

KANSAS FARMER

For the improvement  of the Farm and Home

Volume 51, Number 33.

TOPEKA, KANSAS, AUGU

Established 1863. \$1 a Year

THE farmer is the only business man who sells for what he can get.

We still live under the pleasing fiction that America is an agricultural nation in spite of the fact that half our people live in town and that they have made the problem of food distribution more complex than that of food production. Only thirty-five cents of the city man's dollar, spent for food, is edible—the balance pays for bringing it to him.

Living in cramped quarters the city man has his air, light, fuel and water fed to him through tubes. His garbage is disposed of, his food inspected, his actions policed, his streets swept, his children taught, his nose counted at the polls and he is made to keep off the grass. He has nothing to do but work and yet he furnishes the best farmer market in any land or time.

Why not fix your own prices?

I. D. Graham



GRAIN AND HAY

KANSAS CITY is the largest hay market and one of the largest grain markets in the world. We are among the largest and oldest receivers and shippers in this market and want to handle your shipments, adding you to our already large list of satisfied customers.

Top Prices, Honest Dealing, Quick Returns, Careful Attention to Every Shipment

is the way we have won our customers who ship to us year after year. Our long experience, ability, standing, and way of doing business will please and satisfy any shipper.

GIVE US A TRIAL and you will be convinced that we are the firm you want to do business with.

FOWLER COMMISSION COMPANY

—Established 1890—

Receivers and Shippers Grain, Feeds, Hay

17 & 18 Board of Trade KANSAS CITY, MO.

REFERENCE—Any Bank in Kansas City, Bradstreet's and Dun's Agency.

Priced Low!

These Genuine Edwards STEEL SHINGLES

Low, direct factory prices, all freight paid. Cost less than wood. Can't rot or burn. Made by new "Tightote" Process that forever prevents rust. Come in big clusters of 100, hence far easier put on than wood. Over 100,000 buildings now roofed with Edwards STEEL Shingles. Tell us size of your roof and we'll quote you an almost unbelievably low price on the job. Send postal now for Roof Book 8363 and Prepaid Factory Prices.

THE EDWARDS MFG. CO.
8313-8363 Lock Street Cincinnati, Ohio

BLADE HARROW



No Teeth. No Knives.

Slips the trash; moves the entire surface one to three inches deep, killing all the weeds. A leveler and subsurface packer. Seed-beds, listed corn and potatoes require this machine for best results. Let us explain how to save time and get better yields.

THE BLADE HARROW CO.,
Lawrence, Kan.

WEBER TRACTOR

FOUR-CYLINDER, 35 H.P.
The sensation of the century. Backed by Weber's 30 year's reputation. New Model. 35 Horse-Power. Lightest, strongest, most efficient Tractor made. A complete power plant.

SAVE \$1,000.00

A wonderful price revolution. Tractor will pay for itself the first season. **FREE TRIAL.** Full factory guarantee. Write quick for illustrated book and amazing price offer.

AMERICAN GAS ENGINE CO.,
Dept. 700 Kansas City, Mo.

Hopper & Son, Manhattan, Kansas

Builders of

Concrete Silo

Write for list of silos we have built. Ask our customers about them.

\$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 catalog and price list.

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

FARM AUTO

For the Farm Auto Owner
Inquiries and Suggestions Solicited

When to Light Auto Lamps.

The question as to when automobile lamps should be lighted was fixed by the last Legislature, in Section 9 of Senate Bill 239, which reads as follows:

"Every motor vehicle while in use on public highways shall be provided with good and sufficient brakes and also with a suitable bell, horn or other signal, and shall have exhibited during the period from one-half hour after sunset to one-half hour before sunrise, one or more lamps showing white lights visible within a reasonable distance from the direction toward which such vehicle is proceeding, and a red light visible from the reverse direction."

The law took effect on its publication in the statute book.

Carbon Deposit Removal.

If good oil is used we do not believe it necessary to remove carbon more often than every four or five thousand miles. Carbon can be removed thoroughly and effectively only by scraping. However, carbonizing can be materially reduced and the necessity for scraping relieved by injecting a tablespoonful or two of kerosene into each cylinder every hundred miles or so. The kerosene should be used while the cylinders are

2,000 miles. They have also made the trip from Frederick to New York on horseback, and hold the world's record for an ocean-to-ocean horseback trip. They rode their horses from the Atlantic to the Pacific in just sixty-two days. They have now deserted their horses for the swifter mount, and expect to make their first cross-country motorcycle trip in record time.

Lubricating Springs.

On seven of every ten cars the springs are squeaky. All springs become squeaky as soon as moisture gets between the leaves and causes rust. In the figure taken from the Overland instruction book is shown how springs may be greased. A jack is placed under the corner of the body of the car, thereby raising the



body, and the weight of the wheels and running gears pulls the spring leaves apart. With a feather or thin stick graphite grease may be placed between the leaves and the squeaking discontinued. It is not necessary to lubricate



HOWARD COFFIN, FAMOUS AUTOMOBILE ENGINEER, AND HIS FIRST CAR BUILT SIXTEEN YEARS AGO.

hot. With the spark off, the motor should be cranked a few times immediately after the introduction of the kerosene. In this way the kerosene will work over the entire cylinder surface. The next morning the motor will work freely on account of the solvent action of the kerosene on the carbon.

35,000 Automobiles in Kansas.

Secretary of State Charles Session, has already issued in the neighborhood of 29,000 licenses to automobile owners and the applications are still coming in. At the rate they are coming the indications are that there are over 35,000 cars now owned in the state. The central Kansas counties where they habitually raise big crops of corn, wheat, alfalfa, and feed out large quantities of live stock, have the most automobiles, of course. Sedgwick County leads the list with over 1,400, followed by Reno with Shawnee third. A very large proportion of the cars owned in the state are owned by farmers. Even out in some of the more western counties where a few years ago they had almost nothing but buffalo grass, a good many cars are now owned.

On Motorcycles This Time.

The "Abernathy Kids," age nine and thirteen, started May 15 to ride their motorcycles from Frederick, Okla., to New York City. This is the fourth cross-country trip of these boys, the first having been made when they were five and nine years old respectively. At that time they rode horses, traveling from Guthrie, Okla., to Santa Fe, N. M., and return, a distance of more than

springs in this way more frequently than once a year. The spring bolts these days are usually lubricated by grease cups. These should be given a few turns when it is seen that the bolts are dry.

Washing the Car.

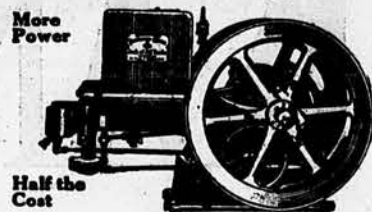
Most automobiles have a piano body finish. You would not wash your piano with hot water and soap with a scrubbing brush. Yet this is done every day by automobile owners.

In the towns and in garages the rubber hose is commonly used in washing and when the hose is accessible this is as good a plan as any. However, the water from the hose should be allowed to run onto the car, the idea being to gently soften the dirt and after softening gently rinse it off. If the water is applied directly with a strong pressure the dirt and sand is ground into the finish. On the running gears where there is more dirt and the parts more difficult to get at, water from the hose by direct pressure may be applied.

When no hose is available the garden sprinkler can well be used. The dirt can be softened as a result of sprinkling and then wiped off with a sponge. The sponge should be kept clean and free from grit. It will be well to have two sponges, one for the running gears and another for the body.

To sum up the whole operation of washing and still retain the beautiful finish, it is only necessary to say that the cleaning should be done at gently and that the sponges used and the chamois in finally drying off the body, should be kept thoroughly clean.

Jack of All Trades Kerosene Engines



Kerosene (Coal Oil) can usually be bought for less than half the price of gasoline and a Jack of All Trades Engine will develop as much power on a gallon of kerosene as on a gallon of gasoline.

Why Buy Gasoline?

Besides their great economy these engines are easy to handle, safe, strong, durable. Always ready for service. Every one guaranteed. Sold at remarkably low prices for high grade engines.

2, 4 and 6 h. p. Horizontal; also 2, 4 and 6 h. p. Vertical. Other types up to 500 h. p. Write for Catalog No. DT 898

Fairbanks, Morse & Co.

Omaha Kansas City St. Louis
Fairbanks Scales, Oil Traction Engines, Water Systems, Electric Light Plants, Pumps, Windmills, Feed Grinders.

FITZ OVERALLS

FIT EVERY ONE FROM A THREE YEAR OLD BOY TO A THREE HUNDRED POUND MAN—NEXT TIME YOU BUY INSIST ON FITZ



Save \$50 to \$300

I absolutely guarantee to save you \$50 to \$300 on any Galloway gasoline engine. Made in sizes from 1 1/2 h. p. to 15 h. p. My famous 5 h. p. engine—without an equal on the market—sells for \$99.50 for the next 60 days only! Buy now! Same size costs \$225 to \$300 through your dealer. Think of it! Over \$200 Galloway engine to use today. All sold on same liberal 90 Day Trial Offer I make you—and all giving satisfaction. Isn't that proof enough?

Get My Catalog and Low Direct Prices

Write me before you buy any other style or make. Get my catalog and low, direct price on the famous Galloway line of frost-proof, water-cooled engines. Free Service Department at your disposal. My special 1913 offer will help you get an engine partly or wholly without cost to you. Write today. Do it now.

WILLIAM GALLOWAY COMPANY,
215 Galloway Station, Waterloo, Iowa

"OHIO" 1913 Model

The Silo Filler With the Direct Drive

Wonderful improvements of 1913 "Ohio" eclipse anything ever before produced. One lever controls all movements—reverses by wood friction at finger pressure. Self-feeder—with famous "Ball Dog" grip. Patented Direct Drive—Shear cut—non-explosive, non-clogging. Enormous tonnage on half inch cut—50 to 250 tons a day—6 to 15 h. p. 25-year durability. "Ohio-cut" silage famous—cuts all crops. Used by Experiment Stations everywhere. Guaranteed. Many big new features this year.

Write for free catalogue, also send 10c for 264-page book, "Modern Silage Methods."

THE SILVER MFG. CO.,
Salem, Ohio

WRITE FOR BOOK

INSTALL YOUR OWN Water Works

Hot and cold running water for country homes. Complete system ready to install \$37.50. Easily installed by anyone or money refunded. Enjoy the comforts of life!

Big Free Catalog

Simply send name today for big low price Catalog FREE. Shows hundreds of bargains in Pumps, Windmills, and everything known in Plumbing Goods direct at manufacturers' prices.

MISSOURI WATER & STEAM SUPPLY CO.,
1730 So. 4th St., St. Joseph, Mo.

BINDER ATTACHMENT

with corn harvester cuts and throws in piles on harvester or in winrow. Man and horse cut and shock equal with a corn binder. Sold in every state. Price only \$20.00 with fodder binder. J. D. Borne, Haswell, Colo., writes: "Your corn harvester is all you claim for it; cut, tied and shocked 65 acres milo, cane and corn last year." Testimonials and catalog free, showing pictures of harvester. Address

PROCESS MFG. CO., Dept. 39, Salina, Kan.

SUBSCRIPTION PRICE

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

ADVERTISING RATES

30 cents per agate line—14 lines to the inch. No medical or questionably worded advertising accepted. Last forms are closed Monday noon. Changes in advertising copy and stop orders must be received by Thursday noon of the week preceding date of publication.



KANSAS FARMER

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

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

T. A. BORMAN, Editor in Chief; G. C. WHEELER, Live Stock Editor.

CHICAGO OFFICE—404 Advertising Building, Geo. W. Herbert, Inc., Manager.
NEW YORK OFFICE—41 Park Row, Wallace C. Richardson Inc., Manager.

Entered at the Topeka, postoffice as second class matter

GUARANTEED CIRCULATION OVER 60,000

OUR GUARANTEE

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



COST OF WINTERING COWS.

The silo long ago proved its efficiency as a cheapener of dairy products. If it could lower the cost of milk and butter, why could it not be used with like effect in the production of beef? The last few years several large Kansas feeders have used the silo and silage to most excellent advantage in the producing of beef. Numerous inquiries have recently been received as to the feasibility of using the silo in the wintering of stock cattle. The expressions of these inquiries would indicate that in their judgment the silo would not supply feed at a sufficiently low cost for a maintenance or wintering ration. Speaking generally, if silage will cheapen milk and butter and will cheapen the cost of producing beef, it will certainly reduce the cost in a maintenance ration and make wintering of stock cattle possible at a lower cost than has prevailed heretofore.

We know of the existence of no figures in detail on the utilization of silage in the ration of the stocker. We do have some data from the Pennsylvania State College on the cost of silage in the maintenance ration of the beef cow—the mother of the farm raised stocker and feeder. It is altogether likely that the cost of maintaining a cow in Pennsylvania is as high if not higher than in any other section of the country. The Pennsylvania station gathered up a herd of twenty cows—ten Shorthorns and ten Angus—and decided to winter these on silage alone with the addition of one pound of cottonseed meal each per day. With this ration no hay or other roughage was used. Straw was used for bedding. It was noted that little or none of this straw was eaten. The cows were wintered in an open shed with small yard. At the end of 140 days feeding on this ration the cows were in condition for beef except those which had calves and these were in an extremely thrifty condition. The Shorthorn cows were quite thin when the experiment began, weighing 1,038 pounds, and at the end of the experiment averaged 1,276 pounds—a gain of 238 pounds each. Each animal had eaten 8,000 pounds of silage and 140 pounds of cottonseed meal. The ten Angus cows averaged 1,105 pounds when put on the feed and gained 150 pounds each, the average weight at the end of the test being 1,256 pounds. These cows had eaten 7,800 pounds of silage each and 140 pounds of cottonseed meal.

It was not the purpose of the test to show the cost of gains in feeding but to ascertain the cost of wintering cows without hay or grain other than as above stated. The test failed to show the cost of a maintenance ration for the reason that each of the twenty animals was not only maintained in good, thrifty condition, but actually gained 195 pounds at a cost of \$17.61 for feeding, rating the silage at \$3.50 per ton, cottonseed meal at \$32.00 per ton and charged with bedding at the rate of \$5 per ton, not counting manure or labor. Had the cows been in good flesh in the fall they would have required less feed to merely hold their own. Our own experiment station conducted last winter at Hays a most interesting experiment in the maintenance of breeding stock cows. There were 19 cows in each lot. One of these lots was fed all the kafir silage and all the wheat straw they would consume, and the other lot 20 pounds of silage and all the wheat straw they would consume, both lots receiving 1 pound of cottonseed meal daily per cow. This experiment was continued for 100 days and during this period the first lot of cows consumed on an average 35½ pounds of silage daily per cow. They consumed in addition 14½ pounds of wheat straw and one pound of cottonseed meal per cow daily. This lot made a gain of 100 pounds per cow during the 100 days of the experiment, or 1 pound per cow daily. The limiting of the amount of silage given daily to 20 pounds per cow caused a consumption of 3 pounds more of the wheat straw per day, 17 pounds

being consumed by each cow per day, the second lot. This lot made a gain of 50 pounds per cow, or one-half pound daily during the 100 days of the test.

In estimating the cost of the feed the silage was charged at the rate of \$2.50 per ton, the wheat straw at 50 cents per ton and the cottonseed meal at \$30.00 per ton. At these prices the feed for each cow in the lot receiving the full silage ration cost 6½ cents per day and the daily ration per head of the lot receiving the limited amount of silage cost 4½ cents daily. Ordinarily wheat straw is given no value at all being considered a waste product. These cows were wintered in far better shape than the average Kansas stock cow, and at a comparatively low cost. At the rate the kafir yielded last year at Hays it required but one-eighth of an acre to produce a sufficient amount of silage to feed one cow during the 100 days of the test where the silage was limited to 20 pounds daily. Where a full allowance of silage was fed it required one-fifth of an acre of kafir to produce the silage required per cow for the 100 day period.

The problem for the farmer to determine is how much silage he can produce per acre and what it costs to produce it. We think the figures in the above experiment indicate quite strongly that when Kansas conditions are taken into consideration that it is possible to do a very much better job of wintering stock cattle than has been the rule in this state, at a very reasonable cost. Our stock cattle as a rule go on

to pasture in the spring with less weight than when they came off of pasture the preceding fall. This principle of feeding cattle or rather keeping cattle, is all wrong and in itself is extremely expensive even though the cattle eat very little. The experiment above stated does not settle anything. It merely points the way to the economical keeping of the cow which is vital in farm cattle raising. We have stated repeatedly that the beef of the future must come from the small farm and if it does come from the small farm, as it must because there is no place else from which it can come, we must feed more economically and to better advantage than heretofore and it is our judgment that the silo will make it possible for the farmer to grow stock cattle and feed the same to finished beef at a profit.

WATERS TO STAY IN KANSAS.

KANSAS FARMER readers will be very glad to hear the Pres. H. J. Waters of the Kansas Agricultural College has turned down the proposition offered him by the Southern Development company and will not leave the big Kansas school. Apparently the big increase in salary offered to him by the Southern Development company did not appeal to him sufficiently to draw him away from the work of making the Kansas Agricultural College the greatest of its kind in the world. It would have been a serious blow to that institution to have lost President Waters at the present time.

SAVE YOUR LIVE STOCK

"PUT all your feed, corn, kafir, milo and cane into a silo and there will be plenty for the stock cattle to eat this winter" is the statement made by the experts on the Rock Island Silo Special. The live stock of Kansas is one of the state's greatest assets. Without live stock no market can be found for the vast amount of rough feed which is grown ever year. The draining of the state of its live stock means the loss of the only machinery with which this material can be converted into cash. It will take several years to re-stock and necessarily at advanced prices. Stock sold on a rapidly declining market seldom makes any money. A permanent system of farming must be built around live stock as its center. Every effort possible should be made to retain our investment in this money making equipment of our farms. Farmers who are "in" and "out" on live stock according to the seasons seldom make a money making proposition of their operations. It must be a regular feature of the farming business and plans must be made whereby a dependable source of feed will be available each year to handle this live stock.

A conference has just been held in Governor Hodges' office for the purpose of discussing the present situation as to the feed supply. This conference was attended by W. J. Bailey, president of the State Bankers' Association; W. W. Bowman, secretary; Chas. M. Sawyer, State Bank Commissioner; Prof. Cochell of the Agricultural College had been called in as an expert on the live stock business. Albert T. Reid and G. C. Wheeler represented KANSAS FARMER. Professor Cochell stated in this conference that a shortage of water was the only legitimate reason for rushing stock cattle to market at the present time. Kansas has produced enough feed if used as silage, to winter all the stock cattle in the state even though not a bushel of corn is matured. This is not a mere theoretical statement. Professor Cochell has made several experiments in determining just how much it takes to properly winter stock cattle. Last season he fed mature stock cows at the Hays Experiment Station rations consisting of 20 pounds of kafir silage daily per cow, all the wheat straw they would eat, which amounted to 17 pounds daily, and one pound of cottonseed meal. There were 19 head of cattle in this experiment and one ton of kafir silage, 1,700 pounds of wheat straw, 100 pounds of cottonseed meal was all the feed required to maintain these cows per head for 100 days. The cows made average gains of 50 pounds each during this period. This feed cost only 4½ cents daily per cow. One acre of kafir supplied sufficient silage to feed 8 cows during this period. The straw is regarded as a waste product and is commonly given no value and too often burned.

The unnecessary sacrificing of stock at the present time would be a calamity to many a Kansas farmer. In some cases the work of 15 or 20 years in building up a high-class producing herd of cattle is sacrificed as the result of a temporary emergency. Even now speculators are planning to take advantage of the rushing of stock cattle to market. Cattle will be in big demand by another year and at advanced prices. The farmers in the live stock business must prepare for such an emergency as this. An investment in a silo in a year of short feed crops will pay for itself in one season. It will make it possible to have a dependable feed supply so that there will be no need of sacrificing stock as results of a single short feed crop. In the normal feed years tons of feed annually go to waste because cattle are not available to consume it. Every organization in Kansas interested in the financial prosperity of the state is willing and eager to do its part in helping to carry the stock through this emergency. Urgent messages were sent out by Governor Hodges through the press and Mr. Sawyer and Mr. Bowman urged all bankers of the state to co-operate in the effort to hold the cattle.

EXPOSITION PLACE FOR GRAHAM.

