



Volume XLIII. Number 5

TOPEKA, KANSAS, FEBRUARY 2, 1905

Established 1863. \$1 a Year

KANSAS FARMER.

Established in 1863.

Published every Thursday by the
KANSAS FARMER CO., - - TOPEKA, KANSASE. B. COWGILL.....President
J. B. McAFEE.....Vice President
D. C. NELLIS.....Secretary and Treasurer

SUBSCRIPTION PRICE: \$1.00 A YEAR

E. B. COWGILL.....Editor
J. D. GRAHAM.....Associate Editor
H. A. HEATH.....Advertising Manager

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



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Display advertising, 15 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.54 per inch per week.

Special reading notices, 25 cents per line. Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of \$5.00 per agate line for one year.

Annual cards in the Breeders' Directory, consisting of four lines or less, for \$16.00 per year, including a copy of the Kansas Farmer free. Special rates for displayed live stock advertising. Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order. Electrotype must have metal base.

Objectable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price. To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

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KANSAS FARMER CO.,

116 West Sixth Ave., Topeka, Kans.

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Responding to requests from farmers interested in small flocks of sheep, Representative Pringle, of Osage County, has introduced a bill in the Legislature making dogs property and providing a tax of 50 cents on every male and \$1 on every female dog. A good

dog is a valuable assistant and protection on the farm. But the dog industry and the sheep industry are not good neighbors. Their proximity is especially dangerous to the sheep. A sheep is taxed. A good dog is doubtless worth 50 cents a year. If he is not worth so much in addition to his keep he had better be sent to the "happy hunting grounds" for the public good.

KEEP UP WITH THE TIMES.

Readers of the KANSAS FARMER are generous in their expressions of appreciation of the value of the paper to the man who is studying the problems of his occupation and to the family in which the Kansas desire for uplift is developed. It has been well said and many times repeated that the winter numbers, giving the proceedings of the great organizations devoted to farming, orcharding, and stock-raising are each so helpful that the price of a year's subscription would be small compensation for the loss of one of these numbers. These proceedings are later published in diverse reports, but their first publication is in the KANSAS FARMER. Again, the KANSAS FARMER is the only publication in which they all appear.

Prepared as these discussions are by the leaders in agricultural research and in successful, practical farming, they are not light reading. But they are within the grasp of every man who studies his occupation. They are exceedingly helpful and are studied thoroughly by those who are making the most marked successes in their business.

The indolent person, the person who will not bring himself to the effort needed to keep up with the progress of the times in his occupation does not deserve and does not attain the prosperity enjoyed by the diligent student. Be up with the best information extant and enjoy the reward of your labors. Study well the proceedings of the great meetings for the promotion of the science and art of agriculture.

PROPOSED RAILROAD LEGISLATION.

The question of railroad rates is now fairly before the people of the United States as a National question, and before the people of Kansas as a State question. Broadly stated, the proposition is that the Government, acting through duly authorized commissioners shall determine what are reasonable charges for inter-State service, and shall enforce their findings; and that the State, acting through its commissioners, shall determine what are reasonable charges for service wholly within this State, and shall enforce their findings.

Under primitive conditions there were two parties to every contract transporting property or persons. These two persons entered into negotiations as to the charge, and if they failed to agree, each had the opportunity to deal with some one else. With some limitations society in this country is still attempting to apply the principles of this primitive bargaining to the complex system of modern transportation.

Competition, then, was under the primitive conditions, and, while competition led to much wasted effort and to much loss of time, competition was a regulator of charges. Competition became destructive in its affects when applied, unrestrained, to railroad traffic. Various plans were devised for the elimination of competition where it existed. On the other hand, where no competition existed there were complaints from patrons of "extortion," "unreasonable charges," "monopoly rates," etc.

To alleviate the destructive effects of competition on the earning power of railroad properties, pooling arrangements were devised.

To secure reasonable rates for the shipper, legal limitations were enacted by the lawmakers, and pooling was made unlawful.

Pooling having been made unlawful, consolidation has taken its place in many cases and traffic agreements in others.

The present system is a complicated one of consolidated lines; of traffic agreements; of competition, particularly as affecting the great shipping points; and legal limitations.

The individual shipper has nothing to say in determining what he shall pay for the service he buys.

The position of the individual railroad is not much more independent in fixing the price of its services than is its individual patron.

This last fact of the situation is not generally understood by patrons of the roads. It will be well, therefore, to illustrate it:

There are four railroads at Topeka. The management of every one of these is well disposed towards this community. Topeka complains that lower rates are made on coal to Kansas City than to Topeka, even though the haul is shorter to Topeka than to Kansas City. Similar complaints of discriminations are heard from many points, not only as to Kansas City but generally, charging that lower rates are made for the larger than for the smaller places. Let the Topeka complaint be examined. The charge is not denied. But if the rate-makers of these four great roads should give their reason for their unjust discrimination, that reason would state that the roads can not do otherwise in justice to their own interests. They would admit that it costs less to haul this coal over the shorter distances to Topeka than over the longer distances to Kansas City. They might even admit the injustice of the discrimination. "But," they would say, "this coal traffic is but a small part of our business. Kansas City controls a large amount of freight, and she demands more favorable rates than she is willing shall be made to other towns. Kansas City is organized and acts through a transportation bureau. If we fail to give to Kansas City more favorable rates than we give to Topeka, Kansas City freight, both in and out, will be routed over other roads. These four roads can not fail to receive the traffic of Topeka, for there are no others here. They can not afford to offend Kansas City. We, the traffic managers of

these four roads, are powerless to help Topeka."

Similar answers would be made to complaints of smaller towns of discriminations in favor of larger places within the State. In like manner, Chicago has unfair advantages over Kansas City, and New York over all other points.

A notable case of the inability of great roads to do even-handed justice to their patrons is presented in the adjustment of freights to Gulf ports. Kansas products find their shortest route to tide-water via Galveston. Very many Kansas points are nearer than Kansas City to Galveston. But no Kansas point has as low rates to Galveston as are accorded to Kansas City. The railroads extending through Kansas from Kansas City to Galveston are powerless to remedy the injustice. For example: Suppose the Santa Fe, a road which has always been kind to Kansas interests, should determine to base rates to Galveston on distances with proper allowance for initial and terminal charges; this great road would at once be met with a diversion to other lines of all freights that could be diverted by Kansas City, and by a refusal of all connecting lines from the East to route Western and Southern shipments via the Santa Fe.

Perhaps enough has been shown to make it clear that the making of just rates has passed beyond the power of even the strongest railroads.

But just rates ought to be made. It has been customary to blame the railroads for conditions which, it is seen, they are utterly unable to mend, however much disposed to do justice as between their patrons.

Impartial students of the situation have, with singular unanimity, reached the conclusion that by Government control of rates, and by that alone, can just rates be made and enforced. This conclusion, as to commerce extending into more than one State, was reached by the Inter-State Commerce Commission several years ago, while Theodore Roosevelt was a member. It has been restated in every annual report from that time to the present. In his late message to Congress, President Roosevelt gave to the proposition his official endorsement, backed by the largest majority ever received by a president, and asked Congress to enact the legislation needed to place Government-made rates in operation as to inter-state commerce.

While potent arguments in favor of State-made rates on commerce within the State of Kansas have been advanced repeatedly, there has been, until recently, no energetic movement to enact the needed laws. In his message to the Legislature, Governor Hoch recommended for Kansas regulation similar to that urged by President Roosevelt for the Nation.

It may be asked why, if Congress enact the law proposed by the President, should the Kansas Legislature do the same thing for Kansas. The answer is briefly that Congress can not regulate commerce that is wholly within any one State; and, on the other hand, no State can regulate commerce that crosses its border.

President Roosevelt is ably second-

ed in his efforts to secure the enactment of the needed federal legislation. It may not be completed during the present session of Congress, but it seems certain of enactment in the near future.

Governor Hoch's recommendation has taken form in the Plumb bill introduced in the Kansas House of Representatives last week. If the present Legislature shall perfect and enact this law, it will have done a work for Kansas that will benefit every productive interest in the State.

Referring again to the illustration of the Kansas City and Topeka coal rates, it will be readily seen that if just rates be made by an authority above the railroads, and enforced by a power which they can not resist, retaliation by the big city will be useless and, therefore, will not be attempted. In the Galveston rates case neither the big city nor the other roads will be able to make reprisals against the Santa Fe or any other Galveston route on account of the institution of equitable rates for intermediate points, because these rates will have been made and enforced without the violation of the roads to which they shall apply.

The complications of the rate problem are largely artificial. These artificial intricacies disappear under rates made and enforced by National and State authority. The inherent complications, such as foreign competition, river, canal and ocean competition, can be as well taken care of by the boards of railroad commissioners as by rate-makers employed by the roads.

The transportation problem needs, for its solution, wise statesmanship, fair dealing, and good faith in an honest effort to eliminate artificial difficulties and to overcome those inherent to the situation.

The Kansas Legislature will redeem the pledges on which it was elected if it shall enact into law the bill introduced by Representative George Plumb.

THE BEEF TRUST HIT HARD.

The American people as a class are patient and long-suffering, but when once aroused, get terribly in earnest and do things.

In Kansas a year ago, the Kansas Improved Stock Breeders' Association took vigorous action in the matter, and in strong resolutions called upon the President of the United States and the Governor of Kansas, to use their best offices in securing the active co-operation of their chief legal officers to investigate and prosecute the further encroachment of the beef combine in the State as well as the Nation. President Roosevelt promptly responded to this request and at once set the Attorney General of the United States to work in an earnest investigation, and as a result of his prosecution, the Supreme Court of the United States on January 30, rendered the most important decision in its history so far as the live-stock industry in the United States is concerned. The Supreme Court decided the case of the United States vs. Swift & Co., known as the beef trust case, charging conspiracy among the packers to fix prices on live stock and fresh meats. The opinion was handed down by Justice Holmes, the other justices concurring. It affirmed the decision of the court below, which was against the packers.

This is a great victory in favor of the live-stock raisers of the United States, and will undoubtedly result in great encouragement to the various Western States which have been prosecuting the beef combine without material results.

On April 1, 1904, the cattlemen of Southwestern Kansas, following the action taken by the Kansas Improved Breeders' Association, held a great convention at Dodge City, at which Senator T. A. Nottzger of Anthony was present and took great interest in assisting the cattlemen in their earnest fight on the beef combine. And as a final outcome of his services, he introduced on last Monday, a resolution calling for an investigation of all trusts and combines, and aimed particularly at the beef trust. The reso-

lution makes it mandatory on the Attorney General to proceed against the packing trust. It is as follows:

NOTTZGER'S RESOLUTION.

Whereas, by chapter 265 of the laws of 1897, and by chapter 293 of the laws of 1899, all trusts, combinations and agreements in restraint of trade, and to prevent full and free competition, are prohibited; and

Whereas, it is a matter of general and common knowledge that there has existed in this State a combination among the various packing houses located in Wyandotte County and elsewhere in the State to depress the market value of cattle and hogs, and advance the price of beef and pork—which has resulted most disastrously to the stock business of this State, and has compelled the consumer to pay an unjust and unreasonable price for the necessities of life; and

Whereas, full and plenary power is given by the laws of this State to prosecute and bring to justice those who have so flagrantly violated the laws enacted for the protection of the people of the State of Kansas; and

Whereas, the several district courts of this State, and the judges thereof, have jurisdiction, and it is their duty, upon good cause shown, and upon written application of the county attorney or the Attorney General, to cause to be issued by the clerk of said court subpoenas for such witnesses as may be named in the application of a county attorney or the Attorney General, and to cause the same to be served by the sheriff of the county where such subpoena is issued; and such witnesses are compelled to appear before such court or judge at the time and place set forth in the subpoena, and are compelled to testify as to any knowledge they may have of the violations of any of the provisions of said acts hereinbefore referred to; and

Whereas, the platform of the Republican party upon which President Theodore Roosevelt was elected President of the United States denounces all combinations, agreements and trusts; and

Whereas, the President has instructed the Department of Justice of the United States to examine into and prosecute all persons violating what is known as the Sherman Anti-Trust act; and

Whereas, it is the duty of the State of Kansas to aid and assist in the enforcement, not only of its own laws, but the laws of the federal government, against combinations and trusts, which are so detrimental to the best interests of the people of this State and country;

Therefore Be it resolved by the Senate, the House concurring:

FIRST.

That the Attorney General of the State of Kansas be, and he is hereby authorized and instructed to forthwith invoke the remedies provided by the laws of the State of Kansas, and to institute an investigation before the district courts, or the judges thereof, for the purpose of ascertaining all the facts connected with the alleged beef combine in the State of Kansas, and that a copy of all evidence which he shall secure as a result of such investigation shall be furnished to the Department of Justice at Washington, D. C.

SECOND.

That the Governor of the State of Kansas be requested to use any part or portion of the Contingent fund that may be necessary to enable the Attorney General to carry out the spirit and intent of this resolution.

THIRD.

That if, upon such investigation, it shall appear that any corporation organized or created under the laws of the State of Kansas, and doing business in this State, or any corporation organized under the laws of any other State, country or territory, and doing business in the State of Kansas has violated or is violating any of the terms or provisions of the act of the Legislature of the State of Kansas entitled: "An act defining and prohibiting trusts, providing procedure to enforce the provisions of this act, and providing penalties for violations of the provisions of this act," the Attorney General of the State of Kansas be and he is hereby instructed to institute actions in the proper courts of this State having jurisdiction thereof, for the forfeiture of the charter, rights and franchises of such corporation, and the dissolution of its corporate existence, and to annul and cancel any permit that has been issued by the charter board of the State of Kansas entitling any such foreign corporation to do business in the State of Kansas; and that, in addition thereto, he shall cause criminal proceedings to be instituted against each, all and every person who has aided, assisted or abetted such corporation in the violation of the laws of the State of Kansas.

FOURTH.

That a certified copy of these resolutions shall be forthwith furnished to the Attorney General of the State of Kansas.

For the good things achieved and the prompt action of the higher courts in sustaining the action of the people, full credit must be given to President Roosevelt, who has indeed been a friend of the American people in being on their side of the case as against the corporate greed of the trusts.

The President's position on this matter is trenchantly stated in the thought expressed in a speech made at the Forty-Second Anniversary Banquet of the Union League of Philadelphia, when he said:

"Neither this people nor any other free people will permanently tolerate the use of the vast power conferred by vast wealth, and especially by wealth in its corporate form, without lodging somewhere in the government the still higher power of seeing that this power,

in addition to being used in the interest of the individual or individuals possessing it, is also used for and not against the interests of the people as a whole."

CREMATION—CROSS-ROAD LAWS.

EDITOR KANSAS FARMER—What stand would the agricultural and live-stock papers take in regard to advocating cremation instead of burial? Is it necessary for the thousands of millions of people who are yet to come to be buried? Could you estimate how many thousand dollars are sunk in the ground yearly with coffins, in Kansas alone? The money that is sunk in that way and lost could be used to better advantage for the living. Will the KANSAS FARMER assist us in exterminating the crows? The farmers are well satisfied with our public road laws.

H. A. N.

Wyandotte County. The question of cremation has been discussed for many years. There is considerable revulsion of sentiment against it when the average person contemplates it as to be applied to the body of his or her loved ones. The agricultural and live-stock papers are not likely to take a decided stand on the subject.

The KANSAS FARMER will assist in such ways as it can in combating every enemy of the farmer. What course does this correspondent propose?

The Corn Breeders.

A meeting of the Kansas Corn Breeders' Association was held in Topeka at the time of the meeting of the State Board of Agriculture. It was decided that hereafter extensive and interesting programs shall be arranged for the meetings, and that these meetings be held in different sections of the State, thus making it possible for a greater number of farmers to attend and consequently resulting in a wider dissemination of modern ideas along the line of plant-breeding.

Arrangements are now being made to call a meeting of the association during the week of the grain-judging contests that are to be held some time in March at the Agricultural College.

The association elected Assistant Shoemith, of the State Experiment Station, secretary and adopted the following resolution in recognition of the work done by the different State Experiment stations and the United States States Department of Agriculture:

Whereas, Experiments conducted by the various State experiment stations and by the United States Department of Agriculture have proved that corn, grain, and other farm crops which are adapted to one locality are not suited to other localities, differing in soil, climatic, and other conditions which affect the growth of plants; and

Whereas, The State of Kansas is of vast extent and has widely differing soil and climatic conditions; and

Whereas, The variety tests of corn, grain and other farm crops conducted at the Kansas State Experiment Station do not show what varieties are the best adapted to other parts of the State; and

Whereas, The development of better strains or varieties of farm crops for various sections of the State would result in a direct and permanent increase in yields of Kansas crops and in the betterment of the material welfare of the agricultural industries of the State; be it therefore

Resolved, That the Kansas Corn Breeders' Association request the State Legislature now in session, that it recognize the importance of plant-breeding and the adaptation of the varieties of farm crops by appropriating two thousand dollars (\$2,000), or sum sufficient to enable it to conduct experiments on a more extended scale than it has heretofore been able to do, in the breeding and improvement of farm crops and the adaptation of the same to the various sections of the State. [The understanding of most of those present was that the appropriation was asked to enable the Farm Department of the Experiment Station to do this work.—Ed.]



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The Only Way to Get the Kansas Farmer for 50 Cents.

Any old subscriber or subscription agent is authorized under our "Blocks of Two" to secure two annual subscriptions, one of which must be a new subscriber, for one year for \$1, the greatest bargain known among farm journals in America.

If there is no agent within reach, then any two (or more) persons may combine and send in their orders together at \$1 for two—thus starting a new subscription center at the cut-rate mentioned.

Why not have the best when it can be had at the price of an inferior periodical?

It is all right for the farmer to try other farm papers, but no farmer in the State can afford to be without the KANSAS FARMER.

Address all orders to Kansas Farmer Company, Topeka, Kans.

Our Special Club List.

By special arrangement with publishers of leading magazines, dailies and other publications, we are able to offer KANSAS FARMER subscribers the most attractive club offers ever made by any publisher or subscription agency.

All combination offers include one year's subscription to the KANSAS FARMER. If more than one other publication is wanted subtract \$1 from the combination offer and the remainder will show the amount necessary to add for each additional paper wanted. If your subscription is already paid in advance, you can send the KANSAS FARMER to some other address. In taking advantage of our Special Club List it is not necessary that all papers should go to one address; they may be sent to any address you name.

If other periodicals are wanted that are not named here, write for what you want, as we have the lowest clubbing rates with all publications. Address all orders to Kansas Farmer Company, Topeka, Kans.

DAILIES.

	Price.	With Farmer 1 year.
Kansas City Star and		
Kansas City Times, 1 year.....	\$5.00	\$5.20
Kansas City Journal, 1 year.....	\$3.00	\$3.50
Topeka Capital, 1 year.....	4.00	4.00
Topeka Journal, 1 year.....	2.50	2.75
Topeka Herald, 1 year.....	2.50	2.75

WEEKLIES.

Western Horseman, 1 year.....	2.00	2.50
Breeders' Gazette, 1 year.....	1.00	2.00
Inter Ocean, 1 year.....	1.00	1.25
Globe-Democrat s. w., 1 year.....	1.00	1.50
Kansas City Journal, 1 year.....	.25	1.15
Mail & Breeze, 1 year.....	1.00	1.50
Capital s. w., 1 year.....	1.00	1.50

MONTHLY MAGAZINES.

Cosmopolitan, 1 year.....	1.00	1.65
McClure's, 1 year.....	1.00	1.50
Leelle's Magazine, 1 year.....	1.00	1.70
St. Nicholas, 1 year.....	3.00	3.50
American Boy, 1 year.....	1.00	1.50
Good Housekeeping, 1 year.....	1.00	1.40
Lippincott's, 1 year.....	2.50	2.50
Success, 1 year.....	1.00	1.75
Twentieth Century Home, 1 year.....	1.00	1.65
Metropolitan Magazine, 1 year.....	1.50	2.00
New England Magazine, 1 year.....	3.00	3.50
Kimball's Dairy Farmer, 1 year.....	1.00	1.25
Hoard's Dairyman, 1 year.....	1.00	1.70
Irrigation Age, 1 year.....	1.00	1.50
Western Fruit Grower, 1 year.....	.50	1.20
American Swineherd, 1 year.....	.50	1.20
Western Swine Breeder, 1 year.....	.50	1.25
Good Housekeeping, 1 year.....	1.00	1.75
The Outlook, 1 year.....	2.00	2.75

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Dr. M. Bye Co., Indianapolis, Ind.
Gentlemen—I used your Oil Cancer Cure as directed, and the treatment proved entirely successful. It performed all that was claimed for it. I would have written you sooner, but thought I would wait till the sore was entirely healed. Yours sincerely,
H. DOWNIE.

No need of the knife or burning plaster, no need of pain or disfigurement; the Combination Oil Cure for cancers is soothing and balmy, safe and sure. Write for free book to the Home Office, Dr. M. Bye Co., Drawer 505, Indianapolis, Ind.

The Stock Interest

THOROUGH-BRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

February 1, 2, 3, 4, 1905—Percherons, Shorthorns, Herefords, Poland-Chinas, Wichita, Kans.; J. C. Robison, Towanda, Kans., Manager.

February 2, 1905—Chester Thomas, Waterville, Kansas, Duroc-Jerseys.

February 4, 1905—W. F. Garrett, Portia, Kansas, Duroc-Jerseys, at Concordia, Kans.

February 6, 1905—Gus Aaron, Leavenworth and H. M. Kirkpatrick, Wolcott, Kans., Poland-China bred sow sale at Leavenworth.

February 7, 1905—Leon Calhoun, Potter, Kans., Poland-China bred sow sale at Atchison, Kans.

February 8, 1905—T. J. Charles, Republic, Kans., Poland-China bred sow sale.

February 8, 1905—Schmitz Bros., Alma, Kans., Poland-Chinas.

February 14, 1905—E. P. Sherman, Wilder, Kans., closing-out sale of Poland-China.

February 15, 1905—S. S. Spangler, Milan, Mo., Percheron horses.

February 15, 1905—Geo. Channon, Hope, Kans., Shorthorns.

February 15, 1905—W. H. Cottingham & Son, McPherson, Kans., Shorthorns and Poland-Chinas.

February 16, 1905—Combination sale of Shorthorns, Omas, M. Johnston, Secretary, Caldwell, Kans.

February 17, 1905—Swine Breeders' Combination Sale, Fredonia, Kans.

February 18, 1905—Cattle Breeders' Combination Sale, Fredonia, Kans.

February 17, 1905—Combination sale of Herefords and driving mares, Chas. M. Johnston, Secretary, Caldwell, Kans.

February 18, 1905—Combination sale of Poland-Chinas, Duroc-Jerseys and Chester Whites, Chas. M. Johnston, Secretary, Caldwell, Kans.

February 20, 1905—J. F. Chaudler, Frankfort, Kans., Duroc-Jersey bred sows.

February 21, 1905—John W. Jones & Co., Delphos, Kans., Duroc-Jersey bred sow sale.

February 22, 1905—N. F. Shaw, Manager, Plainville, Kans., Poland-Chinas.

February 22, 1905—L. L. Vrooman and C. W. Taylor, Hope, Kans., Duroc-Jerseys.

February 23, 1905—Shorthorns, N. F. Shaw, Mgr., Plainville, Kans.

March 2 and 3, 1905—C. A. Stannard, Gudgell & Simpson, and others, Herefords, at Kansas City.

March 7, 1905—Jacks, jennets, and stallions, at Lameston, Valley Farm, Smithton, Mo., L. M. Monsees & Sons, proprietors.

March 8, 1905—Poland-China bred-sow sale, Herbert Haub, Whiting, Kans.

March 14, 1905—F. M. Gifford, Milford, Kans., Shorthorns at Manhattan, Kans.

April 19, 1905—Closing out sale of Shorthorns J. D. Stanley, Horton, Kans.

Feeding and Fitting Pure-Bred Stock for Show and Sale.

J. F. STODDER, BURDEN.

Read before the fifteenth annual meeting of the Kansas Improved Stock Breeders' Association.

It makes all the difference in the world how you are going to get together a show herd, whether you are going to purchase it or breed it. It is an easy matter to select a good judge and let him scan the programs for the exhibit, and send him out to buy a herd of stock for show. Almost any one could get up a good show-herd if they would do it in this way. But there is another way, and that is to breed your own cattle. I have a great deal of respect for a man who will breed and show his own cattle. I very much prefer that way. I think that is the showman's mission.

There are a good many requisites in order to be able to do this, and I think the most important one is the selection of the sire at the head of the herd, the one that is to beget the calves that you are going to show. There are very few bulls that are able to beget a very large percentage of show calves, and it is only by going into the very highest-priced ones and those of the very best breed, and those that have the very best pedigrees behind them, that one will be able to do this. A sire that will get even a very small per cent of show calves is of more value than the ordinary farmer will think he is.

The next thing is the selection of the herd that you are going to show. It isn't an easy matter to look at a lot of calves and tell just which ones are going to feed the best, and come out and develop the best. Any one who tries it will meet with a great many disappointments. We get our eyes on them and think they are just what we want, and perhaps in a few months they lose their form, and we have to select something else.

Care should be taken in breeding, so that the cows will drop their calves from the first of September to the middle of February. This gives you an opportunity to fill both the senior and junior classes in the show-ring. The senior class is composed of cattle that are dropped from the first of September to the first of January. The junior class consists of calves dropped any time after the first of January. It is well to have a large proportion of calves dropped between those two dates. It gives you a large lot to select your calves from. After they are sixty or ninety days old we should

know just exactly what we want to put in the show-ring, and if the dam isn't giving all the milk they will take, a nurse-cow should be provided. It isn't at all easy to give them this increased supply of milk. It should be done gradually. I have known some very promising calves to be practically ruined for show purposes right at this point. In the meantime, they ought to take a mixture of food such as we give, and then they are getting milk from two cows and two feeds of grain mixture per day. They also have all the alfalfa hay they want and soon learn to eat a little of this feed. From this time on until they are eight or nine months old they are carried along in just this way, but perhaps sixty or ninety days before they are shipped out to the shows they are given an extra feed. We give them three feeds a day instead of two, adding one feed at noon, until they are twelve months old. If they are doing well, they should be gaining about a hundred pounds per month, so that when they go into the show-ring in September, all the way from ten to twelve and thirteen months old possibly, they should very nearly weigh a hundred pounds per month. Usually the best of them weigh about that. About the first of June, when the sun is hot and flies are bad, we take them up and keep them in the barn and stables during the day, letting them out at night. My own practice is not to let them have any green feed at all after this time but keep them in dry lots, and feed them roots, which takes the place of that. They do well on it. The older cattle are provided with good, running, box-stalls and plenty of bedding. We always give our show stock plenty of good bedding.

During the last two or three months before we go to the show-ring there is a good deal of time and a good deal of labor expended in training the calves to show themselves, so that if they are placed in one position they will stay there. And it takes a good deal of patience and ingenuity to accomplish this. It is a hard matter to find out just which is the best way to handle the calf to make him show himself.

Perhaps ten days before shipping out for show the horns are dressed down and a little grooming commenced. If they are cared for properly, their coats should always be in condition to respond to the grooming easily. The oil will be there and will come out nice and handsome the first time you groom them. We do very little with the currycomb, using mostly a brush and an oiled flannel rag, which takes the dust out of the hair.

Now, who does all this work? It sounds very easy to do this with just a few head of cattle. I have known many a show-herd to go into the ring and lose prizes by not providing somebody competent to do this work. I do not think any man who owns a farm and has to attend to business of that kind can attend to his farm or any other business and take proper care of his show-herd also, so that he can go into the Royal or International or World's Fair and win. I doubt if it can be done. Therefore, one of the important things is to find somebody who knows how to handle these cattle and handle them to the best advantage. He should give his undivided attention to it. The next year, after returning from the shows, we know pretty well which are our good calves. We perhaps want to carry over one of the bulls we have been showing in order to show a young herd the next year. We select him and carry him on, and if he seems to be a particularly good one we propose to keep him for the next year. That is sometimes done, but not always. Perhaps it is not in the majority of cases. We handle the heifers the same way, although it doesn't seem to be necessary to give the heifers the same or as much attention as the bulls receive. We follow the same rule the next year in selecting our calves.

Some three or four years ago, when I first thought I would like to be a showman, if I had been called upon for this paper I think I could have

told you everything there was in the business. My experience in the meantime has led me to believe that I know very little about it. The question is often asked, will these cattle breed—are they serviceable cattle? So far as my experience goes, we have less trouble getting our show-cows to breed and to drop calves safely than the other cows in our breeding herd. It is not usually so considered, I believe, by most people unless they try it. But the reason for this is generally in the care of the cattle; or rather, in the ration they eat. I do not believe it is possible to keep a cow in a barren stage by the use of plenty of good alfalfa hay and the mixture such as we use in our feed. We use corn-and-cob meal and bran and oats, about one-third of each. If there is any one part of that ration that runs short of the one-third, we try to make it corn-and-cob-meal. We have used some oil-meal. We used a little of it last year but not very much and I cannot say whether or not I will ever use any more.

As to stock foods that so many people use, I have never used but one kind, and that for only a very short time; and as for myself, I do not think I shall ever use any more of it. They are high-priced and I don't believe they are accomplishing as much as some people claim for them. No doubt some of them have a great deal of merit, but most of them are simply claimed to be something to stimulate the appetite, and a good healthy animal doesn't need his appetite stimulated. But if it is necessary to do something to restore the animal's appetite, and a little stock food at that time seems to be the right thing, I think that is where it should be used.

My subject said something about sale-cattle as well as show-cattle. The problem is very much the same as with show-cattle. We use the same mixtures in preparing them for sale. The cows and heifers get perhaps sixty days of special feed, but the bulls are fed, you may say, from the time they learn to eat until they are sold.

DISCUSSION.

Mr. Blair: I want to congratulate the gentleman on the talk. It was good. There is one question I wish to ask, however, and that is: Does he ever have any trouble with the cattle's feet getting sore?

Mr. Stodder: I don't think we ever had but one case of that kind. In fact we have had but one case, and we always rather thought that was due to an injury of some kind rather than to the feeding. We don't stable these cattle perhaps as much as you might think. They get a good deal of exercise. The only time they are tied up is in summer when the flies are bad, and then they are allowed to run loose at night.

Mr. Blair: What kind of floors do you have?

Mr. Stodder: We use board floors but we use a great deal of bedding. There has been a great deal of trouble along the line the gentleman speaks of, but I have had very little of it; in fact but the one case.

Mr. Blair: He also says he does not let his cattle out on grass but feeds them roots instead. I can't see why the grass isn't better for them, a good deal cheaper and much handier than the roots. I believe it is a very good plan to let cattle run on grass in the night and keep them in during the day. I believe they will do better than to be in a dry lot. He also says he does not groom them until about ten days before show-time, and does not feed them any oil-cake. I don't understand how he can keep them in good condition without grooming or oiling them. He may have a secret way of doing this, but I find it hard work to keep their coats in nice condition with grooming them all the time, and feeding them oil-cake.

And another thing, I think the best part of the ration is the ground oats. I believe that will do more to keep an animal in fine condition than any other food.

Mr. Wolf: I would like to hear from Mr. Thompson. I think he can

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give us some information along this line.

Mr. Thompson: I believe Mr. Stodder covered pretty thoroughly the best methods of handling show stock. I rather disagree with him, though, about keeping them on grass. We keep our cattle on grass until a short time before the show, but this is a matter of difference in the nature of cattle. Some are inclined to graze too much at night.

Oil-meal: I have fed very little of, with no very satisfactory results. A good many cattle are inclined to dislike it. But as to improving the coat, it does perhaps for a short time loosen it up; but if they are in good condition, the hair is always loose and pliable and oil-meal has a tendency to make the coat deaden instead of slicken.

As to sore feet: It is a common complaint among show-animals, but I think it is largely due to lack of cleanliness. If you use plenty of bedding and have it moist, when they can not keep their feet moist by going out in the field use a little water or use some disinfectant. I do not believe you will be bothered.

One thing I think possibly Mr. Stodder might have said more of. I apologize for his statement that he was not prepared. He learned that in the show-ring. They never are prepared there. About feeding sale-cattle: I think this is one thing that causes perhaps more loss to breeders of pure-bred cattle than anything else—cattle for auction as well as cattle for private sales. A great many of them graze their cattle until about a month or two before they want to sell, and then put them in lots and feed them all they want, instead of feeding them carefully, and as a result they sell them to people who take them home and they go back to ordinary former treatment and get out of condition and give poor satisfaction; and purchasers begin to feel that there is something in good condition that is not serviceable, and this is a mistake. Cattle should be put on dry foods gradually from weaning time, so that they hardly know when they have been put on dry food; they will do much better.

Mr. Wolf: One question I would like to ask is, when a nurse-cow is used, do they allow the calves to stay with the nurse-cow during the day or do they tie the nurse-cow up and allow the calf to be with her only a part of the time?

Mr. Stodder: Our practice is always to keep the nurse-cow and calf separate. In the evening when the cows come in she is fed a small feed of grain, the calf is allowed to nurse her at night and at no other time and in no other way. They soon learn, both of them, to know just exactly what is coming and both seem to do well under that treatment.

Mr. Peck: Do these people who provide nurse-cows see that these cows are highly bred, or are they beef cows or dairy cows?

Mr. Stodder: If the gentleman would go into some barn where nurse-cows were provided, I think it would not be necessary to ask that question. I think I have seen some of the meanest looking old "pelters" there that ever I saw anywhere. What we want is a cow that is a good milker and that is all we want.

Mr. Stone: I think Mr. Stodder has told us some things of especial interest in regard to show cattle. In the first place I am going to answer the question in regard to sore feet and their causes. The first reason is carelessness and failure to properly take care of them in their stalls, and the second cause is just simply pure carelessness on the part of the herder.

The next point, as our dual-purpose man says, is in regard to the roots and grain and grass, they are a separate food and the cattle have got to have such in order to put their digestive organs in proper shape to make use of other feeds, and my preference for dairy breeding is grass. I do not think there is anything like grass. Cows may be inclined to eat a little too much grass and eat less in the stable in the morning. In such

case, I think the root would perhaps be preferable.

When Mr. Stodder speaks of breeding one's own cattle, he knows well enough that the pure breeds have got to be bred and shown by the same man. The managers are compelling us to do this. I would much rather go to my friend Mr. Westbrook and buy a 2-year-old colt of him that he raised, and after I got it if I found something I didn't understand about it I could go back to him and he would tell me about it. The same way with my friend, Mr. Robison: I would rather go to him and pick out a horse and colt that he has bred than have him import one from a long way off. If I were going to get a nice piece of beef I would go to my friend Stodder. He is one of the best beef breeders in this State.

For a dairy animal we have got to show a young herd under 2 years old, the 2-year-olds that have dropped calves. So that if there is a young man here in the show-ring that is going to show dairy cattle, please be sure and see that your heifers are under 2 years old before you go out.

