, Kan.

**BUTLER COUNTY RANCH BARGAIN.**

760 acres Butler Co., 200 acres first class corn and alfalfa land, 40 acres timber, balance meadow and blue stem pasture; 2 miles to shipping point. R. F. D., telephone, good 5-room house, 2 large barns, never failing running water. Price \$35.00 per acre. For further particulars write

**L. L. KISER.**

Eldorado,

Kan.

**FOR SALE TO PLAT.**

55 acres adjoining Wichita City limits, that will sell for \$100 a lot; 8 2-3 lots to the acre. This will be \$75 per acre. We will sell it for \$125 per acre for the next 20 days, and 2,600 acre well improved ranch in Meade Co., per acre \$16.00.

**J. F. BELLEW & CO.,**

110 Main St.,

Wichita, Kansas.

**NEBRASKA LAND**

**\$11,500.00 BUYS**

One of Nebraska's richest farms of 16 a., 5 miles from Fairbury, 6-room house, barn 67x78, 90 a. cultivated, 35 a. alfalfa. We have many other bargains.

**NIDER & HENRICHS,**

Fairbury,

Neb.

**I SELL DIRT.**

I have for sale one of the best improved ranches in Southwest Nebraska, containing three sets of improvements. The ranch contains 4760 acres of fine land, 2500 of which is fine alfalfa land. I also have for sale good farms from 160 acres up, write me.

**S. STEINMANN,**

Wauneta,

Nebraska.

**PINEAPPLE CITY, MEXICO.**

Excursion Dec. 7.

Almost one half of the 12,000 acres we advertised in this page last week is sold. If you want in on the ground floor on this proposition make your arrangements to be with us on the Dec. 7th excursion, write for our illustrated booklet, it tells the whole story.

**THE MEXICO IMMIGRATION LAND & FIBER CO.,**

201 S. Main St.

Wichita, Kan.

**MISSOURI LAND**

**FARMS FOR SALE** in South Missouri. I have several good farms for sale on easy payments from \$5 to \$10 an acre. Please write me for full particulars.

**WILLIAM BOWEN,**

Houston,

Missouri.

**TEXAS LAND**

**FOR SALE.**

Several thousand acres good agricultural prairie land near R. R. town; price \$17.00 to \$37.50 per acre, owing to location and improvements.

**G. T. REINHARDT,**

East Barnard,

Texas.







# Don't be an Engine —BUY One!

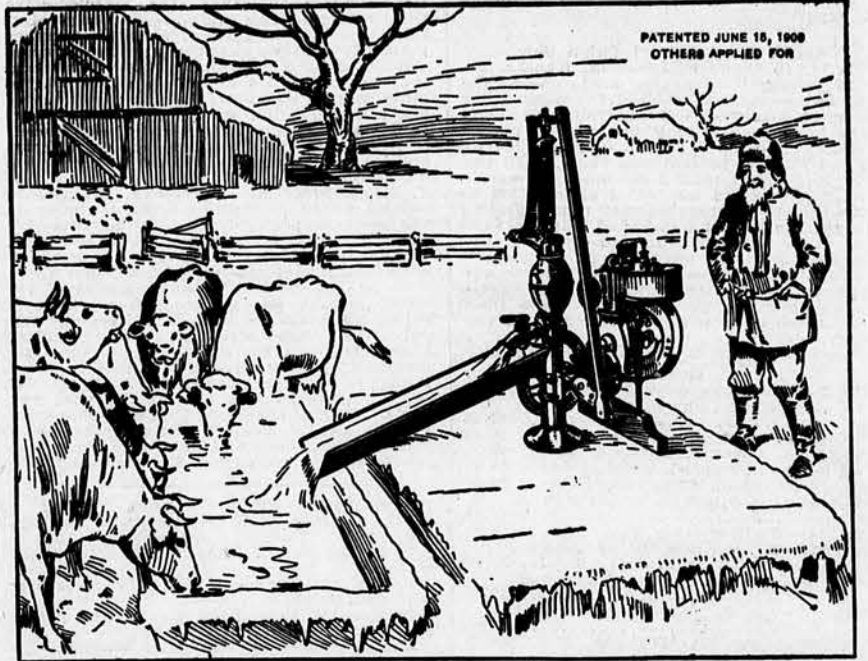
Thousands of thoughtless farmers are doing the work of engines. Pumping water for stock and running all sorts of machines by muscle-power. Burning up human energy instead of cheap gasoline. It's the most expensive mistake a man can make to become a mere machine. Don't do it! A small investment will now secure the famous Farm Pump Engine—the sensational little wonder that almost runs the farm! The most remarkable pumper that ever worked in a well! An engine that will be your "right hand man" for a trifle a day! One with power for every purpose—adaptable to scores of uses—complete in itself—easily moved from place to place and ready for instant action. The pictures printed below point a moral for every man who is wasting time and effort in working like an engine.