Word has just come that I. D. Graham who for thirteen years was associated with KANSAS FARMER and at different times filled practically every position on the staff outside of the mechanical department, has been appointed assistant to Chief D. O. Lively of the Live Stock Division, Panama-Pacific Exposition. Mr. Graham is perhaps best known by KANSAS FARMER readers as the author of the popular front page feature which he supplied until a few weeks ago.

Mr. Graham since the first day of May has been secretary of the International Cattle company which has its headquarters in Topeka. He became closely associated with Mr. Lively during the last session of the legislature. Mr. Graham recently went to San Francisco on account of his health and received notice of his appointment while there. He will remain on the coast until the exposition closes, although he expects to return to Topeka after his work is finished in San Francisco. This appointment was made after a careful canvass of live stock men from different parts of the United States. He is to be congratulated in being selected for this place from among so many men of national reputation.

THE ROCK ISLAND SILO SPECIAL.

The Rock Island Railroad company could not have selected a more appropriate time to run its special lecture train over the various lines of its road. The interest in the silo as a means of preserving the feed has increased amazingly in the last year or so. Over 12,000 farmers were met during the first five days this train was in Kansas. In the extreme west end of the state the interest was even greater than that displayed as the train came farther east. Live stock is bound to become an important factor in the agriculture of western Kansas and the interest taken in the use of the silo is but an indication that the farmers are realizing this most important feature.

Over five hundred persons were present when the train made its stop at Goodland and at Colby. The principal information given these people of the western farms by the experts on the train was to save every ounce of the feed crops produced by placing them in silos. In this form it can be fed out to the dairy cows and other live stock and profitable returns secured. The pit silo has appealed especially to the farmers of this territory and the pamphlet giving in detail experiments in the construction and use of these silos was in great demand by those visiting the train. The first edition of this pamphlet was soon exhausted but through the efforts of Bank Commissioner Chas. M. Sawyer, who was on the train part of the time, Governor Hodges ordered the immediate printing of a second edition of these valuable pamphlets. Five thousand copies of this edition reached the train by express at Hutchinson and were handed out as the train proceeded westward. More will appear later in KANSAS FARMER columns concerning the valuable teachings of this silo lecture train.

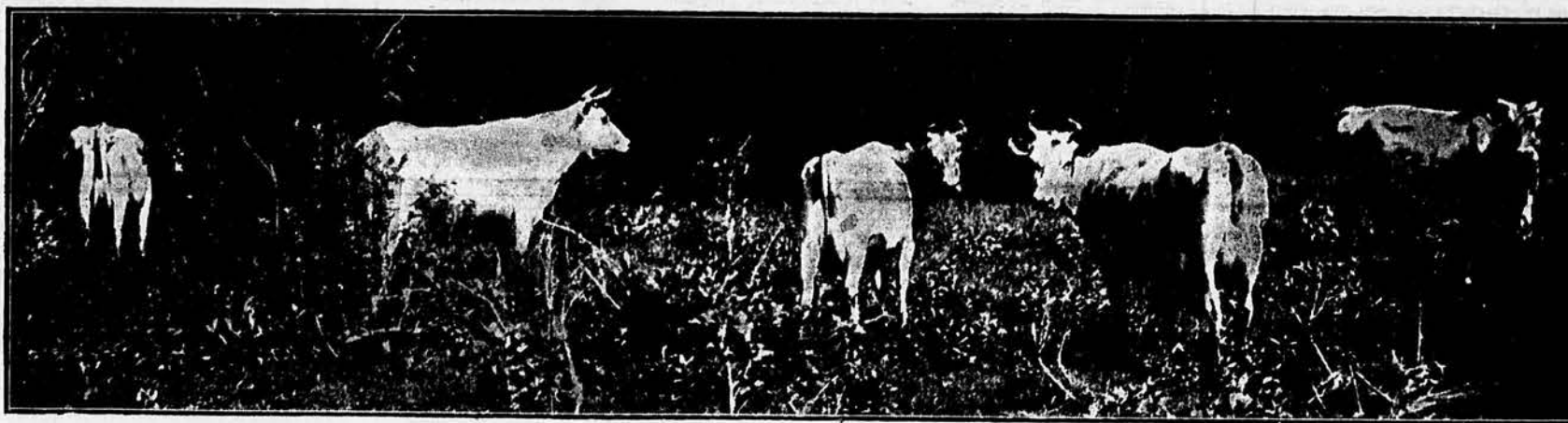
Albert T. Reid, president of KANSAS FARMER COMPANY, has just been honored with an appointment by Governor Hodges as a member of the Panama-Pacific Exposition Commission for the state of Kansas. The other members of this commission are Senator W. F. Benson, Eldorado; J. L. Pettyjohn, Olathe; Walter Innes, Wichita; and H. S. Dean, Kansas City. This committee will have in charge the planning and carrying out of the details of the Kansas Exhibit at the Panama-Pacific Exposition to be held in San Francisco in 1915.

MESSAGES STOPPED CATTLE RUSH.

Only 15,000 cattle came to Kansas City Monday. Half the buyers failed to get cattle. Prices advanced fifty cents to a dollar. Four thousand stock cattle were bought to go back to Kansas.

INTENSIVE FARMING

Raw Material of Farm Must be Manufactured into Finished Products at Home



GOOD DAIRY COWS ARE SPLENDID MACHINES FOR CONVERTING INTO FINISHED PRODUCTS THE VARIOUS RAW MATERIALS OF THE FARM.

THE Danes and Germans, the best farmers in the world, early learned how to fatten their soils at our expense. For nearly half a century they have bought American grain, and linseed and cottonseed cake with which to fatten their live stock, and produce the manure with which to fatten their land. The Danes long since have learned to make exports of such a character as will carry out of the country the smallest amount of plant food and bring the highest price, viz: butter, bacon and eggs. Under this system, Denmark's total food output has increased 50 per cent in the last 20 years.

Under the same system Germany has raised her wheat yield from 17 bushels in 1879 to 31 bushels in 1909. In this time under our system the wheat yield in the United States has declined.

To illustrate the difference in the soil fertility balance between the nation or farmer that buys feed and sells butter or bacon and the one that sells the feed to procure the butter or bacon, the following table should challenge our attention:

ECONOMY IN SELLING FARM CROPS AS ANIMAL PRODUCTS.

Commodity	Value of Fert. constituents per ton	Value of Fert. constituents in feed required to produce a ton	Saving effected in marketing one ton
Butter	\$.64	\$374.67	\$374.03
Meat (beef) ..	12.99	161.22	148.23
Pork (bacon) ..	7.22	97.31	90.00
Eggs	9.18	79.29	70.11
Milk	2.56	18.73	16.17

Thus, if the Kansas farmer sold to the Missouri, Indiana or Danish dairyman the feed required to produce a ton of butter, the fertility of the Kansas farm on which this feed was grown would be depleted to the extent of \$374.67, and all of this fertility with the exception of 64 cents would be left on the Missouri, Indiana or Danish farm when the ton of butter into which the feed had been converted was sold. How much better in general it would be for the Kansas farmer to convert the feed into butter and keep on the farm all the plant food the crops took out of the soil with the exception of the 64 cents that the butter carries away and the amount that is necessarily lost or wasted in feeding the stock and handling the manure.

Some one may ask, "What is to become of Germany and Denmark when the Americans become too intelligent to give them their plant food under the guise of selling them some feed for live stock?" We had better ask ourselves if there is any nation that will be as good to us as we have been to the nations of Europe, now that we have reached the end of our food export business, and our soils are in need of repair. No nation thus far has been able to repair its soil except at the expense of the soils of some other country. In addition to giving away the millions of dollars worth of plant food in the food stuffs we send away, we allow much of the plant food we retain at home to go to waste.

LIVE STOCK FARMING MORE PROFITABLE THAN HAY AND GRAIN FARMING.

Can a system of agriculture be built around live stock that will be profitable

By H. J. WATERS, Before Kansas State Bankers Association

THE farmer must sell a more finished product than he is now selling. There should never be another bushel of Kansas corn shipped across the Missouri River or out of the state, that can profitably be fed in Kansas. Not another ton of hay should reach the Kansas City market carrying with it about \$6 or \$7 worth of permanent capital of Kansas, but it should be fed at home. Mill our wheat in the state and feed the bran and shorts to Kansas live stock and return the manure to the soil should be our slogan. Our export products should be poultry, beef, mutton, pork, butter and eggs—finished products.—H. J. WATERS.

as it goes along as well as saving the fertility of the soil, or does this system commend itself only because it saves the soil? Will live stock farming pay better than grain and hay farming? These are fair questions to ask.

There has not been a decade in our history in which live stock farming has not shown a better balance than grain and hay farming. The census of 1900 will answer our purpose, and is typical. It shows that the average return from the hay and grain farms of the United States per acre was \$7.72, and from the live stock farms it was \$11.42 an acre, or a difference of 48 per cent in favor of live stock farming. Live stock farms as a rule are the poorer farms, containing rougher lands and more or less pasture. For Illinois the figures were \$10.60 an acre for grain and hay farms, and \$12.55 for live stock farms, or a difference of 18 per cent; Missouri, \$7.69 for grain and hay farms, \$9.55 for live stock farms, or a gain of 24 per cent; Iowa, \$8.88 for grain and hay farms, \$13.17 for live stock farms, or a gain of 48 per cent; Kansas, \$4.79 for grain and hay farms, \$5.26 live stock farms.

There is not a part of the United States in which hay and grain farming has been as productive or as profitable as live stock farming. Live stock farming builds up, hay and grain farming destroys the soil. Live stock farming attracts and holds people on the farm, and develops the highest type of citizenship in the open country.

The essentials of live stock farming are adequate capital and intelligent land-owning farmers. You cannot develop a system of live stock farming with tenants. If Kansas is to be developed to her highest degree, it is necessary that we encourage the owning of the land by the men who till it.

MIXED HUSBANDRY AND SILO FOR WESTERN KANSAS.

The western part of Kansas especially must have a mixed system of husbandry based primarily upon live stock and dairying, in combination with wheat. The support for the animals must be the sorghums. The trouble with the land there that has been tilled for a number of years is not that it is worn out. It is yet full of plant food, rich in the elements that go to make crops, but it started with a very limited supply of vegetable matter and much of that which it had has been burned out. Work back into oil vegetable matter in the form of barnyard manure and much of the difficulty is overcome. The silo is as necessary a part of the system as is the live stock.

Calculations have been made from Secretary Coburn's reports showing the average cash return per acre for the 19-year period from 1893 to 1911, inclusive, for 13 counties in the western third of

the state. Rating corn at 100, the cash returns for other crops is as follows:

RELATIVE CASH RETURNS PER ACRE.
Corn, 100; wheat, 114; sorghums, field cured, 174; sorghums, siloed, 261; alfalfa, 306.

If any one could devise a plan whereby alfalfa could be grown successfully on all the upland of this region, he would be hailed as a prophet. Yet milo, kafir and sorghum can be grown successfully there, and according to the figures quoted, these forage crops returned nearly as much value per acre as did the alfalfa grown on the bottom lands. The sorghum crop had two and two-thirds times the value of the corn crop, and more than twice the value of the wheat crop.

The value of silage made from the sorghums is no longer in question. Until very recently unless we had corn to put into the silo we did not think we could make silage.

The tests at the college with beef and dairy cattle show that silage from the sorghums actually is superior to, and is preferred by all classes of cattle to that made from corn. Especially is this true of the corn grown with limited moisture and exposed to hot winds before it is siloed.

A CHEAP SILO FOR WESTERN KANSAS.

For the western third of Kansas the "pit" or "underground" silo is proving a pronounced success. It costs very little to construct and keeps the silage quite as well as the most expensive above-ground types.

The "pit" silo is a hole in the ground with plastered walls. A roof is necessary to keep out dirt and trash and to keep animals and children from falling in and also to provide a free circulation of air and thus prevent the accumulation of carbonic acid gas at the bottom of the pit.

The officers of the Extension Department of the College have inspected many of the pit silos of Western Kansas and find them universally satisfactory. The number of such silos in the state will be greatly increased this year. They are as small as seven feet in diameter and twenty-five feet deep. Such a silo has been constructed for \$12.50, including the cost of labor for hauling and sand and plaster and the cost of the cement.

A silo 18 feet in diameter and 18 feet deep—too shallow to keep silage to the best advantage—cost \$45, not including the farmer's own labor, but including two men to help do the digging and a plasterer to plaster the walls.

Experience shows that a silo eight feet in diameter and 20 feet deep and having a capacity of about 18 tons, will cost from \$25 to \$30.

A "pit" silo 16 x 30 feet and having a

capacity of 120 tons will cost about \$125.

In short, the pit silo will cost, according to present experience, something like a dollar for each ton of storage capacity, and if properly constructed, will last indefinitely.

Above-ground silos cost from \$3 to \$6 per ton capacity and keep the silage no better. Unfortunately, the pit silo is not adapted to regions where the soil becomes saturated with water.

An Oklahoma banker told me a few days ago that he spends most of his time visiting his patrons and encouraging them to build silos. Notwithstanding the fact that the demand for money is strong at from 8 to 10 per cent, he is lending money to farmers at 5 per cent with which to build silos, and giving them all the time they want in which to pay it back. He runs a lumber yard in connection with his bank and sells lumber for silos at absolute cost as a further encouragement to the building of silos. He told me that any one could take his individual ledger and pick out the men who have silos by the amount of their deposits and the way their accounts stand. After two years experience in this work, he was certain that the best way he could build up business for his bank was to encourage his patrons to own silos. He estimated that his business would be doubled if every farmer who deposited at his bank had a silo.

Wisconsin Breeders Co-operate.

Guernsey breeders of Ashland County, Wisconsin, it is said, co-operate more fully than do the dairymen of any other section of that state. They have not only agreed to establish and "grow" herds of this noted Channel Island breed but with the leadership and the assistance of such men as former Senator A. W. Sanborn, and Roy H. Beebe of Ashland and Prof. George C. Humphrey of the College of Agriculture of the University of Wisconsin, they have attempted and accomplished new things in co-operative breeding. That they and other settlers in their district might be able to increase the milk and butter fat producing capabilities of their herds by the use of sires bred for production, they have perfected a plan for "bull clubs" which bid fair to become models for dairymen in similar sections.

Each member of these "bull clubs" pays a membership fee of \$1 per year and agrees to use no other than the community sires. Members are taxed \$1.50 a cow a season for this service and non-members \$2. One-half of the proceeds are paid to the breeder who feeds and cares for the bull, and the remainder is turned into the club treasury to pay for the next sire and for interest on the investment. To encourage still further the use of these superior sires, annual Guernsey shows are held and prizes are confined almost entirely to the progeny of these bulls.

At the Guernsey cattle exposition which will be held in Moquah in Ashland County on August 15 liberal prizes will be awarded to encourage the raising and exhibiting of superior representations of the breed. Among the prizes offered will be a young Guernsey bull furnished by Charles L. Hill, secretary of the Western Guernsey Breeders' Association and president of the American Guernsey Cattle Club.

The methods of these Wisconsin dairymen might well be adopted by dairy communities in Kansas.

SPUDS FOR WESTERN KANSAS

Potatoes Pay \$60 to \$70 an Acre—Quality Good and Demand Active

By EDWARD WERNER, Thomas County

I AM sure it will be a matter of surprise to many western farmers to know that potatoes in this section will give good yields of high quality and that the acre yield and the income from potatoes is in all probability far in excess of the results it is possible for us to obtain from any other crop.

IMPORTANT SOIL REQUISITES.

When inquiring into the possibility of growing potatoes on my farm, I found that perfect drainage is the most important requisite for potato soils. Our soils in this country are certainly well drained and meet this requirement. I then found that the potato is a native of mountain plateaus where the days and nights are cool. This was another condition which seemed to me to fit my surroundings. I found, too, that the potato grows best in a loose, friable, easily worked, perfectly aerated soil and that the physical condition of the soil is a more important factor in successful potato growing than fertility, although, like any other plant, it reaches its greatest development in rich soils. Thinking that the soil on my farm, which is upland and even though it is 160 feet to water, met all of these requirements in addition to its being reasonably fertile, I could see no reason why potatoes could not be successfully grown and the matter of water was the only other important factor.

POTATO NOT LARGE WATER USER.

The history of the potato reveals the fact that it is not a large user of water, or possibly better stated, that it does not require a large amount of water during the growing season which is 100 to 110 days. Potato growers in the irrigated districts irrigate before planting; they plow deep, creating a large reservoir and then fill that reservoir with water by giving the soil all the water it will hold. The potato is then planted and is not watered again until the tubers are formed and then only watered lightly and no more water is given the crop. Not being prepared to irrigate and thus fill the seed bed with water, I conceived the idea of summer fallowing and the growing of potatoes the following year, thus making two seasons' precipitation available for the one crop, knowing that this was the best I could do in approximating irrigating conditions and providing the moisture necessary.

PREPARATION OF LAND FOR CROP.

In the early summer of 1910 I thoroughly plowed three acres of land eight inches deep. The following spring the ground was listed and planted to potatoes. The potatoes were planted in the bottom of the lister row and as they grew I gradually worked the dirt down into the row and around them. I used an anti-clog weeder in cultivating the potatoes and by means of which implement it was possible, without hoeing, to keep the ground absolutely clean. Each time the weeds started the potatoes were cultivated with the weeder until the close of the growing season, when I used the corn cultivator.

For my 1912 crop I disked the ground in the spring of 1911 and continued disking through the summer, keeping the ground clean and prevented it from blowing. This ground had been previously well plowed. In the spring of 1912 I again disked and listed and planted the potatoes as in 1911. This crop consisted of 16 acres and when digging time came I purchased a potato digger.

YIELD OF 75 AND 125 BUSHELS.

A part of the field was planted to "Early Six Weeks" potatoes. These yielded 75 bushels per acre. The other part of the ground was planted to late "Peach Blow" potatoes and these averaged over 125 bushels. A timely rain which missed the early potatoes came just right for the late potatoes. Had the rain fallen a few days earlier the early potatoes would have yielded equal to the late. Both varieties of potatoes are dry and mealy and the merchants in the nearby towns to whom I sold the potatoes, stated that my potatoes gave their customers better satisfaction than the Colorado potatoes.

SELLING PRICES OF CROP.

The early potatoes I sold to merchants locally for 75 cents per bushel. Those I saved for seed sold for more money. When I began marketing my late potatoes I received 60 cents and sold most at this figure. By this time Colorado potatoes had come on to the market. I might say that the price of potatoes in the Colorado irrigated district governed the price at which I sold my po-

I CANNOT say how much I am pleased with the attention KANSAS FARMER is giving to the successes in the several lines which occasional farmers in the western one-third of Kansas have achieved. These successes demonstrate that farmers generally throughout our section have been giving too much attention to one crop—namely, wheat. When I read in KANSAS FARMER how farmers here and there have made money and are entirely satisfied with the conditions under which they have operated, and I know that in these successes wheat has been a minor factor, I am convinced that the opinion I have long held, namely, that we should diversify our farm interests, is correct. It is along this line that I cannot refrain from relating my experience the past few years with potatoes.—EDWARD WERNER.

tatoes, the merchants paying me for my product such price as the Colorado potatoes cost f. o. b. the car's destination point.

It is my recommendation that we in this section grow the early variety of potatoes. These will get on to the market in advance of the Colorado grown and can be dug as soon as ready and marketed and the seasons' operations cleaned up.

It will be seen from above that my early potatoes brought me about \$80 per acre at the prices at which I sold last year. Having sold about all my late potatoes at the prices prevailing at digging time, I realized \$75 per acre. MAY BE CONSIDERED AVERAGE YIELD.

It must be kept in mind that these potatoes were grown on ordinary upland and, as above stated, on land on which it is 160 feet to water. The potato crop as reported is not a big crop compared with the yield in the irrigated section of Colorado or even in the Kaw Valley of eastern Kansas, but I do believe that this yield may be considered an average yield on summer fallowed land in this section and surely demonstrates that fifteen or twenty acres of potatoes on a quarter section farm will justify the owner of such farm in giving attention to the growing of potatoes even in western Kansas. Such income as I have realized would certainly be appreciated by western Kansas farmers.

MORE GROWERS COULD ESTABLISH DEMAND.

I firmly believe in the advisability of farmers generally growing potatoes in this section on a moderate scale. If enough people could be induced to engage in the potato growing business and a sufficient quantity of potatoes should be produced in our section, we could establish a reputation for our potatoes which reputation would be advantageous in marketing. With a sufficient acreage grown it would permit of co-operative marketing and growers should and would be justified in combining in the sale and thus could ship potatoes in carloads which would extend the market to the consuming centers and a good potato would command a good price.