Mr. Parker Parrish was called on and said:

I don't know that I can add anything to what has already been said. I always turn my cattle out at night from the time we start out. I have been feeding oil-meal but I think it is doubtful. But I believe our show-herd, as Mr. Stodder says, drop their calves just as regularly and as safely as any cows we have.

Mr. Wolf: Do you wet their coats?

Mr. Paris: About three weeks before starting out to show we wet their coats.

Mr. Wolf: It occurred to me that possibly the moist atmosphere had something to do with the growth of hair, because we find all of the cattle in Great Britain have a large growth of hair.

The American Horse.

FRANK H. FOSTER, TOPEKA.

Read before the fifteenth annual meeting of the Kansas Improved Stock Breeders' Association.

The part that the horse has played in the development and destiny of the human race has been so important, and our present institutions, industrial and commercial, are so dependent on him now, that perhaps some of you may be interested and possibly instructed by the reading of a few facts that I have compiled from a somewhat extensive search for quotations which I have been able to gather and edit herein.

Scientists seem now to be agreed that the horse was evolved here in America, and found his way across to Central Asia by reason of there having been means of land communication that has since been cut off in the changes of the earth's surface. He was first domesticated by the Aryans. Prof. N. S. Schaler treats it as an accepted fact that the predominance of this race is due to the use by them of the horse in warfare, and cites many instances to show the decided advantage that armies have had that were supplied by the strongest attachment of mounted men. It may not be out of place here to give a summary of the natural history of the horse, especially as it seems that the place of his development was about the head waters of the Missouri. Evolutionists trace the beginning of the differentiations which lead to the higher forms of the mammals, from that of the lower grade to which the kangaroo and the opossum belong, from the Tertiary period. The environments of that age required tree-climbing powers rather than swift locomotion over dry land. At that period, mammal habitations were arboreal, and relatively small bodies for tree-climbing were necessary. For this life the feet needed to be loose-jointed and so the system of five toes terminating in nail or claw became fixed in the inheritance. With the disappearance of the reptiles, the mammals came down out of the trees and acquired greater proportions, and the limbs which had served them well for tree-climbing had to undergo many changes, to enable them to more com-

pletely possess their new kingdom. Speed then became the most essential requisite in the battle for the survival of the fittest.

Long toes with the greatest strength increasing toward the trunk were admirable for tree-climbing, but a detriment to speed. Swift runners bear their weight as nearly on the end of their toes as they can. If you have not thought of this, try to run flat-footed as a bear is compelled to run, and your experience will illustrate why the bear is not swift. Loose-jointed, long-toed feet became in the way. The necessity for fleetness lead to various experiments in nature. In the elephants, which retain the originally numerous toes, the bones of these members are planted in an upright position and are tied together with such strong muscles and sinews, that the foot parts have something like the solidity and strength of the upper portions of the legs.

In the single-hoofed or horse-like forms and in the cloven-footed animals, other series of experiments have been tried, which in the end have proven most successful, producing the speediest creatures, except the creatures of the air. The success which has been obtained in the ordinary large herbivora, and which has made them competent to evade the chase of the beasts of prey, has been accomplished by reducing the number of toes, giving the strength of the aborted parts to increase the power of those remaining. An illustration of how the disuse of a kindred member will strengthen the one used, can be observed by the smallest attention. We know that the person with a crippled arm very soon finds the other vastly stronger. The result, then, has been the formation of two great groups, the double-hoofed forms, including all of the domestic animals, except the horse and mule, and the single-toed species, of which the horse is the foremost example. In the reduction of the number of toes, different plans were followed in each of these groups. In the cloven-footed animals a single toe disappeared, leaving but four, then two of these were aborted, leaving two nearly equal digits. In the case of the horse where the development is traced more clearly, the earliest form was five-toed, but the outer and inner digit were shrunken so as to be of little use. This condition of the creature in the early Tertiaries gave us the beginning of the equine series, and shows that far away as the creature is now from ourselves, it originated from the main stem of mammal life, from which our own forms have sprung.

In the next higher stage in time and likewise in development, we find these lessened toes at their vanishing point, and two of the remaining digits lying on either side of what corresponds to the middle finger of our own hand, beginning to shrink in length and volume, while the central toe becomes larger and stronger than before. Last in the series we come to our ordinary equine form, in which nothing is left but the single massive extremity, though the remnants of two of the toes can be traced in the form of slender bones, known as splints, which are altogether inclosed within the skin which wraps the region about the fetlock joint. In rare instances colts are now foaled with three hoofs on each leg, this representing a form of the intermediate ancestors of the horse. So far as known, splint bones, which we now find on every horse, have no use, and are often the cause of much annoyance, when the horse is subjected to supreme tests of strength and endurance, especially when young.

In its present elaborate form the hoof of the horse is the most perfect instrument of support which has been devised in the animal kingdom, to uphold a large and swift-moving animal in its passage over the ground. The foregoing is probably the most widely accepted theory about the development of the horse, and so perfectly have these forms of development been disclosed by fossil remains, that every scientist of standing treats it as a demonstrated fact.

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the trotting horse. Our trotting horses are so far superior to the trotting horses of other nations, that it is not profitable to notice the others by way of comparison. Various causes have been assigned for this superiority. Some claim that the character of the dirt roads and the long distances required to be traversed before the advent of the railroads accentuated the need of the fast trotter, and it has always been found that no domestic animal has so readily responded to the demands of man as the horse. In the middle ages, the knight with mailed armor could not be carried with the small oriental horse with good results, and the big horses of Normandy, the source of our best draft-horses, by careful breeding, selecting the largest for that purpose, came to be a distinct breed. As the periods of peace became longer and the normal condition was that of peace rather than war, the unemployed nobility had to be amused, and the English took to horse-racing—running races—as the Greeks and Romans had to the Olympic games and gladiatorial combats. This led to the development of the thoroughbred which has been of but little practical use save on the track, but is of inestimable value in modifying and improving other breeds. The thoroughbreds crossed with other breeds have produced all the best grades of carriage and coach-horses in Europe. The Cleveland Bays, The Hackney and the French Coach, as well as several other distinctively valuable breeds, have been evolved by a crossing of the thoroughbred with other breeds. The race-track in England has given the principal and almost exclusive impetus to the development of the thoroughbred, and to a great extent it is true that the race-track of America has been the most potent factor in the development of the trotting-horse. It is said that the reason that the trotting or harness races became so popular and predominate over the running races, as they have for many years in the Northern States, is that the early laws of many of the States prohibited betting on a horse-race, which was only understood to be a running race at the time of the passage of these laws, and that it was held that such laws did not apply to trotting or harness racing. This theory has some plausibility and is grasped with eagerness by those who think that betting is a necessary adjunct of the sport. The gambling feature of horse-racing is the only sane objection that can be urged against the sport. If I thought that it was a necessary adjunct, I would enlist in a warfare against the sport, under any intelligent or well directed leadership. I maintain, however, that this criticism against the sport is not any better supported than a similar one could be against baseball or college athletics. I think these evils will disappear in the general advancement of public morals, as they are now gradually, though very slowly being eliminated. The recklessness displayed in the betting on the chariot race of Ben Hur will be easily recalled. I presume that General Wallace intended to portray an historical fact. We see nothing like this in modern times. It is more reasonable to attribute the predominance of harness racing to the practical good sense of the American people. Harness racing tends to develop a horse of the greatest usefulness. A good trotter is the best type of an all-purpose horse. A good running race-horse is good for nothing else, as a general rule.

Whatever causes may have led up to the consummation, we have developed a breed of horses, superior to anything the world has ever seen, excelling in usefulness, beauty and sport. It can be well claimed that in the American trotter, we now have a horse which will outlast the Hackney, outstep the high steppers, outstrip the Orloffs on long distance, and pound for pound, outpull any class of horses that live. I presume that it will be claimed that the type does not include all these; that the hackney should be low and blocky, the coach-horse tall, rangy and a high-stepper and that

the high-stepper or park-horse is not speedy. I insist that we can produce any one of these classes by breeding strictly in the trotting family with an equal certainty of obtaining the type desired to that obtainable with the use of any other breed, and get the required type with much more speed. We have the low, blocky trotter typified in the Morgan, the tall, rangy coach build illustrated by Joe Patchen, the Almonts and others; and in several families the high-stepping quality, the extreme of which is a matter of education. And I repeat that from each of these types it is reasonable to expect great speed. The American trotter has been derived from the English thoroughbred, and mainly from a single importation, the thoroughbred Messenger imported in 1790. Although a runner in breeding, whose immediate progenitors were among the most distinguished and successful running race-horses, he was also exceptionally strong in trotting action and had the power to transmit it to his descendants in a wonderful degree. The English thoroughbred is derived from the Arabian and the Barb, the latter also probably from the former. By intelligent and painstaking breeding, the thoroughbred has become a superior animal to his Arabian ancestor and the Arabians of this day, although it is probably true that the Arabian has not degenerated. There was a family of horses known as Morgans having their origin in Vermont at about the same time that Messenger was brought to this country. These have usually been classed as belonging to the family of American trotters. I believe that the type of the American trotter has become so thoroughly established as belonging to those descendants of Messenger, and those that have been registered as standard-bred in the American Trotting Horse Registry, that it is not proper to speak of the Morgan as such, as belonging to this class.

These horses were low, blocky animals, symmetrical in form, with fine eyes, feet and legs, wonderful spirit and courage and had unusual endurance. They were much more speedy than the common road-horse of their day and had a very attractive disposition. They were quite small, seldom weighing a thousand pounds, but proved to be admirably adapted for road purposes, when no considerable load was required. The representatives of this family that have been able to trot faster than a mile in two minutes and forty seconds, carry as much of the blood of Messenger as they do of Justin Morgan, the progenitor of this family. The notable fast ones were Black Hawk, record 2:42, Ethan Allen, 2:25½, and Daniel Lambert, 2:42. Daniel Lambert is more notable for the number of his sons and daughters with records of 2:30 or better. Black Hawk sired Ethan Allen and Ethan Allen sired Daniel Lambert. Ethan Allen was out of a Messenger mare, and was owned in New York and New England until he was 21 years old, when he was purchased by Sprague & Akers of Lawrence, this State, where he died, after contributing somewhat to the fame of this State as one of the best horse-breeding States in the Union.

In New England, it is still insisted by most persons interested enough in horses to write about them, that the Morgans are pre-eminent for their contributions to the great excellence achieved in the development of the present-day trotter. Local pride has induced me to examine these claims with some care, for my native town, Walpole, N. H., was long noted for being the center of Morgan horse breeding. But I am forced to the conclusion that the blood was run out so thin, when it has appeared in any considerable number of sires of great trotters, or dams of distinction in producing speed, that the claim is based more upon sentiment than sound reason. Daniel Lambert was a great horse. His 38 sons and daughters with records of 2:30 or better, although he lived in 1858 and 1889, say all that for him, and more. The further fact that a large percentage of the present-day horses of extreme speed carry his



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Gentlemen: In reply to your recent letter will say that in January, 1901, I bought 1,000 pounds of Iowa Stock Food for cattle feeding. I was at the time feeding a full ration of corn and about three pounds of oil-meal per day to sixty head of cattle. I was somewhat skeptical regarding stock foods of any kind. I had never fed any. Being somewhat acquainted with your salesman, Mr. W. A. Scott, who told me that if I would feed Iowa Stock Food that I would get nearer the full value out of my ration of corn and oil meal, I decided to try it. I fed the food according to your directions, and must say that I was surprised. My cattle seemed to relish their feed a great deal better, and stay on feed better. They ate a full, even ration as long as I fed them, which was until the following June. I was told that scarcely any whole corn would pass through my cattle, which I found to be a fact. At least it greatly reduced the amount of undigested corn, and I absolutely know that Iowa Stock Food is all right to feed with corn and oil-meal. I have since my first purchase been a steady user of Iowa Stock Food. F. W. BUXTON, Deep River, Iowa.

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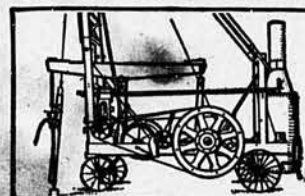
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blood, make him probably the greatest horse of New England. Add to this that he had such great beauty, finish and fine action, that our veteran horse-breeder, R. I. Lee, asserts that the memory of having seen him, is one of the pleasantest he cherishes. Such feats make the enthusiasm for this representative of the Morgan family easy to explain. Yet, when it is borne in mind that the dam of Daniel Lambert was a Messenger, and ninety-five per cent of all the fast trotters carry Messenger blood, and the more they have of it the better they are, the fact that Daniel Lambert's ancestor in the direct line four times removed, was Justin Morgan, has but little more than sentiment, upon which to base great claims. The claim would be less absurd if his pedigree could be traced back to Justin Morgan through more than a single line. Another fact that has made these New Englanders somewhat eloquent in their claims for the Morgans, is that the Surrey mare, the dam of the great George Wilkes, was a Morgan. That she was a Morgan is little more than a conjecture. All that is known is that she was shipped from Surry, N. H., to New York, and afterwards bred to Rysdick's Hambletonian. The most sanguine claim to Morgan blood could not claim for her more of it than was in Daniel Lambert. Here again local pride would impel me to sympathize with this sentiment. Surry is an adjoining town to my birthplace, and with her hills, history, and huge boulders I am familiar; and most of her people I once knew well.

To illustrate the development of the trotter in the last sixty-five years, I will now allude to the description and breeding of some of the notable ones that have for any length of time held the world's record. These are:

Lady Suffolk	2:28	1844
Flora Temple	2:19 1/4	1859
Dexter	2:17 1/4	1867
Goldsmith Maid	2:14	1874
Rarus	2:13 1/4	1878
St. Julian	2:11 1/4	1880
Maud S.	2:08 1/4	1885
Sunol	2:08 1/4	1891
Nancey Hanks	2:04	1892
Alix	2:03 1/4	1894
Cresceus	2:02 1/4	1901
Lou Dillon		
With a wind-shield	1:58 1/4	1904
Without a wind-shield	2:01 1/4	1904

Each of these horses carried the blood of Messenger except Flora Temple and Rarus, and it is quite possible that these two did also, for the reason that their origin back of a single generation on either side is obscure. All but Lady Suffolk and these two carried the blood of Rysdick's Hambletonian, and most of them trace back to this notable and preeminent sire through several crosses. This horse is at the head of the greatest dynasty in the horse world. He was foaled in 1849 in Orange County, N. Y., which was his home until the time of his death in 1876. His sire was Adallah I, a grandson of Messenger, and his dam is traced back to the same source. His most notable son was Dexter, of whom more later. The brilliant career of Dexter turned the eyes of all trotting breeders to this horse, which had already gained the first rank among the select intelligent breeders. Subsequent events have demonstrated that the popularity of this horse while living was well merited. Of all the trotting horses in the world that have a record of 2:30 or better, and there are many thousands of them, more than ninety per cent carry the blood of this sire. As an individual, he had several serious faults, such as a long back, and coarse, heavy head and ears. He had fine size, action, great muscular development, and the strongest and soundest of legs and feet. His marked characteristics as a sire consisted in his ability to perpetuate his best qualities, and assimilate the best qualities in the other side of the inheritance. He sired forty sons and daughters that took a record of 2:30 or better; the fastest being Dexter. He sired 150 stallions who sired just 1500 in this role of honor. But this record is greatly outdone by his best son, George Wilkes, who sired 83 and was in the stud but two or three years, and 102 of his sons have 2645 in this list, up to the beginning of 1904, and many

of these sires are still living, while the sons of Hambletonian are all dead. It is reasonable to expect that the 2645 will be increased to three or four thousand. Rysdick's Hambletonian is commonly meant, when you hear of Hambletonian stock, although there have probably been a hundred others bearing his name. His number in the Registry of The American Trotting Association is ten.

LADY SUFFOLK.

I take you back to a brief description of the trotters which have held the championship records below two minutes and thirty seconds. The first one to perform this feat, as you have observed, is Lady Suffolk. Her career goes back to the days of Webster and Choate, both of whom witnessed her performances many times. She was foaled in Suffolk County, Long Island, in 1833. She first appeared on the race track at five years of age—the age at which Cresceus took his fastest record. Her best time this year was 3:11. She remained on the turf until she was twenty years old, and was a consistent winner in all her campaigns, except in the last year. She trotted 252 heats, more than half of which were two miles or more. She trotted 161 races, winning 88 and losing 73—13 in the last year that she was on the turf, and in nearly all of the races in which she was beaten she was the confounding horse. She won in purses \$35,011.00. Her sire was Engineer, whose sire was by the famous Messenger, I have several times mentioned. Her dam was by Plato, also a son of Messenger. She was a gray mare of thoroughbred conformation, with a very long stride. She was about fifteen hands and two inches high and when in good order would weigh 1075. She was seventeen years old when she obtained her then famous record of 2:28. Hiram Woodruff, the pioneer scientific trainer and driver of trotting horses, and who rode and drove this mare in many of her races thus describes her: "She was well made, long in the body, back a little roached, powerful long quarters, hocks let down low, short cannon bones and long fetlocks. She had good shoulders, a light and slim but muscular neck, a large, long, bony head, and big ears. In trotting she went with her head low, and nose and throat out. Her neck was very straight."

FLORA TEMPLE.

The brilliant career of Lady Suffolk had scarcely begun to wane, when there appeared a greater than she, Flora Temple. Of the breeding of this remarkable little mare little is known. Pleasurable conjectures were indulged in regarding her origin, which served to create some interest in her time, but in this age, when certainty of pedigree of all harness-horses of any considerable note is easily attainable, and with as much certainty as the genealogy of an heir apparent to an hereditary title, it is a waste of time to even mention these conjectures. What she was and did has been told so many times in the press of the period in which she had her career, that those of us who have been born since her time hardly persuade ourselves that we have not seen her.

She was a bay mare only fourteen and a half hands high, with docked tail. She was foaled in 1845 and was never successfully driven in harness until she was more than five years old. She soon became one of the prominent race-horses of the period, and in 1857, she was on every race-track of note from Maine to Missouri, and the acknowledged queen of the turf. Her expected appearance at a fair was the chief event in the locality. She was fourteen years old when she took her best record at Kalamazoo, Michigan, in 1859, 2:19 1/4, and for two years she met and defeated all competitors, and retired unbeaten. Her superior was not developed until some years after.

DEXTER.

I invite your attention now to the famous horse, Dexter. He was foaled in 1858. His sire was Rysdick's Hambletonian, and his dam was by Seeley's American Star. His breeding,

therefore, is similar to that of the great Kansas horse, Robert McGregor, the latter being by Major Edsell, son of Hambletonian, and the dam of Robert McGregor was also by American Star.

Dexter was a brown gelding, of very rich color, with four white legs and a blaze in the face. He was 15 hands and an inch high, long and deep through the heart, very powerful in the stifles, loins and quarters. He had a good head, neck and eyes, oblique shoulders and excellent legs and feet.

He seems to have attracted little attention until he was four years old, at which time he was unbroken. Perhaps that old saw:

"One white leg, inspect him;
Two white legs, reject him;
Three white legs, sell him to your foes;
Four white legs, feed him to the crows;"

had something to do with the fact that he did not earlier receive attention.

He came into the hands of the veteran horseman, Hiram Woodruff, when he was five years old. Hiram Woodruff had trained and driven the fast horses I have previously mentioned, Lady Sutton and Flora Temple. He changed ownership several times, and came into the hands of Budd Doble, whose connection with this horse made his owner and driver famous; and Budd Doble remained the most prominent reinsman in the country until the last four or five years.

Dexter was on the turf practically about three seasons. He was started in 53 races, and won all but four. He was equally good under the saddle, hitched to the sulky or wagon, and beat all competitors when on equal terms, and established his record of 2:17 1/4 when he was 9 years old.

Robert Bonner then bought him for private use, and paid the handsome sum of \$33,000 for him. Mr. Bonner never raced his horses, but aimed to own the fastest trotter in the world, and the holders of the world's fastest trotting records usually found their last home in his palatial stables.

I can remember that at the time Dexter took his record it was believed by many that it would never again be equalled.

GOLDSMITH MAID.

Goldsmith Maid was the next to hold the honors for any considerable time. She was piloted by Budd Doble, also. To me her career is the most interesting of all, but it was so long that time will permit of only a passing notice.

She was the longest upon the turf, and the most successful of any harness racing-horse, living or dead. Joe Patchen comes nearer equaling her than any other horse since her day. She was foaled in 1857, and had come into considerable prominence before the time of Dexter. She was by Alexander's Abdallah, and he by Rysdick's Hambletonian. Her dam was by Abdallah, the sire of Rysdick's Hambletonian, so it will be seen that she was closely inbred. Besides this, her dam traced back to Old Messenger, through two lines, thus having a large infusion of the blood of this very prepotent breed of trotting horses I have several times mentioned.

She was rather small—a little more than 15 hands high—but long and low, and of the wiry whalebone sort, which could stand much work and thrive upon it. This sort of a horse is like a steel spring, the harder you wind it, the greater force of the rebound when the let-up comes.

She was very riotous and ungovernable, and ran wild until she was about 8 years old. No fence could keep her in the pasture when she wanted to get out. She very often started soon after dark and made a night of it, galloping over the fields and leaping the fences of her neighborhood. Her owners once tried to work her to a harrow, but the results were such that it was not deemed advisable to try it again.

She eventually came into the hands of Mr. Alden Goldsmith of Walnut Grove Farm, Orange County, New York, and found in him her master. He subdued her by gentle but firm

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Miss Kate McDonald, of Woodbridge, N. J., writes:

Dear Mrs. Pinkham:

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"For a long time I suffered untold agony with a uterine trouble and irregularities, which made me a physical wreck, and no one thought I would recover, but Lydia E. Pinkham's Vegetable Compound has entirely cured me, and made me well and strong, and I feel it my duty to tell other suffering women what a splendid medicine it is."

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treatment, without any abatement of her spirit.

I have been told many yarns about the discovery of the speed of this mare, such as her being seen to run away with a dray; and sometimes it was a milk-wagon; and sometimes a wagon loaded with garden truck; but these are all myths, and belong in the realm of the George-Washington-hatchet stories.

She early took a dislike to blinds on the bridle, check-reins, and martingales. As soon as Mr. Goldsmith discovered this, he discarded them, and she was raced three years without a check-rein.

She won some local distinction in 1866, and the next year, the last year that Dexter was on the turf, she gave him his hardest races, but was beaten by him each time. The only horses to ever beat Dexter were Lady Thorn and Ethan Allen, the latter being hitched with a running mate to do it.

The season that Dexter was retired, the Maid raced against Lady Thorn five times, and was beaten by her each time. (Lady Thorn that year was hurt while being loaded into a car, and never trotted after that.) She appeared in every important trotting meeting from Maine to California for the next ten years. The people thronged to see her as the chief attraction. She won more money than any other race-horse that ever lived, and when she was retired, at the age of 21, was perfectly sound.

The prominence of these great record-breaking horses was productive of more benefit to the improvement of the horse industry of this country than can yet be estimated or comprehended. The performances of Lady Sutton were commented upon all over Europe, and those of Flora Temple excited wonder, and those of Dexter were not believed, until they were witnessed by the diplomatic corp in Washington.

The career of Goldsmith Maid had demonstrated to a certainty the value of breeding in the Messenger families. Each community came soon to be defrauded by dishonest pedigrees, and all thoughtful people began to realize the necessity of maintaining some authentic record or register of pedigrees. There was during this period a man by the name of J. H. Wallace, who was engaged in publishing an agricultural periodical at Muscatine, Iowa, who wrote much in his paper about the importance of blood lines in breeding; and to him, more than to all others, is due the credit of establishing our present system of registration. After many years of careful and painstaking research, he compiled in a volume of 500 pages, the pedigrees of over 2500 famous trotting horses and sires. This undertaking was so well received that he evolved a plan for a standard of a trotting horse, and advertised that for a small fee he would register all that came within these rules as standard-bred horses.

As this is not exclusively an audience of horsebreeders, it is perhaps well to give these rules so that it may be thoroughly understood what is meant by "standard-bred trotting horse."

The rules are as follows:

1. Any stallion that has, himself, a record of two minutes and thirty seconds (2:30) or better; provided any of his get has a record of 2:40, or better; or provided his sire or his dam, his grandsire or his grandam is already a standard animal.

2. Any mare or gelding that has a record of 2:30 or better.

3. Any horse that is the sire of two animals with a record of 2:30 or better.

4. Any horse that is the sire of one animal with a record of 2:30 or better, provided he has either of the following qualifications:

a. A record himself of 2:40 or better.

b. Is the sire of two other animals with a record of 2:40 or better.

c. Has a sire or dam, grandsire or grandam, that is already a standard animal.

5. Any mare that has produced an animal with a record of 2:30 or better.

6. The progeny of a standard horse when out of a standard mare.

7. The progeny of a standard horse out of a mare by a standard horse.

8. The progeny of a standard horse when out of a mare whose dam is a standard mare.

9. Any mare that has a record of 2:40 or better, and whose sire or dam, grandsire or grandam is a standard animal.

10. A record to wagon of 2:35 or better, shall be regarded as equal to a 2:30 record."

Breeders from all over the country rapidly availed themselves of this offer, and thousand are registered each year. The records are now owned and managed by a corporation, with headquarters in Chicago, and the stockholders are prominent breeders from all over the country.

The rules have been changed from time to time, so as to raise the standard gradually, and the enterprise has succeeded beyond the hopes of the most sanguine promoters. An annual is printed each year, comprising all new additions to the list. Stallions are given consecutive numbers: For instance, Abdallah, the sire of Rysdick's Hambletonian is No. 1, Rysdick's Hambletonian is No. 10, and Jackdaw, one of the greatest stallions in the West, is No. 14297.

I have given a somewhat detailed description of some of the horses which have held the world's record for trotting to illustrate the improvement in the breeding of horses as to speed.

While it is but a short time since Maud S. was the champion of the world, having taken her best record in 1881, at the end of the season of 1903 164 horses had beaten her record of 2:10 $\frac{1}{4}$, and five had taken a record of 2:05 or better.

While extreme speed has been the principal feature of these performances, there has been a corresponding improvement in style and size. Improvement in speed carries with it better legs, feet and wind, and all these qualities, which add to the endurance and soundness of the horse, and consequently, its serviceability. This improvement, as exemplified in the exceptional career of the horses mentioned, is a true index of the improvement of the entire breed.

There is not a quality that adds to the desirability of the trotter as a race-animal that does not also add to its value and desirability as a driving horse. Cresceus, the King of Trotters, is as nearly perfect in disposition for a family roadster as he is for a race-horse. Two months after he took his great record the daughter, of his owner, then 12 years old, was seen driving this famous stallion through the streets of Toledo, delivering invitations to a party, unaccompanied, except by a girl schoolmate of about the same age. Mr. Ketcham, his millionaire owner, trainer and driver, thinks that the success he has had with this horse is attributable much to the fact that he has always seemed to possess a superior intelligence in perceiving what was wanted of him, and a cheerful compliance with the will of his master—a sort of dog-like obedience.

While Kentucky has been most prominent in the development of the trotting-horse industry of this country, Kansas and Kansans have had a conspicuous part. Three times a Kansas horse has held the world's record for harness-racing. The famous stallion, Smuggler, that had the honor of defeating Goldsmith Maid several times, and for a short time the holder of the world's record for stallion trotters, was owned in Johnson County, this State, and was trained and driven by the veteran reinsman, Chas. Marvin, who afterwards became more famous as the superintendent of the Palo Alto stables in California, belonging to Leland Stanford. While Marvin was at Palo Alto, the home of the great horse, Electioneer, such sensational horses as Sunol, afterwards purchased by Robert Bonner, when she had the world's record, Palo Alto, one of the best race-horses that ever lived, and Arion, with a 2-year-old record of 2:10, that has never been before or since attained, were brought out and developed.

John R. Gentry, still one of the

greatest horses on the globe, was bred and owned in Wichita until he had achieved a National reputation, and his record of 2:00 $\frac{1}{2}$ has only been beaten by four horses, living or dead.

Joe Patchen, "the horse of iron," is of Kansas origin, and to Shawnee County belongs the honor of holding the trotting race record for yearlings. Pansy McGregor's record of 2:23 $\frac{1}{4}$, as a yearling, is also unbeaten, and she was owned by Wm. Bradbury, of this city. The daughter of Pansy, Maxine, by Jackdaw, bred in this county, was the fastest 4-year-old trotter on the turf, in 1902.

Prairie Dell Stock Farm, four miles west of Topeka, was for many years the home of Robert McGregor, the sire of Cresceus, the fastest trotter of the world, until the coming of Lou Dillon.

HORSE RACING.

If America has a National sport, it is either harness-racing or base-ball playing. There are those who decry against both, and would have them abolished on account of the attendant evils of betting. It is not my purpose to defend base-ball playing. It does not come within the purview of this paper. I have no excuse to offer for any form of betting. It is indefensible. It is, however, no necessary part of the sport. I believe that in time public opinion will make it obsolete as rum is at a New England barn-raising.

It is this sport which has been one of the chief causes of the splendid developments of the trotting horse, and I have shown how the development of the trotting qualities of the horse conduces to its general usefulness. I cannot say as much for running races.

While the thoroughbred is a splendid type of his kind, and from him we have derived the trotting horse, the running-race horse is not fit for any other service—at least, there are better types for each of the other services for which the horse is needed.

The American trotter is the greatest all-purpose horse. A trotting horse 16 hands high, stylish, kind and spirited, can be as certainly bred as a Short-horn steer of a given style and size. Such a horse, bred from standard trotting stock, will as surely have three minute speed, as the Shorthorn steer, properly bred, will weigh 1200 pounds when three years old. He will be well-mannered in harness, with the best roadster qualities. He can be used with equal satisfaction in hauling the family carriage and the run-about. He will outlast and outdo any other in ordinary farm work and will draw a greater load than any other horse alive of his weight. He will be longer-lived and easier kept, and can be trained to the saddle gaits, and made the best of hunters; and, once possessed, will be forever loved and admired.

Report of Committee on Resolutions of the Kansas Live-Stock Breeders' Association.

Whereas, We find that the present Live-Stock Sanitary Commission is greatly hampered in its work of controlling outbreaks of contagious diseases throughout the State, owing to distances to be traveled by the present veterinary council of the sanitary board, therefore be it

Resolved, That this association recommend the appointment of a qualified veterinarian in each Congressional District, to act in conjunction with the sanitary board.

Whereas, It is a well-known fact that cattle scabies, or mange, exists in numerous herds of cattle throughout this State, and that, under the existing laws of Interstate Commerce, the Bureau of Animal Industry through its representatives can treat only the outbreaks occurring in herds which are offered for Interstate movement, therefore be it

Resolved, That this association requests that the Governor, in his wisdom, proceed in such manner as to eradicate the disease by appointing some practical energetic cattlemen—one for each and every county in which the disease is known to exist—who shall be clothed with proper authority to enforce the law and adopt



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recognized purity measures, viz., the dipping of all affected herds twice and of exposed herds once, in dips recognized by the Bureau of Animal Industry.

Whereas, The multiplicity of herd books and books of registration in the different breeds produces and must continue to produce confusion and expense to breeders and a tendency to discourage those who might become breeders, and,

Whereas, It is our judgment that this evil is a growing one that should be suppressed at once, therefore be it

Resolved, By the Kansas Improved Stock-Breeders' Association, in fifteenth annual meeting assembled, that we deprecate the present condition of things in this respect and hereby pledge our efforts to correct the same by discouraging a further increase in numbers of herd books and the consolidation of those now in existence for each breed.

Resolved, That this association constitute itself a committee of the whole to urge upon the Legislature the necessity of providing, by appropriation, for the publication and distribution of the reports and breeders' annuals of this association, in order that they may have a wider circulation among the farmers and breeders, and the work of the association in its battle against the scrub be enhanced.

Resolved, That we urge upon the Legislature the necessity for making liberal appropriations for the benefit of the Animal Husbandry Department of the State Agricultural College, to the end that the good work which ought to be done there in training the young men of the State who are the future breeders, may be accomplished, as the reputation of our State and the best interests of our chief industry demands.

Whereas, At the annual meeting of this association, held one year ago, this body passed a resolution asking the President of the United States to investigate the beef trust, and

Whereas, We note with pride and pleasure the President is now doing, or having done, the very thing we asked for, therefore

Resolved, That this association of Improved Stock Breeders, tender our hearty thanks to the President for his efforts and our earnest hopes for his abundant success therein.

Whereas, The live-stock interests of Kansas have had imposed upon them and levied against them increases in rates of freight charged in transporting cattle and other live stock to the markets of the country, to such an extent that Kansas is now paying exorbitant rates of freight for the transportation of live stock to market and elsewhere; and

Whereas, These rates of freight have been fixed and the increases thereof have been made from time to time by a combination of the railroads in the country without restriction or regulation by law, as to interstate shipments, thus destroying competition in the making of railroad rates; and,

Whereas, By reason of the practice of railroads in handling live-stock traffic which has been put into effect under the system of transportation known as the "Tonnage System," the service being rendered is poor; and by reason of delays in transportation and by reason of loading down stock trains with heavy cars of dead freight, injuries by shrinkage and otherwise result to live stock in shipment to a far greater extent than resulted when the rates of freight were lower and when the tonnage system was not in vogue, and,

Whereas, Great losses are being sustained by the live-stock interests of the country, and burdens being placed upon the live-stock business; and,

Whereas, It is for the benefit of the whole live-stock interest and the desire of this association to secure the enactment of such laws as will invest the railroad commission with the power and authority to regulate, in a more speedy, perfect and efficient manner than now exists, the charging, demanding and collecting of rates of freight, and to provide a system of transportation for live stock less injurious to them than the unrestricted

method now in use by the railroads; therefore

Resolved, That it is the desire of this association that a bill for the control of railroads such as was suggested and authorized by the Kansas federation of commercial interests, be enacted by the Legislature.

Resolved, That we regard the movement inaugurated by President Roosevelt looking toward equal and equitable railroad charges as the most hopeful effort yet made in Washington to coerce the railroads into doing justice to all shippers alike and, as such shippers, regardless of our political affiliations, we give it our hearty and unanimous approval.

Resolved, That the president and secretary of this association be directed to convey to President Roosevelt suitable expression of our appreciation of his course in the matter of the meat trust, and that we tender to the President every assistance in our power to the end that the measures taken may eliminate the meat-trust evil.

Resolved, That our thanks are due and are hereby most heartily expressed to Ex-Governor Hoard of Wisconsin, Prof. H. R. Smith of Nebraska, Prof. E. W. Curtis of Iowa and E. B. Mitchell of Missouri and to Col. W. H. Moore of the National Good Roads Association, as visitors from without the



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State, for the able and valuable papers and discussions with which they have severally favored us.

Resolved, That we hereby express our thanks to the Kansas Supreme Court for their courtesy in inviting the association to use the court room for its sessions.

No Hog Cholera.