**Pumping by MAN-POWER Is WORK!**

"Being an engine" is no joke when it's cold as Greenland and the cattle are so thirsty they simply can't drink enough. The boy is "shooing" them away before they are satisfied. The man at the pump is "working like an engine" and every muscle says "Ouch!"

Moral: Get a Fuller & Johnson Farm Pump Engine.



PATENTED JUNE 15, 1908  
OTHERS APPLIED FOR

**Pumping by ENGINE-POWER Is PLAY!**

The man is "taking it easy" while the Farm Pump Engine works. The busy little engine is on the job and the cattle drink all they want. While watching it work the farmer is thinking—"What a fool I was that I didn't get that dandy little engine long ago! It's the best 'hired man' on the place!"

Moral: Get a Fuller & Johnson Farm Pump Engine.



Patented  
June 15, '09.  
Others  
Applied  
For

## THE FULLER & JOHNSON FARM PUMP ENGINE

### The Engine That Almost Runs the Farm!

The Fuller & Johnson Farm Pump Engine is a Prodigy in Power. It's supreme as a pumping engine alone, yet this doesn't begin to tell the scope of its ready service. For no other engine, regardless of price, does all that this wonder will do. Note how it differs in looks from ordinary gasoline engines. This is the key to its greatness. It's a complete, portable little Power Plant. Needs no cement foundation! No arms! No belts! The engine is absolutely complete in itself, and ready for work any time, anywhere! Everything but the gasoline comes in the packing box in which it is shipped.

#### How it Works

The engine attaches to any standard force pump by means of four common nuts. It will start with half a ton lift on the sucker rod and run at the rate of 31 to 35 strokes a minute as long as the fuel holds out. The length of strokes can be regulated.

Works in any well that a windmill will pump. Easily detached and moved. Has a convenient 4-inch pulley for operating all kinds of hand-power machines—churn, cream separator, grindstone, feed cutter, fanning mill, washing machine, etc.

By attaching a piece of ordinary pipe for extra air chamber, it will throw water over any ordinary building. Splendid fire protection—worth everything in an emergency.

The Fuller & Johnson Farm Pump Engine is as high grade a machine in every respect as the best automobile engines. The perfectly Air-Cooled Engine—no fans or cooling attachments. Every engine built and GUARANTEED for Strength, Durability and Steady Running, by the Fuller & Johnson Co.

#### Clip the Coupon for FREE ENGINE BOOK!

We cannot do justice to the Farm Pump Engine in an advertisement. We can only give you an idea of its startling advantages. Let us send you the new engine book, in which full details are given. In fairness to yourself, get posted on this ever-ready engine that gives such cheap and dependable power. No engine has ever made such a splendid record for service. Farmers everywhere are talking about it. Dealers all over the country are scrambling for the agency. Every progressive farmer will be deeply interested in the description of the engine and what it will actually DO! Send the coupon or a postal card for it today. You will be abundantly repaid. Write for the name of the dealer in your locality who sells this wonderful engine.

FULLER & JOHNSON MFG. CO., 543 North Ave., MADISON, WIS.  
Established 1840

#### Cannot Freeze or Overheat

It will run in the hottest weather or when the thermometer stands 30 degrees below zero. Self-oiling. All important working parts encased, yet easily accessible. The simplest, neatest, handiest, strongest and most adaptable little engine on the market. We couldn't make it better if we charged \$500 for it. Yet it costs even less than a windmill!

**Dealers** The territory is being assigned rapidly. The demand is simply tremendous. Write at once if you wish the agency for the engine that is revolutionizing the business.

#### FREE ENGINE BOOK

Fuller & Johnson Mfg. Co., 543 North Ave., Madison, Wis.  
Please send Catalog of Farm Pump Engine to address below:

Name \_\_\_\_\_  
Town \_\_\_\_\_  
R. F. D. \_\_\_\_\_ State \_\_\_\_\_  
Dealer's Name \_\_\_\_\_

Sign and Send Today