POTATOES PREPARE LAND FOR OTHER CROPS.

One advantage which I cannot overlook in growing potatoes, is that of the condition of the land following the potato crop. It is in fine condition for the seeding of wheat, oats, kafir or milo. The seed bed left by the potato is deep, the field is clean, it takes up moisture readily, it holds the moisture well and those crops following potatoes are better supplied with moisture than when planted on other fields. The fact is, too, that potatoes planted in a properly prepared seed bed will withstand dry

weather much better than many of us have thought and the old superstition that a lot of rain is required during the potato growing season, is, to my satisfaction, not supported by the facts.

ZEBBIE BAKER of Cheyenne County, which is the northwest corner county in Kansas, is the lad who won Sweepstakes in the boys' potato contest for the western section of Kansas and which contest was promoted by the Extension Division of the Kansas Agricultural College. His statement with reference to the growing of potatoes on the high lands of Cheyenne County during the season of 1912, will prove interesting. He writes:

"The ground in which the potatoes were planted was summer fallowed during the summer of 1911. Early in the spring of 1912 I disked the ground as soon as it was dry enough, which was about April 7. I let the ground lie until May 1, then plowed the ground, planting the potatoes in every third furrow and placing the hills two rows apart with two good eyes planted in each hill. The potatoes were planted five to six inches deep.

"I harrowed every day or two until I could follow the potato rows across the field. Then I cultivated with a two-horse, four-shovel cultivator and used the hoe some also. In the spring of 1912 we had two feet of sub-moisture to begin with.

"I planted two kinds of potatoes, Rural New Yorker, and Late Rose. The seed of each variety was imported. The yield was at the rate of 300 bushels an acre. I planted a half acre patch of each.

"The land on which these potatoes were planted had never been manured but it had been broken about six years. The year before planting potatoes it had been prepared for and planted to trees, but it was plowed in the spring and the trees died. This land was disked and harrowed during the following summer to keep the weeds down. It will be observed, therefore, that the land had no better treatment than ordinary summer fallow. It was apparent, however, that this land took up all the moisture that fell on it and the disking during the 1911 season had the effect of conserving the moisture. This was upland and as near level as it could be. It was just as high as any land we have.

"I concluded that in entering this contest and planting these potatoes I would give the growing of potatoes as much attention as people in other sections of the state are giving to wheat and corn, with the result that I obtained the above named yield and won Sweepstakes prize in the potato contest for my section of the state.

"I will plant potatoes again this year. I have all the ground that we are going to plant summer fallowed and disked. I will handle the ground exactly as I did last year. The ground is in good shape. However, it is new ground and has grown only one crop.

"I am thoroughly interested in growing potatoes and it may be that each year I cannot grow as large a crop as I grew last year. However, I can grow a much smaller crop and still make it highly profitable. It is certain that we can grow enough potatoes for home consumption and I am confident that all of my neighbors can do as well if they would.

"I was born in one of the best counties in the state—Cheyenne County. I will be seventeen years old my next birthday. My father homesteaded in this county in 1892. I have six sisters and five brothers. We live three-quarters of a mile from school. Yours for good potatoes."

Good Roads Pay for Themselves.

The direct effect that changing bad roads into good roads has upon land values and the general economic welfare of a community is shown in several concrete illustrations gathered by the United States Department of Agriculture. The Department has just issued a statement on the subject, based upon a mass of information gathered by the Office of Public Roads, which is making a special study of the economic effect of road improvement in the country. According to data gathered, where good roads replace bad ones, the values of farm lands bordering on the roads increase to such an extent that the cost of road improvement is equalized, if not exceeded. The general land values, as well as farm values, show marked advances, following the improvement of roads.

Among the illustrations cited by the Department are the following:

In Lee County, Virginia, a farmer owned 100 acres between Ben Hur and Jonesville, which he offered to sell for \$1,800. In 1908 this road was improved, and, although the farmer fought the improvement, he has since refused \$3,000 for his farm. Along this same road a tract of 188 acres was supposed to have been sold for \$6,000. The purchaser refused the contract, however, and the owner threatened to sue him. After the road improvement, and without any improvement upon the land, the same farm was sold to the original purchaser for \$9,000.

In Jackson County, Alabama, the people voted a bond issue of \$250,000 for road improvement and improved 24 per cent of the roads. The census of 1900 gives the value of all farm lands in Jackson County at \$4.90 per acre. The selling value at that time was from \$6 to \$15 per acre. The census of 1910 places the value of all farm lands in Jackson County at \$9.79 per acre, and the selling price is now from \$15 to \$25 per acre. Actual figures of increased value following road improvement are shown.

As the roads in no way effect soil fertility or quality of the farm, advances are due essentially to the decrease in the cost of hauling produce to market or shipping point. Farms are now regarded as plants for the business of farming, and any reduction in their profits through unnecessarily heavy costs for hauling on bad roads naturally reduces their capitalization into values. With reduced costs for hauling, profits are increased; with the result that the farm plant shows satisfactory earnings on a higher capital value.

The automobile also has begun to be an important factor in increasing rural values where good roads are introduced. Immigration is particularly marked where road conditions are favorable; in fact, the figures of the Department seem to indicate that good roads indirectly increase the demand for rural property, and the price of farm land, like that of any commodity, is ruled by the relations between demand and supply.

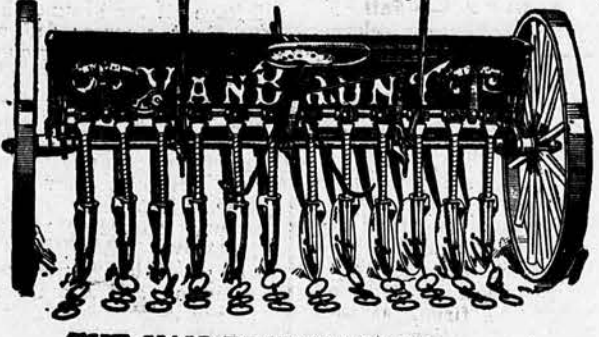
Order by Smell.

A little girl was sent to the grocery with a jug to get some vinegar. Being unable to pronounce the word "vinegar," she took the cork out of the jug, set the jug on the counter and said to the astonished clerk:

"Here, smell of that, and give me a quart!"—Household.



J. E. THOMPSON OF MORELAND, BELIEVES IN SUMMER FALLOW FOR WESTERN KANSAS. NO OTHER WHEAT IN HIS NEIGHBORHOOD WAS WORTH CUTTING.



**USE
LESS
SEED
GET
MORE
CROP**

THE VAN BRUNT DRILL

This is the lightest, but at the same time the strongest and most durable drill on the market. Every part having to stand any strain is thoroughly braced, and only the best of material is used on the entire drill.

LESS SEED

Is required to get maximum returns, as the Van Brunt Drill gives you an even flow of seed into a furrow of uniform depth. It does not plant too much in spots so that growth of grain is retarded or smothered account crowded. Such planting means not only poor returns, but is also a waste of seed.

MORE CROP

Is the result of "Van Brunt" seeding. This drill does not choke up and skip planting part of the soil. You are getting returns from every bit of your land. Seed is planted at uniform depth and is all up and ready for harvest at the same time.

THE ACCURATE SEEDER

The Van Brunt is the most accurate seeder on account of its construction. Can be adjusted to plant any small grain.

Each wheel drives half of the machine.
Adjustable, force-feed insures even flow from hopper.
Adjustable gate feed regulates this flow and prevents bunching.

PLANTS AT UNIFORM DEPTH

You not only have an even flow of seed, but also plant it at uniform depth. Adjustable pressure springs on openers make furrow of even depth all the time. Closed boot delivery puts seed at bottom of furrow before soil can fall in. The Van Brunt plants accurately in any soil that can be seeded.

DISCS AND BEARINGS

The "hard-working" part of any drill and on most drills soon gives out. But not on the Van Brunt. We guarantee our disc bearings will last life-time of drill. Any that should happen to wear out, we will replace free of charge at our shops.

GRASS SEED ATTACHMENT

The "Van Brunt" can be furnished with grass seed attachment, tubes of which are so made that you can either drill or sow broadcast.

Be progressive. To do so you must have up-to-date implements to get results. The "Van Brunt" is "The Drill." Write us immediately for our new catalog.

Ask for package No. VB 13

Address JOHN DEERE PLOW CO., Moline, Ill.



Polarine
FRICTION REDUCING MOTOR OIL

For Any Kind of Motor—In Any Kind of Car or Boat

An oil that's right is right in every type of motor, whether in a pleasure car, a motor truck or motor boat. The universal oil is Polarine—used everywhere, and sold at cross-roads stations. Users never need go far without it.

Maintains the correct lubricating body at any motor speed or heat, and flows perfectly at zero. Penetrates to the remotest parts of the motor, protecting every friction point.

Cars run for years without any depreciation when Polarine is used. It's the best insurance you can buy, and costs the least.

The World's Oil Specialists make it after 50 years' experience with every kind of lubricating problem and a study of all makes of motors produced. Polarine is the right oil.

STANDARD OIL COMPANY
(AN INDIANA CORPORATION)

Makers of Special Lubricating Oils for Leading Engineering and Industrial Works of the World

Get New Soil on Your Farm

By deep tilling with the Spalding Deep Tilling Machine. Goes down from 12 to 16 inches, mixes and pulverizes in one operation, practically re-making your farm. Increases yields. Saves time. Makes more money. Users know. There are farmers near you who will say deep tilling is the greatest thing they do. Write for their testimony and catalog.

Spalding Department 70
Gale Manufacturing Company, Albion, Mich.



THE FARM



For soil inoculation preparatory to raising alfalfa and to restore a run down soil to a fertile state—no crop can equal sweet clover. There are many thousands of acres of land in Illinois so low in fertility that the immediate attempt to raise alfalfa or most any legume on them, would be a failure, but when sown to sweet clover will yield an abundant harvest of hay, besides materially enriching the soil by its deep rooting system.

Our subscriber L. M. of Clark County, writes to us that in spite of the extremely dry summer, kafir and milo have a chance to make a crop, while corn is so dried up that it will hardly make fodder. Such a season as the present one certainly brings out the great value of kafir and milo as a crop to tie to. Through many sections of Kansas it is not a safe proposition to count on corn alone. This correspondent is planning to dig a pit silo for his kafir and milo to have a better and cheaper feed for his milk cows this winter.

Cooling by Evaporation.

A cooling box of much interest to those not having ice can be made as follows: Get a large stone jar and a box, nearly square, about six or eight inches larger than the diameter of the jar, and a little deeper than its height. Set the box in a shady place, put into it a layer of sand about three inches deep, place the jar in the center of the box and fill in with sand to about three-fourths the height of the jar. Wet the sand thoroughly, cover the jar to keep out the dirt, and cover the box with a screen or netting. Butter, milk, etc., placed in a cooling box so arranged will keep nicely for some time. The evaporation of the water in the sand keeps the jar and contents very cool. As the sand becomes dry supply plenty of water.—FRED G. PERSON, Colorado Agricultural College.

Fertilizer For Wheat.

Some tests with fertilizers on a sixty-two acre field of wheat were made the past year by C. F. Benson on his farm near Pendleton, Miami County.

The first 30 acres next to the Frisco railroad was sown to hard wheat and 125 pounds of pure bone meal. One bushel and one peck of wheat to the acre was drilled in with a fertilizer drill and made 40 bushels to the acre. The next 18 acres was sown to soft wheat and 125 pounds of pure bone meal and one bushel and one peck of wheat was used to the acre, and this made 35 bushels to the acre. On the remainder of the field, 14 acres, that laid next to the creek, and which was much better land, there was no fertilizer used and this yielded 24 bushels to the acre.

The land was plowed in July and August and was double disked and harrowed down to a good seed bed before the wheat was drilled in. The wheat was drilled in from the 15th of September to the 1st of October.

The Agricultural College of Kansas is planning a systematic campaign along the lines of the improvement of rural life conditions in Kansas. The recent summer conference of rural leaders was very successful and a much larger number were present than at the session held a year ago. The plan for next year is to have a two week's summer camp conference on the campus. Professor Holton says this will be a regular "canvass" conference, the meetings being held in a large tent provided for the purpose. A number of smaller tents will provide sleeping accommodations for those in attendance. The college plans to furnish board for the visiting delegates at cost, so a "mess" tent will be a part of the camp equipment. Professor Holton has estimated that under this plan it should not cost the delegates more than fifty cents a piece each day for board and lodging.

Neighborhood Improvement.

Rev. A. M. Harkness, Belpre, Kan., brought to the recent rural conference at Manhattan a most interesting report of some community work which had been carried on around this little town of 400 inhabitants. Mr. Harkness de-

cided last spring that he would start a campaign for improving conditions in and around the town and the Commercial Club gave him their backing and told him to "go to it." He prepared a plan or program, called a meeting and had it adopted by the community. This plan outlined the needs of the community and told how to get the results desired. The county commissioners aided the working out of the project by appointing Mr. Harkness assessor for the township. This greatly facilitated his meeting the people of the community. While performing the work of this office he had ample opportunity to tell the people whom he met on the farms of his plans for community uplift. As a result of this he has organized two farm neighborhood improvement clubs which are auxiliary to the town Commercial Club. Another club is now being organized. He has induced the town to take up the matter of a municipal electric light and water plant. A small library which was left as a memorial to the town is receiving some attention. Up to the present time this library has never had a book in it, but Mr. Harkness is taking the matter up with the Carnegie Foundation and hopes to establish branch libraries at the rural churches near Belpre where the neighborhood improvement clubs meet. This has all been accomplished in four months and his program is not more than fairly started.

Newton Builds Splendid Bridge.

The contract has recently been let for the building of a fine concrete bridge on North Main Street in the city of Newton. This structure is first class in every respect. The methods used by the local officials in handling this matter was such that every contractor was placed on an equal basis and they secured an exceptionally good price on the bridge. The plans and specifications for the bridge were furnished by W. S. Gearheart, State Engineer. It is being built jointly by the city of Newton, the county and the Arkansas Valley Interurban Railway company. It is on the principal street of Newton and on the "Meridian Road," or the "Winnipeg to the Gulf Highway." The structure is composed of two sixty foot reinforced concrete arches. The clear width of right of way is forty-three feet including two 5-foot sidewalks. It is designed to carry the heaviest interurban railway traffic. Its construction will require 898 yards of concrete and 35,765 pounds of steel reinforcement.

Pit Silo for Republic County.

From our subscriber, G. S., of Republic County, Kansas, comes the inquiry as to whether it would be advisable for him to put in a small pit silo to save what little corn he will secure from a 40-acre field which has been much damaged by the dry weather. As has been many times stated in KANSAS FARMER columns, the pit silo is to be generally recommended only for the dryer regions of Western Kansas where there is absolutely no danger of ground water seeping in. If a thoroughly dry location could be secured in Republic County, a small silo of this kind might be constructed at a cost varying from \$15 to \$25 outside of the labor required.

Silage made from immature corn which has been badly damaged by the drought will not be first class, but its feeding value will be very much greater if fed as silage than if fed as dry fodder. This kind of silage may be used as the roughage part of the ration for either cattle or sheep.

It would be difficult to say exactly how large a silo would be required to contain feed grown on 40 acres of damaged corn. In good years when corn yields from 40 to 50 bushels per acre, ten tons of silage per acre is about an average amount to expect. A 10 x 20 silo would not hold over about 25 tons of silage. If pit silos are used it would be advisable to construct several smaller ones rather than try to dig one large one. Our subscriber is fortunate, indeed, to have 2,000 bushels of old corn reserved for such an emergency as has occurred this season. With old corn on hand it will be much easier to utilize to the best advantage possible what roughage may be produced this year.

The GRANGE

DIRECTORY OF THE KANSAS STATE GRANGE.

OFFICERS.
 Master.....A. P. Reardon, McLouth
 Overseer.....J. L. Heberling, Wakarusa
 Lecturer.....L. S. Fry, Manhattan
 Secretary.....L. A. Wedd, Lenexa
 Treasurer.....W. J. Rhoades, Olathe
 Chairman of Executive Committee.....
 W. T. Dickson, Carbondale
 Chairman of Legislative Committee.....
 O. F. Whitney, North Topeka
 Chairman of Committee on Education.....
 E. B. Cowgill, Lawrence
 Chairman of Insurance Committee.....
 I. D. Hibner, Olathe
 Chairman of Women's Work Committee.....
 Adella B. Hester, Lone Elm
NATIONAL GRANGE OFFICERS.
 Master.....Oliver Wilson, Peoria, Ill.
 Lecturer.....N. F. Hull, Diamonddale, Mich.
 Secretary.....C. M. Freeman, Tippecanoe City, O.
 Sec'y.....C. M. Freeman, Tippecanoe City, O.

Shawnee County Pomona Grange met in special meeting with Indian Creek Grange July 17 and a very pleasant time was had by all as also at the regular meeting in June at Wakarusa. The subject of "Needed Legislation," was subject for a general discussion of all members besides a short program of readings and music at Indian Creek. A regular meeting of the Pomona Grange will be held the third Thursday of August, (21st) at Highland Park and all granges are urged to be represented here as it is a central point meeting. The subject for general discussion will be "Commission Form of State Government."—L. MABEL WATERS.

Suggested Programs for August.

Roll call, responded to by each member reading or speaking a piece or singing, as in the old-time Friday afternoon exercises at school. Limit the time for each so that all will have a chance, and try to have each member take part.

SECOND MEETING.

1. Discussions—Farm Co-operation Associations. (a) Buying and Selling Associations. (b) Local Meat Associations.
 2. Paper, "How to Cultivate a Love for Farm Life in Our Children."
 3. "Planning the Farm Kitchen," given by a brother who knows something of the work of a carpenter.
 4. Music, interspersed with recitations.
- For additional topics see National Grange Monthly. Each Grange should furnish copy for use of lecturer.—L. S. Fry, State Lecturer.

Centennial Grange No. 1532 was organized this spring with 57 charter members. We meet the second and fourth Wednesday in each month. The officers are: W. E. Muse, Worthy Master; J. E. Bamfield, Worthy Overseer; N. S. Sellers, Secretary; P. G. Ebaugh, Corresponding Secretary. We had a fine meeting July 23—a nice program and also a bread contest.—P. G. EBAUGH, McPherson, Kan.

Grange Ideals.

The Patrons of Husbandry was the first organization of a secret nature that ever admitted women to equal privileges. She is equal in all things and superior in some. I believe in woman's work in the Grange. The Grange as an organization has been before the people for almost half a century, and there never has been an organization called into existence that has been less understood, more misrepresented maliciously and otherwise, than has this great organization. The true fundamental principle of the Grange is education. Don't understand me to say that we as farmers need more education than other industries, but we need to keep up the organization. The sisters should come to the Grange as a social organization, the men as a business proposition, and the boys and girls that they may learn the forum and become public speakers and public thinkers and show them that they have the same advantages for an education and the same rights and privileges as the boy or girl who is so unfortunate as to be born in a city. That is why I am out organizing Granges, that we may have a place to go socially and intellectually, and if each one of our 30 deputies would get one organization before the session of State Grange, with the showing I have made thus far, we could line up with over 50 new organizations.—A. P. REARDON.

Up-to-Date Grange Ideas.

We have a number of times wondered if members carefully note each issue of the annual proceedings of the Kansas State Grange. We frequently have occasion to refer to this report, and often, having a half hour to spend in reading, we take up one of the old reports and see what various Granges were doing a few years ago. Recently we chanced to glance through the report of 1911. The State Grange meeting was held in December of that year at Topeka. We

read there the report of the Manhattan Grange. The report states that the members believe that the Grange should be for the rural district what the commercial club is to the city, the Grange adding to its working force a legislative committee, a road and highway committee, public building and improvement committee, and a trade extension committee. The roads committee was to take up the question of road improvement with the state roads and highway engineer, the county commissioners, the township board, and the commercial and motor clubs of Manhattan, with a view to uniting these parties and organizations in a general and common cause for better roads. The building and improvement committee was to have charge of all questions such as the location of factories, building of Grange halls, the planting of hitching posts at public places where farmers gather, the burning of weeds, brush and grass with a view to checking the increase of insects destructive to crops. The duty of the trade extension committee was to find out in season what there was for sale and what the members had to buy. The report says: "Since it is a fact that the farmers are the greatest consumers in the world, counting that which goes to waste, Manhattan Grange believes we can blaze a way around the fellow who sits on the fence and watches the farmer plant potatoes, cultivate, dig, sack, and put on board the car, and who then climbs down and collects a

toll that does curtail consumption."