EDITOR KANSAS FARMER:—One of our most valuable and profitable domestic animals is the hog. Swine husbandry is flourishing in our country. With our pork we can be the leaders in the meat markets of the world, as no other nation has facilities for producing better pork or cheaper. With our fertile and seemingly inexhaustible soil, both upon the broad prairies and countless creek and river-bottoms, the great staple crop is and ever will be corn—the grain above all others best adapted to the production of pork. Oats, wheat, rye, barley, potatoes, alfalfa, clover, timothy, bluegrass are growing in abundance. Do we not have all preliminary conditions for success? Who can compare with us? We can look with pride upon our success.

Between the present hog and its ancestors is the same difference as between a Pullman palace car and the first Baltimore & Ohio Railroad cars, or the present ocean steamer and the old sailing boat. We have not only improved our race of hogs, but we have more or less changed the manner of raising them. At the same time, we have with the improvement and the change, effeminized the same, and the hog is now more sub-

ject to diseases, which the farmer falsely calls hog-cholera.

Whenever the so-called hog-cholera appears, the symptoms are varying; and it is easy to understand that the sickness has for its development different causes which every farmer can avoid. It is frequently asserted that we have no remedy, no cure for hog disease. Nevertheless, I am able to prove the contrary; I invite men of scientific and practical knowledge to demonstrate that I am both untruthful and a humbug.

The so-called hog-cholera is a weed, to be exterminated; and to do so effectively, we must take it by the root. What are the causes of hog-cholera? My answer is, in-breeding, improper treatment and nourishment of the breeding animals (boar and sow), and of the suckling pigs, a defective supply of water, fresh air, light and sunshine, insufficient protection against

changes of weather, dirty stables and feeding-places, the latter generally the birthplace of germs and bacteria, continual confinement, sudden changes in food, sudden and too great increase in daily rations, inexact composition of the substances in the food. The last three effect the irregularities of the digestion and are the most frequent causes of sickness.

To prevent hog-cholera, in the first place, to avoid in-breeding and then pay sufficient attention to the selection of breeding hogs if you want to be sure of perfection in the offspring. The boar should be kept in a comfortable pen, with a lot or pasture adjoining, and supplied with a variety of nutritious food. His condition should always be that of thrift and vigorous health, not too fat, nor yet so lean that as barrow he would be considered unfit for pork. If too fat, he will be clumsy, slow, and in no wise a good getter.

As important, if not more so, is the brood sow. The sow is the laboratory wherein the germs of the future herd are developed. The sow is the one who has to give birth to and nourish a reasonable number of pigs. A brood sow must necessarily be of vigorous health and appetite. The sow should not be kept too fat, as fat sows have smaller pigs, do badly in farrowing, and are, as a rule, poor sucklers. The sow in moderate flesh—what is called a "stock" hog in fine condition—is calculated to bring the best results. A good sow kept especially for breeding should not be fed upon corn exclusively. She needs a variety of food that will make bone and muscle, rather

than fat, little or no corn, but oats and wheat, bran, shorts, middlings, cooked potatoes, and in addition, a good pasture. We leave the thinking farmer to regulate this. Grass or other green food should be given to hogs of all ages when vegetation allows it. What is the food of the animal during the summer months in its wild state? Is it not the growing grass, clover, oats, wheat, rye, etc? Is not our hog the same animal only domesticated and improved? The hog is as much a grass-eater as a grain-eating animal. If the hogs are given grain and green food together, they will increase 20 to 40 per cent more than if no green food were given to them.

For the first week of a pig's life the mother's milk is drink as well as food; therefore we have to furnish the suckling sow food easy to digest, but nutritious and that which will supply the pigs with plenty of good milk. The first weeks in a pig's life is a critical period; special care to suckling sows is indispensable to success. When pigs are 3 weeks old they will usually begin to eat, if suitable food is placed where they can get it. The best place to feed them is in a pen or lot, inaccessible to the mother. Feed ground corn that has been soaked about twenty-four hours, or slop of ground oats and corn mixed with bran, shorts and middlings. While quite young, milk with shorts or meal in it is still better. —the best food for pigs is milk if it is to be had. We increase the daily ration at the age of 6 or 8 months. The weaning is a small matter.

For sows and pigs a good pasture of clover, alfalfa, or blue-grass is of incalculable advantage. A fenced field sowed to oats, wheat or rye, will not replace the pasture but is better than a yard, and this again is far better than a pen. According to Prof. W. A. Henry, tests of the differences in pigs that have exercise from those confined in close pens, it was shown that it required 420 pounds to make 100 pounds of gain for pigs that have exercise in yards or run of pasture, while those confined in small pens required 512 pounds to make 100 pounds of gain; showing a saving of 18 per cent of the feed in favor of yard and pasture over close confinement. Pigs should have plenty of fresh air, sunshine, and exercise; if they miss it, they get stunted, they will perish. Pigs, like plants, need sunlight. They also need exercise to strengthen them and create muscle instead of excessive fat, which leads to thumps. When the pigs are weaned, shut up the sows and not the pigs; it is here that the mistake is made, and the young animal is disturbed in its growth and stunted. A stunted pig never fully recovers and never makes the best use of food thereafter. If there is opportunity to divide the pens, it is still better, because exercise is better for a sow than close confinement.

Besides sound and healthy food, fresh, clean water is the main part in swine husbandry, and this should be at all times within reach, and I am sorry to say this is not the case on every farm. Feeding and watering has to be done regularly if an immense quantity of food shall not be wasted. Further, we have to mind that sudden changes in food are always injurious. Therefore, we should make all changes gradually, especially with corn, green or old.

The selection of the best breeding animals, and a supply of the very best food will not bring you success if in connection with the right keeping and rearing, your hogs have no protection against the burning sun, the cold winds, the shivering rains and the violent blizzards. With a good ventilated stable, with plenty of straw

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The French people have for cen-
(Continued on page 128.)

Agriculture

Feeding and Crop Questions.

What feeds are strongest in protein and what strongest in carbohydrates? Will you please tell me which of the following crops takes the most fertility and moisture from the ground: Wheat, barley, cane (sowed), or Kafir-corn (sowed)? Which would be the best suited for this county, cow-peas or soy-beans, and how planted, in rows or sowed? I very much enjoy reading the pamphlets I received from the station and I am beginning to find that I have still much to learn about farming and stock-raising, which is my business.

N. R. BISHOP.

Meat County.

I have requested Professor Willard to send you a copy of his Bulletin No. 115 in which you will find a table giving the percentages of protein, carbohydrates and fat found in different kinds of feed. Professor Willard has also figured out a large number of balanced feeds and explains an easy method of calculating balanced rations. Answering your question briefly, all the legume crops, such as alfalfa, clover, soy-beans, and cow-peas are rich in protein, while all kinds of stover, as corn, Kafir-corn, cane, and also the grass and hays contain a relatively low per cent of protein and a high per cent of carbohydrates. Of the grains, cow-peas, soy-beans, and other legume seeds contain a relatively high per cent of protein, while bran, oil-meal, and cottonseed-meal are especially rich protein feeds. On the other hand, common grains, corn, oats, barley, etc., contain a relatively high percentage of carbohydrates.

In experiments conducted at this station in 1903 it required 14.08 inches of water to produce a thirty-two bushel crop of barley and 16.54 inches to produce a twenty-eight bushel crop of wheat. To produce 9,142 pounds of chemically dried (sowed) cane-fodder required 28.02 inches of water. The field yield of this crop was over seven tons per acre. We have no record for sowed Kafir-corn, but to produce a crop of Kafir-corn planted in rows and cultivated which yielded fifty bushels of grain, or 7,050 pounds of dry matter per acre including fodder, required 29.3 inches of water. To produce fifty bushels of corn per acre, or 5,647 pounds of dry matter, required 26.66 inches of water. These experiments were conducted as follows: Soil samples were taken to the depth of six feet at planting time and the percentage of the moisture in the soil determined. A record of the rainfall during the period of growth of the crop was kept. When the crop was harvested a second set of samples was taken from each field and the amount of moisture in the soil determined. The loss of moisture from the soil plus the total rainfall during the period of growth was charged against the crop in the figures given above.

Early in the spring of 1904 soil samples taken from the various plots showed that the corn ground contained a higher percentage of water in the soil than any other plot. Compared with the corn ground the soil of the wheat ground held 2.97 per cent less water in the first six feet of soil, the barley ground 3.23 per cent less than the corn ground, sowed cane 2.61 per cent less, while the Kafir-corn ground was the driest, containing 3.53 per cent less water than the corn ground. Comparing Kafir-corn and cane ground with corn ground late in the fall previous, the cane ground proved to be the driest, containing 3.51 per cent less water than the corn ground, while the Kafir-corn ground contained 2.88 per cent less. It appears that during the winter the cane ground retained more water than the Kafir-corn ground, perhaps due to the fact that it had more cover and may have accumulated more snow.

Under separate cover I have mailed you a copy of the Industrialist published July 9, 1904, in which Mr. C. H. Kyle, assistant in this department, published an article giving results of

our soil moisture studies during the season of 1903. plant-food is almost inexhaustible. However, we know from experience

TABLE I.—Plant-food taken from the soil by various crops.

Crops.	Yield per acre, lbs.	Nitrogen, lbs.	Potash, lbs.	Phosphoric acid, lbs.	Lime, lbs.
Wheat	30	50.40	28.37	20.16	8.19
Barley	30	36.66	29.88	15.33	7.99
Oats	50	46.08	59.84	19.84	15.36
Corn	50	69.76	95.64	35.72	26.32
Potatoes	150	31.50	45.81	11.97	.96
Clover hay	2.66	109.80	99.05	29.70	107.90
Alfalfa hay	4.00	157.60	148.80	44.80	160.80
Sorghum (green)	15.00	58.50	141.00	57.75	32.05

In table I. I have computed the amount of nitrogen, potash, phosphoric acid and lime which each of the several crops removes from the soil, with the yield of grain or fodder given in the table. I have not been able to find a complete analysis of Kafir-corn but its chemical composition will be similar to that of cane or corn. The yield of Kafir-corn per acre will exceed the yield of the corn crop. Probably the Kafir-corn will exhaust the plant-food of the soil in about the same amounts as given for sorghum in the table.

Prof. J. T. Willard, chemist at this station, in an analysis of the soil of the station farm, finds that the surface nine inches of soil contains the percentages of the various plant-foods given in Table II:

Name of plant-food.	Percent in soil.	Tons in acre-foot.
Nitrogen	0.245	4.80
Potash	0.656	12.85
Phosphoric acid	0.140	2.74
Lime	0.686	13.44

In making the above calculation of the plant-food in an acre-foot, 90 pounds was taken as the average weight of the soil per cubic foot. From the figures given in the above table I have calculated that there was enough nitrogen in the surface foot of soil when the analysis was made, to produce 191 crops of wheat, or 260 crops of barley, or 208 crops of oats, or 137 crops of corn, or 304 crops of potatoes, or 87.4 crops of clover, or 61 crops of alfalfa, or 161 crops of sorghum. Of course the figures for nitrogen for clover and alfalfa would not be theoretically correct because these two crops take their nitrogen largely from the air and tend to build up the nitrogen of the soil rather than to exhaust it. From the figures given, the phosphoric acid and potash of the soil will last to produce even a larger number of crops than calculated for the nitrogen and this calculation is made only on one foot of soil, while the plant-food elements, especially the potash and phosphoric acid are found in most soils to the depth of several feet in almost as large quantities as in the surface foot. It will appear then from a theoretical standpoint, that the

that no such number of crops can be grown continuously on the same land without the application of fertilizers. We conclude, therefore, that the plant-food elements of the soil are lost in some other way than by being taken out by the crop.

A series of experiments conducted at the Minnesota Experiment Station, 1892-1900, make evident that the nitrogen at least is lost from the soil much more rapidly than it is taken out by the crop. The figures given in Table III are calculated from bulletin No. 70 of the Minnesota Experiment Station:

It will be observed from the figures given in Table III that the nitrogen of the soil was exhausted much more rapidly by the continuous growing of grain crops than by the growing of corn, while with the rotation of crops in which two crops of clover, two crops of corn and four crops of grain were grown in eight years, there was an actual gain of nitrogen to the soil above what was taken out by the crops themselves. It is probable that cane and Kafir-corn will exhaust the soil more rapidly than corn since these crops produce a greater yield and hence take more of the plant-food elements out of the soil than does the corn. However, if these crops are cultivated, it is possible that the plant-food will not be wasted as is the result of continued cropping with wheat, oats and barley. Just how the grain crops are more wasteful of the soil fertility than the corn crops is not fully understood. The conclusion, however, from the above data is very favorable to a rotation of crops, in order to maintain the soil fertility, in which should be included legumes and cultivated crops, and I should add also grasses.

I believe you will find cow-peas better adapted for growing in Meade County than soy-beans. Cow-peas are quicker and ranker growers than soy-beans and produce larger yields of fodder and grain per acre at this station than soy-beans, and this will be more apt to be the case in your part of the State than here, since the cow-peas do better farther south. For the production of forage, possibly cow-peas planted in close drills on a well-pre-

TABLE III.—LOSS OF NITROGEN BY CONTINUOUS CROPPING vs. ROTATION OF CROPS.

	Nitrogen in soil in 1892.	Nitrogen in soil in 1900.	Nitrogen in soil in 1901.	Nitrogen in soil in 1902.	Nitrogen in soil in 1903.	Nitrogen in soil in 1904.	Nitrogen in soil in 1905.	Nitrogen in soil in 1906.	Nitrogen in soil in 1907.	Nitrogen in soil in 1908.	Nitrogen in soil in 1909.	Nitrogen in soil in 1910.
Wheat	7700	6000	1700	199	1501	31						
Corn	7400	6640	760	584	176	3.5						
Oats	7400	6156	1244	341	903	19						
Barley	7400	6032	1368	275	1093	23						
Rotation No. 1	7700	6900	800	329	471	10						
Rotation No. 2	7400	6950	450	499	49							

Rotation 1.—Wheat, clover, wheat, oats, wheat, clover, wheat, wheat.
Rotation 2.—Oats, clover, barley, corn, corn, oats, clover, barley.

The first column of figures shows the amount of nitrogen in pounds found by chemical analysis in the first acre foot of soil when the experiment was begun in 1893, the second column of figures shows the amount of nitrogen which remained in the soil in 1900, at the end of the eight-year period of cropping with the crops named at the left of the table. In column three is given the number of pounds of nitrogen exhausted from an acre foot of soil in the different fields during the eight-year period. In column four is given the actual amount of nitrogen in pounds which the crop took out of the soil, as determined by the weight and chemical analysis of the crop. The figures in the fifth column are the difference between the amount of nitrogen which was exhausted from an acre foot of soil during the eight-year period of cropping and the amount of nitrogen actually removed from the soil in the crop, that is, these figures represent the amount of nitrogen lost from the soil and unaccounted for. In the last column at the right of the table the value of the nitrogen lost from the soil, unaccounted for, is estimated in wheat crops of thirty bushels per acre, from which it will be seen that during a period of eight years in which eight crops of wheat were produced, enough nitrogen was lost from the soil above that which the wheat actually took out, to produce 31 crops of wheat. In other words, to produce eight crops of wheat enough nitrogen was exhausted from the soil to produce 39 crops of wheat, while to produce eight crops of oats enough nitrogen was lost from the soil to produce not only eight crops of oats but to produce 19 additional crops of wheat. The effect of continuous cropping of barley was similar to that of continuous cropping with oats or wheat. On the other hand, in growing eight continuous crops of corn the amount of nitrogen exhausted from the soil above that which could be accounted for in the crops of corn only amounted to 176 pounds of nitrogen per acre, which in wheat crops may be valued at three and one-half, thirty-bushel wheat crops. In rotation No. 2 the crops according to the chemical analyses, took from an acre 499 pounds of nitrogen in eight years, while taken from the soil, or there was added that only 450 pounds of nitrogen had the chemical analyses of the soil shows actual gain of 49 pounds of nitrogen per acre above what the crops actually removed from the soil.

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pared seed-bed, sowed at the rate of one and one-half bushels of peas per acre, would produce a good crop. If your purpose is the production of grain, I would recommend to plant in drill rows, two and one-half to three feet apart, dropping the peas one to two inches apart in the row. Planted in this way it will be necessary to harvest the crop with a bean harvester in order to save all the peas, but when sown in close drills or broad-cast the plants grow erect so that the crop may be harvested with a mower. Another reason why cow-peas will likely be the better adapted for growing in your country is that on new lands the soy-bean bacteria appear to be lacking, while the bacteria which infect the cow-pea roots are present in all the soils of the State, so far as examination has been made, that is, the tubercles appear on the roots of the cow-pea plants without any artificial inoculation of the soil.

You should secure and study the bulletins of this station. They are free to all Kansas farmers. A good book for you to read and study is Prof. W. A. Henry's "Feeds and Feeding," published by the author at Madison, Wisconsin. Another excellent set of new books has been recently published on "Agriculture and Stock Growing," by Prof. Wm. P. Brooks, published by the King, Richardson Co., Springfield, Mass. There are a large number of good books relating to the different agricultural subjects of which I shall be pleased to give you a list if you desire it.

A. M. TENEYCK.

Seeding Questions.

I have a two-acre field that I wish to sow to red clover next spring. This field was plowed twice this season, sowed to rape in June and partly "hogged down" this fall. It is free from weeds and is in a good state of cultivation. Would a thorough disking and harrowing as early in the spring as weather and ground conditions will permit prepare a good enough seed-bed for red clover? How many pounds of seed should I sow per acre and about what date should it be sown? This field is good soil and well drained.

I also have an eight-acre field mostly low ground that I desire to sow to a mixture, English blue-grass, redtop, and Alsike clover, next spring. This field was well plowed last May, half the field was sowed to millet the other half broadcasted into Kafir-corn. This field is free from weeds and in a good state of cultivation. Weather-conditions being favorable, do you think I would get satisfactory results by preparing the ground with disk and harrow as mentioned above? What time in the spring should blue-grass seed be sown? Owing to the extremely dry fall and rush of other work, I was unable to get this ground fall-plowed as it should have been.

Morris County. A SUBSCRIBER.

In each of the two fields which you have described I believe you will succeed in preparing the most favorable seed-bed for grass and clover by disking and harrowing. I am quite positive that this will be the preferable method on the field that grew rape last season; and on the Kafir-corn-millet field, unless there is so much litter on the ground that it will interfere with cultivating, disking will be preferable to plowing. I would recommend not to disk too deep but as early in the spring as it is in fit condition to work go over the ground twice with the disk, lapping one-half, or cross-disking if you think it more desirable. A little later follow with the harrow, leveling and firming the soil so as to leave a fine, mellow surface to the depth of about two inches. A seed-bed for grasses should not be too mellow and loose to too great a depth; rather it should be mellow only about as deep as the seed is sown, and the subsurface beneath the seed should be rather firm and compact. It is not easy to get this character of seed-bed by spring plowing and it can only be accomplished by the use of an implement like the subsurface packer and by much cultivating. If the ground is

plowed late in the summer or early in the fall the soil will usually settle and become sufficiently compact to prepare a good seed-bed by cultivating the surface the next spring. As a rule, however, I would prefer preparing a seed-bed for grasses, alfalfa or clover by disking the ground as described above provided the surface be in fit condition to prepare a proper seed-bed in this way.

English blue-grass may be sown as early in the spring as the ground is in fit condition to work and to plant and I usually practice early seeding of clover although there is some danger of injury to the young clover-plants by late frosts. The grass, however, will take no injury from frost. In general I would recommend that you prepare your seed-bed early in the spring and sow as soon as the soil is in a fit condition to germinate the seed.

A. M. TENEYCK.

Restoring Fertility to Sorghum Ground.

I have a field on which I have raised six crops of sorghum in succession and they have all been good heavy crops save in 1901 when the yield was two tons per acre, and this year, 1904, when it was so wet that I did not get the cane planted until August 1, the yield was about 2½ tons per acre. For the other years the crops averaged 6 to 8 tons per acre. I keep all of my land in blue-grass and do not care to plow any of it up. Can I keep up the fertility of this forty acres upon which I raise sorghum and make it produce good average crops by using some kind of fertilizer? I usually sow 75 to 100 pounds of seed to the acre with drill.

Please give me what information you can about this matter and advise me what kind of fertilizer to use and how much per acre, or would it be best to plow up some of my blue-grass and give the cane-field a rest?

T. C. BLACKWELL.

Jackson County, Mo.

By frequent applications of barn-yard manure and thorough tillage of the land you will doubtless be able to maintain the fertility of the soil and continue to grow profitable crops of cane for many years on the land in question. Possibly it will also be necessary to add chemical fertilizers, especially those containing phosphoric acid, potash and lime, as these mineral elements are rapidly exhausted from the soil by large crops of sorghum. This land will be apt to suffer from drouth in a severe season if it is continually cropped with sorghum, since the sorghum is a great exhauster of the moisture of the soil. If your purpose is to continue using this land for sorghum I would recommend fall-plowing Turn under a coat of manure and plow deep. The next spring cultivate the land during the early part of the season until seeding time. By this method of tillage you will be able to catch and retain the rains and conserve the soil moisture to the greatest degree. On general principles it is not advisable to grow one crop on the land continuously, as doubtless larger crops of cane can be grown in rotation with other crops, so other crops may at times be benefited by a rotation with cane. However, in the case which you speak of where the rest of your land is permanent Kentucky blue-grass pasture, it may be advisable to continue using the one piece of ground for the sorghum crop.

I would not make too heavy applications of manure at one time. It would be better to manure lightly each fall, say twelve to fifteen loads per acre. If chemical fertilizers are used, it would not be advisable to make heavy applications. A small amount of chemical fertilizers might be applied when the grain is seeded if you have a fertilizer attachment to your drill. An application of forty to fifty pounds of nitrate of potash fertilizer would be sufficient at one time, while one to two hundred pounds per acre of a good phosphate fertilizer may be applied at a single application. The soil is not apt to need lime for a long time and when it does it is probably as well to give it a pretty good appli-

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WHEN WRITING ADVERTISERS PLEASE MENTION THIS PAPER.

cation, say one to two tons of air-slacked lime per acre, or the lime may be applied in combination with other fertilizers at more frequent intervals, at the rate of 25 to 30 bushels per acre. In Bulletin No. 55 of the Department of Agriculture, State of Pennsylvania, quantities of different kinds of fertilizers which it is advisable to apply annually for the production of certain kinds of crops, are recommended for a large number of crops. Sorghum is not named in this list. For corn, which is a vigorous feeder, perhaps equal to sorghum, the following application of chemical fertilizers each season is recommended: For nitrogen, 30 to 60 pounds of nitrate of soda; 50 to 100 pounds dried blood, or 75 to 150 pounds cottonseed-meal; for phosphoric acid, 200 to 400 pounds of bone meal or 250 to 500 pounds dissolved bone black, dissolved bone or dissolved phosphate rock; for potash, 60 to 120 pounds of muriate or sulphate of potash; 200 to 400 pounds of kainite or 600 to 1200 pounds of unleached wood ashes. It is generally conceded better to apply potash and lime fertilizers in the fall and plow under, although these salts may be applied usually safely early in the spring if the ground is well cultivated so as to mix the fertilizer well with the soil. The lime and potash salts when applied in any considerable quantity just previous to seeding are apt to injure the young plants. However, very light application at seeding-time would not result in injury and would likely give some benefit. It is not easy to advise regarding the use of chemical fertilizers. On the whole, I would not prefer to use them in any considerable quantity but would use the barnyard manure if it can be secured.

By growing legume crops occasionally on this field, such as cow-peas, soybeans, or by seeding it down to alfalfa for a few years you can in a large measure restore the organic matter, the nitrogen and humus of the soil, and with such rotation it will not be so necessary to apply large quantities of barnyard manure.

For information regarding the use of fertilizers and methods of experimenting with different crops I refer you to Vol. 23, No. 90, Report of Kansas State Board of Agriculture for the quarter ending June, 1904. You can secure a copy of this report by writing to Secretary F. D. Coburn, Topeka, Kansas. In it Prof. J. T. Willard, chemist of this station, has outlined methods for experimenting with different kinds of fertilizers.

A. M. TENEYCK.

Alfalfa Questions.

How much soil from an inoculated alfalfa-field should be applied per acre upon a field which shows no nodules in order to obtain good results? How early in your climate can alfalfa be disked to good advantage, and how deep can it be disked?

Carlsbad, N. M. F. E. BRYANT.

Two hundred pounds of soil from an old alfalfa-field which is well infected with the alfalfa bacteria, is sufficient to apply per acre on land which needs inoculation. The infection may not be immediate upon making the application but within a year or two the nodules will begin to appear in numbers upon the roots of the alfalfa plants. Of course, a larger amount of soil may be applied with the result of giving more immediate and more complete inoculation, and even a less amount may be used, as small a quantity as one hundred pounds per acre well distributed over the land and well cultivated into the soil, will infect the whole field within a year or two.

We have disked alfalfa early in the spring before it starts, say the middle of March or the first of April, practically as soon as the land is in fit condition to cultivate, and the result has been favorable. We prefer to disk rather early, before the alfalfa starts much. We plan to run the disk on an average of about two to three inches deep, setting the disks rather straight and weighting the harrow in order to make it cut the desired depth. In our experiments last season the best work was accomplished when the field was cross-disked and harrowed once after

disking. If the harrow does not follow the disk the soil is left rather loose and rough and does not form a perfect mulch to conserve the moisture and also the clods interfere with mowing. I do not think it advisable to disk over three inches deep, as deeper diskings will injure some of the surface roots and will cause the loose soil to dry out about the roots in a dry time. The purpose of diskings is to loosen the surface so as to absorb the rains, promote soil ventilation, conserve the moisture of the soil by means of the soil mulch, and destroy weeds. With alfalfa, as with other crops, doubtless more frequent surface cultivation will be preferable to less frequent deep cultivation. We have no records of experiments along this line, however, to prove these points.

A. M. TENEYCK.

Relation of Yield to the Amount of Water Soluble Plant Food Materials in Soils.

PROF. R. H. KING, MADISON, WISCONSIN.

NO. I.

The active food materials, of both plants and animals, are in available form only when in solution. Solid foods, when eaten, are dissolved in the digestive tract and only then can they enter the system to nourish the body or contribute to its supply of energy. So, too, the immediately available plant-food material obtained from the soil is carried in the soil-moisture and with it enters the plant through the roots.

Since both the soil-moisture and the plant-food materials dissolved in it are essential to plant growth, it is clearly of fundamental importance to learn whether the yields of crops are greater where the dissolved plant-food materials, or the readily soluble forms of them, are present in larger amounts in the soil. Two soils, under normal field conditions, one giving a yield of 54.6 bushels of shelled corn per acre and the other 17.3 bushels, were leached, during about 6 hours, with distilled water. From the surface foot of the first, potash (K) was recovered at the rate of 287 pounds per acre, the second giving but 160 pounds. Likewise, the first soil yielded 280 pounds of phosphoric acid (HPO₄), while the other gave only 122 pounds per acre. Of nitric acid, too, the substance from which plants derive their supply of nitrogen, the soil yielding 54.6 bu. of corn per acre gave up to the water at the rate of 301 pounds of nitric acid (NO₃) from the surface foot; while the soil yielding only 17.3 bushels gave to the water but 98 pounds from the surface foot. Thus it is seen, where large amounts of essential plant-food materials could be recovered from the soil, there the yields were also large, and where the water removed small amounts of plant-food material there the yield was also small.

When the amounts of the different plant-food materials which were removed from these soils during only about 6 hours of leaching with pure water are put in the form of a table they stand as given below:

Amounts of plant-food materials removed with distilled water in about 6 hours from two soils, one where the yield of corn was 54.6 bushels, and the other where the yield was 17.3 bushels per acre. Amounts are in pounds per acre from the surface foot.

	Large corn.	Small corn.
Potash (K).....	287	160
Lime (Ca).....	521	178
Magnesia (Mg).....	367	250
Nitric acid (NO ₃).....	301	98
Phosphoric acid (HPO ₄).....	280	122
Sulphuric acid (SO ₄).....	1019	463
Total.....	2775	1271

To recover these amounts of plant food materials, it may be stated that the distilled water was caused to leach slowly through a very thin layer 3-16 of an inch thick and the amount used was enough to cover the surface about 40 inches deep.

The amounts of potash present in these two soils, and shown to be in available form by its removal with water, was equal to that removed by 19.4 tons of field-cured stalks and ears

per acre, in the case of the stronger soil, and of 10.9 tons per acre, for the poorer soil. Likewise, there was phosphoric acid enough recovered, for 19.1 tons and 8.3 tons respectively.

In a comparative study of eight soil types, four of which were strong and four others poor, upon which both corn and potatoes were grown under normal field conditions and in four States, it was found that the mean yield, on the four stronger soils; at the same time it was found, as an average of a large number of determinations, that the total plant-food materials which could be removed from the surface foot of soil by washing with distilled water during three minutes was 2.39 times greater from the stronger soils than from the four poorer soils. These results, and those given above, leave little reason to doubt that the larger yields of generally productive soils are not only associated with larger amounts of plant-food materials soluble in water, but that the larger yields are, in a large measure, the direct result of the abundance of available plant-food.

Setting aside the cause of the differences in the enduring fertility of soils, it is the writer's conviction, when the necessary critical study has been made, it will be found that the immediately productive capacity of soils in a very high degree determined by those plant-food materials which are present in forms which are readily dissolved in water; and that those soils, climate permitting, which contain these water-soluble plant-food materials in greatest abundance, up to optimum limits, are capable of producing the largest yields. Various observations which have been made tend to show that good soil management has the effect to clothe the soil skeleton with heavier and heavier accumulations of the soluble plant-food materials; while poor soil management leaves the soil skeleton less and less heavily clothed, thus reducing the store of immediately available plant-food to lower and still lower limits, and thus necessitating smaller and still smaller yields.

To Kill Osage Hedge.

EDITOR KANSAS FARMER:—In the KANSAS FARMER of Jan. 12, Ed. Atkinson of Pottawatomie County asks how to kill Osage hedge. I will tell him how I killed 80 rods of hedge in February and March of 1901. I cut the hedge close to the ground, and later in the spring, when the stumps had sprouted and the sprouts were about six inches high, I mulched it with wet, heavy straw. I waited till after the sprouts had started because I thought it would not take so much mulching to smother them, as it would keep the sprouts from coming through the straw if it was put on before they had grown much. Then in August I set fire to the straw and burned it all off. That killed much of it; it would have killed all of it, but the boys failed to put on enough in places. Then on the stumps I had not killed I kept the sprouts cut down about twice a year until last winter, when I pulled them up.

The hedge had been planted 25 or 30 years, so to pull up what remained I went to the creek and got a pole about 30 feet long and 10 inches in diameter at the butt and 5 inches at the small end. I took pole, ropes, chain and team and went to work. I first made the big end of the pole fast to good solid stump and let the pole lay back beside the row; then put the chain around the pole about four feet from the end and gave it a couple of turns around a stump and hooked back so it would not slip; and then hitched my team to the little end of the pole and drove them around until they had the stump row on the other side of the "hitch." That would give me about eight feet of pull on the stump which would generally get it out of the ground. But before I commenced pulling I took a road plow and put on three horses and plowed as close to the stump as possible, throwing the dirt away. I had a man go along with me and when I would strike a root that

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the team could not break, we would cut it with the ax. Once in a while I would have to make the second and even the third pull to get it out. If I failed to get the roots all out, I would take a grubbing hoe and dig down and cut the roots off, then loose the chain and throw the stump out of the way; then turn the team around and drive back to the place of starting and throw the chain around the next one, and so on until I got to the end of the chain, then let out the rope some on the end of the pole from the "hitch" stump; and so on until I would pull the length of the rope and chain which was about 50 feet; then move up and make a new hitch and pull again, of course using the pole as a lever. It takes a good rope and chain to stand the pull. I used an inch-and-half rope doubled and a three-quarters-inch chain. I cut a journal on the little end of the pole and put on a binder truck wheel, so as to keep the pole from dragging on the ground. Myself and a 15-year-old boy and a span of mares would pull out a rod an hour.

We began pulling where the stumps were the smallest, so by the time we got to the larger ones we were "onto the job," and could handle the big ones all right.

Labette County. R. B. WILLIAMS.

To Do Away With Mud at the Stock-Tank.

Put a light pole over the first cross-bar of the windmill tower letting one end extend over the tank, with the other end under a board fastened not far above the handle that pulls the mill out of gear. Bore a hole larger than a spike down through the end of the pole under the board. Drive a spike through the board about 1/2 inch into the hole. Place a halter ring around the spike between the pole and the board. Fasten a rope or wire from the ring down to the handle. Have a stone wired to the end of the handle heavy enough to hold the ring and spike trigger in place until the water lifts the float and releases the ring; then the stone will do the rest.

My float weighs about ten pounds. It swings at the top of the tank till the water gets up about two inches on its sides, then the ring pulls out. When the stock have used the water down about two inches, the float swings free and begins to dry out.

The trigger has to be set to put the mill in gear but it will not let the water run over. The wire with the ring on has to be fastened to the handle wherever the tension will hold the ring till the float is lifted. The trigger does not have to be directly over the handle, but if it is far away a small rope and two little pulleys should be used. By using a T at the tank and one at the trigger with a wire connecting them I see no reason why a distant tank full could not shut off the mill.

Brown County.

C. A. B.

Constitution of Anti-Hunting Association of Geary County, Kansas.

ARTICLE I.

This association shall be known as the Anti-Hunting Association of Geary County, Kansas.

ARTICLE II.

The object of this association is to protect property, prevent trespassing on growing crops, and to protect all kinds of game by helping the civil authorities to enforce the game laws and trespass laws of the State of Kansas.

ARTICLE III.

Section I. The officers of this association shall consist of a president, one vice president from each township, a secretary and treasurer, all of whom shall constitute an advisory board with the farmer to prosecute violators of the game and trespass laws of the State of Kansas. Said officers shall serve until their successors are elected and qualified. It shall be their duty to provide and arrange for a course of not less than four lectures during the year on agricultural subjects.

Sec. II. It shall be the duty of the

president to preside at all meetings, when present, maintain order, sign all warrants, and appoint all committees not otherwise provided for. In the absence of the president, a vice president shall perform his duties.

Sec. III. The secretary shall keep a record of all proceedings of the association, countersign all warrants, and issue all notices ordered by the association.

Sec. IV. The treasurer shall receive all money from the secretary, and receipt for the same, pay it out for such purposes as the association directs, and report in detail at each regular meeting.

ARTICLE IV.

All persons are eligible to membership in this association who believe in the right of undisturbed possession of their rights, the enforcement of the game laws of the State, and the payment of a membership fee of 25 cents.

ARTICLE V.

It shall be the duty of every member of this association to report all violations of its provisions to the county attorney, or advisory board, with date and name of person so violating.

ARTICLE VI.

The annual meetings of this association for election of officers shall be the first Saturday in December of each year in the city of Junction City, Geary County, Kansas. Business meetings to be called by the president and secretary, by publishing notice in local papers.

ARTICLE VII.

Provides that nothing in this constitution or by-laws, shall be construed to prevent persons or invited friends from hunting on lands they own, rent or occupy.

ARTICLE VIII.

This constitution may be altered or amended at any regular meeting by a two-thirds vote of the members present providing there are not less than ten members present who shall constitute a quorum.