It occurs to us that the enterprise of Manhattan Grange is worthy of imitation; that their report suggests to every Grange how it can be wide awake and assist in the uplifting of agriculture generally, as well as in the uplift of its members.

The Modern State Fair.

"A modern state fair is a celebration, a festival, a vacation, a recreation. Its essential spirit is entirely foreign to the morbidly serious purpose which our toiling forefathers had in view when they brought fairs into existence. We have outgrown many of the restraints and dogmas that may have been useful in earlier days. We demand more freedom, more joy, more life, than our ancestors dared even to seek. Our attitude toward life is not their attitude; it is less austere, less afraid, less serious. We believe as firmly as they believed in useful education; we respect as much as they respected productive, honest work—but we demand a longer and higher reach of the spirit, a larger scope for the play of our own life, a wider outlook, a greater incentive to thought and action, a nobler excuse for our living. It is impossible for us to be satisfied with their program, excellent as it was for its day. We are compelled by the dynamic force that surges through us to utilize our own personal resources, our individual powers, in building and re-shaping the present.

"Our fairs should exploit the science of agriculture; they have done their share of exploiting the art. When they began their work, we had no science of agriculture; we had a crude art. Practice was emphasized. Educational results were secured by means of imitation. What one man did, another, seeing the result and procuring the prescription, could do. For many years the history of practical farming has been nothing more than the perpetuation of dogmas, the following of ancient example, the wearing of old shoes, the unthinking worshiping of venerable Confucius represented by old, fossilized methods.

"Now that science has come modestly but actively into the field, the whole need of agricultural education has changed. We now seek scientific facts with their fascinating philosophies and social implications, where our forefathers found and were content with rules, plans, prescriptions, cut and dried statements and formulas which could be used like machines. Land has become soil with its millions of life forms and chemical wonders; animals have come to be individuals with marvelous capacities to serve man; crops are living, feeding, breathing plants, with beautiful relationships and wonderful adaptabilities and an astonishing veracity, yielding, besides their own wealth, important information to the man who is trained to interpret their language."—D. C. WING, before Association of Fairs.

Tire Prices Down

Now the Costliest Tires—No-Rim-Cut Tires Cost You No More Than Others

Goodyear No-Rim-Cut tires used to cost one-fifth more than other standard tires. The reasons are told below.

These tires, despite that extra cost, came to outsell any other. As our output grew the cost came down.

Now you pay no more for No-Rim-Cut tires than for any other standard tire. Yet notice what you get.

Rim-Cutting Ended

You save in these tires all the ruin of rim-cutting. And that's an enormous item.

We had public accountants lately gather statistics. They examined thousands of ruined clincher tires—the old-type hooked-base tires. And they found that 31.8 per cent had been discarded for rim-cutting only.

That's almost one in three.

No-Rim-Cut tires, made by a costly method which we control, end that loss completely. That we guarantee.

Save Blow-Outs

We give these tires the "On-Air Cure." That is,

they are final-vulcanized on air bags shaped like inner tubes.

That's to save wrinkling the fabric.

All other tires are vulcanized on iron cores alone. The fabric often buckles. And that buckled fabric leads to countless blow-outs.

This "On-Air Cure," which we alone employ, adds to our tire cost \$1,500 per day.

Save Loose Treads

We use another costly method to prevent tread separation. The rights to it cost us \$50,000.

Millions of dollars have been lost to tire users through the loosening of the treads. No other tire in the world employs the effective method we use to combat it.

Yet No Extra Price

You get all these savings in No-Rim-Cut tires.

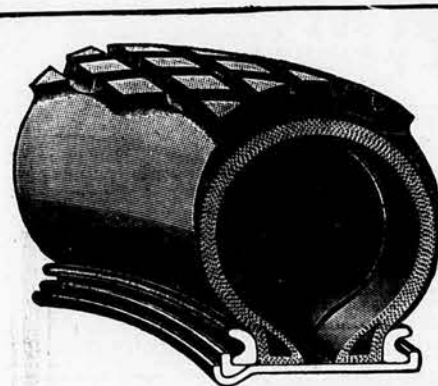
All these features used by no one else. Yet no other standard tire today costs less than No-Rim-Cut tires.

The reasons are mammoth output, new factories, new equipment. In one item alone—in overhead cost—we have saved 24 per cent.

Another reason is that we keep our profits within 8½ per cent.

Judge for yourself if tires lacking these features are worth the Goodyear price.

Our dealers are everywhere.



GOODYEAR
 AKRON, OHIO
No-Rim-Cut Tires
 With or Without Non-Skid Treads

THE GOODYEAR TIRE & RUBBER COMPANY, AKRON, OHIO
 Branches and Agencies in 103 Principal Cities More Service Stations Than Any Other Tire
 We Have All Kinds of Rubber Tires, Tire Accessories and Repair Outfits
 Main Canadian Office, Toronto, Ont. — Canadian Factory, Bowmanville, Ont.

JOHN DEERE

THE SAGLESS ELEVATOR

Your First Chance to Get a Sagless Steel Elevator

John Deere—The Sagless Elevator, is the first portable elevator to have turnbuckles on the truss rods so that you can keep the elevator from sagging.

You know how the power required increases when an elevator once starts to sag. Likewise, you know what a strain sagging throws on the whole elevator, especially the bearings in the head and boot sections.

The John Deere, for the sagless feature alone—even if it didn't have all those other things of advantage—is worth your careful consideration.

The Sagless Feature

Four turnbuckles on the truss rods, together with extra strong section connections make the John Deere a really sagless elevator. Sections are triple-lapped, connected with fourteen bolts, banded with a heavy iron band and reinforced at the upper edge on the inside. That is one big advantage in having a John Deere—The Sagless Elevator.

Screen Section

John Deere—The Sagless Elevator, separates and takes the shelled corn out when elevating ear corn. A screen, in the second section (that can be closed up when elevating shelled corn or small grain) does the work. Shelled corn that gets into the crib with ear corn fills up the air spaces and very often causes the corn to heat or mold.



John Deere—The Sagless Elevator Ready for Work

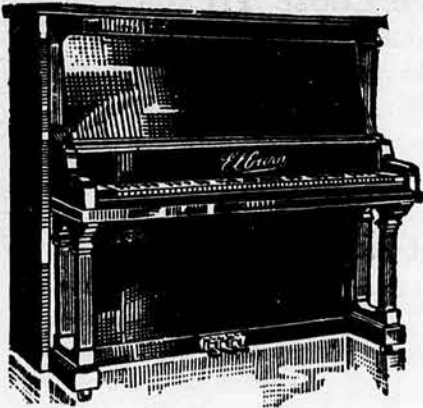
"How to Build Corn Crib" with Blue Print Plans

Besides containing complete descriptions of the John Deere—The Sagless Elevators, this book has ten blue print plans covering the construction of corn cribs and granaries, showing the style of elevator used with each crib. It also contains cost estimates and furnishes a source of valuable information whereby anyone can arrive at the comparative cost of the various styles of cribs and granaries. You can get it free if you will ask for book No. A

John Deere Plow Co., Moline, Illinois

DEPENDABLE PIANOS

They Pay!



Dependable Pianos—made by factories of recognized reliability—sold strictly on their merits, and exactly for what they are—and not only warranted by the makers but by Jenkins—that's the way pianos are sold here. Strictly one price—and a popular price—a price that takes advantage of every saving that comes from perfect organization, economical selling methods and a tremendous volume of business—that's the Jenkins way.

Steinway, Vose, Kurtzmann, Elburn.

pianos on comfortable payments. Write for catalog and prices—\$125 and up. High class guaranteed Player Pianos, \$435 and up. Call or write.

J. W. Jenkins Sons Music Co., Kansas City, Mo.

Spread more Manure in a day

Use Gamble 3-Horse Equalizers on your manure

spreaders and spread more manure in a day. Haul bigger loads—make fewer trips—save time and strength of horses. Gamble 3-Horse Equalizers even the pull to a fraction of a pound—give each horse exactly same share of pull. Made for Manure Spreaders, Disc Harrows, and Grain Harvesting Machines with right-hand cut, and Grain Drills, Seeders and Mowers that pull from top of the tongue—also for farm and dump wagons equipped with bound tongues.

Gamble Equalizers for 3, 4 or 5 horses, made for wagons, potato diggers, harvesters, hay loaders, plows, harrows, etc. We make clevises and attachments for use with all improvements.

Send for catalog

Gamble Equalizers

are Guaranteed

to give perfect satisfaction and do everything we say, or money refunded. Pull in direct line—no side draft. No chance of tugs rubbing horse's legs. Each horse has plenty of room and gets its share of the pull. They are the original equalizers—the best—fully protected by patents. Made of very best material. Will last many years. No others like them. Do not accept a substitute. Cost so little you cannot afford to be without them. See them at your implement dealer's. If he does not handle them, send us his name. We will see you are supplied. Send for free illustrated catalog showing full line Gamble Equalizers.

STAR MFG. CO., Dept. 23, Carpentersville, Ill.

DAIRY



Charge for Cutting Silage.

An Illinois subscriber writes to us asking what it would be worth for a man and engine to fill a 13½ x 30-foot silo, the man to do nothing but run the engine. In KANSAS FARMER issue of June 21 a similar inquiry was answered for a subscriber from Kingman County, Kansas. The charges here in Kansas for an engine and man to operate it range from \$5 to \$10 per day. The man for whom the silage is being cut furnishes the coal and water, delivering it at the engine. We also find that some of our Kansas silo men are paying at the rate of 30 to 35 cents a ton to the owner of engine and cutter for filling silos. A silo the size of the one mentioned above would hold, if full, about 85 tons.

Essentials of a Good Pit Silo.

There are certain points that must be kept in mind when constructing a pit silo in order that it may give the best satisfaction when completed. In brief, they are as follows:

1. The silo must be located in firm, dry and well-drained soil and therefore is not adapted to humid districts.
2. The silo must have a curb extending a few inches above the ground and a little below the frost line.
3. The walls should be plastered from three-quarters to one inch thick.
4. The walls should be washed with a cement coat to make them air tight and water tight.
5. The walls must be absolutely perpendicular and smooth, so that the silage will settle evenly.
6. A covering must be provided that will keep out dirt, trash, domestic animals and children, and also provide for a free circulation of air.
7. If walls become dry before plastering they should be sprinkled lightly. This helps the plaster to stick and keeps it from drying out too rapidly.

From pamphlet on Pit Silo, Extension Division, Agricultural College, Manhattan, Kansas.

Community of Breeders.

We notice in an exchange recently, reference made to a farm sale of grade dairy cows where the animals brought from \$100 to \$175 per head. These animals were all the high grades and to all appearances were pure-bred animals, but of course could not be recorded. It is plainly evident that the pure-bred sires used in producing these high grade cows returned high value to the owner and yet this exchange goes on to say there were a number of buyers at the sale desiring pure-bred cattle who had to go home without making purchases. No one in that community had herds of registered cattle. If this practical dairyman had secured a few registered cows at the time he started his dairy herd, he would have had by this time an equally good producing herd of registered cattle. If a number of men in that locality had done so, all would have been better off, since it would have become a community center for cattle of that kind and buyers from all over would have recognized the fact and gone there to purchase their registered stock. We have many striking examples in some of the older dairy states as to the value of such a community.

Silo for Three Animals.

W. W. C., a subscriber in Crawford County, Kansas, who operates a small truck farm, is wondering whether he would find it practical to install a silo small enough to supply feed for a couple of horses and one cow. It would really be impractical to put up a silo for such a limited amount of live stock. The surface area would have to be so small in order to feed it rapidly enough to keep the silage from spoiling from day to day that it would be difficult to secure a good quality of silage. It is barely possible that a small pit silo might prove satisfactory if it could be dug on a thoroughly well drained hillside. This could be dug four or five feet in diameter and ten to twelve feet deep. If the dirt walls will stand without caving, they could be simply plastered with a rich cement plaster, using one part of cement to two parts of sand. This kind of a silo, however, under no consideration should be tried unless it can be located where no ground water

would have any tendency, whatever, to seep in. This type of silo is being very largely used in the dry plains region of Western Kansas. A very small feed cutter could be used, and likewise a small engine, since no power would be needed to elevate the silage, as is the case when silos are built high above the ground. If such a location is available, the sweet corn which has been grown on this farm and failed to produce any marketable ears could be saved as silage this year unless it has become so thoroughly dry as to make it impossible to pack solidly in the silo. Such a small silo built above ground would cost so much in proportion to the silage capacity that it would hardly pay to put one up.

Dairying in Arizona.

A very interesting letter recently came to KANSAS FARMER from Phoenix, Ariz. This letter, with our reply, is given below:

"We have three months of hot weather yet before us. August and September are hot, it slacks up about October, but the days are around 85 to 90 with cool nights but seldom any frost except a little at nights until early in November. Can we hope to make a good silage crop by planting sorghum the first week in August? Will a slight frost—not a killing frost—hurt or unfit sorghum for silage? We take it that to make good silage the seed should be pretty near ripe. Are we correct?"

"We are building up a creamery business and have about 100 cows of our own and handle about 2,000 customers daily. I find our neighbors don't read enough, so please send me ten KANSAS FARMERS and label same 'With the Good Wishes of the Yeager Creamery,' and send bill to me paid to January 1, 1914, and I will send check."

"One more word about our sorghum crop. The soil is light of the sandy order and has been in Bermuda grass for four years. It breaks up plowing very nicely and we have all the irrigating water we want. We are planting sorghum seed known as 'Red Top,' and it does well here. We planted some May 1 and notice some few stalks now heading. It is sure to make 25 tons, the wise ones say. Think the seed will be ripe the middle of August. It made little progress in May, as it was a cold month for this country. Will greatly appreciate the courtesy of a reply."

It would seem that you could reasonably expect to grow quite a crop of sorghum before your first frost in the fall, even though it is not planted before the first week in August. Of course the cool nights are not so favorable for the rapid growing of this crop, but the variety to which you refer has undoubtedly become more or less acclimated to this condition. It does not hurt sorghum to be slightly frosted before placing it in the silo. It is always desirable to let it become as well matured as possible, and here in Kansas we often find it necessary to let it grow and mature up as late as possible in the season. After the first frost comes, however, it must not be left long in the field.

You certainly are producing tremendous yields of sorghum there if you have a crop that will produce 25 tons per acre. Of course, your dairyman should recognize the fact that sorghum silage is a very unbalanced feed and must be supplemented with something rich in protein, such as cottonseed meal or some of the legume roughages such as alfalfa or peas.

It is usually desirable to plant the silage crop a little thicker than where grain is expected. Larger returns in nutrient value usually result from thicker planting. We will be glad to place your name on our regular mailing list to receive ten copies of KANSAS FARMER, as you request.

Exercise and the proper food are the main essentials of success in the poultry business. It is natural for a hen to be busy, and it is safe to say that the idle hen is not a well one. Keep the hens in good health, being careful that they do not get such food as will over-fatten, and they will keep busy, and it is the busy hen that pays her board and leaves a neat profit for her owner.

LOUDEN-MACHINERY CO.
211 Broadway Fairfield Iowa.

**IT'S CHEAP
IT'S STRONG
IT'S DURABLE
IT'S SANITARY
IT'S COMFORTABLE
IT'S BIG VALUE FOR
LITTLE MONEY**

**BUY IT OF YOUR
DEALER OR WRITE
US.**

**SEND FOR OUR
CATALOG—YOU NEED
IT AND IT'S FREE**

LOUDEN-MACHINERY CO.
211 Broadway Fairfield Iowa.

**Champion
Silos for Big Profits**

That's what farmers make who own Champion silos because the silo is perfect in construction. It's ahead of others in improvements and is sold at factory prices on our special proposition. **Valuable Information Free.** Get it before you buy. Find out what other farmers are doing. Get proof that Champion silos are bigger value for the money than any other.

WESTERN SILO CO.
135 11th St. Des Moines, Ia.

When writing advertisers, please mention KANSAS FARMER.



WITH THE SILO SPECIAL

THE man who talked in favor of silos in western Kansas a few years ago was given scant attention. How to grow wheat on a limited rainfall seemed to be the only question these farmers cared to hear discussed. A great change has come over the farmers of that section, however. A more timely lecture train than the Rock Island Silo Special has never been run over any railroad in Kansas. These farmers were greedy for information concerning the silo as a means of enabling them to secure some revenue from the crops produced. Many of these western Kansas farmers are greatly hampered for working capital. The pit silo appeals mightily to this class of farmers because of the small amount of cash investment it requires. Fourteen pit silos were under construction around Clayton on the day the silo train went through. Our illustration shows Mr. McKee, demonstration agent, surrounded by an eager group of farmers to whom he is explaining the model of the pit silo which was exhibited on the train.

COLLEGE EXPERTS VISIT FARMS

There has been a bigger demand on the Extension Division of the Kansas State Agricultural College this year than ever before for farm visits by the various specialists. Two hundred farm visits have been made by P. E. Crabtree, G. C. Wheeler, and A. S. Neale in Wyandotte, Allen, Miami, Anderson, Franklin, Douglas, Labette, Coffey, Lyon, Osage, and Harvey Counties, with nearly a month's work yet ahead.

The plan of work has generally been to announce in a neighborhood the farms to be visited, together with the dates and hours of the visits. A group of from eight to eleven farmers then meet and make rounds to the different farms, together with the college representative

and much work is accomplished with a minimum of repetition. Time has generally been utilized to the greatest advantage by using about three automobiles, each machine carrying a full load of farmers.

The work in a neighborhood or county usually closes with a central meeting and discussions of some topic such as "The Value of Inoculating Legumes," "Effects of Lime on Acid Soils."

These visits are made by regular members of the Extensive staff on request of the farmers. Traveling expenses are paid by the owners of the farms visited, and the work has received the highest appreciation wherever undertaken.

DE LAVAL CREAM SEPARATORS

THE BEST SUMMER FARM INVESTMENT

When dairy production is largest waste is greatest and quality poorest without a separator. The De Laval Separator Co. New York Chicago San Francisco

Kalamazoo ALFALFA & ENSILAGE CUTTERS

make a positive shearing cut full width of bundle, from sides to center of throat, hence do cleaner work on less power. Our sickle-edge knives cut the hard, dry alfalfa to 1/4 inch lengths. Only silo fillers made having these wonderful knives. Investigate now. Write for catalog. Address Dept. 82 KALAMAZOO TANK & SILO CO. KALAMAZOO, MICH.



GREEN CORN CUTTER

Cuts and gathers corn, cane, kafir corn or anything planted in rows. Runs easy. Long lasting. Thousands in use. Fully protected by patents. Send for free circulars.

J. A. COLE, Mfr., TOPEKA, KAN.

BEATRICE Cream Separator

Easy to Run, Hard to Wear Out

THE CONTINENTAL CREAMERY COMPANY
Topeka, Kan., Oklahoma City, Okla.

Kansas' Greatest Fair

TOPEKA, SEPTEMBER 8 to 13, 1913

"Look Into The Jayhawker State's Mirror"

The Most Comprehensive Exposition Ever Presented
of KANSAS' Agricultural and Industrial Interests

\$40,000 — IN PREMIUMS AND SPEED — \$40,000

All The Desirable Features of Other Years—Together With New and Instructive Attractions

Mammoth Live Stock and Agricultural Exhibits.
New Fire-Proof Concrete Buildings for Stock and Exhibits.
Four Grand Band Concerts Daily.
New and Up-to-Date Free Acts.
Five Days' Racing with Free Acts and Band Concerts
Aeroplane Flights.

EVERY NIGHT PAIN'S MAMMOTH SPECTACLE

Old Mexico, 1847. The storming and capture of Fortress Chapultepec. The awful and awe-inspiring spectacle of Mt. Popocatepetl in volcanic eruption. Scenic effects 350 feet long, 200 performers, followed by the greatest fireworks display ever seen in Kansas.

Patterson's Shows on the Midway.
The Fair at Topeka is in a class with the big State Fairs of the Western country.
Every Day a Big One.
This Fair is Chartered by the State of Kansas and receives from the State the same recognition financially as any fair in Kansas.

T. A. Borman, Pres.
S. E. Lux, Vice Pres.

Special Service on all Railroads

H. L. Cook, Secretary
Topeka, Kansas

PLAN YOUR VACATION AT THE STATE FAIR, TOPEKA---SEPTEMBER 8 to 13, 1913



Let the Horses Do the Work

IN all the operations necessary to the raising of corn, from the preparation of the seed bed in the spring to the planting and cultivating, you use power-drawn machines. Why stop a reasonable method and go back fifty years or more at harvest time? Why take the horses off the work just when the hardest job is to be done? This year buy a corn binder and let the horses do all of the work incident to the corn crop.

There is not alone the saving in work to be considered; there are other important savings resulting from the purchase and use of an I H C corn binder. Properly used it saves the one-third of your corn crop which the old method wasted. Each corn binder saves the wages of four or five extra men or saves about four-fifths of the time spent in harvesting the corn by hand. No matter how you look at it, you will make money by investing in an

I H C Corn Binder

Corn is hard to cut, but the practical design and strong construction of I H C corn binders make them last and do good work for years in all kinds of corn, either short or tall, standing, down or tangled. When cut at the right time and cured in the shock the whole corn crop, ears, stalks and leaves are ready to be turned to profit by being run through an

I H C Husker and Shredder

Deering, McCormick or Plano

In years when the hay crop is short and prices high, a plentiful supply of nutritious stover enables you to bale your hay and sell it in the best market without detriment to your stock. Shredded fodder is eagerly eaten by the stock and is especially good winter feed, because of the large amount of heat-producing materials it contains. It is better to use corn stover in the barn than to waste it in the field; especially, since it comes to you as clear profit and at practically no expense.

I H C local dealers will assist you in deciding on the right machines for you to buy and they will give you cheerful and willing service, both before you buy and afterward, as long as your machine lasts. Get catalogues and full particulars from them or, write the

International Harvester Company of America

Chicago

(Incorporated)

U S A



Can make 100 miles an hour Yet safe in hands of 10 year boy

The Excelsior, the fastest and most powerful of motorcycles, is far the *easiest controlled*. Your hands never leave the handle bars. The clutch is controlled by the left-hand grip, the throttle by the right. The most powerful motorcycle engine ever made—obeys your slightest touch. Every Excelsior victory is made with a motor of this *regular stock design*. You need never take the dust of any machine, on two wheels or four, riding on an

**Best at Portland, Ore.
Races, June 9, 1913**
Excelsior won six heats and was second out of seven events. An Excelsior four-horsepower single, which had run 68,000 miles in daily service, made five miles in five minutes flat—fastest time in its class.

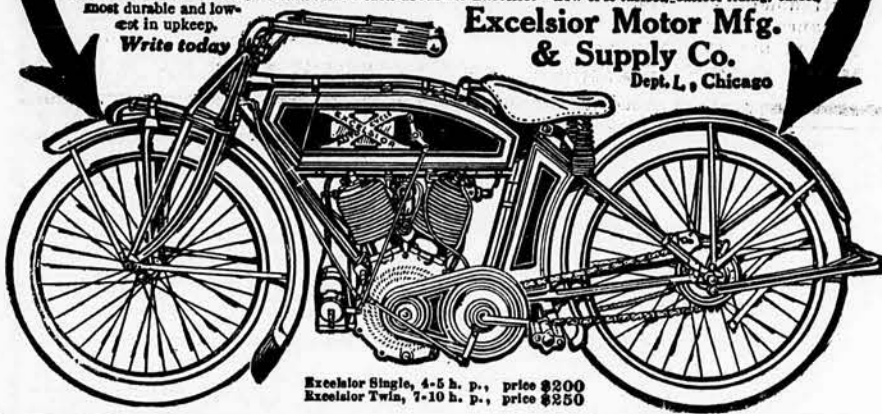
Excelsior

—the only motorcycle with complete handle bar control

The Excelsior lasts for years. The machines of pioneer days still give good service. Its remarkable strength and endurance is proved in its racing triumphs. Exclusive Excelsior features such as the shock-absorbing Kumpfort cushion seat-post and spring fork make it easiest riding. Write for Illustrated Catalog and Dealer's Name. Learn all the facts about the Excelsior—how it is fastest, easiest riding, safest, most durable and lowest in upkeep.

Write today

**Excelsior Motor Mfg.
& Supply Co.**
Dept. L, Chicago



Excelsior Single, 4-5 h. p., price \$200
Excelsior Twin, 7-10 h. p., price \$250

**READ KANSAS FARMER'S CLASSIFIED
ADVERTISING PAGE FOR READY BARGAINS**

LIVE STOCK



Must Vaccinate in Clean Pens.

"It is unsafe to vaccinate hogs unless the pens in which they are kept are in a reasonably sanitary condition," said Dr. F. S. Schoenleber, state veterinarian, in announcing the results of a number of investigations. "The wound made by the needle used in vaccinating is likely to become infected under such conditions. As a result the vitality of the animal is reduced to such an extent that the hog develops an abscess at the point of inoculation from which it may die, or, in this weak condition, a case of cholera which the serum is powerless to prevent developed. Or, as in many instances, ordinary blood poisoning results.

Percheron Sales.

A review of trade conditions in Percherons for the six months ending April 30, 1913, has just been completed by the Percheron Society of America.

Percheron breeders have cause for congratulation in the excellent trade enjoyed for good Percherons this season. Between November 1, 1913, 4,130 transfers of animals sold during these six months were given and have been cleared through the office. This does not represent all the sales made, for some purchasers have neglected to file their transfers promptly. Two thousand five hundred twenty-two of the above transfers were to men not yet members of the society, beginners in Percheron breeding, who are for the most part substantial farmers.

New Book on Live Stock.

"Beginnings in Animal Husbandry" is the title of a new book just from the press by Prof. Charles S. Plumb of the Ohio State University. With the great demand for the introduction of agricultural education into the schools, there has been need for many new books because of the introduction of these subjects. Previous to the publication of this book there has been no elementary text book treating of this particular phase of agricultural education. While primarily written for use in high schools and other schools of secondary grade, the book would be of great interest to the young people of the farm and to the older people as well. The origin and history of different breeds of live stock are taken up briefly. The points of the horse and judging of the horse, the judging of cattle, sheep and other live stock, is taken up in considerable detail. Chapters on heredity, selection and pedigrees, with suggestions to young breeders, are given. The book is splendidly illustrated, many of the illustrations being from photographs by the author. It is published by the Webb Publishing Company, St. Paul, Minn., and sells for \$1.25 net.

Experts to Investigate Meat Packing.

The Secretary of Agriculture has designated three experts in veterinary science, meat inspection and public sanitation to inspect and report upon meat packing establishments operating under federal supervision at various points in New York, Massachusetts, Connecticut, Missouri and Illinois. It is the purpose of the Secretary to extend this work, and to secure for these inspections the leading authorities in the country, with the idea that such action will foster confidence of the public in the meat inspection work.

Dr. J. W. Connaway, Missouri Agricultural College, Columbia, Mo., is the expert appointed to inspect and report on conditions in the meat packing establishments of Kansas City, St. Louis and St. Joseph, Mo., and National Stock Yards, Illinois.

The Secretary's instructions to each of these experts reads as follows:

"With a view to safeguarding public health and maintaining the highest degree of efficiency in the meat inspection service of this Department, it is my desire that you report directly to me fully and frankly the conditions as you find them at the various packing establishments, together with such recommendations looking to the improvement of the service as in your judgment may seem best."

This new inspection of meat packing establishments by outside experts, under

temporary assignment by the Government, will in no way supercede or lessen the work now being done by the Bureau of Animal Industry. The idea, according to the Secretary, is simply to have the inspection and regulatory work checked up by competent authorities who will report directly to the Secretary.

Train Colt for Show.

Too often the amateur showman in exhibiting his live stock fails to show them to the best advantage through failure to properly train the animal before fair time. This is especially true in showing colts and horses. Attempting to pick out the winners from a bunch of wild, unmanageable colts is a most difficult task for a judge. He may easily overlook a good colt due to its bad actions in the show ring.

The colt first of all should be taught to stand still and not get excited and tear around and in general act up like a spoiled child while company is around. It will require considerable careful handling to accomplish this result. The colt should then be taught to stand quietly in the proper position to show off his good points to best advantage. This means that his front feet should be squarely under him, his hind feet standing side by side and his head well up. When being shown in the ring the owner or attendant must be constantly on the lookout to see that his colt or horse is properly maintaining his position. Too often, especially at the small country fairs, the men or boys holding the colts get to gossiping and let the animals slouch around in all sorts of positions.

The weaning colt should be broken to handle with the bridle as it is oftentimes difficult to control them properly where the halter only is used in handling them. The colt should be taught to lead both in the walk and trot, since the ability to show the action properly may have a very important bearing upon the final decision of the judge. All this means considerable training before hand. In training the colt to trot, the attendant should run beside his shoulder always keeping close to the animal. A little careful preparation along the lines suggested will make the poor horse or colt show up fairly well, and likewise prevent the really good horse from appearing badly.

Serum Tested at College.

Every drop of serum made at the agricultural college is thoroughly tested before it is sent out. Six susceptible hogs are inoculated with cholera germs. Twice as much infected blood is injected into these animals as they ever would get by vaccination. Two of these test pigs are vaccinated with a normal dose of the serum; two with three-fourths the normal amount, and two receive no serum. If the two not receiving serum die of cholera in the usual time, and the four receiving serum live and show no signs of ailment, the serum is counted satisfactory. If the pigs receiving three-fourths the normal dose develop fever the serum is not counted satisfactory but its protective power is raised by adding to it some stronger blood. If all the pigs, inoculated and uninoculated, show cholera and die, the serum is judged worthless and is thrown away. Thus, all the serum sent out has a protective power double that which is required, if directions are followed.

Few Brood Mares Produce Colts.

Statistics show that less than one out of every three mares bred each year raises a colt. The stallion is usually blamed for this, but as a matter of fact in the great majority of cases the mares are to blame.

The Kansas Registry Board desires to help the stallion owner, as well as the horse breeding interests in general, and expects to carry on an active campaign among mare owners to get them to take better care of their mares and to give more attention and study to the matter of horse production. The Registry Board also hopes to get them to appreciate and to realize more fully the position of the stallion owner, and that a service fee is a legitimate debt that ought not to be neglected.

POULTRY

Chicken feed has nearly doubled in price within a month. How many chickens have you that are eating their heads off? Had not you better sell all that you do not need for next season's breeders?

During the very hot weather the chicks seem to be at a standstill. See that they have green feed in abundance with a little meat occasionally. Also plenty of fresh pure water should be within their reach at all times.

The hot sun having burnt out nearly all the grass, leaves hardly anything green for the chickens. We are bound to have rain before very long, so spade up the yards and sow to rye or oats. This will make fine green feed for fall.

During hot weather do not feed too heavily in the morning. If you do, you will find that the hens will get to loafing too much, and will do no scratching, but wait for the next feed. Neither will they be anxious for the last feed at night, which is the most important feeding time for they need full crops at night to last them till morning.

Good birds will pay their way, no matter how you are working the business. There are farmers who make the hens pay the grocery bills, and at the same time do not give the birds the attention that they deserve. If proper care were given these same birds, the results would be far greater. You can make your poultry do more than they now do if you plan your work wisely and give them a little extra care.

It is a good plan to teach the growing chicks the ways of the roost in tie. If when they are about half grown you will put roosts in their houses you will find that when changed to their winter quarters they will go right up on the roost at night. It has been said that it is not good to provide roosts for chicks too young, as it will make crooked breast bones. This may be true when birds are very small, but after they weigh two or three pounds they should be taught the use of the roost. Chicks can acquire crooked breast bones even though they lay on the floor at night, if they are over-crowded. That should be avoided no matter how they rest at night, on roosts or on the floor.

Mites.

The following is what the Missouri Experiment Station has to say about mites, and how to get rid of them:

Derhanyssus Galinae, the scientists call him, but to us he is just the "pesky red mite." He is red, by the way, only when he is full of blood. The rest of the time he is gray with black spots.

Although one of the smallest of the parasites which infest our poultry, the red mite, owing to its large numbers, is one of the most serious. This is especially true during the warm weather, under which conditions, they multiply most rapidly. Dark, damp, dirty hen houses are especially favorable to their growth, and it is in houses of this sort that they are found in largest numbers.

Mites, like some of the larger "varmints" which prey upon fowls, do their evil work mostly at night. They crawl upon the hens while they are at roost, and suck their blood. As soon as they are full, they return to the cracks and crevices in and around the roosts. They are also found in large numbers in dirty nests, and are the direct cause of the death of many setting hens during the warmer months.

Facts and rules which you should observe:

1. Red mites multiply most readily during warm weather, and in dark, damp, filthy houses.
2. Avoid all the hiding places possible. Change nest material often. Don't allow any decayed or broken eggs to remain in the nests.
3. When a house is once infested, very thorough treatment is required in order to get rid of them.
4. Anyone of three methods may be used: (a) whitewashing and painting with kerosene and crude carbolic acid; (b) fumigating with sulphur and painting with cresol emulsion; (c) spraying with lime sulphur solution.
5. To prevent mites, keep the house clean, and paint the roosts and interior of nests every two weeks with kerosene and crude carbolic acid. Remember that there is no reasonable excuse for a house being infested with mites. If the house is kept clean, sanitary and properly sprayed, they will never appear.

Healthy Stock

is assured to the wise farmer and stock raiser who guards against all parasitic and skin diseases by occasional dippings and sprayings. You should always use Dr. Hess Dip and Disinfectant for two important reasons—its effectiveness and its uniform strength. Its cheapness permits of its free general use everywhere.

DR. HESS DIP and Disinfectant

is a guaranteed preventive. It contains elements harmless to animal life, but deadly to parasitic and germ life. Little trouble to use it. For sheep, or when contagious diseases are suspected, a dipping tank is best. One gallon of dip makes 100 gallons of solution.

Write for Dip Booklet.
DR. HESS & CLARK, Ashland, Ohio.

Cleans like Magic Without Scouring

In addition to its value on the farm as a preventive of hog cholera—as a disinfectant—as a water softener and for making soap—

Lewis' Lye

The Standard for Half a Century

is a household necessity for cleaning purposes. It cleans anything and everything like magic, without scouring and does its work with less labor than any other so-called cleanser on the market. It is, without question, best for cleaning

- Bath Room Fixtures
- Kitchen Utensils
- Milk Pans or Churns
- Woodwork
- Windows.

Lewis' Lye—the purity and full strength of which is guaranteed—is the only lye made and marketed by manufacturing chemists. Booklet describing the many uses of Lewis' Lye, mailed free on request.

PENNSYLVANIA SALT MFG. COMPANY
Manufacturing Chemists
PHILADELPHIA

RE-INFORCED CONCRETE TANK

Build It Yourself In a Day

A re-inforced concrete tank built with Lock-Form will last forever. Lock-Form is proper re-inforcement and form in one. On an off-day you can build the perfect tank—no cracks, no rust—less cost than any other tank made. Free booklet tells how you can build re-inforced concrete TANKS, SILOS and GRAIN BINS.

The Edwards Metal Structures Company.
1203 West 28th St. Kansas City, Mo.

Running Water

In House and Barn at even temperature Winter or Summer at Small Cost.

Send Postal for New Water Supply Plan. It will bring you 100 pictures of it in actual use. Do it Now.

Aermotor Co., 1144 S. Campbell Av., Chicago, Ill.
Aermotor Co., 2d and Madison Streets, Oakland, Cal.

KENDALL'S SPAVIN CURE

The old reliable remedy for curb, splint, bony growths, ringbone, spavin or other lameness. 36 years of remarkable results. \$1 a bottle, 6 for \$5. At all drug stores. Ask for Free Book, "Treatment on the Horse," Dr. B. J. Kendall Co., Rosburg, Pa., Va.

When writing advertisers, please mention Kansas Farmer.

Wheat or Straw?

On some of the best wheat land the crop runs to straw. This is because there are not enough available mineral foods to balance the manure or clover. A field test on such land showed that Potash increased the grain from 20 bushels on unfertilized soil to 31 bushels where

POTASH

was used, and to 37 bushels where Potash and phosphate were used. Both were profitable. Supplement the humus of such land with 200 lbs. acid phosphate and 30 lbs. Muriate of Potash or 125 lbs. Kainit per acre. Potash Pays.

If your dealer does not sell Potash, write us for prices stating quantities required and ask for our free book on "Fall Fertilizers." Study of the fertilizer question means saving and profit to you.

GERMAN KALI WORKS, Inc.
NEW YORK—42 BROADWAY
CHICAGO—McCormick Block
NEW ORLEANS—Whitney Central Bank Building
SAVANNAH—Bank & Trust Building
ATLANTA—Empire Building
SAN FRANCISCO—24 California Street

RIGHT PROPORTION OF HEAD TO STRAW

CROP RUNS TO STRAW

Here's Walter Johnson

Washington "Nationals" (American League) one of the speediest pitchers of either of the big leagues—he

Drinks Coca-Cola

He's got the head, the arm, the ginger and the endurance. Coca-Cola didn't give him them; but he says it's the one best beverage for the athlete in training—

The Successful Thirst-Quencher
For Ball Players—and YOU

Send for Free Booklet. 54-A

THE COCA-COLA COMPANY, Atlanta, Ga.

"Opens and Closes Easier Than Your Barn Door"

That's the opinion of every man who ever fed stock from the Hinge Door Silo. So simple and easy that it can be operated by a child with safety. Write us today for full facts about

The HINGE-DOOR and LANSING SILOS

with all the latest and valuable improvements in silo construction, and trebled in value with the Hinge Door. Our book also tells about Lansing Silos. Your choice of two famous makes. Get our book before you close a deal for any silo.

The Continental Creamery Co., Topeka, Kan.
State Agents, Gen'l office Woods Bros. Silo & Mfg. Co., Dept. 21, Lincoln, Neb.

WRITE FOR FREE BOOK NOW

JEFF CONSTANT & SON'S DUROC SALE

DENVER, MO., FRIDAY, AUG. 29, 1913

- | | |
|-------------------------|-------------------------|
| 10 Bred Sows. | 10 Oct. and Nov. Gilts. |
| 10 Tried Sows, open. | 9 July and Aug. Boars. |
| 10 July and Aug. Gilts. | 4 Oct. and Nov. Boars. |

Sows bred to I Am Bell's Chief, W. J. C's Prince of Cols and Constant's Crimson Wonder Again. This includes daughters of the most noted Duroc sires. Breeders will find the entire offering first class. Free entertainment and conveyance to sale will be furnished parties from a distance at Albany and Grant City, Mo. Bids sent to auctioneers or field-men in our care will receive fair treatment. Send for catalog at once.

W. J. CODY, Fieldman. JEFF CONSTANT & SON, Denver, Mo.

DISPERSION SALE OF JERSEY CATTLE

Have sold my farm and will sell at private treaty my entire herd of richly bred Jerseys, at once.

THIRTY-FIVE CHOICE ANIMALS

Mostly yearlings and 2-year old heifers—only one cow over 4 years old. Prize winning daughters and grand-daughters of Viola's Golden Jolly; 4 daughters of Imp. Brighton Lad and daughters of Goldstream are included in this lot.

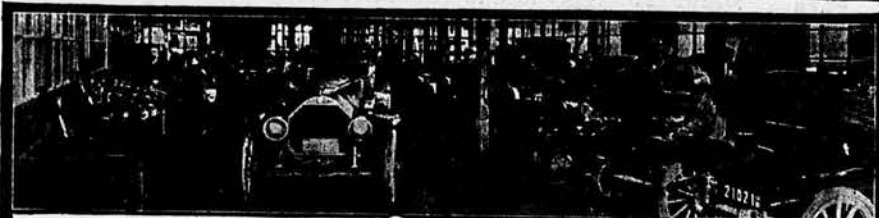
NOBLE PEER OF OAKLAND 95499

Seventy-five per cent the same blood as the famous prize winner Noble Peer, the \$3,000 yearling, heads my herd. My herd has been developed after years of careful and painstaking selection and culling. If you want Jerseys of the best blood lines combined with splendid individuality you can find it at my farm. Will be pleased to meet prospective buyers at train and show them this splendid offering of Jerseys.

JOHN T. HIGGINS

Abilene, Kansas

SCHOOLS AND COLLEGES



School terms open June 10, Sept. 2, Oct. 13, Nov. 25, 1913; Jan. 5, Feb. 17, Mar. 30, May 12, 1914. New classes formed each term. Students advance rapidly.