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buying Advance Fence.—Johe Nierste, Westphalia, Ind.

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In the Dairy

Starter Vat for Cream—Artificial Ferment.

EDITOR KANSAS FARMER:—I am having great difficulty this cold weather in getting cream into condition to churn. I have no place in which the cream can be kept at an even temperature until it sours, I must set it in water or on the stove, and run the risk of scalding. What temperature will the cream stand without injury? Is there any safe artificial ferment which will hasten the process of souring?

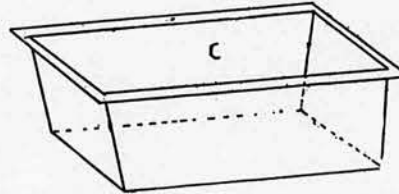
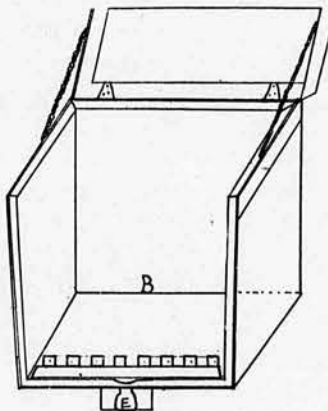
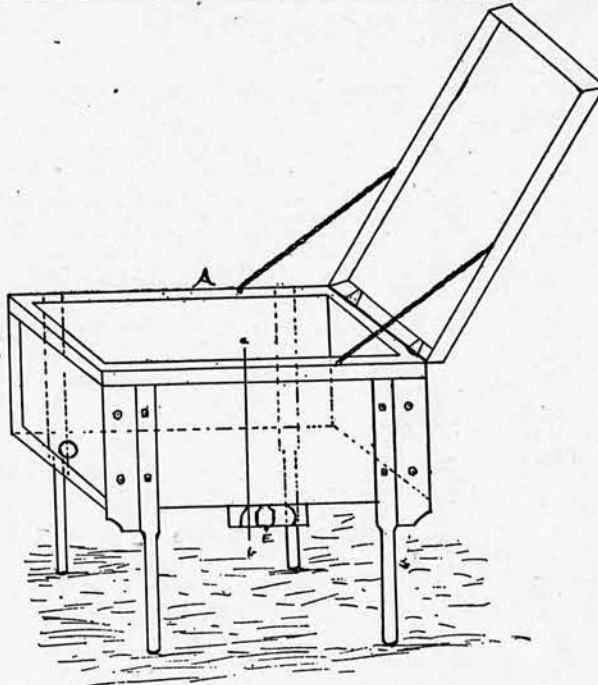
A HOUSEWIFE.

If you have no place where cream can be kept at an even temperature, you will always have more or less difficulty in ripening it properly. However, this can be largely overcome by the use of a starter vat such as Professor Erf has invented and used with perfect satisfaction, for several years. If you have only a small amount of cream, two hundred pounds or less, it can be put in such a vat and kept at an even temperature until ripened and ready to churn. This vat is double-lined, having a dead-air space of about three inches between the tin jacket and outer tank. This space surrounds the entire tin jacket or inner tank, and can be filled with warm air in the winter and cold in the summer, to impart an even temperature to cream or milk contained therein. About six inches of water may be kept in the tank to aid in maintaining even temperature. Ice may be used in summer if obtainable. Of course the opening E should be closed in the summer. We invented and used this vat for the purpose of growing artificial or natural culture of lactic acid ferment but it could be used with a small amount of cream as above suggested. The enclosed cut represents the vat. E represents the opening from below to the dead-air space and the place for the lamp which is kept burning continually expect when room temperature is 70° F. or warmer. The lamp keeps the air warm and at an even temperature regardless of the weather. In case of extreme cold weather the burner may be turned higher than in warm weather. D represents the slats used in the bottom of the tank to allow the water to come in contact with the bottom of the pails used.

Cream may be poured directly into the vat or set into it in pails when water is used. Our vat is 36 inches long by 28 inches wide inside measure. The cover fits very closely and retains its temperature with very lit-

tle loss of heat in the coldest weather. It cost \$9 to make, including paint and tin jacket. The inner vat or jacket is made of heavy tin. A vat could be more cheaply constructed without the inner tank and the pails set directly into the water. However, that kind of a tank would not be as efficient as ours. Cream must be stirred frequent-

and use one part of this curdled starter and let stand at 70° F. until it has become curdled to the same consistency as the former amount. This second quantity is the proper starter to be used. The third inoculation is even better; in other words, the starter is a clean flavored batch of sour milk. Never use the first quart of



A, complete vat. B, cross-section a to b. C, tin jacket. D, slats for bottom of vat. E, lamp holder.

ly to ripen evenly and this can be done once an hour with a clean dipper or any convenient agitator.

Cream should be left at 70° F. until ready to churn in order to give best results, that is, after adding either artificial or natural starter which develops best at 70° F., it should be left until it develops .5 to .6 per cent acidity, or is well turned—sour but not rancid. Cream left at 100° F. often develops a species of bacteria which produces a gas and a rancid flavor. Cream left below 45° F. develops a species of bacteria producing a better flavor and occasionally a sweet, thick curd. Artificial ferment, more properly called starter on account of giving cream a start in ripening, is perfectly safe to use, and adds the normal flavor to butter that it should have under proper cleanly conditions. It is merely a growth of desirable bacteria in large numbers. They are grown in several laboratories in the United States and Europe and sent out in nutrient media to all prominent creameries throughout these countries. Among the leading firms who handle these cultures are O. Douglass, Boston, Mass.; Parke, Davis & Co., Detroit, Mich., and C. Hansen, Little Falls, New York.

Artificial or commercial starter is made in the following way: Take a two-quart covered glass or other suitable jar and thoroughly cleanse it with boiling water, placing therein a quart or more of skim-milk. Heat by steam or by placing for one-half hour in water heated to 200° F. or about boiling; then cool it down to 80° F. and add contents of the pure culture in bottle or capsule. Stir or shake three or four times during the first few hours in order to mix bacteria evenly. Keep the bottle or glass tightly covered at a temperature between 70° and 80° F., until the milk becomes curdled to a thick creamy consistency. This will occupy eighteen to twenty hours. Take about 25 parts of sterilized milk

milk from the original pure culture, as it will impart a taste of the medium in which the bacteria was grown.

Commercial starter is usually at its best after it has been propagated a week. Always use the starter from the top surface, leaving a small quantity in the bottom of the can to mix with the next batch of sterilized milk for new starter. That which remains in the bottom of the can is less likely to be contaminated than the surface starter. This may be continued for several days, sometimes almost a month before new starter need be made. It will depend of course upon the care taken to prevent contamination from other forms of bacteria in surrounding atmosphere or unclean thermometer, etc.

For every one hundred pounds of cream use from ten to twenty pounds of starter. A definite amount can not be given, as much depends upon the temperature, acidity, and thickness of cream, of which every dairymen must judge according to his conditions. Natural or home-made starter is made by selecting milk from a healthy cow and after carefully sterilizing the utensils to be used in boiling water or steam, the milk of this cow should be separated if possible to eliminate all fine particles of dirt that can not be strained through the strainer. Then set at 70° F. in a well-covered vessel until it thickens to a consistency of thick cream. Use the same as artificial starter. Natural and commercial starters are the same, the chief difference being in the original ferment, which in the case of natural starter consists of a quart of selected milk allowed to sour naturally, while in the commercial it consists of a bottle of culture prepared in the laboratory.

The use of a starter hastens the ripening of cream several hours, depending upon the per cent used, eight to ten hours being necessary to ripen cream fresh from the separator. A starter renders cream more easily

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OUR OFFER. We will ship on our 30 days' free trial plan, with the binding understanding and agreement if you do not find by comparison, test and use that it will skim closer, skim colder milk, skim easier, run lighter and skim one-half more milk than any other Cream Separator made, you can return the Separator to us at our expense and we will immediately return any money you may have paid for freight charges or otherwise. Cut this ad out at once and mail to us, and you will receive by return mail, free, postpaid, our LATEST SPECIAL CREAM SEPARATOR CATALOGUE. You will get our big offer and our free trial proposition and you will receive the most astonishingly liberal Cream Separator offer ever heard of. Address, SEARS, ROEBUCK & CO., CHICAGO.

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churned, obviates the difficulty from frothing or foaming in the churn, increases the keeping-quality, and imparts the desired flavor to butter.

CHAS. W. MELICK.
Agricultural Experiment Station.

Size of Cow-Stables.

Would you please have published in the KANSAS FARMER a little information on the following topic, which very likely will prove a benefit to the writer as well as to other readers?

How long do you make your cow-stable floors, where you use stanchions? I have just finished mine and seemingly got them a little long. I saw a statement some time ago which, according to my recollection, says something about 5 feet 3 inches. Thinking that would make it about right I saw my 16-foot planks into three pieces, over-running a little in length, which made it about 5 feet 4 1/2 inches. I seems to me that about 5 feet would be right for ordinary cows. Both trough and floor have necessary slope. I realize that I can not make the floor longer after making change, hence would like your advice? J. J. Rice County.

The platform for your cows is undoubtedly several inches too long, as from four and one-half feet to five feet from manger to gutter is the length usually adopted. It will depend entirely upon the length of the cow, however. It is somewhat difficult, where cows of different sizes and lengths are accommodated in the same stable, to have the platform exactly the right length for all. It would be well to have the gutter run in such a way that the platform varies in length, growing wider at one end. In this way different lengths of cows can be accommodated, which is very essential if they are to be kept clean. Personally I do not believe in the stanchion at all. To my mind it is too much like an instrument of torture.

The most comfortable stall which can be used for cows is one in which they are not tied or confined at all by the head, having gates at the sides and a chain across the rear. These stalls can be purchased ready to set up but are rather expensive. It is always best to have some sort of a division between the cows as serious injury to teats and udder are very often caused by cows stepping on each other.

The gutter behind the cows should be at least eighteen inches wide and the depth next to the cow five or six inches with four inches on the other side. The walk behind should be lower than the platform.

G. C. WHEELER.
Kansas Experiment Station.

Experimenting With Dairy Cows.

Excerpts from Bulletin No. 125, Kansas Experiment Station, by D. H. Otis.

(Continued.)

Pasturing Green Alfalfa.—During the last two years the Kansas Experiment Station has been experimenting to see what can be done in the way of pasturing alfalfa. This work has covered both fall and spring seasons.

On September 26, 1901, nineteen common cows were given all the alfalfa hay they would eat, and in the afternoon pastured on alfalfa, which was in a fine, succulent condition, as a result of the September rains. They were watched carefully and left in from an hour to an hour and a half. No bad results followed. The next morning they were again fed all the alfalfa hay they would eat, but, after having had a taste of the green alfalfa they seemed to care very little for the hay. They were turned on alfalfa pasture at 7.20 a. m. and taken out at 8.35 a. m. No sign of bloat was apparent. They were left in the dry lot with access to alfalfa hay. At 1.20 p. m. one of the smaller cows bloated. To give the matter a thorough test, the remainder of the herd was again turned on alfalfa pasture and remained there about fifty minutes, when one of the cows showed signs of bloating, gas forming so rapidly that it was necessary to use the trocar and canula. The paunch was so full of food that very little gas could be removed with the

canula. Four other cows were also bloated. Three were relieved by a gag, and one was finally relieved by the trocar and canula, although complete relief did not occur until about 7.30 p. m.

Soon after this experiment the college was presented with some sample "alfalfa bits," with the request that we make a thorough test of them. These bits consist of a small tube about three-eighths of an inch in diameter, the bore being about one-fourth inch in diameter. The center of this bit is perforated with holes a little over one-eighth inch in diameter, connecting with the bore running lengthwise of the bit. These holes are six in number and about one-half inch apart. It is claimed that these bits will prevent cows from bloating while on alfalfa. The gas formed is supposed to go to the mouth, enter the bore of the bit through the perforations, and escape from the bit on either side of the mouth. Since the bits were recommended by some of our most successful stock-breeders of the State, we thought we should give them a test.

The 1st of November we took ten calves, averaging about six months of age, and put them on alfalfa pasture, five with bits and five without bits. These calves became accustomed to the alfalfa gradually, the time being increased fifteen minutes per day until they got all they would eat. This experiment was continued through the month of November, and we did not have a single case of bloat, with or without the bits.

We continued the experiment with the bits during the months of May and June, 1902, using cows instead of calves. Three cows were provided with bits and one without. These cows were first allowed to eat all the tame-grass pasture they could handle, after which they were turned on alfalfa for fifteen minutes. The next day they were given the same treatment, with the exception of increasing the time on alfalfa to thirty minutes; the third day they were on for one and one-half hours; the fourth, three hours; then all day, and a little later were allowed on day and night. No case of bloat appeared for over a week. At this time the alfalfa was cut, and soon after the cows were eating second growth. One morning soon after this the cow without the bit bloated immediately after being watered; she was relieved of the gas by a gag, after which an alfalfa bit was placed in her mouth, and she was allowed to return to alfalfa pasture. For a couple of days all went well, after which she bloated up six different times, and the last time had to be punctured. One of the other cows bloated three times and another four times. One of the cows went through the experiment without bloating at all. About the middle of June a fifth cow was added to the experiment, with a bit. In less than ten days she had bloated twice.

Our experience indicates that it is unsafe to pasture alfalfa with cows, although some farmers have done it successfully, and we have done it successfully with some individual animals. If a man wants to run the risk of pasturing alfalfa, we believe the bits are a help, in that they prevent the cows from eating the alfalfa as fast as they would without them. The bits might have some influence as a gag, although they appear to be rather small for this purpose and have a tendency to make the cow's mouth sore. Our experience indicates that the openings into the bore of the bit are of no particular value, as they are soon stopped up with the green alfalfa. The straight bits seem to be better than the curved ones, as they are more easily cleaned.

The cows did well while on alfalfa, they increased in the milk flow, and not only did not need grain but would practically refuse to eat it; but they required so much watching, especially with the second growth of alfalfa, that we considered it too risky to keep them on it longer.

(To be continued.)

A good many people know this town because every Lake Shore passenger train stops there to change engines. Even the famous 20th Century Limited which does not enter the large city of Buffalo, N. Y.,

and passes through a great many other large places without stopping, halts for a few moment's rest at Elkhart. But many thousands more know Elkhart because it is the home of the famous Elkhart Buggies, and thousands upon thousands of these sterling vehicles are in daily use all over the country and abroad. For thirty-two years the Elkhart Company has been selling their product direct from the factory to the consumer. Their Catalog is most complete, showing over 200 styles of Vehicles and 65 styles of Harness. It is gladly sent free to any reader of this paper who will write for it. Address Elkhart Carriage and Harness Mfg. Co., Elkhart, Ind.

Protection of an American product by the English courts against infringement by Englishmen is accorded only upon absolute proof that the product is genuine and deserves such protection. The recent perpetual injunction issued in Justice Buckley's Court, London, England, against a company which offered for sale an imitation of the celebrated Magic Foot Drafts, the great Michigan external cure for Rheumatism, which is now sold all over the world, is the only case of its kind on record, and demonstrates the absolute fairness and impartiality of the English law. The demand for Magic Foot Drafts in England became so great that an attempt was made to imitate this great discovery, but the result was only a spurious counterfeit, for the peculiar virtue of the genuine rests in a secret formula which has not yet been successfully duplicated either in this country or abroad, in spite of the numerous attempts. This imitation was suppressed in Great Britain by Justice Buckley, thus protecting the people against fraudulent imitations likely to be injurious. Magic Foot Drafts (the genuine) are made only in Jackson, Michigan, and London, England, by the Magic Foot Draft Co., and are sent free on approval—that is, you don't pay a cent until satisfied—then you send a dollar. If not satisfied you pay nothing. It is needless to say that the makers could not follow this plan if the Drafts didn't cure.

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U S U S U S U S U S U

Grange Department

"For the good of our order,
our country, and mankind."

Conducted by E. W. Westgate, Manhattan, to whom all correspondence for this department should be addressed. Papers from Kansas Granges are especially solicited.
The Kansas Farmer is the official paper of the Kansas State Grange.

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Communications from other granges are cordially solicited.

Oak Grange has come into line and energetically taken hold of a subject which promises to interest every farmer: The Parcels Post. Who next? Will not the granges of this county report if any action has been taken on the topics suggested by the National Lecturer.

Patrons, have you read the Declaration of Purposes? Obtain a copy of the National Grange Bulletin and notice the statement in conclusion which surely is not the least in the Declaration. Impress this statement on your neighbor when requesting him to become a member of the order. A statement no other organization makes.

"Why should we join the grange?" 1. Because it has exerted the greatest influence known in breaking up the isolation of farm life, and in making farm life attractive to the boys and girls, bringing sunshine and happiness into the farm home to such an extent as never before existed.—Grange Bulletin.

Are there other reasons?

A cordial and encouraging letter is at hand from the lecturer of Pomona Grange, a short extract from which is appended for the benefit of subordinate granges:

"It is my desire to have the lecture work in our subordinate granges systematized and unified; to have them adopt the plan laid out by the National lecturers; to have the action taken by the subordinate granges on the subjects assigned by him and on other matters of common interest reported to me to be tabulated and read before the county grange. The good things done should be published. We shall be judged by what we do, not by what we profess. When the grange gets to doing things and the right things it may take the country."

A Brother at the Pomona grange became very earnest and reiterated the statement, "We must organize." Are we not organized—fully organized? Rather should we say, and emphatically, "Let us work!"

The National Lecturer, wisely deciding that granges should become more interested in questions of legislation, has suggested topics of interest to be discussed in subordinate granges.

TOPIC FOR FEBRUARY.

What State legislation is of the most importance to farmers and what can we do to promote it?

A question difficult to determine as opinions would be so diverse that a definite selection could not be made. Each one would judge of the importance of this or that measure from his or her standpoint. The lecturer can here use discretion and by systematizing the work secure beneficial results. Announce one suggested topic, discuss it thoroughly, presenting its merits and demerits so

plainly that no one need err therein, thus creating a sentiment in favor of the measure strong enough to enlist public workers in its behalf.

It is necessary if success is achieved to be united in purpose. Will it not be an inspiration to know that wherever there is a grange there a measure of common interest is being considered?

New Granges Organized and Reorganized.

The following are the new granges organized and granges reorganized from October 1, 1904, to December 31, 1904, both inclusive:

Organized.—Kansas, 1; Maine, 4; Massachusetts, 4; Maryland, 1; Michigan, 19; New York, 2; Ohio, 4; Oregon, 2; Pennsylvania, 7; South Carolina, 1; Vermont, 5; Washington, 2; total, 52.

Reorganized.—Iowa, 1; Kansas, 2; Kentucky, 1; Maine, 1; Maryland, 1; Michigan, 1; New Jersey, 1; Pennsylvania, 4; South Carolina, 2; West Virginia, 10; total 24.

A Pomona Grange in Shawnee County.

The first meeting of the Shawnee Pomona Grange was held in Lincoln Post Hall, January 14, at which time the officers for the ensuing year were installed by E. W. Westgate, master of the Kansas State Grange.

The day was cold and stormy and those who attended were certainly enthusiastic in the cause. There were members present from all of the subordinate granges in the county except one. The beautiful and impressive installation ceremony as rendered by the State master was a delight to all those present.

Miss Owens recited, "An Original Bear Story." Miss Sims gave a vocal solo, accompanying herself on the piano. Miss Dressel rendered a choice selection on the piano. Miss Dauber recited that patriotic selection, "The Story of Our Flag." Miss Mabel Waters related a very interesting account of the Civil War, in which the line "Cover my defenseless head with the shadow of Thy wing" of that good old hymn, sung by a sentinel, had actually saved his life as was proven in after years by the parties interested.

State Master Westgate gave a brief report of the last State Grange, of the work planned for the subordinate granges, committees appointed, etc.; also of the arrangements made by which the KANSAS FARMER becomes the official organ of the Kansas State Grange. The lecturer of each subordinate grange is expected to report progress and other items of general interest to the movement and in return is to receive a copy of the paper for the benefit of the grange.

Continuing, the master spoke of the National Grange and its work. Kansas is just up to the average; our chance is good to go forward with the grand work and he believed that we would advance rapidly as we now have a State organizer in the field for eight months. The Eastern States are ahead of us in this grand cause. New Hampshire has over one hundred grangers in the Legislature. Vermont's Governor is a granger. New York is very prominent in the work and could have named the Assistant Secretary of Agriculture. The Worthy Master closed by saying that our Pomona Grange would be a good movement in this county and would help the order to expand.

Dr. Taylor was then introduced and gave a most interesting talk on germs and how they work in the human body and in a brief and simple way explained toxin and anti-toxin, the working of that wonderful means of combating disease, so all could understand.

J. S. Longshore told why he was a granger and said that we as grangers had a wonderful mission to perform. He said that our aim is to build up the American home, and to do this we as farmers must organize—that organization must be our watchword and battle cry.

H. H. Wallace told of what we had achieved in the way of insurance.

A committee of four was appointed

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to look after legislation for the benefit of good roads. The committee is J. S. Longshore, A. E. Dickinson, J. M. Pollom and W. H. Coultis.

It was decided that the Pomona Grange shall meet the first Saturday in March, June, September and December. The place of meeting was left to the executive committee.

On account of the short session, much business was crowded out and will be attended to by the executive committee.

Adjourned to meet March 4.

O. F. WHITNEY, Secretary.

I. D. Hibner's Fifteenth Annual Report.

I beg leave to submit the following report for the year ending December 31, 1904:

Total risk, Dec. 31, 1904.....	\$3,275,105.00
Net gain during 1904.....	608,700.00
No. of policies written 1904.....	668
Excess over 1903.....	79
No. of policies in force, Dec. 31, 1904.....	2205
Net gain in policies during 1904.....	324
Total membership, Dec. 31, 1904.....	1589
Net gain in members during 1904.....	248
Cash in treasury, Jan. 1, 1904.....	2,825.74
Total receipts during 1904.....	5,719.13
Total.....	8,544.87
Paid on losses during 1904.....	3,212.62
Paid on all other expenses during 1904.....	1,024.48
Balance in treasury Dec. 31, 1904.....	4,307.77
Total.....	5,544.87
Premiums uncollected Dec. 31, 1904.....	35.99
Office furniture and fixtures.....	185.00
Total resources, Dec. 31, 1904.....	4,528.76
Liabilities.....	none
Cost on each \$1,000 for 1904.....	1.43
No. of losses paid since our organization.....	232
No. of losses 1904.....	32

ITEMIZED EXPENSE ACCOUNT.

Paid on losses.....	3,212.62
Paid secretary and for clerical help.....	579.00
Paid for stamps, box rent, etc.....	60.03
Paid for telephone, room rent and light.....	58.52
Paid for blanks and printing.....	46.75
Paid unearned premium returned.....	127.25
Paid for adjusting losses.....	13.50
Paid president for signing policies.....	6.00
Paid for transportation and moving safe.....	16.10
Paid for office furniture and fixtures.....	35.58
Paid for auditor and board fees.....	42.00
Paid treasurer.....	28.00
Miscellaneous.....	11.75
Total.....	\$4,237.10

It would be perhaps as well for me to send out to our people the foregoing figures and facts without farther comment, as far as any real good will be accomplished, for our members are farmers with all the cares and responsibilities of their homes and farms upon their minds and it is natural for them to say "Well, we elect officers to attend to our insurance and their duty is to take care of it for I do not have time to study its intricacies and will trust it all to them." This disposition is just what we must overcome for it is useless for us to hope to permanently establish cooperative insurance or cooperative anything, unless each member makes himself sufficiently familiar with the business to cast an intelligent vote and in controversies lend an intelligent thought, whenever propositions are before the company that must be settled and molded into its business policies.

When the time comes that the officers feel that they are the whole thing with no other power to interfere; with no public eye to watch, check, or control them, then there is danger. Patrons, we are handling lots

of money and it is your money and you should certainly be interested in the supervision of the work. We are making a world record in insurance, but you fostered it into life and should be deeply interesting in shaping its destiny.

The dream of all the later years of my life has been to see the Grange of Kansas establish an ideal cooperative insurance company, and my dream has been realized and I know that it is possible to indefinitely continue this good work if the patrons will see that it is ever conducted with economy and along the lines of safe business principles.

Last year the people of Kansas paid to old-line companies \$156,904,974 in premiums and got back in losses \$77,043,545. Where is the other 79 millions and why did our people give it away? Our company would have saved at least 45 millions of this money to the people and yet have paid every loss as fully and promptly as they have done. Do not let us make millionaires in this way and then howl at them, for we are to blame and not they.

It is easy for our people to get the insurance report from the State Department and see that they paid out \$156 for every \$77 they got back while the only service rendered was for them to receive the money and pay it back to those that suffered loss. Of course there must be some expense in carrying out all the details of insurance work but there is no excuse for charging as much or more than you get back for simply receiving and paying it back on loss account. It is true that the old-line companies, in their fierce competition for business are like great contending armies, and are forced to have expensive generals and councils and splendid office quarters and a multitude of agents and well-paid solicitors, and all this cost the insured must pay and dividends to the stockholders in addition. They therefore never can compete with us, never can reach our economies, and therefore never can reach our low premium rates.

I want all of our people to know this, and to know that there is no danger of our company ever costing them as much as speculative companies.

The Grange company is now in its sixteenth year, and while it has paid 232 losses yet it has cast but four assessments, and every liability is paid; no debts hanging over it, and money in our treasury to meet other losses that must and will come, for this is our purpose and the cause of our organization, to collect premiums and equitably pay them out in losses.

For six years we have run our entire expenses at less than the average farm loss rate of Kansas. Of course this can not always last, since our premium averages only \$5.45 on \$1,000 for each five years, and we must not hope to get through our business life at such a figure; other assessments will come and when they do, surely our people will meet them without complaint, for they will not come until the money is actually needed, until the last cent in our treasury is gone and after this long run of exceedingly low rates I am satisfied our members will pay an assessment that will give us a little surplus again.

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THE INTERNATIONAL SUNDAY-SCHOOL LESSON.

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First Quarter—Lesson VI—John 4:5-14.
February 5, 1905.

Jesus at Jacob's Well.

Jesus was transferring the scene of his ministry from Judea to Galilee; but while in transit, he quietly placed the leaven of His gospel in the very heart of populous Samaria. He had spent eight months of the first year of His public life in and around Jerusalem, but the approach of winter, and that worse winter of pharisaical hostility, bade Him find a more congenial locality. He ignored the prejudice of the Jews, and gave His disciples an object-lesson by going through Samaria. . . . After four days' journey, at midday, Jesus, wearied, sat thus upon the well. "Thus," not upon a throne, or chair, or cushion," but as a wayfaring man would, upon the ground, his side against the stone parapet of the well. His arm upon its top, and His head supported by His hand. See in this the reality of our Savior's human nature!

A woman approaches. She comes, perhaps, at this unusual hour because her character made it impossible for her to come at the seasons when the pure maids and matrons of Sychar visited the well. She lowers her large earthen vessel by the cord which she has brought for the purpose, a hundred feet to the cool, crystal water. Just as she lifts the dripping jar to her head the dusty Traveler asks a drink. Jesus put Himself under obligation to her at the very start by His request. He took her good will for granted. A compliment was implied. "We despise not him whose service we ask." . . . What magic in kindness! This obtuse and sinful woman, used only to epithet and blow—gentle politeness transmutes her into a docile pupil. She recognizes the nationality of the Stranger. Countenance, accent, and garb betray Him. A Jew—but where is the racial prejudice? She vaguely recognizes the moral superiority of the person before her, and is prepared for the step in advance, to which Jesus leads her in His next remark. . . . Poetry is, in large measure, the association of superior ideas with common objects. If that be so, Jesus was an ideal poet. He takes the commonest of objects, water, and the commonest of experiences, the quenching of thirst with this natural fluid, to portray the most uncommon experience of the human soul. The woman sees the enigma. She is set a-wondering; and that, for her, was a great gain; for "wonder provokes progress." . . . While she still loosely holds to the literal, and talks of the depth of the well and the lack of the drawing appliances, she yet skirts the edge of the Savior's spiritual meaning, and knows in her heart that He who talks with her is greater than the patriarch (whom she claimed as a progenitor) who bestowed upon his descendants the great boon of this excellent well.

Jesus lets in a new ray of light upon a mind from which the mists have already begun to lift when He contrasts nature's water with the living water. Water for only the briefest possible period slakes thirst. The path to the fountain is well trodden, but the gift of God is the transplanting of a perennial fountain into the very soul—a fountain whose tall jet penetrates even to the immortal life above. . . . The poor Samaritan heretic and outcast is enamored of this "gift" so wondrously described. She asks for it, but in terms which reveal the fact that the husks of literalism have not all been stripped off. The heaviest duty of her life is this frequent two-mile journey from city to well and back; the laborious drawing with the crudest possible appliances; the carrying of the heavy jar upon the head. If the gift of God will set her free from all this toil, and yet keep her from thirst, of course she wants it. At the same time she has a dawning consciousness that the gift means more than this. . . . Like a skillful surgeon, kind but firm, Jesus inserts the gleaming lancet of His ques-

tion. The hideous incidents of an adulterous career are laid bare in a moment. The woman is in the presence of Omniscience. The exact and minute details of her unsavory life are noted. Yet such mercy and gentleness is irresistible. The thing is done, not in such a manner as to make her cry, "Hast thou found me out, O mine enemy?" but rather, "Sir, I perceive Thou art a Prophet." . . . A seared conscience is softened, confession is made, and tears of penitence flow. She rises now easily to the spiritual plane of the Savior's teaching. She knows that the water of which He spoke is for the washing of regeneration—the gift is a new heart to which the Spirit bears witness. In the joy of her new life she propounds a practical question to the Divine Teacher, whom it was her happy fortune to meet that day. Where shall she worship the Infinite One, whose ineffable gift she had just received? On Gerizim—to which she pointed as she spoke—according to her hereditary instruction, or in Jerusalem, from which He had just come? In answer to this question, Jesus unfolds that basal principle of Christianity, that all the earth is holy, and no one spot more holy than another; that the item of topography in religion is henceforth erased; and, further, that henceforth, to a Spirit-God spirit-sacrifices only shall be made. (Heb. ix, 14; Rom. xii, 1.) . . . The woman, her clouded mind now thoroughly illumined, looked up, and adoringly exclaimed, "Your teaching is just like that which we might expect from the Messiah Himself!" The Savior accepts her loving challenge; and in despised Samaria, and to a woman till late degraded, He made His first categorical declaration of Messiahship.

The Teacher's Lantern.

The Samaritan woman may well represent that class who probably would never come to Jesus of their own accord, as Nicodemus stands for the seeking and inquiring class. Some seem thoroughly unspiritual; they have eyes and ears, but never use them in religious matters. They are likely to die in the treadmill of the daily tasks which concern what we shall eat and drink and wear. How to get them above the rut, so that they may see the new heaven and the new earth—that is the problem. They will not come to us. We must go to them. We must make an opportunity to speak to them of religion. . . . Two classes, but one gospel for both! Not one gospel for Nicodemus and another for the Samaritan woman. Jesus gives the same testimony to the ignorant schismatic and sinner as to the sanctified Pharisee. The terminus is the same, but the approaches are necessarily different. . . . However, it is an open question whether this latter scene does not portray the ideal method of soul-saving. See how Jesus takes the commonest incident and makes it a starting-point; how He leads on gently by carefully framed questions and statements. He does not grow impatient with inveterate obtuseness. He is not diverted from the end in view by desultory questions. He is gentility itself, but allowed of no evasion. He helps the woman first to see herself, then to see Him—herself a sinner, Himself a Savior. . . . En route Jesus would pass by Gibbon, and would be reminded of Saul, Bethel and would think of Jacob and his angel-crowded ladder, and Shiloh, the resting-place of the tabernacle. The general appearance of the country surrounding Sychar is unchanged since Jesus' day. The wheatfields of the rich plain of Elmuksnah, to which the Master pointed His disciples, still look like billowy seas whose waves seem to break on the base of twin mountains. . . . What associations are here! On Gerizim Melchizedek officiated as priest of the Most High God. There Abraham reared his first altar. There stood six of the tribes reciting the blessings, while on opposite Ebal the other six responded with the curses of the law. Just beneath is that parcel of ground which

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Jacob, on his return from exile, purchased for a hundred pieces of silver, and which he bequeathed to Joseph. There Joseph's mummied

form was finally interred. But all these associations are eclipsed by that pictorial scene which the evangelist has delineated with infinitesimal skill.

The Young Folks

CONDUCTED BY RUTH COWGILL.

Three Old Saws.

If the world seems cold to you,
Kindle fires to warm it!
Let their comfort hide from view
Winters that deform it.
Hearts as frozen as your own
To that radiance gather;
You will soon forget the moan
"Ah! the cheerless weather!"

If the world's a wilderness,
Go build houses in it!
Will it help your loneliness
On the winds to din it?
Raise a hut, however slight;
Weeds and brambles smother;
And to roof and meal invite
Some forlorn brother.

If the world's a vale of tears,
Smile till rainbows span it!
Breathe the love that life endears,
Clear from clouds to fan it.
Of your gladness lend a gleam
Unto souls that shiver;
Show them how dark Sorrow's stream
Blends with Hope's bright river!

—Lucy Larcom.

A Girl's Own Room.

Dear Dorothy:—I am just sending you to-day by express a copy of the Sistine madonna. I saw this beautiful little copy in a shop-window, and I wanted it for you, so forthwith I bought it, and sent it at once. I want you to hang it on the wall opposite the head of your bed, so that you can see it when you first open your eyes in the morning. Perhaps it will help to start the day aright. The things that we see influence us far more profoundly than we realize.

And this reminds me of something I want to talk to you about. You do not seem to feel any pride or even interest in your room. My room has always been the dearest spot on earth to me. One's room is the one intimate personal place, that witnesses one's tears and one's struggles and all the feelings and thoughts one does not show to all the world.

You probably feel because you share your room with the two little girls that it has not the charm of being your very own, and for that reason you take no pains to make it attractive. You consider it simply a place in which to pass the hours of sleep, and to store your clothing.

Now, the fact of the little girls being there with you, ought really to make no difference in your feeling about it. They are healthy little animals who sleep while they are about it, and do not bother their curly heads about anything further—though if Dorothy makes the room look pretty, they will doubtless admire it, and perhaps, as the years glide along, as they do so swiftly, the cozy place may become to them, also, in some bitter days a place of refuge. And perhaps the thought of the older sister who, then, doubtless, will have passed out to a home of her own, perhaps the thought of her, who was sweet and strong, may linger in the room and bless it.

But this is beyond what I was going to say. It is of your room, not Bess's, or Anna's, that I wanted to talk.