Trade School Engineering Courses Highland Park College

The industrial world is calling for engineers of all kinds. Opportunities for good positions and good salaries for the young man fully equipped are greater to-day than ever before. Take your first job as a trained man—not as an apprentice. Start at a good salary. Our graduates are found in paying positions everywhere. Three-year courses of 48 weeks each are equal to the four years at other colleges.

Machinist, Automobile Machinist, Chauffeur and Manual Training Courses

The Machinist Course is completed in 48 weeks, equivalent to 5 years' apprenticeship. Actual work on lathe, drill, shaper, chuck, milling machine, planes, grinder and vise. Special attention to accuracy and speed.

Automobile Machinist Course is of 48 weeks' duration, and is the most complete ever offered. Qualifies you to take a position in factory or as foreman in large repair shop.

Chauffeur Course is complete in 12 weeks. In that time we teach you how to repair any car, and you

are qualified to work as a repairman in a garage. There is also a special six weeks' driving course. Manual Training Course may be completed in 48 weeks. In the cities and larger towns there is a great demand for trained manual training teachers, and the salaries paid are good, averaging at the start about \$100 a month.

Also Civil, Electrical, Mechanical, Steam and Traction Engine Courses, co-ordinate with others in the Engineering Department. Complete one-year course in Mechanical Drawing.

FULLY EQUIPPED REPAIR AND MACHINE SHOPS

We have the largest and most complete school machine shops in the United States, containing all the necessary apparatus, tool and machinery. School all the year. Enter any time. Small tuition fees. Minimum living expenses. Magnificent buildings, fully equipped. Equal to best Eastern schools. Send for catalogue.

GEORGE P. MAGILL, President

Highland Park College, Des Moines, Iowa

KANSAS STATE SCHOOLS

Board of Educational Administration

ED. T. HACKNEY, E. W. HOCH, MRS. CORA G. LEWIS.

The University of Kansas, Lawrence.
Kansas State Agricultural College,
Manhattan.

Normal Training School, Emporia.
Western Normal Training School,
Hays.

Normal Manual Training School,
Pittsburg.

School of Medicine, Kansas City, Kan.
School of Mines and Metallurgy,
Weir.

School for the Deaf, Olathe.
School for Blind, Kansas City, Kan.

The Kansas State Schools are equipped with everything for higher education and special training. There are excellent faculties, well equipped laboratories, good libraries and splendid professional schools, fine buildings, gymnasiums and outdoor fields. The moral welfare of students will be carefully looked after. Every help will be given young people who wish to be self supporting.

Write for information to the school carrying the course desired.

Mount Carmel Academy, Wichita, Kansas

Select boarding school for girls. In beautiful suburbs of Wichita. Fifty-acre campus, modern building. Preparatory, Academic, Commercial, Special advantages, Music, Art, Elocution, Languages, Domestic Science. Get beautiful catalog. Address

SISTER DIRECTRESS, MOUNT CARMEL ACADEMY, WICHITA, KANSAS.

WASHBURN COLLEGE

LOCATION—Accessible, wholesome, helpful.
DEPARTMENTS—College, College Preparatory, Law, Music, Painting, Drawing, Expression; courses introductory to Engineering, Medicine, Domestic Science and Theology. College home for young women.
Address WASHBURN COLLEGE, Topeka, Kansas.

THE KANSAS STATE AGRICULTURAL COLLEGE

Efficiency in AGRICULTURE, ENGINEERING, HOME ECONOMICS.
offers instruction in SCHOOL OF AGRICULTURE—with three-year courses in Agriculture, Mechanic Arts, Home Economics, admitting students on common school standing. COLLEGE OF AGRICULTURE AND MECHANIC ARTS, with courses in Agriculture, Engineering, Home Economics and Veterinary Medicine, admitting students on high school standing. Fall term opens Sept. 16, 1913. Send for one or both of the following pamphlets: "School of Agriculture," "College Courses" and the "Catalogue." (Correspondence courses offered.) Address, THE REGISTRAR, KANSAS STATE AGRICULTURAL COLLEGE, BOX E MANHATTAN, KANSAS.

DOUBLE RESPONSIBILITY

WHEN you buy an article, what is your first thought? "Am I getting my money's worth?" You don't care so much whether it is the cheapest article of its kind, but you do like to feel satisfied that you are receiving honest value for what you have paid.

The dealer may assure you that you are, but the dealer does not manufacture the merchandise, and sometimes he is deceived.

When you buy an article with an advertised name, you have a double guarantee behind it—of the dealer who sold it and of the manufacturer who made it.

Insist on double protection by giving preference to advertised goods.

KANSAS CITY Business College

Young Women's Christian Association Bldg.
1020-24 McGee Street, Kansas City, Mo.



Finlay Engineering College.
All branches of Engineering; enroll any time; machinery in operation; day and night session. Finlay Bldg., 10th and Indiana, K. C., Mo. Ask for Catalogue E. Phones East 295.

HOME CIRCLE

A wise old owl
Lived in an Oak;
The more he saw
The less he spoke
The less he spoke
The more he heard;
Why can't we be
Like that old bird?

The Typhoid Fly—Anti-Fly Crusade.
The three (dis) graces—filth, flies and fever.

"Fruit a la Filth"—the kind served from sidewalk stands after being exposed to street dirt and flies.

Screens on windows and doors to keep out flies will do more to safeguard your treasurers than will locks to keep out burglars.

Not every fly that comes along is carrying disease germs, but many of them are and you can't tell which is which. Take no chances—swat all.

Because your neighbor throws garbage in the alley is no reason why you should follow his example—it's a reason why you should set him a good example.

With all houses well sewered and screened, the flies that feed upon the filth and kitchen refuse would largely disappear and the health conditions would be to that extent improved.

The house fly should be called the "typhoid," the only objection being that the name might give rise to the erroneous impression that typhoid is the only infection it carries, while in fact it spreads the bacteria of all intestinal diseases.—Holland's Magazine.

A simple way to overcome sagging in the back of a skirt is to sew a straight, narrow strip of goods or tape in with the back seam. Also try sewing in the hooks and using pins to make the eyes when doing final fittings; there will be no mistakes, nor ripping off of the eyes.

Maple Ice Cream.

Boil a pint of milk in the double boiler. Mix three beaten egg yolks with a cupful of milk then stir into the hot milk. Melt a cupful and a half of maple sugar, or use maple syrup; add to the thickened milk, and take from the fire. Add a pint of rich cream and when cooled, freeze.

Maple Sauce to Serve with Ice Cream.

Vanilla cream is delicious when served with maple sugar sauce. Boil a cupful of thin cream with a pound of maple sugar and a generous tablespoonful of butter. Do not stir. When a little dropped in cold water makes a soft ball, it is ready to serve. If necessary to keep hot, set in a pan of hot water. With the addition of some nuts, this sauce becomes the ever popular Maple Sundae.

Kodak Albums Free.

Best loose-leaf, any size, for those who have kodak work done. First roll dev. free. Send 2c for free coupon. J. C. Wolcott, Topeka, Kan.—Adv.



No. 6234—A Practical Waist. This design is to be classed with shirt waists. It has two tucks at each side of the front, but the back is plain. The closing is made with a box pleat or without as preferred and the neck is trimmed with either a standing collar or a flat, ornamental one, both being provided in the pattern. This style is good for crepe materials, linen, gingham, cambric, pongee and serge. The waist pattern, No. 6234, is cut in sizes 34 to 42 inches bust measure. Medium sizes requires 2 1/2 yards of 36-inch material. This pattern can be obtained by sending 10 cents to the office of this paper.

WICHITA BUSINESS COLLEGE

TEACHERS.

The strongest reason for your attending the Wichita Business College is that it has the largest and most experienced staff of teachers to be found in any western business college. Each department is in charge of a principal who has had many years practical experience in the work handled by him.

Employing so many teachers enables us to conduct enough classes to insure each student being placed where he belongs whether it is studying fractions or reviewing the most difficult problems of higher accounting. A. W. B. C. teacher must not only be competent to teach but must be kind, patient, considerate, so the beginner's first few days are free from embarrassment and discouragement.

A teaching staff is by far our heaviest item of expense, but it has caused us to be known as the High Grade Business College of the West. Address,

THE SECRETARY,
WICHITA BUSINESS COLLEGE,
WICHITA, KAN.



The U. S. Civil Service

offers salaries to start of \$900 to \$1,000, with short hours and sure pay.

We prepare for Stenographic, Bookkeeping and Clerical examinations. Write for Catalog B.

Dougherty's Business College
GEO. E. DOUGHERTY, PRES.,
Topeka, Kan.

MEN WANTED IN AUTO BUSINESS

Big demand for trained men. Earn from \$75.00 to \$150.00 per month. Learn all about automobiles in six weeks by THE "SWEENEY SYSTEM" of practical experience. In our machine shop, garage and on the road you learn by actual experience how to repair, drive, demonstrate and sell automobiles. Send for free catalog explaining The "Sweeney System" and showing views of the largest and best equipped auto school in the world. Write today. Now.

SWEENEY AUTO SCHOOL,
1124 East 15th St., Kansas City Mo.

Spalding's COMMERCIAL COLLEGE

10th & Oak Sts., KANSAS CITY, MO.
47th Year. \$100,000 College Building has 15 Rooms, including Auditorium and Free Gymnasium. SHORTHAND, TYPEWRITING, BOOK-KEEPING, TELEGRAPHY AND ENGLISH. DAY & NIGHT SCHOOLS. Write to-day for FREE Catalogue "P"

Strickler's

28 years of continued success.
Topeka Business College.
Graduates in every state in the U. S. Most up-to-date school in the West. We get you the position.
Write today for catalogue.
111-113-115-117 E. 8th St., Topeka, Kansas.

THE CENTRAL

BUSINESS COLLEGE PLAN brings a position and the training to hold it, no matter what your financial condition. Elegant catalog explaining this great plan free. Central Business College, 1219-21 Oak, Kansas City's Largest Business College. 22d year.

St. Joseph Veterinary College

Thoroughly modern three years' course in veterinary medicine leading to the degree of D. V. M. College recognized by the U. S. Department of Agriculture. Modern and completely equipped laboratories. Unexcelled clinical facilities. For prospectus address

DR. F. W. CALDWELL, DEAN,
St. Joseph, Mo.

OTTAWA UNIVERSITY

A College with large variety of courses; an Academy with commercial courses; a Conservatory of Music and a Department of Expression. Expenses very reasonable. Influences wholesome. It emphasizes character. New Bulletin just out.
S. E. PRICE, President, Ottawa, Kan.

Does Your Salary Grow With Your Needs?

Is there more than enough in your pay envelope to make both ends meet? If not, we can help you. Write for catalog to

PLATT COMMERCIAL COLLEGE
9th and Frederick Ave., St. Joseph, Mo.

Bargains in Land

80 A. Improved Valley Farm, 35 cult., on Ry.
\$16 a. Robert Sessions, Winthrop, Ark.

Book of 1,000 Farms, etc., everywhere,
for exchange. Graham Bros., El Dorado, Kan.

BUY or Trade with us—Exchange book
free. BERSIE AGENCY,
El Dorado, Kan.

OZARK FARMS—Timber, fruit and pas-
ture lands for sale or exchange, from \$5 to
\$100 per acre. If interested write
AVERY & STEPHENS, Mansfield, Mo.

Central Illinois Farm For Exchange.
280 acres joins town; clear; well im-
proved. Want eastern Kansas or western
Missouri land.

CHENAULT BROTHERS, Fort Scott, Kans.

10,000 ACRES
Farm Land, Pulaski County, Ark., \$6 to
\$15 per acre; 5 years to pay.
MARTIN GAULDIN,
229 Railway Exchange Bldg., Chicago.

WANTED LOAN.
Owner of timber in Washington will pay
\$5 for three year mortgage loan, or will
sell part in order to hold for rising prices.
Address, 548 Advocate Office.
A. B. Holloway, Montesano, Wash.

CLOUD COUNTY LANDS
400-acre stock farm, 160 under plow.
Good investment at low price.
W. C. WHIPP & CO., Concordia, Kansas.

ADMINISTRATOR'S SALE.—640 acres,
good wheat, corn and alfalfa land; two sets
of improvements; in German settlement near
church and school; near Carleton, Thayer
Co., Neb. Price, \$100 per acre. Must be
sold. Address Wm. Gallant, Hebron, Neb.

ALWAYS HAVE
Just what you want in farm or city prop-
erty. A new list just out. Write for it.
List your sale and exchanges with me.
Hardware for sale.
ED A. DAVIS, Minneapolis, Kansas.

LAWRENCE REALTY COMPANY
The Home of the "Swappers," handles
exchanges of all kinds with agents or own-
ers. Write us for particulars.
Lawrence Realty Company, Lawrence, Kan.

320 ACRES good local bottom land on Re-
publican River. No sand. No overflow. All
good alfalfa land; all fenced; 65 acres
broken out; never failing spring; water
crosses one corner. Three miles from town.
\$30.00 per acre. **BROWN LAND & LOAN**
COMPANY, Superior, Nebraska.

BARGAIN—200 Acres Fine
Bottom Land, above
overflow; virgin tim-
ber, near railroad. \$4,000, terms. Also
handle exchanges everywhere. List free.
BURROWS, Warm Springs, Ark.

CASH BARGAIN FOR TRADE.—640-
Acre Lyon County Farm, 160 acres cult.,
mostly bottom, balance native bluestem
grass. Good creek and timber. Price, \$45
per acre. Mortgage, \$10,000. Will take
good 80 or 160-acre farm. Good chance for
stock man. Fred J. Wegley, Emporia, Kan.

FINE FARM, BUTLER COUNTY, KANSAS.
275 acres; 95 a. first bottom, 40 a. alfalfa,
150 a. cult., 120 a. best blue stem grass;
new improvements; near El Dorado; beau-
tiful farm. \$20,000.
V. A. OSBURN, El Dorado, Kansas.

SNAPP
Owner of that fine home quarter mile and
half place, well improved, all fine land,
instructs us to sell at once for \$30,000 an
acre—just half what it should bring. Write
for description. **BUXTON, Utica Kansas.**

FORCED SALE. 320 acres improved, 8
miles from Leoti, Kansas; exceptional in-
vestment; plenty fine water; school on
place. Price, \$7.00 per acre, cash. No
trades considered.
D. F. CARTER, (Bonded Abstractor)
Leoti, Kansas.

DICKINSON COUNTY BARGAINS.
We have many fine creek and river bot-
tom farms, also splendid upland farms for
sale. Soil deep rich black loam, producing
the big corn, wheat and alfalfa. Our prices
are reasonable. Write for terms and list.
Briney, Pautz & Danford, Abilene, Kan.

SOMETHING WORTH THE MONEY.
260 acres located in Anderson Co., Kan.
Tons smooth and is free from rock. Well
improved. Four miles from good town.
Ninety acres tame grass, 35 acres prairie
timber or hay land; 30 acres timber; bal-
ance in cultivation, with abundance of liv-
ing water. Price, \$55.00 per acre; half cash,
balance at 6 per cent interest. Write for
particulars.
W. L. WARE, Garnett, Kan.

TO TRADE FOR LAND IN ARKANSAS.
320 acres 9 miles north of Dodge City,
Kansas; 90 acres in cultivation, new
house 16x28. Stable room 28 head
stock. Shed barn. Well and windmill.
Chicken house, good granary. Rural
free delivery and telephone. Price,
\$1,800. \$1,500 against land due 2 years.
Will trade this for a farm near Sheri-
dan, Arkansas.

H. B. BELL LAND COMPANY,
Room 5 Commerce Building,
Phone No. 2 - - Dodge City, Kansas.

Why Forswear
Your Allegiance to "Uncle Sam" and
take up your abode where the growing
season is short and the climate is
rigorous, when the very best land
that the sun shines on is in the
United States, and where, in many
places, you can work outdoors almost
all the year 'round?

If you think of moving from your
present location, ask me where to ob-
tain good land at reasonable prices.
Say what state you prefer and I will
send information to you free.

R. A. SMITH,
Colonization and Industrial Agent,
Union Pacific Railroad Co., Room
242 Union Pacific Building,
OMAHA, NEBRASKA.

VIRGINIA OFFERS fertile farm lands at
\$15 to \$50 per acre. Ideal fruit and graz-
ing land at \$5 to \$15 per acre. Abundant
rainfall, long growing season, nearness to
World's best markets, mild and delightful
climate, educational advantages and great
promise for the future.
VIRGINIA WANTS 10,000 young and in-
dustrious practical farmers to occupy and
cultivate the vacant farms and help reduce
the cost of living. Write at once to
VA. LAND IMMIGRATION BUREAU,
6 Gale Block, Dr. W. J. Quick, General
Manager, Roanoke, Va.

REAL ESTATE.

SELL YOUR PROPERTY QUICKLY FOR
cash, no matter where located. Particulars
free. Real Estate Salesman Co., Dept. 77,
Lincoln, Neb.

FOR SALE—CHOICE WHEAT, CORN
and alfalfa lands in Clark, Ford and Meade
Counties. Write for list trades. Nate Neal,
Real Estate, Minneola, Kan.

SPLENDID QUARTER SECTION FOR
sale in northeast Kansas. Close to town.
Well improved. Owner leaving country.
No agents. Answer "X" Kansas Farmer.

BARGAIN—A NICE SMOOTH 80 ACRES
of tillable land, only 7 miles from Salina;
\$3,200.00. Write for list. V. E. Niquette,
Salina, Kan.

DO YOU WANT A HOME IN A WELL-
watered, rich alluvial valley; three railroads
and near big city—mild climate and natural
dairy country; on terms of one-tenth cash,
balance nine years. Write Humbird Lumber
Co., Sandpoint, Idaho, about cut-over lands.

FIELD NOTES

Shropshire Rams at Rich Hill, Mo.
Mr. E. E. Laughlin, Rich Hill, Mo., is
offering for sale some choice rams, all reg-
istered, at very low prices. The Laughlin
herd is headed by Imported C. H. Justice
010035R. Stock from this breeder always
gives satisfaction. Last year each purchaser
wrote to Mr. Laughlin telling how very
much pleased he was. A good many of our
readers have been customers of Mr. Laugh-
lin in the past. The quality of his sheep
is known to them. If you are in the market
for a first class ram, don't forget to write
Mr. Laughlin for descriptions and prices.
Please mention Kansas Farmer.

Constant & Son's Fine Duroc Offering.
The attention of Duroc breeders is called
to the sale advertisement of W. J. Constant
& Son in this issue of Kansas Farmer. On
August 29 they will offer a select draft
of Duroc sows, gilts and a few extra boars.
The bred sows will include some of the
best of their noted herd of Duroc sows.
They are bred to their great herd boars, I
Am Bell's Chief, W. J. C's Prince of Cols
and Constant's Crimson Wonder Again.
Three of the noted sires of the breed.
Among the sows in this sale will be Chief's
Belle by Ohio Chief out of Savannah Belle,
Woolen's Best by Duroc Improver out of
Proud Sylvia by Proud Advance and other
good ones. The gilts in this sale will in-
terest breeders wanting high class breeding
stock and the boars that will go in this
sale will be one of the good lots to be sold
this year. Write for catalog at once.
Please mention Kansas Farmer when writ-
ing.

W. R. Murphy of Cosby, Mo., will have
one of the best Duroc Jersey offerings that
will be sold in the corn belt this year.
The spring boars and gilts that he will
offer this year are strictly high class and
there are some outstanding herd leader
prospects among the boars. The entire
offering was sired by Mr. Murphy's great
herd boar King of the Pike, without a
doubt one of the best Duroc sires now in
service. Watch for his announcement.

Classified Advertising

Advertising "bargain counter." Thousands of people have surplus items or stock
for sale—limited in amount or numbers hardly enough to justify extensive display adver-
tising. Thousands of other people want to buy these same things. These intending
buyers read the classified "ads"—looking for bargains. Your advertisement here reaches
over 300,000 readers for 4 cents a word for one week; 8 cents a word for two weeks; 12
cents a word for three weeks; 14 cents a word for four weeks. Additional weeks after
four weeks, the rate is 3½ cents a word per week. No "ad" taken for less than 50 cents.
All "ads" set in uniform style, no display. Initials and numbers count as words. Ad-
dress counted. Terms, always cash with order.

SITUATIONS WANTED ads, up to 25 words, including address, will be inserted free
of charge for two weeks, for bona fide seekers of employment on farms.

HELP WANTED.