Do you think the room is hopeless, because of its bare, brown-plastered walls, or because of its dark, uncarpeted floor, and because you can not spare the money to change it? Do you know that those rough brown walls are really esthetic? Some new houses that I have entered are finished in just this way. I do not deny that they are smoother and more carefully done, and some of them are tinted, but your brown walls are not at all bad—not nearly so bad as some that I have seen covered with hideous figured paper. That plain, soft gray-brown will make a beautiful background for pictures. As for your floor—suppose it is bare and rough and ugly. Put some pieces of bright-colored carpet on it for rugs, and be happy that it has at least that first requisite of good taste, simplicity. Take out all those ugly boxes and cluttered-up things and have a chair or two, and a footstool, and have your bed and

the little shelf in front of your mirror dressed in white, and take care to keep the whole thing clean; and your room will be sweet and dainty and inviting. I have often read fascinating articles on this subject of furnishing a room, in which the reader was given minute instructions how to make elegant and useful furniture out of old boxes and cheap draperies. I have even tried some of the plausible-sounding schemes—in fact, I am so gullible that I almost always at least want to try them. But my advice to you will be, beware. My experience has been that before I was through my materials cost a very pretty sum, and the "furniture" I had contrived was distinctly "wobbly" and uncertain of its equilibrium. If you have any money to spend for draperies, spend it on dainty white curtains for your windows. I saw a girl's room once which had a wall decoration which was unique and very charming, also. Around the room where a border usually comes, this ingenious girl had pasted a strip of plain gray wall paper. Then upon this, here and there, she had pasted pictures that were pretty or graceful or quaint, which had been cut out from magazines and papers. You know there are so many odd and interesting and pretty pictures in the advertisements, that it is easy to find enough for anything of this sort.

Your room is cold as Greenland, I know, and in this weather you can not spend much time in it. But it will be a pleasure to you to know that it is an attractive place, and to look about at its charming plainness. And when the warmer weather comes, you will find great pleasure in it. Its simplicity will seem like peace to you and will rest you. And if you can, in the long years, collect a few really good pictures for your walls, you will find your room growing beautiful in your eyes, and your life growing happier for it.

Trusting that I shall receive one of your good letters soon, I am

Your loving aunt,

DOROTHY DEAN.

Lights and Shades on the Plains.— The Hall-Storm.

BY ELSIE S. TAYLOR.

It was four o'clock of a sultry July day. Not a breath of wind was stirring. The leaves of the cottonwood trees around Mr. Bushman's little home hung motionless. There had been a heavy rain and the vapor from the damp ground filled the air.

Mr. Bushman came into the house and called, "Ma!" A voice answered from another room and the door opened admitting a plump, bustling old lady.

"Say," her husband said slowly, peering out of the window, "I believe it's goin' to storm and we'd better get the chickens in. See that cloud in the northwest? You'll not see much blue sky in half an hour."

"I will in a little while. I'm busy now. I don't believe it'll storm so soon. They won't go in till it begins to rain, anyhow."

"Well, don't wait too long and get soaking wet. I'll go and take that canvas off the binder. I'll be right back."

Mr. Bushman was very tall and he was obliged to bend his gray head a little as he went out of the door. He paused a moment outside looking at the clouds.

He was of admirable figure save that he was slightly stooped. The expression in his strong, kind face spoke of a life of right living and of charity and harmony with the world. His wife, as she turned again to her work, showed in the brief glimpse of her face the same steadfast character, softened by a heart of motherly love. It is seldom that we meet such people in life's pathway. Their presence is soothing and warm and lightsome like the sunshine. The blessing of real contentment is rare in all the stress and tension of our progressive day.

But over in the northwest the little pale-blue cloud was silently but swiftly widening and spreading over the western sky. It was getting blacker.

It had ragged edges that reached out over the sky.

In the northeast was a mass of feathery white clouds piled billow upon billow. A broad glare of lightning trembled over them a second. It was answered by a defiant snake-like flash darting across the black cloud. The white cloud answered again. Then the black cloud rose in awful majesty. His anger was thrilling. It hushed the world below him. With a prolonged roll of thunder he swept across the sky, covering it with his numberless legions and annihilating the white cloud by absorbing it into his own dark depths. Loud he vaunted in many a roll of thunder and hissed in lightning glare. Lord of the sky he looked for "other worlds to conquer." It was just at this time that Mrs. Bushman was calling her flock to the door of the henhouse and trying by all the arts she knew to persuade them to enter. A very cool wind had risen. In fact, whereas it had been unbearably hot five minutes ago it was now hardly warm enough for comfort.

Mr. Bushman came hurrying up the path. "Look at that green cloud! Hall, sure this time!"

Most of the chickens, after due deliberation had decided to go in and Mrs. Bushman propped the door shut and opened the little slide door near the ground for the accommodation of repentant stragglers. It had begun to rain a little in gusts. Then it came in sheets and the ground was soon covered with water. Mr. Bushman and his wife fled to the house. Just as they reached the shelter the wind stopped. A few large hailstones fell. Then more and more. The wind rose in a gust. Such a pelting and again into a angry roar on roofs and beating and drumming. Crashing of windows and scurrying of rabbits and fluttering of frightened birds! Every moment the hail came thicker and faster and harder. For half an hour the black cloud shelled his defenseless opponent. Then the wind abated and the rain stopped. A few scattering hailstones fell with a splash into the puddles. The clouds parted and the sun shone out. His ammunition exhausted, the black cloud retreated into the east. The sky was very blue, the grass very green, and the sun very bright, but alas, the destruction in the fields!

Mr. and Mrs. Bushman came out, picking their way carefully along past puddles and little streams of water. In many places the ground was white with hailstones.

"My, my!" exclaimed Mrs. Bushman, when they came to the garden. "There's nothing left. Everything looks like it had been chewed up! There's nothing but little stumps in the cabbage-rows! Why, where are the squash vines? I believe they're pounded into the ground!"

Taking a stick she prodded about and soon brought up a battered stalk. "There's nothing left!" she said, mournfully, after taking a long look at the ruined garden, "and it was the best garden we'd had in years."

"Maybe some of it'll come on again, ma," Mr. Bushman said, gently. "I suppose that nice sweet corn is gone too." Then turned and went on to the potato patch and the sweet corn. Every vestige of vegetable life was gone except a few corn-stalks.

"The potatoes are grown, anyway," said Mrs. Bushman. "That's one comfort. Let's go back. I haven't any heart to look any more." As they turned back they found several dead chickens, some almost featherless and pounded to a pulp. The cattle and horses had come in from the pasture and were standing at the gate. Suddenly Mr. Bushman stopped. "That little calf up in the draw!" he exclaimed. "I'll bet it's dead!" He hurried off and soon came back with the calf none the worse for his rough experience except the loss of considerable hair and hide from his back.

Many of the horses and cows had streams of blood trickling down their sides and noses and the cat came toiling up the path on three feet. She stopped to look for the can which she ate out of but it was beaten flat.

Half an hour later Mr. Bushman, re-

turning from a walk to the fields, brought the report that the wheat was ruined and the second crop of alfalfa lost, but the corn was uninjured though in an adjoining field.

The next day he took the milk to the creamery at the little town two miles distant and there he heard the news of the extent of the storm and the damage done.

"I heard this morning," said a neighbor who met Mr. Bushman in the post-office, "that Ed. Hurston's house had forty lights of glass knocked out and Sam Wilson went to the barn to shut the windows and couldn't get back. Had to stay there through the storm. The hail knocked out the window lights and the women had to hold up blankets to keep it from blowing the house out of the windows. And that big house of Thomkin's had part of the roof taken off, they say, but I can't hardly believe that. I guess it blew lots harder over there, though."

"Well, the funniest thing about this hail business," said a tall, red-haired man with crossed eyes, "is the way it skips around over the country. Now Eastman lost all his corn and his wheat ain't a quarter of a mile away and it wasn't touched. And I lost my wheat and my corn just across the road a piece wasn't hurt any hardly. Some fellers' crops weren't touched 'tall and them all round 'em was hailed clean out. I can't understand it."

"That's no saying it's a deep question," put in another lounge.

"Well, let's hear your opinion, Wisdom," said another.

"Well, sir, I believe it's something about the lay of the land."

"I don't," contended the red-haired man. "I believe it's something about the soil that attracts the electricity."

"Brothers," said the new minister from his corner, "I believe it is something about the lives of men that attracts the hail."

"I don't," piped up he of the catlocks. "It says it rains on the catlocks and the unjust and I don't see why the hail business shouldn't be run in the same way."

"I suppose you think if Providence had any choice it showed poor judgment, seein' as it give you a swipe," added the one addressed as "Wisdom."

"Well," said the postmaster, "I'll be switched if I know why it is or have any idea, but I do know it was the worst hailstorm we've had in years."

Mr. Bushman lingered long gathering more news with each newcomer until he had a report from all parts of the hail-belt.

When he started for home he bought some seeds of late turnips and beans. He spent some time when he reached home telling his wife what he had heard and ended by saying, "We're no worse off'n other folks and not so bad as some; an' we've got the cattle left. The wheat's gone. You wouldn't believe it; it looks as though it had been headed—not a head to be seen. I never saw such a storm in all my days. They say the hailstones was a big as a duck's egg in some places. I met Mrs. Leston in town and she said she and her sister were coming over tomorrow."

The next day as the three women were walking around outdoors looking at the ruins of garden and field, the sister of Mrs. Leston, who had but lately come from Vermont, said earnestly, "I don't see how you can have the heart to go right to work again. I should feel like giving right up."

"Well, we must, you see," Mrs. Bushman replied, "and then we could be worse off."

Such is the philosophy of the plains. Though the West is not an ideal farming country in many ways, it is a splendid country for the formation of character. Though the wheat crop often fails and the chinch-bugs take the corn and the drouth comes and the hail and the fire, still it is a grand country to raise hope and patience and industry, and to develop and perfect that grandest of all the world's products—the American citizen.

God always gives us light in our doubts when we have no other design but to please Him.—Brother Lawrence.

The Home Circle

CONDUCTED BY RUTH COWGILL.

Slipping Away.

They are slipping away—these sweet, swift years,
Like a leaf on the current cast;
With never a break in their rapid flow,
We watch them as one by one they go
Into the beautiful past.

As silent and swift as the weaver's thread,
Or an arrow's flying gleam,
As soft as the languorous breezes hid,
That lift the willow's golden lid,
And ripple the glassy stream.

As light as the breath of the thistle down,
As fond as lover's dream,
As pure as the flush of the sea-shell's throat,
As sweet as the wood-bird's wooing note,
So tender and sweet they seem.

One after another we see them pass
Down the dim-lighted stair;
We hear the sound of their steady tread
In the steps of centuries long since dead,
As beautiful and as fair.

There are only a few years left to live,
Shall we waste them in idle strife?
Shall we trample under our ruthless feet
Those beautiful blossoms, fair and sweet,
By the dusty ways of life?

There are only a few swift years—ah, let
No envious taunts be heard;
Make life's fair pattern of rare design,
And fill up the measure with love's sweet wine,
But never an angry word.

—Anon.

A Plea for Home and Love.

FLORENCE SHAW KELLOGG.

"I do not know whether my husband loves me or not; he has forgotten to tell me since we were married." Pitiful words were these as they fell from the wife's lips, and their truthfulness, not only in one case, but in many, adds infinite sadness and pathos to them.

The young man is full of ardor in his courtship, eager to express his love in all possible ways; devoted to the slightest wish of his "dear girl," overcoming any and all obstacles that they may be fulfilled; feeling every shade of sorrow or weariness that comes to her; full of tender regret and sympathy in all her disappointments; doing his best to literally bear all her burdens and make life a flowery way before her; a path from which his love shall remove every "stone of stumbling," every pitfall, all that would affright or weary her. He bids her lean on him and let him bear all for her, do all for her. He is ever ready to come at her call, and go at her bidding. He lavishes every endearment upon her. He almost wears her with his devotion, his caresses, and nothing is too difficult for him to attempt for her, nothing that he will not give up for her dear sake, so only that she reward him with an approving word or a kiss. Her image is ever before him, a fair ideal beck-

oning him on and on to all the heights of aspiration and endeavor. Thoughts of her mingle in his waking and his sleeping dreams alike, and he feels nothing is impossible to him, nothing that he may not dare and do, with her by his side. Success seems assured; failure is a cloud that may darken another life but can never come to him.

The wedding day passes as in a dream. He can not realize the depth of his joy and blessing that such a being should entrust her life and love, her all, to him! With pitying compassion he looks down upon his bachelor friends and wonders how it could be that they did not each one want the fair one who stands so proudly by his side, his very own forever! The future gleams before him as a long, golden vista down which they shall walk side by side, hand in hand, with naught but love everywhere. The four shorts weeks of the "honeymoon" are quickly fled. If something of the glamor of the wedding day be dimmed it is so little that he scarcely knows it, and it is with real joy that they "settle down" in the new home, where

"For two alone, there in the hall,
Is spread the table, round and small;
Upon the polished silver shine
The evening lamps; but, more divine,
The light of love shines over all;
Of love that says not thine and mine,
But ours, for ours is mine and thine.
They want no guests, to come between
Their tender glances like a screen,
And tell them tales of land and sea,
And whatsoever may betide
The great, forgotten world outside;
They want no guests. They needs
Must be
Each other's own best company."

And still the sweet dream goes on, but little by little, so imperceptibly that its beginning is scarce noticed, a change comes and the sensitive ear perceives the

"Little rift within the lute,
That by and by, shall make its music mute."

With the passing years the table, once so large, becomes crowded with boys and girls who demand time and attention from both father and mother, and they grow more and more busy, more and more absorbed in the cares and trials of work-a-day life. This is unavoidable; and yet why need love be relegated to the background so wholly? Why need the beautiful dreams be banished and forgotten? Why must the lover be so lost in the husband? Why are the wife's thoughts and wishes, her wants and aspirations, less dear to him now than the "dear girl's" used to be? Why does he not still talk to her of love and whisper to her ear alone the many little things that once made her heart leap and sing all the day long? The loving words, the caresses, were precious to the girl, but they are a thousand times more precious to the tolling, care-wearied wife. The little pre-nuptial attentions, the quick noticing of her desires, the eagerness to please her, all the devotion of the lover—ah! words can not tell how dear, how sweet they were! But now, now when the cares of life press hard upon her, when the multitude of her duties, the ever-increasing demands upon her time and strength, when "Care and sorrow and childbirth pain" have "Left their traces on heart and brain," and love, in a measure, dispelled the illusions and made her know the depth and reality of life; now when it seems to her she can never have a quiet moment to call her own again, and she is almost lost in the "maze of being;" when it is "mamma" here, and "mamma" there all day long—and often all night long—though she loves them all with such love as only a mother can know, yet she is but human and must grow tired; now when she hungers and thirsts for love's expression—ah, how much more it would all mean to her now than it did then! How she could work and not grow weary, how bravely she could go on through all discouragements and disappointments and know nothing but joy and gladness still if only her lover would return to her!

Given his parting kiss in the morning, the close pressure of his hand as it held hers for a moment at the door, one little whispered, "I love you, wife," and the beautiful rainbow of hope would span the darkened day. Her heart would sing amid its trials and

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life would be a sunlit way leading ever to holier joys and to more sacred depths of peace and blessing.

Surely it is not that her husband has ceased to love her; he can not have wholly forgotten the tender promises and the beautiful plans they made together in the days that seem so far away now, but, oh! why does he not tell her of it sometimes!

Only three short words—so soon and so easily spoken, but for lack of which she is starving, dying. The love is there but unexpressed, unspoken. It is not enough that he provides for her material wants—that she has food and clothes and all bodily comforts; her heart needs food also; she starves in the midst of plenty; and day by day, month by month, and year by year the horror grows; there is less and less to show his tender thought of her and so in time it comes to be that she can no longer believe in his love. She feels that he must be indifferent to all that once made them happiest and she, too, becomes hard and cold; the beloved wife, the glad mother is merged in the housekeeper, and the home once glorified and blessed by the full, free exchange of loving words and deeds (the small coin of life without which its best work must go undone) comes to be but a place in which to eat and sleep.

All the fair dreams are vanished. All the fond hopes gone, all the beautiful ideals, all the little attentions that told of love and watchful care—gone! Is it any wonder that life seems bleak and barren to such a couple? Any wonder that they become desperate and hard as it stretches away before them in dreary monotony and desolation? The wreck of a home! The shattering of noble ideals! The finding of

"How wearily the grind of toil goes on
When love is wanting, how the eye and ear
And heart are starved amid the plenty-tude
Of Nature, and how hard and colorless
Is life without an atmosphere!"

What is material shipwreck, what is loss of life and property compared to this! If love abide, if it be given full and free expression, and heart answers to heart, soul to soul, all else is but little. One can sing and be glad though the house be but a cot so only it be a place where love is crowned a royal king, and his scepter be wreathed with the fair flowers of tenderness and constancy. The wife and mother can bear anything, do anything so only her husband do not forget to tell her of his love and appreciation.

Do you say the picture is too dark? Dear God, that it were so! But there are places—I can not call them homes—in every neighborhood where its duplicate can be found; families everywhere where if love be there is no sign given and the atmosphere is cold and cheerless. The little children shiver yet know not why. Instinctively they feel that something is amiss but what it is they can not tell. Parents and children plod on in a weary round, and all the glory is gone from life. Love's sunshine is hidden behind the

dark clouds of indifference and carelessness, and the "dear, sweet habit of living together" is not there. Is it any wonder that the children reared in such places are disappointed and unenthusiastic, and easily led astray? What can they know of life's grandeur and beauty? What can they feel of its immensity and holiness and of the overreaching love everywhere?

I plead for the home. I plead for love—warm, tender, and true; love that never grows old; love that renews itself daily, and endures ever fresh and beautiful while life endures; love, the sweetest flower of an earthly Eden and the fairest among the immortelles; love that cherishes and protects, that takes note of all the little details of daily life and neglects no opportunity to make its presence known and felt.

"It is not just as we take it,
This mystical life of ours.
'Tis a field with a yield as we make it
A harvest of thorns or of flowers."

Oh, let it be of flowers, the beautiful, unfading flowers of love whose fruits are akin to the fruits of the spirit, full of peace and joy ineffable; making of the earthly home a fitting threshold to that home "not built with hands, eternal in the Heavens."

A Quilting and Husking Bee.

We have the following account of an evidently very enjoyable occasion in Harper County:

The combination quilting and husking bee which on account of bad weather was postponed from January 11, was held at the Sunny Home Farm, Friday, January 20. Owing to the short notice it was impossible to get word to all who were invited and we regret that some were denied the pleasure of the occasion.

To say that an enjoyable time was had is putting it very mildly. The rooms and tables were tastefully decorated, not with massive palms and beautiful roses, but with cornstalks, ear-corn and quilt-blocks, as being synonymous with the intent of the gathering.

Quilting and corn-husking being the order of business, each was taken up with a will and the fun and laughter which flowed as the work went on both in the house and field, would suggest that every one had come for a good time. A fine dinner, such as only the farm can produce, was served and partaken of with the relish of appetites, which only farm-work can manufacture.

The quilting prizes were awarded by judges selected by the ladies, viz., R. Weller, Chas. Wheeler and W. B. Ruse. The prize on Quilt No. 1 went to Mrs. Loyd Bland, and that on Quilt No. 2 went to Mrs. A. S. Shavely. We understand that a committee of ladies were appointed to wait on these judges with a basket of snowballs.

The contest in the field was decided as given below, the corn being picked up and measured in a standard one-bushel basket. The figures shown are for so many measures, and those

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tastes far better

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does you more good
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husking together are credited each with one-half the amount husked in competing for the prize. All fodder was tied in bundles as shucked.

D. W. Hoskins 22, P. C. Montgomery 26, Chas Wheeler and W. B. Ruse 63, C. Beal and A. S. Snively, 42, Robt. Weller 29, F. R. Wharburton 13, Wm. Taylor and A. Schrier 22, W. A. Schrier 16.

The weight of measure was 40 pounds of corn, total number of measures husked 233, or 9,320 pounds, making 133 bushels. The prize, one bushel of seed-corn went to Ruse and Wheeler.

He Went Back.

General Sherman was one of eleven children. When he was a small boy his father (the celebrated Judge Sherman) said something one day to hurt "Cumpy's" feelings. He uttered the usual small-boy's threat of running away, and accordingly retreated across to a neighbor's, declaring that he was going to be "Mr. King's little boy." He awaited developments, but instead of the stern parent, melted with tears of distress, to beseech him to return, a trunk of clothes arrived addressed to "Cumpy King," and a message from the Judge that he had enough children without him and hoped that Mr. King would like his new son.

There was nothing for it but to go home ignominiously, which Cumpy, for once out-generalled, did forthwith. But his father called him "Cumpy King" for several days, until the lesson was well learned.—February Lippincott's.

We shall be glad to hear from our readers on any of the subjects discussed on these pages, or on any other subject in which they are interested.

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

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Our Club Roll.

Mutual Improvement Club, Carbondale, Osage County (1895).
Give and Get Good Club, Berryton, Shawnee County (1902).
Woman's Literary Club, Osborne, Osborne County (1902).
Woman's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1888).
Ladies' Crescent Club, Tully, Rawlins County (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Chautauo Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literature Club, Ford, Ford County (1903).
Sabeau Club, Mission Center, Shawnee County, Route 2 (1899).
Star Valley Woman's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8, (1903).
Fortnight Club, Grant Township, Reno County (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
The Lady Farmers' Institute, Marysville, Marshall County (1902).
The Woman's Progressive Club, Anthony, Harper County.
Taka Embroidery Club, Madison, Greenwood County (1902).
Mutual Improvement Club, Vermillion, Marshall County (1903).
[All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.]

The club department wants to be of real assistance, and hopes to become more and more helpful. We only ask that you let us know wherein we can help you more.

The next topic in the household program is "The Sabbath;" in the Kansas history program it is "The Civil War, and Kansas' Share in It." Both of these are very interesting subjects, and we will be delighted to hear again from any of the "clubs of one," or others of them. The American literature study takes up Ruskin for its next topic.

I should be very glad to hear more frequently from the different clubs. I know that the country club woman is just as busy as she can be, and that even going to club-meeting seems sometimes an expenditure of time that she can not afford. Yet now and then some member who perhaps has a trifle more time than another,

might be appointed to write to the KANSAS FARMER; to send us one of your good papers, or a bundle of recipes or household hints that have been brought in for response to roll-call. I shall be very deeply grateful for such favors.

If any of the clubs have any puzzling questions that are bothering them, any problems that they can not solve, or desire any information in regard to their work, or club work in general, I shall be very glad to help as best I can. And when the questions are beyond my judgment or information, I will gladly seek advice from others of experience, deeper and wider than my own.

Nathaniel Hawthorne.

Roll call—Quotations from Hawthorne.

- I. The greatest American romancer.
- II. Review of one of his books.
- III. The supernatural in American literature.
- IV. The New England conscience as exemplified in Hawthorne and other New England writers.

America has had many writers, but only to a comparatively small number of them can be applied the term "great." Among these few, Hawthorne holds a first place, as a writer of romances. His books are intensely original, unique, unlike anything else in American literature. The charm of them grows upon you more and more, as you read more.

To follow the discussion of him as a writer of romances, a review of one of them will be interesting. The Scarlet Letter, The House of the Seven Gables, the Marble Faun may be chosen. This review should tell the story, point out its chief characteristics, and its lesson, which is always easy to find in Hawthorne.

In Hawthorne's writings there is always the element of the supernatural, very delicately woven in, yet significant and telling. Starting with a study of this element, in our present author, the paper on the third topic may continue the subject by noting the same element in writers of our American literature.

Much has been written and said of the New England conscience. Since the landing of the Mayflower, that same conscience has made itself felt in America. As conditions have changed, the Puritan conscience has changed in its outward manifestation. It has shown itself in all our literature in different forms, and very markedly in Hawthorne's weird studies of sin and its consequences.

I have recently read an account of a novel program, originated by a woman's club in one of Chicago's suburbs. A magazine was represented by a series of tableaux. The president appeared as the frontispiece. Next came living pictures representing different types of club women as imagined by the average man or caricatured by the press—the frivolous member, the serious member, the ideal member, etc. In the art department a drawing by Gibson and a statuette by Bessie Potter were represented. The dramatic department gave a chance for the singing of a ballad, for the portrayal of "The Mysterious Portrait," and "The Minuet."

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For the Little Ones

I take life jest as I find it,
Hot or cold, I never mind it;
If it's a sunshiny day—
That's my time for makin' hay;
If it's rainin', fills my wish—
Makes the lakes jest right for fish;
When the snow falls white as foam,
Then I track the rabbits home.
Spring or winter, summer, fall,
I'm jest thankful for 'em all!
—F. L. Stanton, in Demorest's Magazine.

Why Elsie Kept Silent.

Lionel came rushing into the room, his eyes snapping fire, his cheeks flushed warm. "Elsie, Elsie, where are you?" he cried, adding, the next moment, as he caught sight of his sister standing near the window, "Why did you touch my kite when you could see that it was not dry? I just left it for a few moments on the dining-room table while I went into the barn, and when I came back I found it spoiled." And then, without waiting for Elsie to speak, he continued to reproach her with hasty, angry words for the mischief done.

Once, when he paused for breath, a brown-haired girl standing by Elsie helping to thread beads raised her head and said:

"Why don't you talk back, Elsie? The idea of his saying you have spoiled his kite when you have not been out of the room for an hour." But Elsie kept silent, and Lionel, having had his say, vanished. "Why didn't you tell him you didn't do it?" Florence asked, gazing half-curiously at her companion.

"I didn't want to quarrel with Lionel," Elsie answered, quietly. A little later the boy entered the room again, this time in a more subdued manner.

"I'm sorry I spoke as I did, Elsie," he remarked, in apologetic tone as he advanced toward the window. "Mary says it was she who did the mischief. But I saw your hat on the chair close to the table, and that made me think, perhaps it was you who touched my kite as you passed through the dining-room when you came indoors. Why didn't you tell me it wasn't you?"

"Because you didn't give me a chance. Besides, you were so angry, I thought if I spoke we might quarrel, so it was best to keep silent and wait until you were calm."

Surely that was a wise decision. Elsie remembered the old saying: "It takes two to make a quarrel," and she resolved that she would not be one of the two.—Happy Hours.

One of the bugbears of old-time people is night air, and there is little exaggeration in saying that the superstition against night air has killed more people than the free circulation of it has ever injured. There is abundance of proof that night air is injurious to no one. On the contrary, people who sleep outdoors under the mere protection of a tent are the healthiest of all people, and the practice has largely gained in popularity of late years under wider knowledge of hygiene for people in delicate health to go in camping parties and breathe the balsam of the night air. The vigor gained from a few weeks of such an outing is a marked proof that the old prejudice against night air is as foolish as most other old wives' whims.

The mother's heart is the child's schoolroom.—Henry Ward Beecher.

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WHITE WYANDOTTES—50 choice cockerels for sale. Prices reasonable. Eggs, \$1 for 15. S. W. Artz, Larned, Kans.

A LIMITED NUMBER OF CHOICE WHITE Wyandotte cockerels for sale, at \$1 each. Mrs. C. E. Williams, Irving, Kans.

M. B. TURKEYS—Young toms and pullets; large-bodied, healthy stock. Call and see them, or write for description and prices. J. E. Miller, Pawnee Rock, Barton County, Kans.

FOR SALE—Barred and White Plymouth Rocks. Now is the time to secure your breeding stock. Won all first premiums and sweepstakes at Ottawa Fair, September 1904. Choice cockerels and pullets and eggs in season. Mr. & Mrs. Chris. Bearman, Ottawa, Kans.

FOR SALE—B. P. Rock cockerels, large, well-bred. For further information address Mrs. Ada L. Ainsworth, Eureka, Kans.

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FOR SALE—Two male Scotch Collies, nearly full grown. Eligible to registry, strong in the blood of Metchley Wonder. Price, \$10 each. Geo. W. Maffet, Lawrence, Kans.

FOR SALE—White Holland toms and Shorthorn bulls. H. M. Harrington, Clearwater, Kans.

SINGLE COMB RHODE ISLAND COCKERELS \$2.50 to \$5 each. H. C. Staley, breeder, Rose Hill, Butler County, Kans.

FOR SALE—Barred Plymouth Rocks, pure-bred and well-bred. Chas. Parsons, Clearwater, Kans.

I HAVE choice young M. B. turkeys for sale from high-scoring stock. Hens, \$3; toms, \$5. Write your wants. Mrs. A. E. Harness, Speed, Mo.

FOR SALE—Silver Wyandottes, choice hens and pullets, score 90 or more. Eggs \$1 for 15. Orders booked. Address W. C. Koenig, First National Bank Building, Nortonville, Kans.

CHOICE B. P. Rock cockerels and pullets—Collie pups; send for circular. W. B. Williams, Stella, Neb.

THOROUGHbred POULTRY—Forty varieties. Eggs and stock, incubators and poultry supplies. Pit games. Write your wants. Oakhurst Poultry Agency, Kansas City, Mo.

S. C. BROWN LEIGHORNS—Only a few choice cockerels left. First come, first served. Prices reasonable. Stock guaranteed to be pure-bred. J. A. Kaufman, Abilene, Kans.

TO GIVE AWAY—50 Buff Orpingtons and 50 Buff Leghorns to Shawnee county farmers. Will buy the chicks and eggs. Write me. W. H. Maxwell, 921 Topeka Ave., Topeka, Kans.

SCOTCH COLLIE PUPS—Four more litters of these high-bred Collies, from 1 to 3 weeks old, for sale. Booking orders now. Walnut Grove Farm, H. D. Nutting, Prop., Emporia, Kans.

256 TO 278 EGGS A YEAR EACH. Our Barred Rocks bred for business. Profits doubled by new methods in breeding, hatching, and feeding. Instructive catalog free. F. Grundy, Morrisonville, Ill.

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Eggs in season.

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The Barred Rock Specialist.

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THOMAS OWEN, Topeka, Kansas.

The Poultry Yard

CONDUCTED BY THOMAS OWEN.

The State Poultry Show.

The great Poultry Show of 1905 will go into history as having the best quality of poultry ever shown in the state of Kansas. The weeding-out process is more in evidence at each succeeding show, so that now only the very best quality of fowls is shown at the State Show. The American breeds, viz., the Barred, White and Buff Plymouth Rocks and the White, Buff, and Silver Wyandottes, were out in much greater numbers than any other class. They are deservedly popular, for they are the utility breeds, the breeds for profit, the breeds for the fancier, the breeds for the farmer.

Conspicuous among the less numerous varieties were a Buff Cochins cock scoring 95 and a Light Brahma cock scoring 96½, both said to be at the head of their class at the World's Fair. Judge Rhodes said the Light Brahma cock was the finest bird of its variety he ever handled. I. K. Felch, the veteran poultry-breeder and judge, of Natick, Mass., once told the writer that a Light Brahma cock that scored 97 points was worth \$1,000 and that he was prepared to pay that amount whenever such a bird was forthcoming. This magnificent fellow comes very near toeing the mark.

Among the newer breeds, the Partridge Wyandottes are coming to the front with great strides. The great improvement that has been made in the color of this variety in the last few years is remarkable. The small number of turkeys at this show was very noticeable. There was not a Mammoth Bronze turkey on exhibition and but a few White Holland turkeys. The high prices paid for turkeys from Thanksgiving to Christmas must have depleted the stock to such an extent as to leave none over for seed. Farmers should take more interest in turkey-raising for at twenty cents per pound there is big money in it.

The weather was very unpropitious for the show, being the severest week of the winter, and curtailed the attendance very materially. Here is where the \$1,000 appropriated by the State comes in very handy, enabling the management to pay their premiums in full, though handicapped so heavily by the slim attendance and meager gate receipts.

LIST OF AWARDS.

BARRED PLYMOUTH ROCKS—162—S. Herick, Argentine, Kan., 2 ckl, 92½; 2, 5 hen, 92½; 3 pen, 184.19. C. S. Hart, Milan, Mo., 1 pul, 93½; 5 pen, 182.62. A. H. Miller, Bern, Kan., 1 ckl (tie), 93. Judge T. L. Norval, Seward, Neb., 3, 4 ckl, 88½, 88½; 1 (tie), 4 ckl, 93, 92; 1, 2, 5 hen, 92½, 91½, 91½; 2, 3, 4 pul, 93, 93, 93; 1, 2 pen, 184.87, 184.26. Wm. Vesper, Topeka, Kan., 1, 5 ckl, 91½, 88. L. A. Elliott, Iowa City, Iowa, 2 ckl, 88½; 4 hen, 91½; 3 ckl, 92½; 4 pen, 183.25. W. W. Mellott, Salina, Kan., 3 hen, 91½.

WHITE PLYMOUTH ROCKS—135—C. S. Hart, Milan, Mo., 5 ckl, 92½; 2, 5 hen, 95½, 94½; 5 pen, 188.12. Mitchell Bros., Valley Falls, Kan., 2 ckl, 94; 5 pul, 94½; 4 pen, 188.43. W. L. Bates, Topeka, Kan., 4 ckl, 94; 5 ckl, 93½. H. C. Nichols, Spearville, Kan., 1 ckl, 94½; 3, 4 ckl, 94, 93½; 1, 3, 4 hen, 96, 95, 94½; 2, 3, 4 pul, 95½, 95, 95; 1, 2 pen, 189.81, 188.68. N. N. Neher, Topeka, Kan., 1, 2 ckl, 94½, 94; 1 pul, 95; 3 pen, 188.56. Mrs. Ida M. Jones, Abilene, Kan., 3 ckl, 94.

BUFF PLYMOUTH ROCKS—60—C. R. Baker, Abilene, Kan., 2 ckl, 92; 3 pul, 93½; 4 pen, 184.12. J. J. Bleakley, Lawrence, Kan., 3 ckl, 91; 1 hen, 93½; 5 pul, 93½; 3 pen, 184.12. C. S. Hart, Milan, Mo., 2 pul, 94; 1 ckl, 93½; 1 pen, 186.37. Robt. Larmer, Stanberry, Mo., 1 ckl, 92; 2 hen, 93; 1, 4 pul, 94, 93½; 2 pen, 185.12. R. L. Parker, Olathe, Kan., 4 ckl, 91. Geo. H. Gurtler, Topeka, Kan., 2 ckl, 91½; 3 hen, 92; 5 pen, 183.5. A. J. Waddell, Wichita, Kan., 5 ckl, 91; 4, 5 hen, 91½, 90½.

SILVER LACED WYANDOTTES—100—W. R. Comstock, Topeka, Kan., 5 ckl, 91; 1, 2 pul, 92½, 92½; 3 pen, 182.93. M. M. Gnette, Florence, Kan., 3 hen, 89½. Mrs. J. W. Gause, Emporia, Kan., 3, 5 pul, 92½, 92; 4 ckl, 89½; 4 hen, 88½; 1, 3 ckl, 92½, 91½; 1, 4 pen, 184.25, 182.81. M. B. Caldwell, Broughton, Kan., 2, 3 ckl, 90, 89½; 2 ckl, 91½; 2 hen, 89½; 4 pul, 92½; 2 pen, 183.31. F. Merrifield, Kensington, Kan., 1, 5 ckl, 90½, 89½; 4 ckl, 91½; 1, 5 hen, 90, 88½; 5 pen, 181.94.