WANTED—MAN TO MILK 18 COWS,
care for them and calves and wash tinware.
Liquor and tobacco users not wanted. Harry
W. Mollhagen, Bushton, Kan.

WANTED—MEN AND WOMEN FOR
government positions. Examinations soon.
I conducted government examinations. Trial
examination free. Write Ozment, 44-R, St.
Louis.

FREE ILLUSTRATED BOOKLET TELLS
about 300,000 protected positions in U. S.
service. Thousands of vacancies every year.
There is a big chance here for you, sure
and generous pay, lifetime employment. Just
ask for booklet S-609. No obligation. Earl
Hopkins, Washington, D. C.

GOVERNMENT JOBS OPEN TO MEN
and women. \$65 to \$150 month. Vacan-
tion. Steady work. Short hours. Com-
mon education sufficient. "Pull" unneces-
sary. Thousands of appointments coming.
Write immediately for full particulars and
list of positions open. Franklin Institute,
Dept. S-85, Rochester, N. Y.

POULTRY.

WHITE AND BUFF ORPINGTONS,
Kellerstrass and Cook strains. Addie Ed-
wards, Kahoka, Mo.

TOULOUSE GEESE, RUNNER DUCKS.
Bargain prices. Mrs. Emma Ahlstedt,
Roxbury, Kansas.

BLACK LANGSHANS—PEN. \$1.50 PER
15, \$2.75 per 30; open range, \$1 per 15, \$1.75
per 30. Good hatch guaranteed. D. W.
Wolfe, Route 2, Carrollton, Mo.

INDIAN RUNNER DRAKES, FAWN
and white, both light and dark. Fine,
erect and racy. Two dollars each. Mrs.
Chas. A. Roark, Barstow, Texas.

BUFF WYANDOTTES—CHOICE BREED-
ing stock at all times. A few bargains in
males and females from our 1913 breeding
pens. Must be taken soon. Wheeler &
Wylie, Manhattan, Kan.

PATENTS

SEND FOR FREE BOOKLET, ALL
About Patents and Their Cost. Shepherd &
Campbell, Patent Attorneys, 500-R Victor
Bldg., Washington, D. C.

MYSTERIOUS FADE AWAY
CARD TRICK

The effect of this wonderful trick is to
show three cards, making any one disappear
and reappear at will. Anybody can do it.
Send 10c for 1, or 25c for 4 sets today.
Wm. A. Droste Co., Suite 136, Detroit, Mich.

When writing advertisers, please men-
tion KANSAS FARMER.

CATTLE.

REGISTERED GUERNSEYS TO SELL.
Address John Bogner, Mt. Hope, Kansas.

WELL BRED GRADE HOLSTEIN BULL
calves crated at \$20 per head while they
last. Arnold & Brady, Manhattan, Kan.

FOR SALE—4 PURE-BRED GUERN-
sey bulls; one of A. R. cow. Address Phil
R. Toll, Graceland Farm, Lee's Summit, Mo.

FOR BULLS WITH A. R. O. BACKING,
see or write to Harry W. Mollhagen, Bush-
ton, Kan.

FOR SALE—32 HEAD HOLSTEINS,
Shorthorns and Jerseys, all bred from win-
ter cows. Good young stock. Owned by
dairymen going out of business. Sell all for
\$60 a head. Jack Hammel, 215 Adams St.,
Topeka, Kan.

MISCELLANEOUS.

THE ANDERSON LOADER LOADS MA-
nure, cornstalks, stack bottoms, dirt, gravel,
sand. No hand work. Write Anderson Mfg.
Co., Osage City, Kan.

FOR SALE—COMPLETE FILES OF
Breeder's Gazette from March 8, 1899 to
March 30, 1904—5 years. T. F. Ziegler,
Iola, Kansas.

WANTED—A POSITION AS MANAGER
on poultry farm. College man, married, and
have strictly temperate habits. Best of
references. Box 15, R. 6, Newton, Kan.

LUMBER—ENORMOUS SAVING IN BUY-
ing direct from mill. Send list of material
for estimate. Write today for catalog num-
ber 48. Keystone Lumber Company, Ta-
coma, Wash.

DOGS.

SCOTCH COLLIE PUPS FOR SALE,
farm raised and good workers. M. B. Tur-
keys in season. I. P. Kohl, Furley, Kan.

BEE SUPPLIES.

BEE SUPPLIES, ROOTS GOODS, SEND
for catalog. O. A. Keene, 1600 Seward Ave.,
Topeka, Kan.

SEEDS AND PLANTS.

FOR SALE—ONE THOUSAND BUSHELS
choice Turkey Red seed wheat, \$2 per
bushel. Reference, First National Bank.
David Killean, Fairbury, Neb.

HORSES AND MULES.

FOR SALE—FINE PAIR BLACK REG-
istered Percheron mares, 3 and 4 years old.
Weight, 2,800. Casino daughters. Their
grandmother won the big prize, American
Royal, Kansas City. Chas. Shaffer, Mon-
mouth, Kan.

THE KANSAS STATE FAIR

There is But
One State Fair
in Kansas

Hutchinson, Sept. 13-20, 1913

Under Management State Board of Agriculture

Created by Law and Located at Hutchinson

There is But
One State Fair
in Kansas

\$40,000 IN PRIZES--TO BE PAID TO EXHIBITORS

Thirteen Years of Unequalled Success. Located in the heart of Agricultural Kansas. The
Natural meeting place of Breeder and Buyer. Unrivalled Railroad Facilities. Electricity for
Light and Power. Electric Rapid Transit, two Tracks. Steam Railroad into the Grounds.
City Water—Pure and Plenty. Good Buildings—Good Shade. Cement Walk to Grounds.

The Great Agricultural and Live Stock Show of Kansas. It is the Farmers' and Business
Men's Fair. Educational—Inspirational—Recreational. It always has been and still is
the People's Fair. Six Great Races daily on the Best Track in the West.

A New Feature is the Horse Show

Tuesday, Wednesday and Thursday nights under Electric Lights. The Highest Class Free
Attractions Ever Brought to Kansas. Carnivals, Bands, Free Acts—Something Doing
Day and Night. The Greatest Display of Tractor Engines in America.

There is But
One State Fair
in Kansas

It is just a nice auto ride from any point in Kansas.
Special Trains, Special Equipment, Special Service on
all Railroads. For Prize List or Information address

Geo. B. Ross, Pres.

A. L. Sponsler, Secy.

There is But
One State Fair
in Kansas

POLAND CHINAS

POLAND CHINAS

Long King's Equal and A Wonder Jumbo

One hundred and seventy-five pigs sired by the above-named boars and out of A Wonder, Long King's Equal, and my famous Jumbo sows. We are headquarters for herd boars. Will also sell a few bred sows. Breeders will find the largest and best big-type Polands in this herd. Come and see them and you will be convinced. If unable to come, write me and I will do my best to please you. "Satisfied Customers" is my motto. All go at private sale. No fall sale.

JOHN B. LAWSON, Clarinda, Iowa.

WRAY & SON'S BIG TYPE POLAND CHINAS

Herd headed by Sterling Prince, one of the largest and best 2-year-old boars of the breed. Assisted by Chief Price's Wonder, one of the best sons of the great breeding boar, Chief Price Again. Young stock for sale. Better than your grandpa ever raised.

ENOS OFFERS 20 BIG, SMOOTH, BRED GILTS.

July and August gilts by A Wonder's Equal by A Wonder, dams by Nox All Hadley, bred for August and September farrow to the noted Orphan Chief. Blood lines and quality to spare. \$35 to \$40. Only good ones shipped.

A. E. ENOS, Roma, Kansas.

BIG-TYPE POLAND CHINA PIGS

Both sexes, February and March farrow. Fifty-five head, tops from 100 head sired by Ross Hadley and Hadley C. out of extra big sows of Expansive, Price We Know, King Mastodon and Mogul breeding. Can furnish pairs not related. Well grown out on alfalfa pasture and of the best big-type breeding. JOHN COLEMAN, Denison, Jackson County, Kansas.

225 REGISTERED POLAND CHINAS FOR SALE.

Thirty-two sows bred for summer and fall; 20 fall gilts, bred or open; six fall boars, tops from fall crop; 135 spring pigs. Both big and medium type. Sell at reasonable prices with big discounts on several head. J. D. WILLFOUNG, Zeandale, Kan. Ten miles east of Manhattan.

OUTSTANDING FALL BOAR FOR SALE.

Four under yearling boars, last sons of Mastery, the great Expansive and Mogul bred boar. One an outstanding prize winner for fall fair at \$100. Also some spring boar pigs priced to go quick at only \$12.00 each.

F. A. TRIPP & SONS, Meriden, Kansas.

Gritter's Surprise Fall Boars For Sale. Two good ones sired by Gritter's Surprise by Long Surprise. Dam of these boars is a Lady Wonder sow of the large Iowa type. They are immune from cholera and priced right. Also a few bred gilts for sale.

A. J. SWINGLE, Leonardville, Kan.

H. G. Nash's Big Boned Polands

Have a large bunch of spring pigs sired by the noted boars, Gold Medal and Hadley's Model, out of big roomy sows. Public sale October 3. Send for catalog.

H. G. NASH, Iola, Kansas.

BIG POLAND CHINA SPRING PIGS

Sired by Peter Mouw boars. Here is where you can get big-type pigs at a low price. Never before was there such a bargain offered. Write me your wants. Ben Rademacher, Box 13, Mulberry Grove, Illinois.

GREAT SON OF GOLD METAL

Heads our herd, mated with Utility, dam of the noted \$580 litter; Colossus, O. K. Price and Gold Metal. Fine lot of pigs out of these sows, most of them sired by Melbourne Jumbo. Inspection invited.

AUSTIN SMITH, Dwight, Kan.

BARGAIN IN HERD BOAR.

First Quality, by Blue Valley's Quality. Dam, Blue Valley Ex., by Exception. Three years old and a splendid breeder. Can't use him any longer and will sell him at \$75. Fully guaranteed.

JAMES ARKELL, Junction City, Kan.

ALBRIGHT TYPE POLANDS FOR SALE.

Forty head of choice fall boars and fall gilts, bred or open, and 65 spring pigs, all sired by Cavett's Mastiff, one of the best boars now in service. Only the best of individuals offered. Inspection invited.

A. L. ALBRIGHT, Waterville, Kansas.

Merten's Big Smooth Poland Chinas Headed by King Hadley 3d and Kansas Wonder, mated with daughters of Old Expansion, What's Ex, and Grand Look Jr. Stock for sale.

E. E. MERTEN, Clay Center, Kansas.

TEN BIG FALL POLAND BOARS.

Four by Mogul's Monarch. Two by Long King, son of Long King's Equal. Two by Gephart.

Extra good individuals at \$25 each.

J. H. HARTER, Westmoreland, Kansas.

STRYKER BROTHERS' POLAND CHINAS.

Choice boars and gilts from our show herd. Can sell all kinds of breeding stock at reasonable prices. Also Hereford cattle and standard-bred horses for sale.

STRYKER BROS., Fredonia, Kan.

Hartman Has Choice Big Fall Boars.

Eighteen summer and fall Poland China boars, by Blue Valley Jr. and Hartman's Hadley by Nox All Hadley. Length and breadth right. Prices reasonable for quick sale.

J. J. HARTMAN, Elmo, Kan.

POLAND CHINA HOGS—15 fall boars and 10 fall gilts sired by the champion boar at American Royal, 1911, priced to sell reasonable. G. M. Carnutt, Montserrat, Mo.

POLAND CHINAS. Spring pigs, one yearling boar Meddler breeding. All immune. Sable & White Stock Farm, Seward, Kan.

WESTVIEW JERSEY FARM

HERD BULLS—Financial Countess Lad, grand champion Jersey bull, Dairy Cattle Congress, Waterloo, Iowa, 1912, the largest Jersey show ever held in the United States. Sold for \$2,500 when 90 days old, and again as a two-year-old for \$5,000. Dam, Financial Countess 155100, the 1908 national butter champion, 13,248 pounds milk, 935 pounds 10 ounces butter.

Ruby Financial Count 87211, a grandson of Financial King, dam a Register of Merit granddaughter of Financial King; milk record of 56 pounds per day. Herd founded on Finance, Interest and Gamboge Knight families. Cows milk, as three-year-olds, 40 to 56 pounds per day. Every cow in herd on test. No dairyman ever considered a cow beautiful unless she is a heavy producer. Constitution first, production second, beauty third.

J. E. JONES, PROPRIETOR, NOWATA, OKLAHOMA.

Polands and Shorthorns

25 choice big type spring boars sired by A's Big Orange; same number of spring gilts. Also four red Scotch bulls ready for service. Few females.

S. B. AMCOATS, Clay Center, Kansas

44 Spring Pigs - 2 December Pigs

At cut prices. In pairs and trios. By Model Monday and other great boars, out of sows of the best blood lines.

O. R. STRAUSS, Route 1, Milford, Kansas.

TWO HERD BOARS FOR SALE—One 3-year-old, a grandson of Big Hadley; one fall yearling sired by Mastiff by King Mastiff. Priced to sell. Geo. Haas, Lyons, Kan.

WE WILL PAY EXPRESS ON PIGS.

Sixty choice Poland China spring pigs at \$20 each for choice, express prepaid, for the next thirty days. Can furnish pairs.

HOWARD E. AMES, Maple Hill, Kan.

POLAND CHINAS—Choice pigs, both sexes, sired by Guy's Expansion 2d. Cheap for quick sale. L. H. Grote, Morganville, Ks.

JERSEY CATTLE.

Register of Merit Jerseys

The only herd in Kansas making and keeping official records. Eighty head to select from. Cows in milk, bred heifers, heifer calves, and the finest lot of young bulls ever on the farm. All ages. Six or eight now ready for service out of cows with official tests up to 512 pounds of butter with first calf, sons of Imp. Oakland Sultan, Gambos Knight, and a son of Golden Fern's Lad. Tuberculin tested and fully guaranteed.

R. J. LINSOTT, Holton, Kansas.

Bank's Farm Jerseys

Quality with milk and butter records. One of the best sons of CHAMPION FLYING FOX, imported, at head of herd. Stock for sale.

W. N. BANKS, Independence, Kan.

Jersey Bull Three weeks old; drinks milk; registered and choice individual. Sired by Guinon's Eminent out of a Brown Bessie dam. Will make great bull. Must be sold right away. Low price.

Johnson & Nordstrom, Clay Center, Kan.

WINELAND FARM JERSEYS.

One of the strongest official record herds in the west. For sale, 10 choice young bulls, sired by Imp. "Duke's" Raleigh, and other good bulls. Out of cows now undergoing or having authenticated tests. Also 25 females of different ages. H. C. YOUNG, Lincoln, Nebraska.

5 JERSEY BULL CALVES—TARIFF OFF.

Females of all ages. Solid colors and bred along fashionable lines. The cows pay their board twice every day. "Blue Boys Baron" 99918 heads herd. About 20 head of cows in milk.

S. S. SMITH, Clay Center, Kansas.

JERSEYS FOR PROFIT

AMERICAN JERSEY CATTLE CLUB, 324 W. 23d St., New York.

OHIO IMPROVED CHESTERS

FROST'S O. I. C. 20 Mar. and Apr. boar pigs for sale; also 3 show boars weighing from 300 to 500 lbs. Prices reasonable. Address, S. D. & B. H. Frost, Kingston, Mo.

O. I. C. Swine For Sale

THIRTY FIVE. March farrow, both sexes, well grown prolific breeders. Reasonable prices for thirty days.

ALVEY BROS., Meriden, Kansas.

WOLFE'S O. I. C. SWINE.

Large, prolific kind, March and April boars. Gilts bred or open. Fall pigs. Prices low. Pedigrees free. Write your wants.

D. W. WOLFE, Route 2, Carrollton, Mo.

MAPLE LEAF CHESTERS

Large, smooth and prolific. Our stock and prices are right. Write us your wants. Satisfaction guaranteed.

R. W. GAGE, Garnett, Kansas.

O. I. C. PIGS. HARRY W. HAYNES.

Meriden, Kan.

RED POLLED CATTLE

AULD BROTHERS Red Polled Cattle

Bull calves for sale. Prices right. Herd headed by Prince, one of the best sons of Actor.

AULD BROS., Frankfort, Kansas.

Coburn Herd of Red Polled Cattle and Percheron Horses.

25 extra good young bulls and 7 first class young stallions for sale at bargain prices. Also young cows and heifers.

GEO. GROENMILLER & SON, Pomona, Kansas.

RED POLLS FOR SALE.

In order to reduce the size of herd we offer choice registered cows of large frame and splendid milkers at very low prices considering quality.

RESER & WAGNER, Bigelow, Kan.

Phillips County Red Polls and Polands. All bulls over six months old sold. Bred cows and heifers for sale, also choice lot of big-type Poland China fall boars. Inspection invited.

Chas. Morrison & Son, Phillipsburg, Kan.

SHROPSHIRE SHEEP

PARADISE DELL SHEEP RANCH. The home of registered Hampshire Sheep and Barred Plymouth Rock Chickens. Stock for sale at all times. Twenty choice spring rams for sale. Five miles southwest of Waldo and 14 miles from Russell. Visitors welcome.

E. S. TALIAFERRO, Russell, Kansas.

SHROPSHIRE SHEEP.

Twenty-five two-year-old registered Shropshire rams for sale. They are good ones.

E. A. BUNTON, Maysville, Mo.

REGISTERED SHROPSHIRE RAMS.

Imported C. H. Justice 010035R at head of flock. Our flock rams are and always will be the best. Prices low. E. E. Laughlin, Rich Hill, Mo., (Bates County.)

AUCTIONEERS.

Be an Auctioneer. Travel over the country and make big money. No other profession can be learned so quickly that will pay as big wages. Write today for big free catalog of Home Study Course, as well as the Actual Practice School, which opens October 6, 1913.

MISSOURI AUCTION SCHOOL. Largest in the World. W. B. Carpenter. Pres., 1400-1404 Grand Ave., Kansas City, Mo.

Col. Jas. T. McCulloch Live Stock and General Auctioneer.

Clay Center, Kansas. Ten years of study and practice selling for some of the best breeders.

R. L. HARRIMAN LIVE STOCK AUCTIONEER

Bunceton, Missouri.

LAFE BURGER LIVE STOCK AND REAL ESTATE AUCTIONEER

Wellington - Kansas.

FRANK J. ZAUN FINE STOCK AUCTIONEER

Independence, Mo., Bell Phone 675 Ind. My references: America's Best Breeders, for whom I have been selling for years. GET ZAUN—HE KNOWS HOW.

Col. W. B. RYAN LEBANON, KANSAS.

Live stock and farm sales auctioneer. The man that gets the high dollar and works for you like a brother.

Col. C. A. Hawk; Live Stock and General Auctioneer.

Effingham, Kan.

Col. Will Myers Live Stock and General Auctioneer.

Beloit, Kansas.

W. C. CURPHEY Pure-Bred Stock and Big Farm Sales.

Salina, Kansas.

Col. J. H. BROWN Live Stock Auctioneer.

Oskaloosa, Kan.

Col. N. E. Leonard Live Stock and General Auctioneer.

Use up-to-date methods. Pawnee City, Nebraska.

Col. Frank Regan Live Stock and General Auctioneer.

Esbon, Jewell County, Kansas.

L.R. BRADY Fine Stock Auctioneer.

Manhattan, Kansas.

Col. Jesse Howell Live Stock and General Auctioneer.

Up-to-date methods. Herkimer, Kan.

FAULKNER'S FAMOUS SPOTTED POLANDS

"LEADERS OF THEIR KIND"

One hundred and fifty May and June pigs now ready to ship. Special prices: Single pig, either sex, \$35; pair, not akin, \$65; trio, not akin, \$90. They will be sold in the next thirty days.

START RIGHT WITH OUR FOREFATHERS' KIND. Mail your check with first letter.

H. L. FAULKNER, Owner, Highview Breeding Farm, Jamesport, Mo.

OTT'S BIG ORANGE OFFERING

Ott's Big Orange at 12 months old, weight 550 pounds. Individuality you won't fault. The kind we breed, feed and sell.

The kind \$25 to \$50 will bring to you. February to April farrow. These pigs will range in weight from 90 to 200 pounds.

J. O. JAMES, BRADYVILLE, IOWA.



DUROC JERSEYS

Tatarax Herd Durocs

For Sale—12 head of tried sows and mature gilts, bred to Tatarax, G. M.'s Tat Col. and Tat's Top, for September litters. Prices reasonable.