GOLDEN LACED WYANDOTTES—12—Searcy Bros., Springdale, Ark., 1, 3 ckl, 91, 87½; 4 hen, 86½; 1, 2 pul, 91½, 89½. J. D. Moore, Blue Mound, Kan., 1, 3 hen, 92, 87; 3 pul, 89; 2 ckl, 89½; 2 ckl, 80.

WHITE WYANDOTTES—100—W. S. Young, McPherson, Kan., 5 ckl, 91½. R. S. Paxton, Topeka, Kan., 1 ckl, 95; 1 pul, 95½; 1 pen, 189.31. M. M. Gnette, Florence, Kan., 4 ckl, 92½; 5 ckl, 93; 5 hen, 94½; 5 pul, 94½; 5 pen, 187.44. R. B. Bridgeman, Oregon, Mo., 3 ckl, 93; 1 hen, 95½; 3 ckl, 94; 2 pul, 95½; 2 pen, 188.81. C. S. Hart, Milan, Mo., 4 ckl, 93½. F. A. Millard, Independence, Mo., 2 ckl, 93; 2 ckl, 94½; 3 pul, 94½; 3 pen, 188.62. Leon A. Tracy, Spickard, Mo., 4 pul, 94; 4 ckl, 94; 4 hen, 94½; 4 pen, 187.69. J. H. Brown, Clay Center, Kan., 2, 3 hen, 94½, 94½.

BUFF WYANDOTTES—52—A. Wilson, Cheney, Neb., 4 pul, 89½; 4 pen, 182.69. W. A. Forbes, North Topeka, Kan., 1, 4 ckl, 92, 90; 1, 2, 4, 5 ckl, 93½, 93, 92½, 92½; 1, 2, 3 hen, 93½, 93, 92½; 2, 3, 5 pul, 94, 94, 92½; 1, 2 pen, 187.19, 185.69. Col. J. W. F. Hughes, Topeka, Kan., 2, 3, 5 ckl, 91½, 90½, 89½; 3 ckl, 92½; 4, 5 hen, 91½, 91; 1 pul, 94; 3 pen, 184.81.

PARTRIDGE WYANDOTTES—34—M. J. Haxton, Sabetha, Kan., 4, 5 ckl, 92, 92; 4 ckl, 92½; 3, 4 hen, 91½, 91½; 5 pul, 92; 2, 4 pen, 184, 183.44. Dr. N. E. Mighell, Marshalltown, Iowa, 1 hen, 93½; 1, 2, 3 ckl, 93½, 92½, 92½; 1, 2 pul, 94, 93; 1, 2 ckl, 94, 93; 1 pen, 187.06. Harry Finch, North Topeka, Kan., 5 ckl, 92½; 3 ckl, 92½; 3, 4 pul, 92½, 92; 2, 5 hen, 92, 91½; 2, 5 pen, 184.25, 183.12.

BUFF COCHINS—25—Frank Gage, Minneapolis, Minn., 2 ckl, 88½; 1, 4 hen, 84, 92½; 4 pen, 180.81. Clarence F. Young, Topeka, Kan., 1 ckl, 95; 4 ckl, 92½; 5 hen, 92½; 1, 2 pul, 95, 94½; 1 pen, 189. Frank Morton, King City, Mo., 1, 2, 3 ckl, 94½, 94, 93½; 2, 3 hen, 92½, 92½; 3, 4, 5 pul, 94½, 94½, 94½; 2, 3 pen, 188.81, 187.62.

WHITE COCHINS—6—Geo. W. Plummer, Perry, Kan., 2, 3 ckl, 88½, 88½; 1 hen, 90; 1, 2, 3 pul, 92, 91½, 91½.

PARTRIDGE COCHINS—5—W. J. Scott, Nortonville, Kan., 1 ckl, 90½; 1, 2, 3 hen, 94½, 94½, 94; 1 pul, 93½.

LIGHT BRAHMAS—25—A. L. Withers, Leavenworth, Kan., 2 ckl, 93½; 3, 5 hen, 93½; 4, 5 ckl, 93½, 93½; 4 pul, 95½; 3 pen, 188.26. Dr. N. E. Mighell, Marshalltown, Iowa, 1 ckl, 95; 1, 2 hen, 96, 95; 1, 2, 3 ckl, 95½, 94½, 94; 1, 2, 3 pul, 95½, 95½, 95½; 1, 2 pen, 191.06, 189.81. Geo. H. Garrett, Topeka, Kan., 4, 5 hen, 92½, 91½; 4 pen, 183.37.

DARK BRAHMAS—24—Elliott Marshall, Leavenworth, Kan., 1, 2, 3, 4 ckl, 91½, 89½, 89, 89; 1 ckl, 91; 1, 2, 3, 4, 5 hen, 92½, 92½, 91½, 90½, 89½; 1, 2, 3, 4, 5 pul, 94, 93½, 93½, 93½, 93½; 1, 2, 3, 4 pen, 185.44, 184.5, 182.12, 180.81.

BLACK LANGSHANS—97—Mrs. Melvin Gregg, Stanberry, Mo., 2 ckl, 95½; 4, 5 hen, 95½, 94½; 4 pul, 95; 2 pen, 190.19. Col. J. W. F. Hughes, Topeka, Kan., 3, 4 ckl, 93½, 93½. Chas. G. Miller & Son, Booneville, Mo., 1 ckl, 95½; 1, 3 ckl, 95½, 95½; 1, 3 hen, 95½, 95; 1, 3 pul, 95½, 95; 1 pen, 190.81. H. M. Palmer, Florence, Kan., 2 ckl, 94; 2 hen, 95; 2, 5 pul, 95½, 95; 4, 5 ckl, 95, 95; 3, 4 pen, 189.94, 189.19. D. Q. Diven, Topeka, Kan., 5 ckl, 93½. Mrs. Geo. W. King, Solomon, Kan., 5 pen, 187.75.

WHITE LANGSHANS—20—H. M. Palmer, Florence, Kan., 1 ckl, 93; 1 ckl, 94½; 2, 4, 5 hen, 94½, 94, 93½; 1, 2, 3 pul, 95, 95, 94½; 1 pen, 189. M. W. Jones, Lees Summit, Mo., 2, 3 ckl, 93, 92; 2, 3, 4 ckl, 92½, 92½, 91; 1, 3 hen, 95, 94; 4, 5 pul, 93½, 93½; 2 pen, 187.12.

S. C. BROWN LEIGHORNS—92—Jewell Bros., Humboldt, Kan., 4 ckl (tie), 93½. G. J. Groshong, Topeka, Kan., 5 ckl, 89½. T. E. Applegate, Spickard, Mo., 5 (tie), 5 (tie), 5 (tie), 93½, 93½; 5 pen, 185.75. A. Fleming, Ozark, Kan., 4 hen, 93½. Dr. H. B. Adair, Kansas City, Mo., 3 ckl, 94. H. C. Short, Leavenworth, Kan., 3, 4 ckl, 91½, 90½; 1, 3, 5 (tie) hen, 93½, 93½, 93; 1 pen, 186.62. A. J. Kerns, Salina, Kan., 1, 2 ckl, 92½, 92½; 1 (tie), 3 ckl, 94, 93½; 2 pen, 186.94. H. P. Swedersberger, Wichita, Kan., 1 (tie), 2, 4 (tie), 5 ckl, 94, 93½, 93½; 2, 5 (tie) hen, 93½, 93; 1, 2 (tie), 2 (tie), 4 pul, 94½, 94, 94, 94; 1, 3 pen, 188.12, 188.81.

R. C. BROWN LEIGHORNS—26—T. E. Applegate, Spickard, Mo., 1 ckl, 90½; 2, 5 ckl, 92½, 92½; 1, 2, 3, 5 hen, 92½, 92, 92, 91½; 1, 2, 4 pul, 94½, 92½, 92½; 1, 3 pen, 186.38, 184.44. Mr. and Mrs. A. Fleming, Ozark, Kan., 1, 4 ckl, 93½, 92½; 4 hen, 92; 3, 5 pul, 92½, 92; 2 pen, 185.44. G. H. Kittell, McPherson, Kan., 3 ckl, 93½.

S. C. WHITE LEIGHORNS—53—Inez M. Stine, Little River, Kan., 2 ckl, 89½. Will C. Watt, Walton, Kan., 2, 5 ckl, 93½, 91½; 2, 4, 5 pul, 94½, 94½, 94½; 2, 4 pen, 187.87, 185.37. W. S. Young, McPherson, Kan., 3 ckl, 89; 1, 4 hen, 94½, 93; 1 ckl, 93½; 1 pen, 187.94. D. S. Whitcomb, Beatrice, Neb., 3 ckl, 92½; 3 hen, 93½. Busy Day Poultry Plant, Lawrence, Kan., 2, 5 hen, 94, 92½; 5 pen, 185.06. P. J. Casserly, Leavenworth, Kan., 4 ckl, 92½; 1 pul, 94½; 3 pen, 185.75. A. Fleming, Ozark, Kan., 3 pul, 94½.

R. C. WHITE LEIGHORNS—11—W. S. Young, McPherson, Kan., 1 ckl, 91½; 1, 2, 4, 5 hen, 94, 93½, 91½, 91; 2 pul, 92; 1 pen, 184.5. M. W. McManus, Lincoln, Kan., 1 ckl, 91; 3 hen, 92½; 1, 3, 4 pul, 92½, 91½, 91; 2 pen, 182.94.

R. C. BUFF LEIGHORNS—5—Geo. Tenney, Lincoln, Kan., 1 ckl, 90½; 1, 2, 3, 4 pul, 91½, 91½, 90, 90; 1 pen, 181.18.

S. C. BUFF LEIGHORNS—34—Geo. Thorpe, Ashley, Mo., 2 ckl, 91½; 2, 3 ckl, 93, 91½; 1 hen, 92½; 5 pul, 93, 93; 1, 4 pen, 185.87, 182.75. E. Ferrenback, St. Louis, Mo., 1 ckl, 92½; 1 ckl, 93½; 5 hen, 90; 4 pul, 93; 2 pen, 185.5. W. H. Maxwell, Topeka, Kan., 3, 4 ckl, 89, 88½; 5 ckl, 88½; 2, 4 hen, 91, 90; 5 pen, 178.87. J. K. Werner, St. Joseph, Mo., 4 ckl, 90½; 3 hen, 90½; 2, 3 pul, 93, 93; 3 pen, 183.87.

S. C. BLACK MINORCAS—9—H. J. Feder, St. Louis, Mo., 1, 2 pul, 92½, 92½; 1, 2 ckl, 94, 94.

BLUE ANDALUSIANS—10—J. D. Martin, Salina, Kan., 1, 2 ckl, 92½, 91½; 1, 2, 3, 4 hen, 91½, 90½, 89½, 87½; 1, 2, 3, 4 pul, 92½, 92½, 89½, 89.

WHITE FACE BLACK SPANISH—18—Chas. Pantle, Atchison, Kan., 1 ckl, 91; 1, 2 hen, 93, 92½; 1, 2, 5 pul, 94½, 93, 91½; 2 pen, 184.25. H. W. Chestnut, Birmingham, Kan., 1 ckl, 92½; 2, 3 ckl, 90½, 89½; 3, 4, 5 hen, 92, 91½, 91½; 3, 4 pul, 93, 92½; 1 pen, 184.87.

WHITE CRESTED BLACK POLISH—12—Henry G. Wittman, Lincoln, Neb., 2 (tie), 2 (tie), 3 ckl, 90½, 90½, 90½; 1, 2 ckl, 91, 89½; 1 hen, 93½; 1, 2, 3 pul, 92, 91½, 91½; 1 pen, 183.18. Maggie Pett, Abilene, Kan., 1 ckl, 91; 2, 3 hen, 93½, 93.

GOLDEN POLISH—3—S. R. Behler, Newton, Kan., 1 ckl, 90; 1 hen, 91½; 1 pul, 91½.

SILVER SPANGLED HAMBURGERS—21—Fay Finkle, Galva, Kan., 3 ckl, 88½; 1, 2, 3, 4, 5 ckl, 92½, 91, 89½, 89½; 1, 2, 4 hen, 94½, 92½, 91½; 1, 2, 3, 4 pul, 92½, 92½, 92½, 92; 91; 1, 2 pen, 185.75, 182.75. Chas. Linberg, St. Louis, Mo., 2 ckl, 89; 3, 5 hen, 92½, 91½; 3 pen, 180.21.

HOUDANS—26—Frank Knopf, Holton, Kan., 5 ckl, 90; 1, 2, 3, 4 pul, 93½, 93½, 93½, 93; 4 pen, 183.37. W. L. Bullock, Lawrence, Kan., 1, 2, 3 ckl, 92, 91½, 91½; 91; 1, 2, 3, 4, 5 hen, 93½, 93½, 93½, 93½, 93; 5 pul, 93; 1, 2, 3 pen, 185.55, 184.25, 183.62.

S. C. RHODE ISLAND REDS—8—S. R. Behler, Newton, Kan., 1 ckl, 92½; 1 ckl, 92½; 1, 2 hen, 90, 88½; 1, 2, 3, 4 pul, 94, 93½, 93, 92½; 1 pen, 186.06.

R. C. RHODE ISLAND REDS—53—S. R. Behler, Newton, Kan., 1 ckl, 92½; 2 ckl, 93; 3, 4 hen, 89; 2 pul, 93½; 2, 4 pen, 185.81, 184. J. A. Snapp, King City, Mo., 1 ckl, 92½; 5 (tie), 5 (tie) pul, 93, 93; 1 pen, 186.25. Dr. J. Martin, Wichita, Kan., 2 ckl, 92½; 5 ckl, 92½; 1, 2 hen, 91½, 89½; 5 pen, 183.75. H. A. Sibley, Lawrence, Kan., 4 ckl, 92½; 1, 3, 4 pul, 94, 93½, 93½; 3 ckl, 93; 3 pen, 184.94.

S. C. BUFF ORPINGTONS—31—W. H. Maxwell, Topeka, Kan., 2, 3 ckl, 88½, 86; 3 ckl, 86½; 4, 5 pul, 89½, 89; 2 pen, 177.56. Searcy Bros., Springdale, Ark., 1 ckl, 90½; 3, 4 hen, 89½, 89; 1, 2, 3 pul, 92½, 92, 90; 1 pen, 181.5. H. Checksfield, Jr., Topeka, Kan., 4 ckl, 85½; 2, 5 hen, 89½, 88½; 3, 4 pul, 173.87, 169.94.

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GORNISH INDIAN GAMES—12—S. R. Behler, Newton, Kan., 1 ck, 91; 1 ckl, 90½; 1, 2, 3, 4, 5 hen, 92½, 92, 91½, 91¼, 90¾; 1, 2, 3, 4, 5 pul, 93, 92, 92, 91½, 91; 1, 2 pen, 183.31, 182.12.

BUFF COCHIN BANTAMS—16—Chas. Heitman, Topeka, Kan., 2 ckl, 92. E. Henry Galusha, Ensley, Ala., 1 ck, 90½; 1 hen, 92½. Harold Loucks, Topeka, Kan., 1, 4 ckl, 93½, 91½; 3 hen, 91; 1, 2, 3 pul, 94, 93½, 93½. Otis Challaad, Topeka, Kan., 3 ckl, 91½; 2 hen, 91; 4, 5 pul, 93½, 91½.

BLACK COCHIN BANTAMS—2—E. H. Galusha, Ensley, Ala., 1 ck, 90½; 1 pul, 92½.

WHITE COCHIN BANTAMS—7—E. H. Galusha, Ensley, Ala., 2 pul, 94½. Donald G. Shannon, Carthage, Mo., 1 ckl, 91½; 2 hen, 93; 1, 3, 4 pul, 94½, 94½, 93; 1 pen, 185.19.

WHITE R. C. BANTAMS—2—E. H. Galusha, Ensley, Ala., 1 ckl, 94; 1 hen, 93½.

BLACK R. C. BANTAMS—2—E. H. Galusha, Ensley, Ala., 1 ckl, 94½; 1 hen, 94.

GOLDEN SEBRIGHT BANTAMS—23—Jas. Aigner, Topeka, Kan., 1 ck, 91; 3 hen, 93½; 1 pen, 183.44. Ralph & Paul Kaufman, Nortonville, Kan., 2 ckl, 89; 2, 5 hen, 93½, 92½; 1, 3, 4, 5 pul, 93½, 93, 92½, 92; 2 pen, 182.12. S. B. Ferrell, Granbury, Texas, 1 hen, 93½; 2 pul, 93½. E. H. Galusha, Ensley, Ala., 2 ck, 90½; 4 hen, 92½.

SILVER SEBRIGHT BANTAMS—5—Col. J. W. F. Hughes, Topeka, Kan., 1, 2, 3 hen, 93, 93, 91½.

B. B. R. GAME BANTAMS—24—Mrs. W. C. Weaver, Muscatine, Iowa, 3 ckl, 94; 3, 5 pul, 93½, 92½; 2 pen, 186.37. Everett G. Miller, Topeka, Kan., 2, 3 ckl, 94, 94½; 3 hen, 94. S. B. Ferrell, Granbury, Texas, 2 ck, 93; 5 ckl, 92½; 4, 5 hen, 93½; 3 pen, 186.19. T. I. Heron, Topeka, Kan., 1 ck, 94½; 1 ckl, 95½; 1, 2 hen, 95½, 94½; 1, 2, 4 pul, 95½, 95, 93½; 1 pen, 190.81.

BLACK TAILED JAPANESE BANTAMS—2—E. H. Galusha, Ensley, Ala., 1 ck, 91½; 1 hen, 91.

WHITE JAPANESE BANTAMS—2—E. H. Galusha, Ensley, Ala., 1 ck, 93; 1 hen, 94½.

SILVER DUCKWING BANTAMS—6—S. B. Ferrell, Granbury, Texas, 1, 2 ck, 93, 92; 1, 2 hen, 92½, 91; 1, 2 pul, 93, 91½; 1 pen, 184.87.

GOLDEN DUCKWING BANTAMS—4—S. B. Ferrell, 1 ck, 93½; 1, 2, 3 hen, 92½, 92, 91½.

RED PILE GAME BANTAMS—4—S. B. Ferrell, 1 ck, 94½; 1, 2 hen, 92½, 91½; 1 pul, 93½.

SILKIES—14—S. R. Behler, Newton, Kan., 1 ck, 91½; 1, 2, 3, 4, 5 ckl, 94, 93½, 92½, 92; 1 hen, 92½; 1, 2, 3, 4, 5 pul, 93½, 93½, 93½, 93; 1, 2 pen.

FRIZZLES—2—All to Col. J. W. F. Hughes, Topeka, Kan.

RUMPLESS—2—All to Col. J. W. F. Hughes, Topeka, Kan.

B. B. RED GAMES—5—C. L. Ward, Narka, Kan., 1 ckl, 93½; 1, 2 hen, 93½, 92½; 1, 2 pul, 93½, 93.

WHITE PEKIN DUCKS—9—D. W. Biggs, Oakland, Kan., 1 ck, 96. Walter E. Kock, Ellinwood, Kan., 1 ckl, 97½; 1 hen, 96½; 1, 2, 3 pul, 97½, 97, 96; 1 pen, Mrs. Henry Shrader, Wauneta, Kan., 2 ck, 95½; 2 ckl, 96½; 2 hen, 96½.

INDIAN RUNNER DUCKS—25—O. C. Sechrist, Meriden, Kan., 1, 2 ck, 96½, 96; 1, 3 ckl, 96, 95½; 1, 2, 3 (tie), 3 (tie), 4 (tie), 4 (tie), 5 hen, 97½, 96½, 96½, 96½, 96½; 1, 2, 3, 4, 5 (tie), 5 (tie) pul, 97, 96½, 96½, 96½, 96½; 1, 2, 3 (tie), 4 pen, 193.5, 192.62, 192.5, 192.12. M. B. Caldwell, Broughton, Kan., 2 ckl, 96; 3 (tie) pen, 192.5.

WHITE EMBDEN GESESE—2—Mrs. Henry Shrader, Wauneta, Kan., 2 ck, 89½; 1, 2 hen, 93½, 86.

BROWN CHINA GESESE—2—O. C. Sechrist, Meriden, Kan., 1 ckl, 95½; 1 pul, 96½.

AFRICAN GESESE—2—Mrs. Willis Hileman, Meriden, Kan., 1 hen, 85; 1 ckl, 88.

WHITE HOLLAND TURKEYS—4—Mrs. Henry Shrader, Wauneta, Kan., 1, 3 ckl, 93½, 86½; 1 hen, 96; 1 pul, 95½.

BOURBON RED TURKEYS—3—O. C. Sechrist, Meriden, Kan., 1 ckl, 92; 1, 2 pul, 94½, 94½.

The Oklahoma Poultry Show.

LIST OF AWARDS.

BARRED PLYMOUTH ROCKS—A. F. Russmisse, Drummond, Okla., 1, 2 ck; 1, 2 ckl; 1, 2, 3 hen; 1, 2 pul; 1, 2 pen. B. F. Dougherty, Oklahoma City, Okla., 3 pul; 3 pen.

WHITE PLYMOUTH ROCKS—W. F. Shannon, Chickasha, I. T., 1 ck; 1, 2 ckl; 1, 2, 3 hen; 1, 2, 3 pul; 1 pen. V. B. Allee, El Reno, Okla., 2 pen.

BUFF PLYMOUTH ROCKS—S. S. Murphey, Oklahoma City, Okla., 1 ckl; 1, 2 hen; 1, 2 pul; 1 pen.

BUFF ORPINGTONS—Geo. H. Schultz, Blackburn, Okla., 1 pen.

RHODE ISLAND REDS—Geo. S. Pearl, El Reno, Okla., 1, 2 ck; 2 pul. Mrs. Linnie Grigsby, El Reno, Okla., 3 pul. Guy Lanman, El Reno, Okla., 1 pul.

SILVER LACED WYANDOTTES—A. G. French, Oklahoma City, Okla., 1, 2, 3 pul; 1 ckl; 2 pen.

BLUE ANDALUSIANS—J. D. Martin, Salina, Kan., 1 ck; 1, 2, 3 hen; 1, 2, 3 pul; 1 pen.

LIGHT BRAHMAS—W. F. Shannon, Chickasha, I. T., 1 ck; 1 hen; 2 pen. E. L. Vickers, Oklahoma City, Okla., 1 ckl; 1, 2, 3 pul; 1 pen. E. J. Rockefeller, Oklahoma City, Okla., 2 ck; 2, 3 hen.

BUFF COCHINS—Wm. Harris, 1 hen; 2, 3 pul.

BLACK LANGSHANS—L. Cohen, El Reno, Okla., 2 ckl; 1, 2 pul. E. F. Kossuth, El Reno, Okla., 1 ckl; 3 pul.

WHITE LANGSHANS—E. J. Rockefeller, Oklahoma City, Okla., 1 ckl; 1, 2 hen; 1, 2 pul; 1 pen.

BUFF COCHIN BANTAMS—Father Constantine, El Reno, Okla., 1 pul.

S. C. B. LEGHORNS—A. A. Gregory, Oklahoma City, Okla., 1 ck; 1, 2 ckl; 1, 2, 3 pul; 1, 2, 3 hen; 1, 2 pen. S. A. Goodrick, Oklahoma City, Okla., 3 ckl.

R. C. WHITE LEGHORNS—Geo. S. Pearl, El Reno, Okla., 1 ck; 2, 3 pul; 1 pen. E. J. Rockefeller, Oklahoma City, Okla., 2 ck; 1, 2 hen; 1 ckl; 1 pul.

R. C. BROWN LEGHORNS—C. H. Leske, El Reno, Okla., 1 ck; 1, 2 ckl; 1, 2 pen.

S. C. WHITE LEGHORNS—Mrs. C. K. Hawkins, Oklahoma City, Okla., 1 ck; 2 ckl; 2 pul; 1 pen. F. W. Walton, El Reno, Okla., 1 hen; 1 pul.

BUFF LEGHORNS—Alex. Lutzberg, Waukomis, Okla., 1 ckl; 1, 2 pul. Mrs. Linnie Grigsby, El Reno, Okla., 3 ck.

BLACK MINORCAS—Mrs. Mary Nolan, Hennessey, Okla., 1 ck; 1, 2, 3 pul; 1 pen.

C. I. GAMES—S. W. Gierhart, El Reno, Okla., 1 ckl; 1 pul. E. J. Rockefeller, Oklahoma City, Okla., 1 ck; 1, 2 hen; 2, 3 pul; 1 pen.

HOUDANS—J. W. Maher, El Reno, Okla., 1, 2, 3 hen.

Poultry Notes.

N. J. SHEPHERD, ELDON, MO.

The eggs are made out of the food eaten by the hens. The question of difference in value of eggs for culinary purposes depends not on the breed but upon the feed.

It often happens that the eggs are

frozen and burst before being gathered. If kept frozen till used, they can be taken into a warm room and scalding water poured over them, then left to cool, when the eggs will be found uninjured for use. They should be used at once after being thawed out.

A flat perch is best, because of being the most comfortable to the feet and the best support to the breast when the chicken is sitting down. Put them far enough from the door or window to avoid a draft, otherwise the fowls will have roup.

During the winter, especially, one of the best ways of feeding milk is to mix up the soft food with it. In nearly all cases it is best to give a warm, soft feed in the morning and milk can always be used to good advantage in this way.

Generally a flock of hens that are busy scratching do not contract the vices peculiar to those fowls that have nothing to do, and they keep pert and in good health. The bright red comb, clear plumage and plenty to do indicate that egg foods are unnecessary.

Exercise is very essential in maintaining health during the winter. One of the best means of affording exercise when the fowls must be closely confined is to scatter a thick layer of straw on the floor of the poultry-house and then scatter grain, corn, wheat, or oats over it and let the fowls scratch it out.

Whatever point may be desired in a stock fowl, it must be considered that

Burr Incubators and Brooders are more popular this year than ever before for the simple reason that they have given universal satisfaction. People who use them are loud in their praise of the wonderful results accomplished. The company has thousands of letters from satisfied customers telling of the good luck they had with chickens hatched and raised in Burr incubators and brooders. One of the chief reasons for Burr's success is their wonderful simplicity. It is so easy to operate them that even the beginner succeeds. Only experts can operate machines with complicated devices, but in the Burr everything has been simplified with the idea of producing an incubator and brooder that the busy farmer's wife can operate with success. Burr incubators and brooders are all sold on the thirty day plan. That is a customer takes the machines and runs them for thirty days and if at the end of that they are unsatisfactory they can be returned when the money will be refunded. Anyone thinking of purchasing an incubator or brooder this season should write at once to the Burr Incubator Co., Omaha, Neb., for their free illustrated catalogue which tells all about the construction and operation of these exceedingly popular machines.

it is at least one of the second varieties in which that point is has been specially and eminently developed to a far greater degree than can be found in an ordinary barnyard fowl. There is some one fowl in which that quality is the leading characteristic, and which is therefore the best for the purpose desired.

For Your Face's Sake.

If your face burns and itches, after shaving, don't swear at your razor or break up the furniture. Stop using cheap soap, and try real shaving soap, made especially for that purpose. The J. B. Williams Co., Glastonbury, Conn., have been making shaving soap for nearly three-quarters of a century. It will take but a moment to send for a free trial sample, as per their offer in another column, and you will reap the benefit all your life, and your wife will have a better natured husband.

Have You Sent Your Name for This Free Book.

Every reader of the Kansas Farmer is entitled to a free copy of "The Standard Feeder," a book of 160 pages, full of useful information concerning the care, feeding and profitable management of live stock of all kinds. It contains 10 special chapters, written by experts; more than 300 illustrations, besides valuable tables, statistics, directions for computing balanced rations and other matter which the stock-growing feeder and farmer will find of money-making value to him. All you are asked to do to get this book is to write a postal card to the Standard Feeder, Howard St., Omaha, Neb., saying how much stock and poultry you keep. Do it today while you think about it. You'll be glad you did it.

A Remarkable Incubator Offer.

An incubator that is sold on 40 days free trial and that is backed by an iron-clad ten-year guarantee, must necessarily contain great merit, or the proposition would prove a losing one to the advertiser. Such an offer is made by the Great Western Incubator Co., of Kansas City, Mo., in their ad on page 126 of this issue. The proposition is proving most successful because the Great Western Incubator is all that the makers claim for

it. Our readers will do well to look up and respond to the Great Western ad.

An Offer of Help.

If you are trying to decide what incubator is best for you to buy, you should have an 80-page book telling about incubators, issued by the George Ertel Company, Quincy, Ill. It tells what an incubator has to do. There are chapters describing just how an old hen hatches out her downy brood and just what a machine will have to do that is intended to accomplish the same result.

The story of the Development of the Chick in the Egg will give you a better idea of what is required of an incubator than dozens of ordinary catalogues. It is something you ought to have, even if you are still going to stick to old-fashioned methods, because it will help even in fixing a nest for the setting hen.

If you want to make money it will prove invaluable. If you want broilers for the early market, when prices are high, read its Hints and Helps. See what it says about raising hens. If you want young pullets to lay next winter, when eggs are dear. The money, too, in fattened fowls for late summer and fall markets. In fact, the poultry business is one industry that is not overdone. The book aims to put you on the right track to make money. The best of it is that the book is free. You need only write a postal, and the firm will gladly mail it to you.

Using the Riding Harrow Cart.

The man who was working to perfect a means whereby the farmer might ride to harrow instead of walking all day behind in the dust and soft earth was working along practical lines. He was working on a little machine to be employed on plain, oft repeated farm work, but he perfected something which is of more real value and saves more slavish labor than anything else that has been brought out in recent years. Our readers have noticed the New Model Harrow Cart being advertised in this paper by the manufacturers, the Wm. Galloway Company, Waterloo, Iowa. We are persuaded that there is no good reason why



every farmer should not use it. They are buying it in great numbers and this goes to show that they have been ready to employ such a device whenever one was worked out which suited their needs. This cart attaches to any harrow. It is a simple affair, that costs little, is easily attached, and is made to last many years. Users say it adds but little to the draft. Full information can be had by writing direct to the manufacturers at the address given in the advertisement.

If any of our readers are willing to invest two cents for the purpose of being cured of any long-standing or simple disease, they should send a two-cent stamp to Fred J. McMann, Marinette, Wis., stating their ailments or symptoms. Using no drugs or appliances at all, the cures he is effecting of all kinds of diseases are startling the country. His methods will revolutionize treatment of disease, all kinds responding readily. It's simply wonderful.

Lovers of fine poultry stock will be interested in the advertisement of Mrs. Albert Ray, Delavan, Kans. By mistake of Farmer types, the address for the last two weeks was given as Delaware, Kans., whereas, it should have been Delavan, Kans. Write her and ask her about it. See advertisement in poultry column.

Those of our readers interested in Barred Plymouth Rocks, White Plymouth Rocks and Single Comb White Leghorns should not fail to notice the double column advertisement of the Imperial Poultry Farm of J. C. Heath, Valley Junction, Ia.

POULTRY BREEDERS' DIRECTORY.

SINGLE COMB "BROWN LEGHORNS"—Would like to trade one dozen good hens for the same number of good White Plymouth Rocks Eggs for hatching in season. J. A. Kaufman, Abilene, Kans.

WHITE WYANDOTTES Exclusively—Pure-bred and good layers. Eggs, \$1 for 16. Stock all sold. Mrs. C. E. Williams, Irving, Kans.

WHITE WYANDOTTES—15 choice, pure-white cockerels cheap. F. H. Sutton, Minneapolis, Kans.

POULTRY PAYS

When you have good stock. Eggs for Hatching, extra fine Barred and White Plymouth Rocks, S. C. White Leghorns at a special low price. Sixteen years a breeder of Fancy Birds. Write for free Art Folder of the largest Fancy Poultry Farm in this country. J. C. Heath's Imperial Poultry Farm, Valley Junction, Ia. Dpt. S.

A Free Book About Incubators

We issue the best book ever written on incubators—written by a man who has spent 28 years in perfecting them—by the man who made the Racine. It tells facts that you must know to get the right incubator. Don't buy without reading it, for the book is free. We Pay the Freight.

Racine Hatcher Co., Box 88, Racine, Wis. Warehouses: Buffalo, Kansas City, St. Paul.

WHY SO SURE?

It's made on the right plan. It works right. It brings best results to the beginner as well as the experienced poultry raiser.



THE Successful

is the nearest of all the out and out automatic machines, both Incubator and Brooder. They can be depended upon under all conditions to hatch the most and brood them the best. 100 pens standard fowls. Incubator, poultry and poultry supply catalogue Free. Poultry paper 1 year ten cts.

Des Moines Incubator Co. Dep. 83, Des Moines, Ia.

INCUBATOR

Johnson started his new Pay-for-itself hatcher last year and raised a rum-pus with high prices. Don't get fooled. Put your trust in

Old Trusty.

The Incubator that is sent on 40 Days Trial

The training he got making 50,000 other incubators enabled him to make "Old Trusty" right. Every user says it's right. No other incubator ever got in first rank the first year. You should get Johnson's Free Catalog and Advice Book. He wrote it. Makes his success your success. M. M. Johnson Co., Clay Center, Neb.

Get One Hatch Free

Don't buy an incubator until you first try a

Royal

It is the best hatcher in the world. If you don't like it send it back. Incubator, poultry and poultry supply catalogue free. Poultry paper one year 10 cents. Write now.

ROYAL INC. CO., Drawer 66, Des Moines, Iowa.

POULTRY SUPPLIES

Thanolice (lice powder).....	25c
Croo-carbo (lice killer).....	50c
Egg Maker.....	25c
Poultry Cure.....	25c
Roup Pills.....	25c
Medicated Nest Eggs.....	5c
Conkey's Roup Cure.....	50c
Buckeye Cholera Cure.....	35c

OWEN & COMPANY

520 Kansas Ave., Topeka, Kans.

JUST ISSUED

POULTRY FEEDING AND FATTENING

A handbook for poultry keepers on the standard and improved methods of feeding and marketing all kinds of poultry.

The subject of feeding and fattening poultry is prepared largely from the side of the best practice and experience here and abroad, although the underlying science of feeding is explained as fully as needful. The subject covers all branches, including chickens, broilers, capons, turkeys and waterfowl; how to feed under various conditions and for different purposes. The whole subject of capons and caponizing is treated in detail. A great mass of practical information and experience not readily obtainable elsewhere is given, with full and explicit directions for fattening and preparing for market. The broad scope of the book is shown in the following

TABLE OF CONTENTS

Thrifty Growth, Expert Chicken Feeding, Broiler Raising, Nutrition for Layers, Special Foods, To Finish and Dress Capons, The Art of Poultry Fattening, Lessons from Foreign Experts, American Fattening Methods At Killing Time, Preparing for Market, Marketing Turkeys and Waterfowl, Finish and Shipping. Profusely illustrated, 160 pages, 5x7 1-2 inches, cloth. Price 50 cents postpaid.

Kansas Farmer Company Topeka, Kansas

When writing advertisers, please mention this paper.

The Percheron and French Coach Horse for the American Farmer and Breeder.

(Continued from page 113.)

turies been aided in the improvement of their breeds of horses by the Government. At the present time no stallion is permitted to stand for public service in France until he has been passed upon by the Government officials. This has aided very materially in the perfection of both the Percheron and the French Coach breeds of horses.

The Percheron horse is bred in his purity in the district southwest of Paris, beginning about fifty miles from Paris at Chartes and extending about seventy-five miles west. It is oval in shape and is about fifty miles wide. In it are some of the most fertile valleys in the world. The country is broken and on this account gives the necessary encouragement to the production not only of a heavy horse but of one with great activity as well.

The coach-horse is bred in the country north of the Perche between Alencon and the English Channel. They are in no way intermingled, as the line between the district where Percherons are bred and where coachers are bred is very well defined.

The Percheron horse is known throughout the whole of this country. In color he is usually gray or black. At the present time the black color probably predominates. In height he is ordinarily about sixteen hands. In weight from sixteen to twenty-two hundred pounds, depending to a very great extent upon the amount of flesh he carries. These horses have been bred in the same district, the son breeding and following in the footsteps of the father, from time immemorial. They have been imported in large numbers to America. In fact, such a drain has been made upon the country that a great many of the inferior specimens have been brought here; yet, notwithstanding this fact, they have crossed with the native mares in America and produced animals vastly superior in conformation, in endurance, in elegance and in activity to those that the very best stallions of any other draft-breed have ever been able to produce. At all of the greatest shows of draft-horses in this country they have never been defeated by the produce of any other draft-breed crossed with the mares of this country. At the recent International in Chicago these grade Percherons defeated the very best purebred animals of the other draft-breeds that unlimited expenditures of money could find in Europe.

The economical farmers of this country who wish to produce on their farms the greatest increase with the least cost (and those are the men who are always successful), will find that grade Percherons will do more work on their farms for a less expenditure in feed than will any other breed of horses that can be found. I wish to urge this fact especially upon your attention. I do not think that there is any possible way of being of more benefit to a community than to be instrumental in procuring animals of this breed to work on your farms and thereby not only increase the production but diminish the cost as well. At this time, when so many of the young men are leaving the farms for the cities, it is essential in order to induce the young man to stay on the farm that he have some interest that will keep him there; good horses will have more influence in this line than will any other breed of live stock.

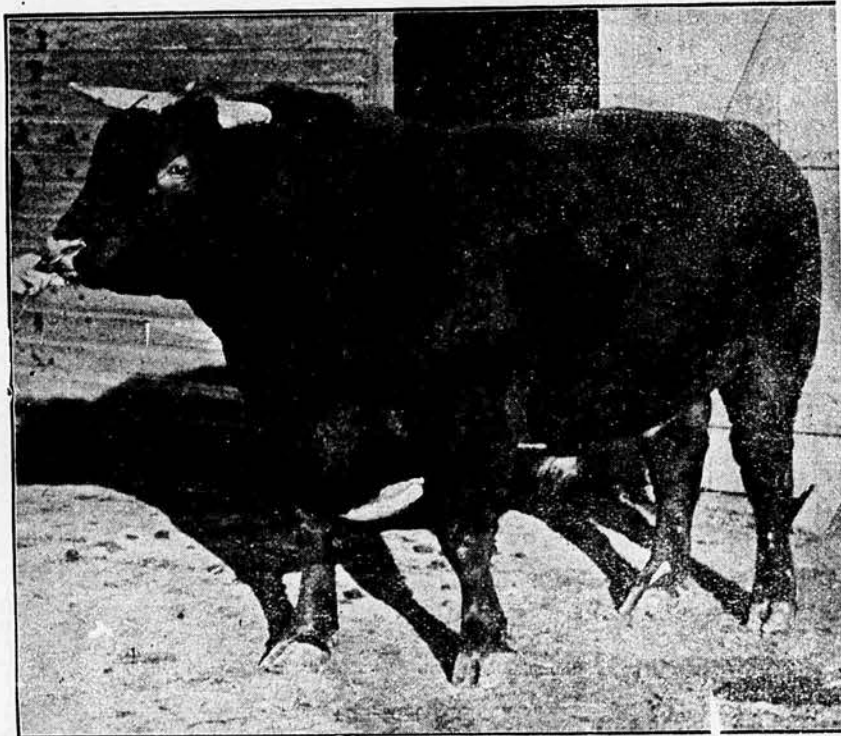
There is also another side, which, while it should not, yet it will probably interest you more, and that is the side which touches the pocketbook. There is no place in which the products of the farm can be placed more profitably than in good horses. There is always a demand for the best and the best always bring the high prices. Only recently in New York a large firm paid \$45,000.00 for one hundred grade Percherons. These horses were all bred in the Middle West and the men that bred them certainly never made any more money out of the corn

and oats they fed to any animals, than they did from the oats and corn these horses ate; and while they were eating it, they were enabled after the age of two years to always earn enough to much more than pay for the feed they consumed.

There is another type of horse which is very profitable for the farmer to raise. It not only gives him great pleasure but great profit as well. This is the highest class carriage horse. His height is about sixteen hands. His weight about twelve hundred pounds and with this he must possess a beautiful conformation as well as good action. The better the action the higher price he will bring. The production of this class of horse can be arrived at in no better and quicker way than by crossing the ordinary light mares of this country, the rotting mares or the saddle mares, with a French Coach stallion. The country about Marion, Iowa, which has produced more high-class carriage horses than any other section of the United States, has used more French Coach stallions in their production than has any other section.

The French Coach horse has been been developed to its present state of perfection by the French Government in order to produce a horse with more

named buyers: J. W. Martin, Richland Center, Wis.; Johnson & Owens, Carthage, Ill.; H. S. Hoyman and Son, Standwood, Ia.; B. F. Fletcher, Dalton, Ill.; John Wilson, Fairview, Mo.; H. B. Allen, Richland Center, Wis.; Sam Waddington, Ortelio, Nebr.; C. Kern, Port Huron, Mich.; C. R. Dawson, Stockton, Ill.; Fred Ambrose, Hudson, Ill.; Schlitz Brewing Co., Milwaukee, Wis.; Warren White, Towanda, Ill.; B. H. Davis, Leroy, Ill.; S. W. Holderly, Leroy, Ill.; R. F. Dunn, Illopolis, Ill.; A. P. Nave, Attica, Ind.; B. K. Moulton, Farmington, Ill.; August Litzaw, Winona, Minn.; Walter Severs, Ashland, Wis.; T. A. Zook, Ellettsville, Mo.; Henry McMackin, Saybrook, Ill.; Avery & Son, Wakefield, Kans.; A. L. Robinson, Tremont, Ill.; J. N. Knox, New Florence, Mo.; C. B. Degger, Floris, Ill.; Jas. Shellhammer, Illopolis, Ill.; Ray Smith, Crawfordsville, Ia.; M. P. & S. E. Lantz, Carlock, Ill.; Samuel Hiser, Cerro Gordo, Ill.; L. C. Lybrand, Richland Center, Wis.; Wesley Bouck, Toronto, Canada; Matt Campbell, Barnes, Ill.; John Roup, Wausau, O.; Jacob Mohr, Norman, Ill.; W. L. Smith, Crawfordsville, Ia.; J. D. Beachy, Arthur, Ill.; Ed Hodge, Bloomington, Ill.; Frank Elsin, Barnes, Ill.; A. C. Johnson, Carthage, Ill.; J. P. Detwiler, Congerville, Ill.; H. G. McMillan, Rock Rapids, Ia.; A. J. Stonebarger, Lone Tree, Ia.; Harry Hartly, West Liberty, Ia.; W. A. Colburn, Secor, Ill.; Elmer Cook, Danvers, Ill.; F. C. Wilson, Mackinaw, Ill.; T. J. Cummins, Newton, Ill.; Joshua Zimmerman, Conkneyville, Ill.; Wm. Rumney & Son, Somanauk, Ill.; Chas. Sprague, Saybrook, Ill.; J. W. & J. C. Robison, Towanda, Kans.; W. T. Tracy, Galesburg, Ill.; Oscar F. Hurdley, Huntington, Ind.; Al Isham, Mazon, Ill.; L. L. Hester, Minonk, Ill.; E. N. DeWitt, Tingley, Ia.; Mercer Davis, Bloomington, Ill.; L. F. Dix, Verona, Ill.; O. J. Howard, Richland Center, Wis.; Geo. Huffman, Farmer City, Ill.; O. M. Andrews, Troy Grove, Ill.; Geo. Warner, Mahomet, Ill.; E. F. Murray, El Paso,



STRAWBERRY BARON 149498.

Herd bull of N. F. Shaw included in Breeders' Association's annual sale at Plainville, Kans., Feb. 23, 1905.

courage, more endurance and better conformation than any other breed of horses in the world. That they have succeeded in this effort is proven by the fact that all other countries in Europe send to France to purchase French Coach stallions for the improvement of their breeds of carriage-horses.

There never was a better time to begin breeding and raising better horses than the present moment. We now have an export trade firmly established for our grade Percherons and Coachers, so that the time will never come when the American farmer cannot sell good ones for Europe at a profit better than he can receive for any other breeds of live stock.

The C. W. Hurt Percheron Sale.

Mr. C. W. Hurt of Arrowsmith, Ill., managed a very successful combination sale of registered horses and cattle at Bloomington, Ill., on January 11, 12 and 13. The horse sales were very satisfactory. Some of the best-known breeders of horses in the country were present and competition was keen. The top of the sale was brought by the 7-year-old Percheron stallion Kimberly, who went to Iowa for \$1,995. The consignors to the horse sale were C. W. Hurt, Arrowsmith, Ill.; S. Noble King, Bloomington, Ill.; Ed Hodgson, El Paso, Ill.; D. Augustine, Carlock, Ill.; Pritchard and Hodgson, Ottawa, Ill.; John C. Baker, Manhattan, Ill.; I. Dillon, Normal; L. Patterson, Eureka; A. J. Dodson, Lexington; E. M. Merritt, Saybrook; A. B. Hodgson, Forrest; Mohr Bros., Normal; Geo. Hougham, Farmer City; Wm. Freitag, Minier; W. D. Lindsay, Kinsman; L. Stubblefield, McLain; John Moon, Colfax; S. E. Lantz, Carlock; J. P. Ropp, Freeport; J. R. Hatfield, Normal; C. L. Yoder, Danvers. The horses were sold to the following

Ill.; Jas. Van Gorter, Mansfield, Ill.; G. E. Roberts, Grant, Ia.; Thos. Mattison, Jr., South Charleston, O.; M. Ankenbrand, Brown, Ill.; Mark Light, Bloomington, Ill.; E. Marts, Towanda, Ill.; C. J. Raboin, Ashkum, Ill.; O. B. Wheeler, Long Point, Ill.; O. F. Hurtle, Huntington, Ind.; Chas. Dewey, Deland, Ill.; C. R. Garner, Dublin, Ind.; B. F. Fletcher, Dalton City, Ill.; B. L. Stipp, El Paso, Ill.; Ed Moots, Towanda, Ill.

SUMMARY—PERCHERONS.

44 mares sold for...\$14,960; average \$340.00
51 stallions sold for...23,525; average 461.00
96 head sold for.....37,806; average 393.75

SHIRES.

1 stallion sold for...\$ 200;
6 mares sold for.....1,815; average \$302.50

CLYDESDALES.

4 stallions sold for.....\$1,340; average \$335
2 mares sold for..... 500; average 250
1 French Coach stallion sold for.....\$410
1 Belgian stallion sold for..... 140
2 road mares sold for..... 205
208 head, all breeds, sold for.....\$42,415


Plainville Shorthorn Sale.

The Plainville Breeders' Association will hold a very important sale of forty registered Shorthorn cattle at Plainville, Rooks County, Kans., on February 23, 1905, consisting of thirty good young bulls and ten cows, choice consignments from leading members of the association. Mr. N. F. Shaw, Plainville, will also include the herd bull Strawberry Baron 149498, a notable sire which he is now ready to part with and will constitute one of the great sale attractions. His picture appears in this issue of the paper. Mr. Shaw will also contribute most of the cows to be sold. William Mellott of Plainville, will contribute a splendid 4-year-old red cow to this sale.

Tucker and Grant, of Natoma, contribute two young bulls, one sired by Mr. Shaw's Strawberry Baron; and Mr. A. E. Cooper of Natoma consigns three young bulls. He is one of the oldest breeders among the Shorthorns members of the association.

J. Leshner of Codeil contributes one 18-months bull, sired by Strawberry Baron

CHALLENGE




When your wind mill and tower blow over, or when the mill is blown from the tower, or when the wheel warps or buckles in the wind, or a short and delicate mast snaps off, then you realize that it would have paid well to have bought a better wind mill. The

Dandy Wind Mill

is that better wind mill. It's better made of better material and of better design. The shafts and bearings are extra long. The gears and all head castings are extra strong. The compound lever brake will control and hold the mill in any wind that blows.

We can't go into details of construction here, but we have a new illustrated circular which tells about the Dandy and the entire Challenge Line. Write for it. Challenge Upright, Horizontal and Mounted Gasoline Engines are the best for all purposes.

Challenge Wind Mill & Feed Mill Co.,
16 River St.,
Batavia, Ill.



FINE CROPS
of hair by mail—six weeks' Correspondence Course Eothen Hair Culture. New Method natural and scientific cure for scalp and hair troubles—Results guaranteed. Send 10 cents postage for one week's treatment free. Eothen Co., 139 Ajax Bldg., Cleveland, O.

SPECIAL SALE FOR NEXT 30 DAYS

A few choice sows bred to Harmonizer. Also a few young boars. M. S. Babcock, Nortonville, Kans.

FAIR ACRES FARM

Offers a choice lot of pure-bred Berkshires, descendants of Lord Premier and Black Robinhood. Pairs not related. Also Black Langshans and White Rocks.

Mrs. C. S. Cross, Emporia, Kans.

STOLL'S STAY-THERE EAR MARK.

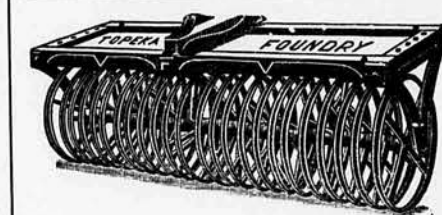
The best and cheapest ear-mark made. It possesses more points of merit than any other mark. Send for samples. H. C. Stoll, Beatrice, Neb.

JACK AND STALLION SALE

AT SAVANNAH, MO., MARCH 9, 1905. □

20 Large Black Jacks, 4 Stallions; 1 Draft, 1 Saddle and 2 Standard, all good. Send for catalogue containing 14 natural photos of stock. Address

G. M. SCOTT, Whitesville, Mo.



NEVER LOSE A CROP

If you use the Topeka Foundry Packer. Packs surface as well as subsurface. Write for prices and circulars.

TOPEKA FOUNDRY, Topeka, Kansas.

and A. W. Hall of Plainville consigns one heifer calf and a bull that were bred by John Warner of Manhattan, and sired by Gloster's Best 175044.

Mr. C. C. Slason of Plainville, consigns a good yearling bull and a young cow with calf at foot, sired by Strawberry Baron.

G. Y. Cockren & Sons, Plainville, contribute six young bulls from 8 to 16 months old and one 2-year-old. These are a very select lot and four of them are straight Bates, being sired by Airdrie Wildeyes 2d 172807, a son of the famous 53d Duke of Airdrie out of Wildeyes Winsome 10th, bred by Governor Glick.

R. L. Ordway of Plainville contributes two splendid bulls of serviceable age that the especially attractive and well-bred animals and like the rest of the cattle in the sale, will appear good to buyers.

may be fortunate enough to be at this sale. For catalogues write N. F. Shaw, Plainville, Kans.

Holdeman's Poland-China Sale.

H. N. Holdeman's second annual public sale of Poland-Chinas was held at Girard, Kans., on January 20, and was more of a success than had been previous ones held at the same town. About fifty head of hogs of both sexes and all ages were disposed of at a general average of about \$20, and while this does not look large on paper, those who were present considered the prices realized to be fairly good and knew that the average was materially reduced by the considerable number of very young animals consigned. The animals were all highly bred and in fine condition, and some of them failed to bring what they were worth, while others brought fully as much as was expected. The highest sale was that of an April gilt, which went to Illinois for \$60, and the second highest was \$42.60 paid for a Missouri Black Perfection sow. The sale was held under Col. Bert Fisher's big tent, which proved quite a satisfactory to both seller and buyer and help to add to the reputation for efficiency which Col. Bert Fisher has already won. He and Col. J. W. Sarks of Marshall, Mo., handled this sale and they make a good working team.

W. A. Prewett's Poland-Chinas.

The writer recently visited this fine herd of Poland-China hogs. He found everything in good condition. The sows and gilts which are to go into Mr. Prewett's sale to be held at his farm one-half mile north of Asherville, Kansas, Feb. 21, were getting into nice shape and will make a very attractive offering. The advertisement of this sale will be found in another column. Further particulars will be given later. Mr. Prewett reports a good fall and winter sale of young boars at fair prices. He is keeping the most of his spring and fall gilts and the writer must say he seldom sees as nice a lot. The boars used in this herd have always been the best obtainable. The oldest is B. B. Perfection, a son of Chief Perfection 2nd. The younger ones are a pair of cracker-jacks—Black Perfection and First Choice, the highest priced pig at F. M. Lall's August sale. The brood sows of the herds have been selected from the best herds of the West and show Mr. Prewett's good judgment. Watch this paper for further particulars and write for catalogue which will be ready soon.

Spriggs' Blue Ribbon Sale.

On Wednesday, February 5, 1905, S. A. Spriggs, Westphalia, Kans., will offer at public sale his champion herd of Percheron stallions and mares and Black Mammoth jacks and jennets. The offering consists of forty head, the biggest sale of the kind ever held in Kansas, and all stock guaranteed shall be as good or better than described in catalogue. As Mr. Spriggs is an expert judge with a national reputation, his judgment on his own stock, which he thinks is the most attractive offering of the kind ever made in the State, should induce shrewd buyers to be in attendance. Twenty years' experience as a successful breeder should enable Mr. Spriggs to present one of the most attractive offerings of the year. Besides the stock shown in the catalogue there will be five non-registered Percheron stallions and a few mares. Watch for some special announcement of notable animals in our next issue and write for catalogue at once to S. A. Spriggs, Westphalia.

White's Poland-Chinas.

C. N. White, of Bennington, Kansas, is preparing to hold a dispersion sale of Poland-Chinas at his farm 4 miles north-east of town, Feb. 22. Mr. White has been a successful breeder for a number of years, but a change of location being necessary he will sell without reserve his entire herd of brood sows and gilts, forty head in all. Fourteen of this number are from the well-known herd of C. M. Garver & Son, Abilene, Kansas. They are daughters of Hadley I Know and Kansas Chief and bred to Bright Sunshine, a grandson of Ideal Sunshine. The other sows and gilts are extra good, many of the gilts being out of the Garver sows mentioned above and sired by Hard To Beat and other good boars. They are safe in pig to Bright Sunshine, though some of the offering have been bred to Hard To Beat, Jr. Write Mr. White for a catalogue.

The Cottlinghams' Ninth Annual Sale.

In their private sale barn at McPherson, Kans., on Wednesday, February 15, W. H. Cottlingham & Sons will sell forty head of draft and road-horses. The drafters will be geldings and mares, some of which are in matched teams. Among the roadsters will be found matched teams and single-drivers. On Thursday, February 16, at the same place, they will sell fifty head of pure-bred Poland-China swine. There will be thirty tried brood sows, fifteen spring gilts and five boars. This will make an exceptionally good opportunity for the breeders and farmers of Kansas to get money-making stock almost at home and for their own price. See their ad on page 136 and write for catalogue.

Do Not Forget the Great Western Two Days' Sale of Poland-Chinas.

The first of these will be held at Leavenworth on Monday, February 6, when John Bollin and Gus Aaron of Leavenworth and H. M. Kirkpatrick of Wolcott will sell some of the best hogs they have ever put in the sale-ring. The other one will be held at Atchison on Tuesday, February 7, when Mr. Leon Calhoun of Potter, Kansas, will sell about fifty head of top-notchers. These sales are easily reached by railroad communication from all directions and the Leavenworth sale can be reached by the trolley cars from Kansas City, which run every hour. Buy-free at a distance will be entertained at the hotels in the respective cities, and there will not be any excuse possible for not owning some of the best Poland-Chinas in Kansas.

Painkiller PERRY DAVIS'
The world-known household remedy for cuts, burns, bruises—coughs, colds, sore throat.

Gossip About Stock.

Have you written Messrs. J. H. Speer & Co., Abilene, Kansas for a list of the fine farms they have for sale?

A. M. Ashcraft & Son, breeders of Shorthorn cattle at Atchison, Kans., report a good inquiry for bulls and say that they have several extra good red bulls on hand, that they are offering at very reasonable prices to make room for the young stock coming on.

Persons desiring to purchase a stallion or jack should notice the sale ad of G. M. Scott, Savannah, Mo., who holds a public sale at that place March 9, 1905. A catalogue describing stock and containing a number of photos will be mailed upon application.

H. W. Sternmeyer, Volland, Kans., announces that as one of the series of Duroc-Jersey sales, on February 23 at Alma, Kans., he proposes to sell forty head of bred sows and gilts, the tops of Egypt Valley herd, of desirable breeding, as shown by the catalogue which will be sent on request.

Mr. N. Kirtley, Savannah, Andrew Co., Mo., claims April 6 and 7 for a public sale of registered cattle. The sale will be held at his large breeding farm, near Savannah, and will include 100 head of Herefords, mostly all of his own breeding. This big two-days sale is one that our readers will look forward to with interest. Full particulars will be given through our advertising columns in due season.

The Harvey County Breeders' Association will hold its next annual sale at Newton on February 21 and 22 as advertised. The first day will be devoted to the sale of pure-bred cattle, Shorthorns, Herefords and Galloways. The second day to pure-bred Poland-Chinas, Duroc-Jersey and Chester White swine. Choice selection from the various pure-bred herds of Harvey County. Look up their advertisement and write the Secretary for catalogue.

Every breeder of pure-bred animals is very much interested in the matter of the sure identification of every animal. Such breeders will be interested in the ear marks made by H. C. Stoll, Beatrice, Nebr., who claims to have the best ear mark on the market, and would be pleased to send a sample to be compared with any other to any of our advertisers. Look up his advertisement and write him at once. Mr. Stoll is an old breeder himself and knows what stockmen require.

We are in receipt of a letter from Geo. Channon, of Hope, Kans., regarding his sale to be held on February 16, 1905, in which he announces that on account of bad weather and scarcity of shelter, he has found it difficult to separate his cattle as originally proposed, and in consequence of which will put into the sale ten of the best cows of the herd, also fifteen of the very best top yearling heifers, which should make the offering much more attractive than originally planned.

At Alma, Kan., on Monday, February 6, A. & P. Schmitz will sell a choice lot of forty-five sows and gilts. All of the fashionable families are represented in the breeding, and the animals themselves are in excellent condition. Two herd boars will also be offered. Buyers will be met at the trains either at Alma or McFarland, and the sale will be held under cover. Colonel Bert Fisher of Topeka, will have charge as auctioneer, and mail bids may be sent to him by those who can not be present.

P. G. Heldegrecht, Inman, Kans., writes: "Our stock is doing finely. Ben Hur 3d, a 3-year-old Percheron stallion, we bought of J. W. & J. C. Robinson, is making a good growth and is the wide-as-a-wagon kind. Also we have raised a very big pair of fillies of the big mares we bought of Mr. J. W. Robinson a year ago. Some people say it don't pay to raise horses, but if we can breed the good kind it will pay. It never has paid to raise a scrub kind, but it always and at all times has been a profit to raise the good kind."

R. F. Norton, Clay Center, Kansas, writes: Sales are good. The breeding of this herd seems to be in demand. I have just sold Baby N. 59736, one of my good aged sows, to Fred Miller, Wakefield, Kansas, at a good round price. Mr. Miller is a new breeder, but if he continues to display the good judgment in his purchases he did with the ones he bought of me, his herd will be a good one. Mr. Norton's change of ad. shows he has made a good many sales since patronizing this paper. Evidently he is finding out what every other patron learns: "That it pays to advertise in the Kansas Farmer."

Everybody in the market for jacks and jennets, will naturally want to go to headquarters to get their stock. And the annual public sale of the Limestone Valley Farm, owned by L. M. Monsees & Son, Smithton, Mo., which will be held early in March, will be the greatest auction event for this class of stock to be held this year. Among the good things in the offering, is the grand old Jack, Limestone Mammoth 288, who was the sire of the greater portion of their World's Fair show-herd, a herd which won seventy premiums, which was more than all other exhibitors combined. Write for catalogue and mention Kansas Farmer.

At Fredonia, Kans., on Friday and Saturday, February 17 and 18, will be held the second annual combination sale of the associated breeders in the vicinity. The first day will be devoted to the selling of sixty-eight head of pure-bred Poland-China, Duroc-Jersey and Berkshire swine. These are contributed by the best-known breeders in Southwestern Kansas. The second day will be devoted to the disposal of a useful lot of cattle number-

ing about fifty head. These are pure-bred Shorthorns, Herefords, Polled Angus and Red Polled cattle and are contributed by breeders that are well-known. The sale will be conducted by Coles J. W. Sheets of Fredonia and Lafe Burger of Wellington, to either of whom mail bids may be sent. Notice the ad on another page.

With the nearing of spring the demand for Herefords, writes C. A. Stannard, Emporia, Kans., is improving and from the inquiry and sales made lately, I believe all good Hereford cattle can be sold at better prices than have prevailed for the last six months. I have sold in the past few days some thirty head, among them Lord Saxon 11th, 188215, to Arthur K. Jacobs, of Neosho Rapids, Kans. I regard this as one of the best, if not the best calf I have ever sold, and as Mr. Jacobs has one of the best little herds of cattle in Kansas, and is a very discriminating buyer, I regard it as a great compliment to my herd bull Lord Saxon, that he should select one of his calves to head his herd. While prices are not what they were two years ago they are fairly remunerative to careful breeders and it is my judgment that the will materially improve in the next ninety days.

One of the new herds of Duroc-Jerseys which has been attracting much favorable attention is that of Mr. and Mrs. Henry Shrader, of Wauneta, Kans. This is not a new herd of hogs but is new to Kansas. Mr. and Mrs. Shrader have been engaged for many years in the breeding of pure-bred poultry and have lately devoted special attention to the Duroc swine. The head of their swine herd is Kansas Chief 31747, who has associated with him some very fine brood sows such as Red Queen 63142, whose last litter was farrowed on August 29 and numbered ten, which now weigh 125 pounds each. Sunshine K. 63144 is a full sister to Red Queen and equally good as a breeder. Goldie B. 68602 is a daughter of Red Queen, Miss Elsie 68606, Miss Jersey 68608, are but samples of the herd. Among them are a lot of early gilts with the brood sows, which are bred for early farrow. The Shraders expect to be able to supply the large demand which has been made upon them easier than ever before. Read their advertising card and write for particulars.

Strawberry Baron 149498.

In this week's issue we present a splendid picture of a famous Shorthorn herd bull, Strawberry Baron, the head of the Plainville Shorthorn herd owned by N. F. Shaw, who is one of the principal contributors at the second annual sale, to be held at Plainville, on February 23, 1905. He has proved to be one of the great sires, as a number of his get will testify in the sale presentation. He and six of his sons will be offered at this sale. Also a number of his daughters. Intending purchasers who want to get Shorthorns of merit, worth the money, that have been handled properly, should write at once to N. F. Shaw, Plainville, for catalogue of this sale.

The Markets

Kansas City Grain and Seed Market.

The railroads reported 107 cars of wheat received, compared with 112 cars a week ago and 101 cars a year ago. Sales of car lots by sample on track, Kansas City: Hard Wheat, No. 2, 1 car \$1.10, 2 cars \$1.09, 4 cars \$1.09. No. 3 hard, 13 cars \$1.08, 11 cars \$1.08, 3 cars \$1.07, 4 cars \$1.07, 2 cars \$1.06, 1 car \$1.06, 1 car \$1.05, 1 car \$1.04, No. 4 hard, 1 car \$1.05, 3 cars \$1.04, 1 car \$1.03, 4 cars \$1.03, 4 cars \$1.02, 8 cars \$1.00, 2 cars 98c. Rejected hard, 1 car 94, 1 car 92, 1 car 91, 1 car 90, 3 cars 87. Soft Wheat, No. 2 red, 1 car \$1.15 No. 3 red, 1 car \$1.11. No. 4 red, 1 car \$1.09, 1 car \$1.02, 1 car \$1.00. Spring wheat, No. 3, 1 car \$1.06. Mixed corn sold readily at unchanged to 1/4c higher prices. White corn was unchanged to 1/4c lower. Receipts were rather large, but offerings on the floor were light. The railroads reported 98 cars of corn received, compared with 89 cars a week ago and 66 cars a year ago. Sales of car lots by sample on track, Kansas City: Mixed corn, No. 2, 2 cars yellow 44c, 1 car yellow 43 1/2c, 2 cars 43 1/2c, 22 cars 43 1/2c; No. 3, 4 cars 43 1/2c, 5 cars 43 1/2c; No. 4, 2 cars yellow 42c. White corn, No. 2, 3 cars 44 1/2c, 2 cars 44 1/2c; No. 3, 2 cars 44 1/2c. Oats prices were unchanged. Receipts were large. The demand was poor. Sales of car lots by sample on track, Kansas City: Mixed oats, No. 2, nominally 31c; No. 3, nominally 30 1/2c to 30 3/4c. White oats, No. 2, 2 cars 31 1/2c; No. 3, 1 car 31c, 1 car 30 1/2c. Rye, No. 2, nominally 77c. Corn Chop, nominally 86c, in 100-lb sacks. Flaxseed, nominally \$1.09 per bushel. Timothy, nominally \$2.50 per 100 lbs. Bran, 1 car poor 82c, in 100-lb sacks. Shorts, nominally 90 1/2c, in 100-lb sacks. Kaffir-corn, nominally 66 1/2c to 70c per 100 lbs. Millet, German, \$1.10 to \$1.40; common, \$1.05 to \$1.25 per 100 lbs. Red clover and alfalfa, \$9.00 to \$11.50 per 100 lbs. Cane Seed—\$1.20 to \$1.30 per 100 lbs. Linseed cake, car lots, \$27 per ton; ton lots, \$28; per 1,000 lbs, \$15; smaller quantities, \$1.60 per cwt. Bulk oil cake, car lots, \$26 per ton. Castor beans, \$1.35 per bushel, in car lots; \$1.30 less than car lots.

Kansas City Live Stock Market.

Kansas City, Jan. 30. Official receipts of cattle for the week ending Saturday were 34,487 against 32,824 last week and 39,684 a year ago. Saturday's beef-steer market closed with best grades showing an advance of 10 to 20c; others dropped 10 to 20c. Cows and heifers held steady for best; others dropped 20 to 35c. Bulls broke 10 to 20c. Calves remained unchanged. Stockers and feeders were quiet with prices on best steady and on others irregularly lower. Receipts to-day were 7,000 and the market for beefs was active and steady to 10c higher. Cows and heifers were 10 to 15c



NONE LIKE IT

GROWN ONLY BY WESTERN SEED COMPANY, SHERANDOAH, IA.

Try our Diamond Seed and see the Difference between them and Cheap Seeds; all such are dear even as a gift and ruinous to those who plant them. Don't be fooled. Better be cautious than sorry. All Our Seeds are Guaranteed to Grow or your money back. Write for our large illustrated catalog today. It tells you all about it. It's Free for the asking. It gives prices and descriptions of all Farm, Garden and Flower Seeds that are worth planting. Every packet sold under seal. Send today then you can order and receive seeds in good time for planting.

Address, WESTERN SEED CO., Shenandoah, Ia.

FOR SALE

Agricultural College Live Stock

Thirty head of imported and home-bred Shropshire ewes, 1 to 3 years old. Strong, healthy and safe in lamb. Also the Galloway herd bull, First King of Avondale 19420, calved April 9, 1900. Sire, King Hensol 9967, dam, Maid of Bellewood 12334. The Ayrshire bull, Marquis of Woodroffe 12945, calved September 27, 1900. Sire, Glencairn of Maple Grove 6973. Three young Ayrshire bulls, one yearling Red Polled bull, one Jersey bull calf, and a few Ayrshire and Galloway cows. All in good condition, well bred and sold for no fault. Prices very reasonable. Visitors always welcome. Address,

PROF. R. J. KINZER,
Kansas State Agricultural College,
Manhattan, Kans.

Headache

Can be Cured with Dr. Miles' Anti-Pain Pills.

If your nerves are subject to disturbances, such as Headaches, Neuralgia, Backache, Rheumatism, Menstrual Pains, Sleeplessness, etc., their jarring and jangling can be quickly ended with a Dr. Miles' Anti-Pain Pill.

Dr. Miles' Anti-Pain Pills are pleasant little pink tablets, which do not act on the bowels, nor do they have any disagreeable weakening or habit-forming effect on the system.

They are the result of the latest scientific knowledge on the subject of Pain, and bring relief safely and quickly to the greatest sufferer.

You should always keep a box of Dr. Miles' Anti-Pain Pills in the house, since you never know when pain may attack you, and it is wrong to suffer when your suffering can be so quickly relieved.

Dr. Miles' Anti-Pain Pills contain no opium, chloral, cocaine, morphine, or similar drugs, and are sold by druggists under a guarantee to relieve you, or pay your money back.

By relieving Pain, Dr. Miles' Anti-Pain Pills shorten suffering, and lengthen life. 25 cents. Never sold in bulk.

"I have used Dr. Miles' Anti-Pain Pills when troubled with headache, and find that one pill infallibly effects relief in a very short time. I also use Dr. Miles' Nerve and Liver Pills when necessary. I am considerably afflicted with neuralgia of the head and find these pills of much benefit to me. They are all that is claimed for them."—GEORGE COLGATE, 219 Oakland St., San Antonio, Tex.

FREE Write to us for Free Trial Package of Dr. Miles' Anti-Pain Pills, the New Scientific Remedy for Pain. Also Symptom Blank. Our Specialist will diagnose your case, tell you what is wrong and how to right it. Free. DR. MILES MEDICAL CO., LABORATORIES, ELKHART, IND.

To Whom It May Concern: The stockholders of the Topeka Independent Telephone Company have thought best to incorporate as a Kansas corporation, the organization having been originally made under the laws of West Virginia. With this end in view and in order to enlarge their capital the business has been transferred to the Independent Telephone Company, organized under the laws of Kansas. There will be no change in management or in the conduct of the business. At a meeting of the stockholders of said company held at 519 Kansas Avenue, Topeka, Kans., on Tuesday, January 3, 1905, the following resolution was adopted for the purpose of securing the dissolution of the old company:

"Be it resolved by the stockholders of the Topeka Independent Telephone Company, in general meeting assembled, that all business of this corporation be discontinued and that no further business be transacted by its officers and directors save and except such as may be necessary to wind up its affairs and conclude its operations, and to this end the president of this company is hereby authorized to cause public notice of this resolution to be made in the Kansas Farmer, a weekly newspaper published at the City of Topeka, Shawnee County, Kansas, near the principal office or place of business of this corporation once a week for six weeks, and he shall also forthwith forward a certified copy of this resolution under his hand and the seal of the corporation to the Secretary of State of the State of West Virginia."