Hammond & Buskirk, Newton, Kans.

DUROC SOWS AND GILTS

50 head of fall yearlings and tried sows. Every one sired by or bred to Drexel Fridge or Queen's Wonder. The big kind—as good as grow. Must sell at \$35.00 to \$75.00. I guarantee satisfaction or money back. Write at once.

W. T. HUTCHISON, Cleveland, Mo.

DUROC March Boars \$12 and up, by Model Again, Long Lad and Tatarax Boy. R. W. BALDWIN, Conway, Kan.

CLEAR CREEK DUROCS
Headed by Clear Creek Col., grandson of Dreamland Col. Forty choice alfalfa-raised pigs to select from. Thrifty and healthy and priced worth the money.

QUIVERA PLACE DUROCS.
Herd headed by Quivera 19511 assisted by M. & M's Col. 111095.
E. G. MUNSIE, Prop.,
Route 4, Herington, Kansas.

CHOICE DUROC JERSEY FALL BOARS
Sired by Dreamland Col. Some herd boar prospects. Selected and priced to move them quick. Also few fall gilts bred or open.

THIRTY EXTRA GOOD REGISTERED DUROC SOWS AND GILTS.
Extra good ones. Popular strains. Sired by Kansas Kruger and College Lad. Bred for August and September farrow to Jean-beg's Choice. Can ship over four roads.

MARSH CREEK DUROCS.
Choice fall gilts sired by Tats Chief bred to Buddy O. K.; also open fall gilts and also spring boars.

GRIFITH DUROCS.
March and April pigs, \$15 each, pairs and tries not related. Large, growthy, sired by Goldfinch Jr. 2d, dam by Goldie S. Write at once or come and see my herd.

TEN DUROC JERSEY FALL BOARS
Good individuals and ready for hard service. Low price of \$25 each because I am short of room. First choice with first check. Descriptions guaranteed.

BIG-TYPE DUROCS.
Monarch, Col. Wonder and Buddy strains. Plenty of fall gilts, open or bred. Fall sale, October 17.

IMMUNE DUROCS—Fifty big-type sows and gilts, fall boars and spring pigs. Choice breeding and guaranteed immune from cholera. Inspection invited.

P. I. NELSON, Assaria, Saline Co., Kan.

BERKSHIRE HOGS

BERKSHIRE PIGS

Choice pigs, 10 to 16 weeks old, either sex. Sired by Robin Hood, Premier 2d, or Adam, a son of Rival's Lord Premier. Nothing but the very choicest specimens shipped. Price, registered, crated, F. O. B. here, one, \$20; two, \$35; three, \$50.

W. J. GRIST, Ozawie, Kan.

LINSOTT BERKSHIRES

Choice tried sows and fall yearlings for sale, sired by Rival's Queen Premier 114255 and Imp. Baron Compton, bred for summer and fall farrow to Robbhood 19th 16595. Also 25 selected boars and gilts ready to ship. February farrow by Robbhood and Commander's Majestic. Nothing but tops shipped.

R. J. LINSOTT, Holton, Kansas.

MULE FOOT HOGS

350 big-type Mulefoot hogs of all ages for sale, from champion line of America.

JOHN DUNLAP, Williamsport, Ohio.

THE STRAY LIST

W. J. BRADLEY, COUNTY CLERK, Coffey County. Taken up—By O. Trim, Lebo, Kansas, one steer; red, white face; three stars on right side. Appraised value, \$35.00, on the 11th day of June, 1913.

HERMAN BROEKER, COUNTY CLERK, Douglas County. Taken up—By J. E. Daniels, Lawrence, Kan., R. F. D. No. 1, one light brown mare mule, blind in one eye, about one year old, appraised value \$50.00, on the 28th day of June, 1913.

TAKEN UP—By J. S. McCORD, OF Canville Township, Neosho County, on July 6, 1913, one gray mare, smooth mouth, possibly 12 or 15 years old; small red spots over body; weight about 1,000 pounds; valued at \$20.00 by taker-up—W. E. Neal, County Clerk, Neosho County, Kansas.

W. C. PLUMMER, COUNTY CLERK, Pottawatomie County. Taken up—One gelding mule with black mane and tail. Appraised value, \$50.00, by Henry Randall, Onaga, Kans., on July 18, 1913.

Ask your dealers for brands of goods advertised in KANSAS FARMER.

CRYSTAL HERD O. I. C.'s

Herd headed by Frost's Buster 29745 by Thea 30442. Extra lot of spring boars and gilts now ready to ship. Have some outstanding herd header prospects, also outstanding gilts. Size and high quality combined. Description of stock guaranteed. Priced right.

DAN WILCOX, R. F. D. 2, Cameron, Mo.

HOLSTEIN CATTLE

SIR JULIAN DE KOL FOR SALE

THE 1400 pound two year old Sir Julian De Kol 7th, No. 74146. Recorded yearling Parkside Sir Lyons for sale at bargain prices.

ARNOLD & BRADY, Manhattan, Kansas.

85 HIGH-GRADE HOLSTEIN HEIFERS
Ranging in age from 1 to 3 years, nicely marked, good size and a part of them bred to freshen this fall. Also registered males old enough for service, and a carload of young cows of good size showing plenty of breeding and milk form, bred to calve in August and September. All tuberculin tested. F. J. Howard, Bouckville, Madison County, New York.

SUNFLOWER HERD HOLSTEINS.
Highest A. R. O. backing. The entire herd, including heifers, average nearly 20 pounds each, 7 days. More cows above 20 pounds than all other Kansas herds combined. Best sires obtainable head herd. Address F. J. SEARLE, Oskaloosa, Kan.

HOLSTEIN FRIESIAN COWS.
We have a number of fine cows and heifers (some fresh, some springers), for sale. Some new ones just received. All animals tested and guaranteed sound.

THE MERRITT DAIRY FARM,
W. G. Merritt & Son, Great Bend, Kansas.

M. E. MOORE & CO.

Cameron, Missouri.
High-class Holstein breeding stock at reasonable prices. Tuberculin tested.

PURE-BRED SELECTED HOLSTEINS.
Seventy-five to select from. Cows in milk. Choice bred heifer calves and young bulls, from the best stock in New York. Selected by us. Glad to show them.

EDMUNDS & YOUNG, Council Grove, Kan.

HOLSTEIN CATTLE



Pure-Bred Registered
HOLSTEIN CATTLE
The Greatest Dairy Breed.
Send for FREE Illustrated Booklets.

Holstein-Friesian Association,
Box 114, Brattleboro, Vt.

HOLSTEINS FOR SALE.

Large registered bulls, cows and heifers. Also five carloads of grade cows and heifers. Our herd is state inspected and tuberculin tested.

THE SPRINGDALE STOCK RANCH,
Concordia, Kansas.

BUTTER BRED HOLSTEINS.
For Sale—Some choice bull calves. Prices very reasonable. Write me your wants today, as these bargains will not last long.

J. F. MAST, Scranton, Kan.

COOKE'S HOLSTEINS.
Cows 3 years or older, \$225 to \$600. Nothing cheaper. No heifers or heifer calves for sale. Bulls 4 to 10 months, \$125 to \$175. Mostly sired by grandson of Pontiac Kordyke.

S. W. COOKE & SONS, Maysville, Mo.

HOLSTEIN BRED COWS AND HEIFERS.
Eighty Head. Choice individuals. Personally selected, Wisconsin-bred, tuberculin tested, pure-bred, unrecorded and high grade females. Recorded bulls. Grade heifer calves.

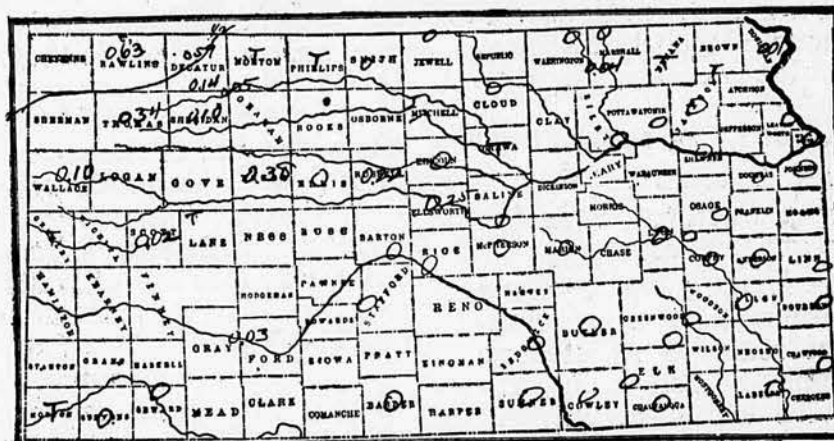
ARNOLD & BRADY, Manhattan, Kansas.

HOLSTEIN BULL CALVES always on hand, and worth the price.

H. B. COWLES, Topeka, Kansas.

FOR SALE—Well bred Holstein heifers and cows, graded, all ages. Also several thoroughbred cows. Write to

GEO. F. DERBY, Lawrence, Kan.

KANSAS CROP REPORT
FOR WEEK ENDING AUGUST 9

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

FIELD NOTES

One of the best Poland China offerings that will be sold this fall will be the extra fine lot from the herd of T. E. Durbin of King City, Mo. There will be 10 fall gilts that will be among the best sold this season, 20 head of spring boars and 20 head of spring gilts, sons and daughters of Mr. Durbin's great herd boar, Blue Valley, Ex. It will be a strictly high class, big type offering.

The Laptad Farm.
Fred G. Laptad, near Lawrence, Kan., has one of the best up-to-date hog farms we see in our travels. Mr. Laptad keeps a herd of Duroc Jerseys and a herd of Poland Chinas. He also has a herd of Jersey Cattle and standard bred horses. Every department on this farm is handled in a business way. Mr. Laptad will sell on October 15 a draft of Poland Chinas and Durocs. A complete announcement of this sale will be made in Kansas Farmer. Write Mr. Laptad to put your name on his catalog list. Kindly mention Kansas Farmer.

Fifty Poland China Pigs For Sale.
With this issue A. J. Erhart & Son of Beeler, Ness County, Kansas, announce they will sell 50 spring Poland China pigs at reduced prices. This herd was formerly from Adrian, Mo., and is one of the best big type Poles in Kansas. The spring pigs are sired by such noted herd boars as Major B. Hadley, the grand champion of the American Royal Stock Show, 1911; Young Hadley and Giant Wonder by A. Wonder. The herd sows are some of the best bred ones known to the breed. If interested in Poland Chinas write to Mr. Erhart & Son at Beeler, Kan., mentioning Kansas Farmer.

Col. T. J. Zaun.
The writer called on the well known auctioneer at Independence, Mo., this week and found him as a very busy man. Colonel Zaun has a number of fall sales booked. It is a well known fact that where he once makes a sale he is re-employed for the next one. Colonel Zaun is a tireless worker and a strong man on the auction block and as a proof of his fast growing demand he is being employed by America's best breeders all over the corn belt. If you have not employed an auctioneer for your next sale, better write Colonel Zaun for date. Kindly mention his ad in Kansas Farmer.

N. R. Riggs' Great Poland China Herd.
N. R. Riggs of Lawson, Mo., claims October 10 as the date of his annual fall sale and on that date breeders of big type Poland Chinas will have a chance to buy from one of the best big type offerings of spring boars and gilts that will be sold in the corn belt this year. This herd is headed by that great boar, Jumbo Orr by Missouri Lad by Big Prospect. He is not only one of the great individuals but one of the best breeders of the big type breed. He is assisted by Longfellow A., by North Star Chief by Up To Date. His dam was Sur-

prise Maid by Longfellow Jr. He is an outstanding individual and is also a great breeder. Mr. Riggs owns one of the extra good sow herds, among them are daughters of Big Bone 2d, Big Columbus, Tecumseh Grand, King's Giant, Jumbo Orr and other noted sires of the breed. This offering for October 10 is one that will interest breeders who want a combination of size, quality and good blood lines. It will be among the very best offerings the writer has seen this year.

Well-Known Jersey Breeder Will Disperse His Entire Herd.

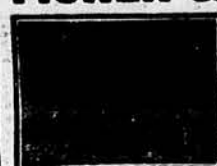
Only once in a good many years does the prospective buyer of Jersey cattle get a chance to buy such stock as that offered by John T. Higgins of Abilene, Kan. Mr. Higgins has sold his farm and must dispose of his entire Jersey herd at once. This herd is headed by the grandly bred bull, Noble Peer of Oakland 95499. This great bull carries 75 per cent of the same blood as the prize winner, Noble Peer that sold



as a yearling for \$3,000. Noble Peer of Oakland, whose picture appears above, was bred by G. A. Messervy, Kennedy, Island of Jersey, and was dropped August 1, 1910. His dam is golden Princess 9995 H. C., fourth prize winner at the North Club show in 1906, and first prize winner at the North Club Show of 1910. Noble Peer of Oakland's winnings as a yearling are as follows: Indiana State Fair he won first in class and was Junior Champion. At Ohio, second in class; first in Wisconsin; first in Michigan; first in Illinois; second at Iowa Dairy Show, and fourth at the International Dairy Show in Chicago. He has not been shown since. His excellence as an individual may be judged by the long list of prizes to his credit at the 1911 shows. There will be 35 choice animals in this offering, mostly yearlings and two year old heifers. Prize winning daughters and grand-daughters of Viola's Golden Jolly; four daughters of Imp. Brighton Lad, and daughters of Goldstream will be included in the lot. Mr. Higgins has attained his high class herd by careful culling and selection of only the best individuals. Look up his ad in this issue of Kansas Farmer and write Mr. Higgins at Abilene for further particulars, kindly mentioning this paper.

HORSES AND MULES

FISHER & WALKER



Of Evansville, Ind., Importers and breeders of Percheron horses, also standard-bred horses and Kentucky and Tennessee jacks. All young and first-class in every detail. Prices right and your own terms on payments. Stock sold with a gilt-edge guarantee that every one is as represented. Reference, Bankers National Bank, Evansville, Ind. Branch barn at Ellsworth, Kan.

J. A. COWLES, Manager, Ellsworth, Kan.

JACKS AND JENNETS

Large mammoth black jacks for sale, ages from 2 to 5 yrs.; large, heavy-boned, broken to mares and prompt servers. Special prices for summer and fall trade.

PHIL WALKER,
Moline, Elk Co., Kansas.

EARLY BUYERS SAVE MONEY
and get the best horses. Buy BIG PERCHERONS now from my big bunch of registered studs 2 and 3 years old. Yearlings and suckers at breeders' prices. Trains direct from Kansas City and St. Joe.

FRED CHANDLER, Route 7, Chariton, Iowa

EXCELSIOR SHETLAND PONIES.
Registered stock, spotted and solid colored ponies for sale. Reasonable prices.

W. M. FULCONER, Belleville, Kan.

SHORTHORN CATTLE

SHORTHORN
Cows and Heifers

THREE \$500 Bargain Lots

Three high class cows, due to calve soon, desirable every way, for \$500. Four good ones with calves at foot or to calve soon, for \$500. Five splendid 12 mos. old heifers and a bull to match, for \$500. Serviceable bulls, \$100 to \$200.

G. A. LAUDE AND SONS, Rose, Kan.

10 SHORTHORN
BULLS 10

Sired by DOUBLE CHAMPION AND WHITE MYSTERY, OUT OF MY BEST COWS, PRICED REASONABLE.

ED GREEN, HOWARD, KAN.

Scotch Bull For Sale

Collynie Goods 333265, dark red, calved April 8, 1909; weight 2,100; kind and gentle; sure and a good breeder. Price, \$250, or will trade for one of equal merit.

JEWELL BROS., Humboldt, Kan.

SHORTHORNS.
Five Choice Red Bulls, 15 and 16 months old, sired by a ton bull, out of richly-bred cows. Write for description. A. H. Cooper, Natoma, Osborne Co., Kansas.

HEREFORD CATTLE

FOR SALE

Fifteen registered Herefords consisting of 8 cows, 2 yearling heifers and 5 calves. Price, \$1,000. The owner is a neighboring breeder past 70 years of age and must dispose of the herd. Must sell by August 15. A bargain for some one. Come and see them at once or write to

SAMUEL BRYBREAD, Elk City, Kansas.

This ad will not appear again, so get busy.

HEREFORD BULLS FOR SALE.

Choice lot, 8 to 15 months old, registered and well grown. Sired by the ton bull, Clark 238402. Out of large cows, rich in Anxiety 4th blood. Prices reasonable. Also Duroc Spring Pigs.

HOWELL BROS., Herkimer, Kan.

C. C. CATRON'S HEREFORDS.

A strictly high-class herd, a number of extra good yearling bulls for sale. Will weigh 1,000 pounds. Extra quality, best blood lines of the breed. They are the breeder's kind.

C. C. CATRON, Bigelow, Mo.

HAMPSHIRE HOGS

HAMPSHIRE SWINE FOR SALE

We will offer for the next few weeks a few bred sows for fall farrow also some extra choice spring boars. If interested write

WM. INGE & COMPANY, Independence, Kansas.

HIGH QUALITY HAMPSHIRE.

Spring boars and gilts now ready for sale. Four gilts and three boars from Mollie S 16264 and General Davis 13169.

S. E. SMITH, Lyons, Kansas.

OXFORD DOWN SHEEP

Largest flock west of Mississippi River. Fifty rams, 100 ewes for sale. All stock sired by imported rams. 140 ribbons at the Iowa State Fair in last eight years. Call on or address, John Graham & Son, Eldora, Ia.

OXFORD DOWN SHEEP.

Oxford Down Sheep—Large, hardy, prolific, well covered.

J. H. WALKER, Lathrop, Missouri.

Overland

Price comes down; value goes up!

Electric head, side and
tail lights
Storage battery and
Ammeter
35 horsepower motor

114-inch wheelbase
Timken bearings
33 x 4 Q. D. Tires
Cowl dash
Splitdorf magnets

\$950

L. O. B. Toledo

Brewster green body with
a light green striping, nickel
and aluminum trimmings
Mohair top and boot
Clear vision windshield

Stewart speedometer
Electric horn
Flush U doors with disappearing
Hinges
Turkish upholstery

With Gray & Davis Electric Starter and Generator—\$1075

HERE is the car of the hour!

The 1914 Overland is ready for immediate delivery.

Again we lower the price. Again we increase the value.

This new car is larger, more speedy and powerful, more finely equipped and more elegantly finished, but in spite of this enormous value increase the price has been materially decreased.

The motor has been enlarged to 35 horsepower and will develop 50 miles an hour with ease.

The wheelbase has been lengthened to 114 inches—which is the average wheelbase of \$1500 cars.

The 1914 Overland tires are larger; the tonneau is longer and roomier; the equipment is better—including such big and costly additional features as electric lights; the body is handsomer, being finished in beautiful rich dark Brewster green, with heavy nickel and aluminum trimmings.

The 1914 Overland is the most magnificent and graceful popular priced car that has ever been made.

In fact, in every single and individual respect here is a much greater, bigger and better car at a reduced price.

This is only another demonstration of how big production will cut costs. For, instead of building 40,000 cars as in 1913, this year we will build 50,000 cars. This is the world's largest production on this type of car.

One big western dealer is begging our sales department for an allotment of 7000 cars. Think of this! A single allotment greater than the individual outputs of over 50% of all the automobile factories in existence.

Other dealers and distributors in the big eastern and western agricultural districts want several thousand cars apiece. Such is the initial demand for the newest Overland.

As we have told you in the past: the combined buying power of thousands lowers the cost for each individual. This year 50,000 will be bought. Therefore we can make a greater reduction than ever. Overland quantity production saves money for you—and lots of it. This year it is saving far more than ever before, because in addition to increased production we are building but one chassis.

We urge you to see this new model at once. Feel what a difference the increased wheelbase makes in riding comfort; see the car's changed appearance; examine the beautiful new finish; inspect the many little refinements about the motor—making it resemble the motors in the big \$3,000 and \$4,000 cars. Examine the tonneau. Enjoy the increased lounging space and the Turkish upholstery.

Look up the nearest Overland dealer. Have a demonstration. Make the demonstration thorough; test the car's remarkable fuel economy. If you want an early delivery do not delay. Act today.

Write us direct for handsomely illustrated 1914 literature—gratis.

Please Address Dept. 82

The Willys-Overland Company, Toledo, Ohio