B. F. PANKEY, President.

higher. Best stockers and feeders were a shade higher; others steady.

The following are the prices now ruling: Extra prime corn-fed steers \$5.25@5.60; good, \$4.50@5.00; ordinary, \$3.75@4.25; choice corn-fed heifers, \$4.00@4.25; good, \$3.50@4.00; medium, \$2.75@3.50; choice corn-fed cows, \$3.50@4.00; good, \$2.75@3.25; medium, \$2.40@2.75; canners, \$1.50@2.25; choice stags, \$4.00@4.50; medium, \$3.25@4.00; choice fed bulls, \$2.00@2.35; veal calves, \$5.00@6.50; good to choice native or western stockers, \$3.75@4.00; fair, \$3.25@3.75; common, \$2.75@3.00; good to choice heavy native feeders, \$4.00@4.50; fair, \$3.50@4.00; good to choice heavy branded horned feeders, \$3.50@3.75; fair, \$3.25@3.50; common, \$2.75@3.00; good to choice stock heifers, \$2.25@2.75; fair, \$1.75@2.00; good to choice stock calves, steers, \$3.50@4.00; fair, \$3.00@3.50.

Saturday's closing prices were unchanged from those ruling that day the week before. Receipts to-day were 7,000 and the market weak to lower. Bulk of sales were from \$4.50 to \$4.75; top, \$4.80. The sheep market for the week made a bad finish, dropping anywhere from 25 to 75c. Receipts to-day were 6,500 and the market was strong to 25c higher. Top lambs brought \$7.00; yearlings \$6.25; ewes, \$4.75; wethers, \$5.00.

Special Want Column

"Wanted," "For Sale," "For Exchange," and small or special advertisements for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

CATTLE.

FOR SALE—Ten head of red Shorthorn bulls, 1 and 2 year olds: one red Crutcher yearling bull good enough to head a herd. Will also sell my aged herd bull or will trade him for another as good; a fine breeder, and a large fellow. White Holland turkeys, and Harred Plymouth Rock cockerels; cockerels for sale, \$1 each. Will be pleased to hear from any one wanting any of the above. Visitors welcome. A. F. Huse, Manhattan, Kans.

FOR SALE—A registered Red Polled bull, 30 months old, weight 1,600 pounds, in good condition will guarantee him a breeder, price, \$100. For pedigree or other information address W. E. Brockelsby, 815 E. Hancock, Lawrence, Kans.

FOUR GOOD HE FORD BULLS, 15 to 20 months, at reduced prices if taken at once; also a few younger ones. A. Johnson, Clearwater, Kans.

YOUNG HOLSTEIN BULLS ready for service, \$40 to \$50 each. They are right in shape, size, color and from cows that produce from 11,000 to 12,500 pounds of 2.7 to 3.9 milk. All registered. Burton & Burton, East Seward Ave., Topeka, Kans.

FOR SALE OR EXCHANGE for another of the same kind, a double standard Polled Durham bull, 3 years old last October. First-class in every respect. I have 35 calves from him and all hornless. R. T. VanDeventer, Manhattan, Kans.

FOR SALE—Guernsey bull from best registered stock. J. W. Perkins, 423 Altman Building, Kansas City, Mo.

FOR SALE—Shorthorn bulls, 11 to 18 months old, sired by Godoy Butterfly 142556; two are Rose of Sharons, one Wild Eyed and one Lydia Langels; none better bred and better individuals; each one out of an extra good big cow; will sell my herd bull, Godoy Butterfly, having used him 4 years. E. S. Myers, Chanute, Kans.

FOR SALE—Eight good, registered Shorthorn bulls, four straight Crutcher, good ones, and prices right. H. W. McAfee, Sta. C, Topeka, Kans.

HOLSTEIN-FRIESIAN BULL CALVES FOR SALE—From best registered stock. Address A. J. White, Route 7, Station B, Topeka, Kans.

FOR SALE—A 3-year-old Shorthorn bull, sired by Royal Bates. Address Dr. N. J. Taylor, Berryton, Kans.

SWINE.

FOR SALE—Say! I have some fine, big-boned, broad-backed Berkshires, brood sows or pigs. Want some? Write me; turkeys all sold. E. M. Melville, Eudora, Kans.

FOR SALE OR TRADE—For Poland-China sows, one Shorthorn bull calf, a show calf and a red. Geo. Manville, Dearborn, Mo.

REGISTERED DUROC-JERSEYS from families that won first prize over Poland-Chinas, Berkshires and all others at Fort Worth Fat Stock Show last year and the year before; young boars ready for service at \$6 to \$10 each. E. S. Burton, East Seward Ave., Topeka, Kans.

FOR SALE—Boars for immediate use. Sons of Perfect I Know, out of daughter of Ideal Sunshine. Geo. W. Maffet, Lawrence, Kans.

FOR QUICK RETURNS—11 of the very choicest breeding of Duroc-Jersey boars from premium stock, April farrow, color right, ears right, head right, and all right or money back; special price for the next 30 days. F. L. McClelland, Route 1, Berryton, Shawnee County, Kans.

WANTED—Farmers to use the latest patented husking hook. You can husk more corn with it than any other sent by mail, price 35 cents. Address A. W. Toole, 809 North Fourth Street, St. Joseph, Mo.

FOR SALE—2 choice Hereford bulls, 22 months old; something good. Call on or address A. Johnson, Route 2, Clearwater, Sedgewick Co., Kansas.

HORSES AND MULES.

FOR SALE OR TRADE—French draft stallion, black in color, 12 years old, registered, weight 1,800 pounds, sound. One imported black Percheron, 12 years old, weight 1,600 pounds, sound. One steel gray jack, 7 years old, 15-1 hands in height, sound and good performer. One unbroken 3-year-old black jack, 15-1 hands high. Colts to show; prefer young jacks, jennets or registered Draft mares. No land wanted. Am quitting the business. J. A. Marshall, Gardner, Johnson County, Kans.

FOR SALE CHEAP—Or will trade for cattle, my imported black Percheron stallion, Cyrus 38455; also my trotting-bred stallion Bird, a fine horse. Address Col. W. C. Hyatt, P. O. Box 35, Carbondale, Kans.

FOR SALE—The Giant, a large brown stallion, trotting-bred and Coachy built; stands seventeen hands high, weighs 1,600 pounds, coming 6 years old, sound, sure foal-getter and good breeder; has fine style and plenty of bone and substance. For price and pedigree address the undersigned, S. Lehman, Newton, Kans.

HORSES AND MULES.

FOR SALE—Seven jacks; five stallions; Percheron saddle, coach or trotters. All under 6 years; ready for service at low prices. Al. E. Smith, Route 1, Lawrence, Kans.

FOR SALE—A Registered Percheron stallion, Alt-nce. A splendid sire, mahogany bay, easy terms. Address J. H. Pennick, Menoken, Kans.

EIGHT JACKS FOR SALE—Running from 14 to 15 hands, by standard measure, white points, four years old, to be headed with a jack. Don't write, but come and see them—still if you can't come, write, James M. Olive, Hume, Bates Co., Mo.

I WANT TO BUY a good jack. William Tomb, Wichita, Kans.

CLYDESDALE STALLIONS FOR SALE—One bay 4-year-old, registered, weighs 1,800 lbs. One black 2-year-old, weighing 1,400 lbs. They have good bone and action and priced cheap. For breeding and prices address A. C. Bradford, Viola, Ill.

FOR SALE—One 4-year-old jack, he is black, with white points. One registered Cleveland Bay stallion, weight 1,800 pounds. These both are good individuals, and good breeders. Will sell or trade for stock, or western land. I. L. Feasel, Taimo, Republic Co., Kans.

FOR SALE—Big, bony, pure-bred Percheron stud colts, 1, 2 or 3 years old, bays, browns and blacks. D. J. Small, Hoyt, Kans.

LEAVENWORTH COUNTY JACK FARM. 5 miles north of Easton; 20 jacks and jennets for sale. O. J. Corson, Potter, Kans.

EIGHT REGISTERED PERCHERON and French Coach stallion and one large black jack, cheap for cash, to close them out by April 1. H. C. Staley, breeder, Rose Hill, Butler County, Kans.

FOR SALE—Standard and registered 4-year-old stallion Honor, also the aged registered stallion Senator Updegraff and Honor, or will lease the aged horses. O. P. Updegraff, Topeka, Kans.

FOR SALE—Black Mammoth Jack, with white points, 8 years old, good breeder, can show colts, easy handled, quick service. \$175 if taken at once. A. E. Cooper, Route 1, Miami, Indian Ter.

FOR SALE—A registered black Norman stallion, weight 1,800, coming 6 years old; also a three-quarter grade, coming 5 years old, weight 1,500, a good individual and breeder. R. E. Casad, Ocheltree, Kans.

STRAY MARE—A black mare came to Wm. Cook's residence, one-half mile east of the city of Downs, Kans., on or about the 10th day of October, 1904, weight about 900 pounds, age about 8 years, worth, \$40; branded on the left shoulder, owner or owners will please come prove property and pay expenses.

SEEDS AND PLANTS.

ALFALFA SEED, \$7. J. Glenn, Wallace, Kans.

FOR SALE—Speltz 60c. per bushel, sacked. L. G. Patterson, or M. Arnett, Blue Rapids, Kans.

FOR SALE—Success Beardless Farley, 90c per bu. Macaroni Wheat \$1.40. Sacks free. Address, W. C. Campbell, Ames, Kans.

WANTED—(ane. kaf-corn, millet, alfalfa clover, English blue-grass and other seeds. If any to offer send samples and write us. Missouri Seed Co., Kansas City, Mo.

SEED-CORN—"Hidreth Yellow Dent easily ranked first as the best producing variety." Bulletin 128. Write C. E. Hidreth, Altamont, Kans.

FOR SALE—Emmer (speltz), extra quality; order early. Willard A. Miller, R. 2, Rantoul, Kans.

50,000 TREES AT HALF PRICE—First-class apple, plum, cherry. Plants, shrubs at wholesale. Peach trees, \$10 per thousand. Freight prepaid anywhere. Catalog free. Seneca Nursery, Seneca, Kans.

FOR SALE—Speltz, 70c bushel; macaroni wheat, \$1.10. b. Wheeler & Baldwin, Delphos, Kans.; or S. B. Wheeler, Ada, Kans.

ENGLISH BLUE GRASS SEED FOR SALE. Reference First National Bank. Address J. G. Hinsh, Eureka, Kans.

MISCELLANEOUS.

NOTICE—Is hereby given, that the name of the Farmers Mutual Hall Insurance Association, having its principal office and place of business in the City of Topeka, a county of Shawnee, and state of Kansas, has been duly changed according to the provisions of the Statute in such cases made and provided, to the Gr. In Growers Hall Insurance Company. W. F. Bagley, President of said Corporation.

FOR SALE—Reliance well drill, good as new, brand new power, 6, 8, 10 and 12-inch bits, new cable; drill mounted on heavy trucks, spools 750 feet of cable. Price, f. o. b. \$800. Grant Ewing, Blue Rapids, Kans.

W. G. HAWORTH, Stock Auctioneer, Eudora, Kans. Choice Galloway cattle and a farm for sale.

WANTED—An experienced blacksmith; good position to right party. Single man preferred. Apply to Deming Ranch, Oswego, Kans.

SILAM SPRINGS, ARK.—High altitude, healthy climate, spring and fruit, swimming water, good schools, churches, Methodist college, no saloons. Wright & Graves, Silam Springs, Ark.

HONEY—New crop, water white, 8 cents per pound. Special prices on quantity. A. S. Parson, Rocky Ford, Colo.

WANTED—Young men to learn Telegraphy and Railway Business. W. J. Skelton, Salina, Kans.

FOR SALE—Second-hand engines, all kinds and all prices; also separators for farmers own use. Address The Gelser Mfg. Co., Kansas City, Mo.

PALATKA—For reliable information, booklets and other literature, address Board of Trade, Palatka, Florida.

FOR SALE—12-horse gas engine, nearly new. Guaranteed to work or no pay. A bargain. Address F. C. Purdy, Sterling, Rice Co., Kans.

WANTED—Right away; a girl to assist with housework; good home, wages, and school if desired. Address at once Langley Stock Farm, Morland, Kans.

WANTED—Good strong country girl for housework; one that can do plain cooking and that is willing to learn; good wages, private family. Address Mrs. A. E. Quinton, 1243 Topeka Ave., Topeka, Kans.

HONEY—Old-fashioned, best white, such as you used to get "back East." 50-lb. can, \$4.80; two, \$9.50. C. A. Hatch, Richland Center, Wis.

FOUR GREAT MARCHES FOR PIANO OR ORGAN—"Odd Fellows Grand March," "Dole's Twostep March," "California Commandery March" and "St. George Commandery March," 15 cents each or the four for 50 cents. If you are not pleased I will return stamps on receipt of music. Offer good for sixty days. Mention Kansas Farmer. Address Isaac Dole, Indianapolis, Ind.

AGENTS.

FARMER AGENTS WANTED—Turn your spare time into dollars. The demand is what makes the quick sales. It is easier than you think. "Sold eight in five hours' work."—Harmon J. Wood, Marion, Ia. "Sold first dozen in one and a half days."—J. W. Babcock, Peasantville, Ia. "Sold five in half day."—C. A. Grigby, Miltonvale, Kan. "Took eight orders this afternoon."—Fred K. Childs, Morristown, N. J. "Sold 20 in two and one-half days."—H. H. Whiting, Ia. "Sold seven in four hours."—H. C. Page, York, Neb. "Sold 13 in one and a half days."—Lyman A. Hall, North Green, N. Y. "My sales of three days' work is 26 account books."—E. R. Follett Concordia, Kans. "Saw nine farmers this afternoon; sold seven."—Wm. H. Spicer, Leeward, Ct. The Farmers' Account Book is a time saver and money-saver. It increases in value from year to year. We pay our agents very liberal. Write 5 days before someone else takes the agency for your locality. Farmers' Account Book Co., Newton, Ia.

WANTED—Salesman to call on grocery trade, \$75 per month and expenses. Enclose stamped envelope for reply. Buffalo Chemical Co., Buffalo, N. Y.

AGENTS—Here is a corker: only pancake griddle in world that bakes square cakes and turns them; bakes six each time; 100 per cent profit. Canton Griddle Co., Canton, Ohio.

WANTED—Man with rig, in each county; salary, \$85 per month. Write to-day. Continental Stock Food Co., Kansas City, Mo.

LADIES—Our Handy Sheet Biting and Tabet Flavouring Extract are the best made. Something new. Absolutely pure. Non-poisonous. Once tried always used. Price 10 cents each, 3 for 25 cents. Sample and circulars for stamp. Lady agents wanted. J. C. Cook & Co., 275 E. Erie, Chicago.

FARMS AND RANCHES.

FOR TRADE—200 acres improved near county seat, central Tennessee; fine. Also Franklin county, Kansas farms to sell. Buckeye Agency, Route 2, Williamsburg, Kans.

280-ACRE DAIRY FARM in Central Kansas, two miles from town, good improvements; \$35 per acre. Address F. W. C., care Kansas Farmer.

YOU CAN GET RICH RAISING FRUIT, GRAIN AND HAY in the Grand Valley. Some good land left at \$50 per acre. Winters are warm and mild. Write for descriptive literature. M. G. Woolverton, Grand Junction, Colo.

FOR SALE—160 acres grass land. Would make good farm. A bargain if bought soon. Land is 5 miles from Beuhler, Kans. Price, \$1,100. F. C. Purdy, Sterling, Kans.

CENTRAL Kansas Stock Farm has for sale cheap, splendid Poland-China boars and gilts, May and June farrow, sired by Corrector Woodburn, and K. O. Perfection, out of Sunshine and Tecumseh sows. E. J. Knowlton, Prop., Alden, Rice Co., Kans.

FOR SALE—A Fine Ranch. 628 acres; 450 pasture of the finest, water for 1,000 cattle, 6 room house, barn 40x100 ft.; 30 acres hay land, balance farm land, half upland and half bottom. Address, C. H. Manley, Jr., Junction City, Kans.

FOR RENT—A good second bottom farm, 80 acres, good house, barn, out-buildings and orchard, 6 miles from Topeka. Call at or address, Room 6, Office Block, Topeka.

FOR SALE—On 8 years time, several 40-acre farm homes, truck farming, stock raising poultry and fruit, in coast country of Texas. A postal card will bring illustrated booklet giving particulars. Who can tell who can tell what the investment of that modest penny may mean. Try it. Why not? Address, HERBERT D. EUDR, 224 Temple Block, Kansas City, Mo.

FOR RENT—Stock ranch, chicken or dairy farm, both for term of years; also 160 acre stock and grain farm. Buckeye Agency, Route 2, Williamsburg, Kans.

SOME GOOD BARGAINS—160 acres, 40 acres bottom, fine orchard, \$3,500; 320 acres, \$4,100 worth of improvements, \$5,500; 320 acres, 70 acres bottom, well improved, \$6,200; 240 acres nice south land, good improvements, \$3,500; 400 acres, 170 acres of first and second bottom in cultivation, \$5,000; 444 acres, 110 acres in cultivation, \$11 per acre, one-fourth cash, balance to 8 ft. Grass land in any sized tract from 160 to 4,000 acres, from \$10 to \$12.50 per acre. Try us. Garrison & Studebaker, Florence, Kans.

WANTED—To trade for land, some good, registered draft stallions, worth the money. A. C. Haworth, Lewis, Iowa.

IMPROVED FARMS, ranches alfalfa farms, pasture lands, Osborne, Russell, and Rooks Counties, Kansas. Mercantile stocks to sell or trade. Correspondence solicited. Write to-day. Otis & Smith, Natoma, Osborne County, Kans.

160-ACRE BOTTOM FARM, 1 1/2 miles from Abilene, well improved; price \$20 per acre. Write for list. J. H. Speer & Co., Abilene, Kans.

FOR SALE—200 acres fine pasture land, 175 acres of it is mow land, two miles from Alma, living water that never fails, all fenced. This is a bargain if taken soon. Call on or address Mrs. M. A. Watts, Alma, Kans.

GOOD BOTTOM FARM FOR CASH RENT—147 acres, 7 miles from Emporia. Address J. M. Rhodes, Emporia, Kans.

MARION COUNTY BARGAINS—160 acres, 5 1/2 miles from county seat, 4-room house, barn 44 by 18 feet, with shed addition, 11 acres alfalfa, 40 acres pasture with spring, balance all good farm land, part bottom. Price, \$5,200 400 acres, finely improved, all good land except 20 acres, which is a little stony, will sell on easy terms, or will take smaller farm as part payment. All kind and sized farms for sale. Let me know what you want to buy, sell or trade. A. S. Quisenberry, Marion, Kans.

MARION COUNTY REAL ESTATE. 80 acres; 50 acres in cultivation, 10 acres alfalfa and orchard; frame house of three rooms, all kinds of outbuildings; handy to school and near to market. Price, \$2,100. 160 acres; 80 in cultivation, nearly all under fence, 20 acres alfalfa; house, stable, granaries and all kinds of outbuildings; 8 miles from Marion, and is a bargain at \$20 per acre. 320 acres of magnificent grass land near this city for \$4,500. Write for descriptive folder. W. P. MORRIS, Marion, Kans.

LAND FOR SALE. In western part of the great wheat state. H. V. Gilbert, Wallace, Kans.

VIRGINIA FARMS—\$5 per acre and up with improvements. Address Farm Dept., N. & W. Ry., Roanoke, Va.

FARMS For rich gardening and fruit-growing. Write J. D. S. Hanson, Hart, Mich.

FARMS FOR SALE on crop payments. J. MULHALL, Sioux City, Ia.

IF YOU WANT A FARM BARGAIN Send for my IOWA FARM LIST. C. A. BENT, Mt. Airy, Iowa.

FARMS AND RANCHES.

"WE CAN SELL"

Or trade your farm, merchandise, or other property. Write description and price of what you have to sell. Tell us what you want to buy or trade for.

SOUTHERN KANSAS REALTY CO., Elk City, Kans.

HOW TO GET A FARM FOR TEN CENTS

Send your name and address to SETTLERS INFORMATION BUREAU, P. O. Box 88 PORTLAND, ORE., enclosing 10 cents in coin.

FARMS and RANCHES WHEAT LANDS

KANSAS \$6 to \$10 PER ACRE

Splendid sections combined farming and stock raising. \$1.75 to \$5.00 Per Acre. Kansas, Colorado and Nebraska. Only one tenth cash. Best land bargains in West. Ask B. A. Meade, A. S. T. R. 1 and Commissioner Dept. F., U. P. R. Co., Omaha, Neb.

I CAN SELL YOUR FARM, RANCH OR BUSINESS, no matter where located.

Properties and business of all kinds sold quickly for cash in all parts of the United States. Don't wait. Write to-day, describing what you have to sell and give cash price on same. A. P. TONE WILSON, Jr., Real Estate Specialist 413 Kansas Ave., Topeka, Kans.

We Can Sell Your Farm OR OTHER REAL ESTATE.

no matter where it is or what it is worth. Send description, state price and learn our wonderfully successful plan. Address

Southern Minnesota Valley Land Co., MADELIA, MINN.

Fine Farm For Sale.

Located in Anderson County, Kansas, 90 miles southwest of Kansas City and 60 miles from Westphalia, on main line Missouri Pacific Railway. Fine lay of 320 acres with very comfortable house and good barn. Lowest cash price, \$22.50 per acre, worth \$30. For full particulars, address L. A. B. care of Kansas Farmer, Topeka, Kans.

FARM LOANS

Made direct to farmers in Shawnee and adjoining counties at a low rate of interest. Money ready. No delay in closing loan when a good title is furnished and security is satisfactory. Please write or call.

DAVIS, WELLCOME & CO., Stormont Bldg., 107 West 6th, Topeka, Ka

CASH For Your Real Estate or Business Anywhere. I Can Sell It; I MEAN IT. Send me Description and LOWEST CASH PRICE today. W. E. MINTON. New England Bldg., Kansas City, Mo.

IN THE HEART OF THE CELEBRATED PECOS VALLEY

Come to the Artesian District of the Pecos Valley.

Government lands, assignments, relinquishments, deeded lands. Alfalfa, apples; cattle range, town lots, etc.

WM. E. CLARK, Artesia, N. M. (On Pecos Valley Branch of A. T. & S. F. R. R.)

The Stray List

Week Ending January 19.

Johnson County—Roscoe Smith, Clerk. HOGS—Taken up by Timothy Halre, in Mission tp. (P. O. Lenox), Jan. 9, 1905, 5 sows and 1 boar valued at \$25.

Allen County—J. W. Kelso, Clerk. STEER—Taken up by C. L. Downs, in Cottage Grove tp. (P. O. Humboldt), Dec. 17, 1904, one red Polled 2-year old steer.

Butler County—W. H. Clark, Clerk. COLT—Taken up by A. Monro, half-mile south of Douglas, Kans., Dec. 16, 1904, one 2-year-old dark gray colt; valued at \$25.

Week Ending January 26.

Coffey County—Wm. Scott, Clerk. STEER—Taken up by R. J. George, in Key West tp. (P. O. Olivet), Jan. 3, 1905, one red 1-year-old steer; valued at \$12.

Jackson County—T. C. McConnell, Clerk. STEER—Taken up by Frank Knaack, in Holton, in Pottawatomie reservation, January 16, 1905, one red steer, silt in left ear and "B" on right hip.

Trego County—J. W. Phares, Clerk. HEIFERS—Taken up by H. G. Watson in Riverside tp. (P. O. McCracken), Jan. 5, 1905, one red and white 3-year-old heifer, white face, underbit in right ear; valued at \$20, two 2-year-old red heifers, underbit in right ear; valued at \$25; one 2-year-old red and white heifer; valued at \$15; also one brindle 1-year-old heifer; valued at \$10.

Week Ending February 2.

Harper County—R. P. Chevraux, Clerk. MULE—Taken up by J. F. Frouse, in Banner tp., Jan. 9, 1905, one dark drab or brown mule, 4 years old, weight about 1,100 pounds, collar mark on top of neck and is breechy; valued at \$125.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY 416 Kansas Avenue, Topeka, Kans.

The Veterinarian

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the Kansas Farmer. Give age, color and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply, all letters for this department should give the inquirer's postoffice, should be signed with his full name, and should be addressed to the Veterinary Department, Kansas Farmer, Topeka, Kans., or Dr. C. L. Barnes, Manhattan, Kans.

Pigs with Ear Trouble.—I should like to ask what is the matter with my pigs. I have two that act as though they had something in their ears; they hold them sideways and get so bad that they get to going in circles. What can I do for them?

Densmore, Kans. J. F. G.

Answer.—I would advise you putting the following preparation in your pigs' ears: One ounce of chloroform mixed with four ounces of glycerine. Mix thoroughly together and swab out the ears of the affected hogs twice daily.

Calf Out of Condition.—I have a red bull 10 weeks old. When he was about 5 weeks old I noticed that he was stiff in the left fore leg in getting up and down, and he kept on getting worse until about 6 weeks old; and then I noticed he was affected the same way in his right hind leg, and now both hind legs are so badly affected that he can hardly walk, after he first gets up, but very soon he seems to get around all right. His hind legs are very straight; I feed him separated milk, a little barley and some cane and alfalfa hay. P. M.

Atwood, Kans.

Answer.—The probabilities are that your calf will recover without any treatment, if he seems to get over his stiffness after moving around a little.

Ringbone.—I should like to know through the KANSAS FARMER what to do for a case of ringbone. It is an old horse that is affected and he has had it for some time. H. N.

Tescott, Kans.

Answer.—Probably the best thing you can do for the horse with ringbone of long standing is to have the ringbone fired and then blistered. Repeat the blister in about three weeks.

Kidney Trouble.—I have a horse that acts as though he had something wrong with his kidneys or loins. He is very weak in his back, so much so that he wiggles when he walks, and raises his hind legs as though he had not good use of them. He is in good condition, is hearty in his eating, and is about 9 years old. He has been ailing for about two months. F. A.

Macksville, Kans.

Answer.—If it is possible for you to do so, poultice your horse's back with linseed-meal or bran and change it as often as it gets cold. Then the last thing at night, after taking off the poultice, put on the following liniment: One pint of compound soap liniment, 4 ounces of fluid extract of belladonna, 4 ounces of spirits of camphor and 2 ounces of spirits of turpentine; shake together thoroughly and apply with vigorous rubbing.

Distemper.—I have a horse which had distemper last spring. The abscess broke under the lower jaw some time in May and has been running ever since; appetite is fair. Will this quit running at the right time? Will the opening close without treatment?

Cherryvale, Kans. A. H. V.

Answer.—I advise you to open the part freely, irrigate daily with a 5-per cent solution of creolin, or any of the other coal-tar products, and I think that in the course of a very short time the discharge will cease. To prevent distemper, keep your horses from taking cold and give them the very best care.

Steer Out of Condition.—I have a steer coming 2 years old, a half-grade Hereford. When brought from pasture he was fat. Since bringing him home have fed once a day corn-fodder with ears left on; balance of time have fed hay, oat straw and corn stalks without corn, with good water and plenty of salt. About six weeks ago I noticed he was falling off in

flesh, also made a slight noise when breathing, as though it was somewhat difficult for him to breathe; he has been eating well all the time but is still shrinking in flesh. Yesterday I noticed for the first time that his throat was swelled, the swelling extending up to the jaws on each side. This morning I bathed the parts with lard, spirits of turpentine and coal-oil; they seemed hard and sore; I also gave 15 drops of aconite. J. G. P.

Plymouth, Kans.

Answer.—It will probably be well for you to poultice your steer's neck with bran or linseed-meal, changing the poultice as often as it gets cold. Should it show signs of breaking, it would be well for you to open the abscess and then wash out the cavity with a disinfectant, such as a 5 per cent carbolic acid solution, or any of the coal-tar products in a 3 per cent to 5 per cent solution. I would then give him the following tonic: Four ounces tincture of nux vomica, 10 ounces of tincture of gentian, 2 ounces of tincture of iron chloride; give a teaspoonful of this every morning and night in a quart of water, as a drench.

Nail Puncture.—I have a sorrel mare 5 years old that got a wire staple in her foot about a week ago. One leg of the staple was bent up and had sunk into the middle of the fore foot a little to one side of the frog; we pulled the staple out and put a little grease in the hole; the point of the staple was in about half an inch; she is pretty lame and the foot is warm. If it should gather, tell me what to do with it. S. M. McH.

Wakeeta, Okla.

Answer.—I would poultice the affected foot, using linseed-meal or bran, changing the poultice frequently. Should the foot start to gather, you would better open at the place where the pus begins to escape from the foot and wash out the opening with hydrogen peroxide twice daily.

Curb.—About two months ago while hauling a load of hogs and leading a cow behind the wagon I curbed a fine young horse; will you, through the KANSAS FARMER, give me a safe, reliable blister, one that will not take the hair off? Please tell me how to mix, how to apply, and how long to use. R. M. K.

Lawrence, Kans.

Answer.—It would be rather hard to cure a curb without blistering it sufficiently to take the hair off, and it would be much less painful for your horse to give it one good blistering than to be continually using a mild blister. The blister that we recommend for curb I make as follows: One ounce of biniodide of mercury, one ounce of pulverized cantharides, and 8 ounces of lard. This will take the hair off. If you care for a preparation that will be stimulating simply, and not blister, use the following: Tincture of iodine 6 ounces, turpentine 4 ounces, 50 per cent alcohol a pint, spirits of camphor 6 ounces; apply once daily with considerable hand rubbing; do not cover with a bandage.

Scab on Pigs.—What would be best to do for mange among hogs? It looks very much like what is often seen on cattle. It forms a rough scab and most of the hair comes off where the scab is located. Pigs get poor, yet do not lose their ambition to hunt for food, water, etc. J. D. G.

Haviland, Kans.

Answer.—I would suggest your dipping the pigs as soon as the weather will permit, using one of the coal-tar products, or lime and sulfur. The coal-tar products are very much easier to prepare and under ordinary conditions will effect a cure.

Dislocated Patella.—I have a very fine 2-year-old black Percheron filly, that since last spring has been bothered with dislocation of the patella or stifle joint. I have lived in hopes that she would outgrow it; she is nearly perfect in build, blocky, broad hip, and well coupled, with straight legs, and stands perfectly square. When she moves at times her hind feet fail to perform. They generally slip back without much trouble. I thought I might cure the trouble by blistering with a liquid blister. How large a

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We will send you, freight prepaid, direct from our factory any Kalamazoo Stove or Range on a

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If you are not perfectly satisfied with it in every way, return it at our expense. No quibble nor trouble. We guarantee under a \$20,000 bond that there is no better stove or range made than the Kalamazoo, and we save you from 20% to 40% because we give you

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We have exceptional facilities for manufacturing; we own and operate one of the largest and best equipped stove factories in the world, and we are the only actual manufacturers who sell the entire product direct to the user by mail. If you want the best procurable article at a big saving, we know we can satisfy you.

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describing full line of cook stoves, ranges and heaters of all kinds for all domestic purposes and for all kinds of fuel. All of the highest quality, built with special reference to long life and economy of fuel. All blacked, polished and ready for immediate use.

All cook stoves and ranges equipped with patented oven thermometer. It save fuel and makes baking easy.

Investigate our offer and save money.

WE PAY THE FREIGHT

KALAMAZOO STOVE CO., Mfrs. Kalamazoo, Mich.



THE SMITH Great Western Endless Apron Manure Spreader



SPREADS all kinds of manure, straw stack bottoms and commercial fertilizer regardless of their condition. Spreads as much in a day as 15 men can by hand. Spreads the largest load in 2 to 4 minutes. Makes the same amount of manure go three times as far and produce better results; makes all manure fine and immediately available for plant food.

NON-BUNCHABLE RAKE forms a hopper, holds all hard chunks in contact with beater until thoroughly pulverized.

ENDLESS APRON is one continuous apron, (not a 1/2 apron) therefore always ready to load. You don't have to drive a certain distance to pull it back into position after each load or wind it back by hand; it is a great advantage in making long hauls.

THERE IS NO GEARING about our Endless Apron to break and cause trouble. It is always up out of the way of obstructions as it does not extend below axle. Spreads evenly from start to finish and cleans out perfectly clean.

HOOD AND END GATE keeps manure away from beater while loading; prevents choking of beater and throwing out a bunch when starting and acts as wind shield when spreading. It has a graduating lever and can be regulated while in motion to spread thick or thin, 3 to 25 loads per acre.

LIGHT DRAFT because the load is nearly equally balanced on front and rear axles. The team is as near the load as it can work. Front and rear axles are the same length and wheels track; beater shaft runs in ball and socket bearings, therefore no friction.

SIMPLICITY Beater is 23 inches in diameter, seat turns over when loading. Machine turns in its own length. There are only two levers on our machine. One which raises the hood, locks it and throws the machine in gear at the same time. It can then be thrown in and out of gear without lowering the hood. One lever which changes feed to spread thick or thin, making it so simple that a boy who can drive a team can handle it.

STRENGTH AND DURABILITY is one of the most important points to be considered in a manure spreader. The Great Western has a good, strong, durable wheel. Extra strong spoke and rim, heavy steel tires. Strong, well braced box with heavy oak sill. Oak tongue, hickory doubletrees, malleable castings, gears and sprockets all keyed on. Galvanized hood. Every part is made extra strong, regardless of cost. It is made for the man who wants the best; made in four sizes, 30, 50, 70 and 100 bushel capacity.

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SMITH MANURE SPREADER CO.

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surface would you advise me to cover? How often will it be necessary to repeat? Will it be necessary to keep her up while doing this? J. J. L.

Lyons, Kans.

Answer.—Your suggestion as to treatment I believe to be a good one. Would advise you to blister over the entire stifle joint, repeating the blister every three or four weeks until cured. It is always well to keep a horse's head tied up rather short while the blister is acting, otherwise it will cause the animal to gnaw at the blistered part and thus cause serious trouble in the mouth. Two or three days after applying the blister rub lard or vaseline thoroughly into the parts that have been blistered; keep the mare in the stable and as quiet as possible during treatment; give soft, loosening food and very little grain.

Caked Udder.—I have a 5-year-old Red Polled cow, fat and in good condition. Has been fresh two weeks; was an exceptionally good milker before her bag became caked; her bag is now solid. Can not detect any inflammation. Have given no treatment. Hamilton, Kans. J. J. K.

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IN THE SOUTHWEST

You can work outdoors practically all the year round—
—you don't "lay up for the winter."

Isn't this the country you would like to live in? Why not go down and look it over?

The Rock Island will run low-rate excursions each first and third Tuesday, monthly, to points in Oklahoma, Indian Territory, Texas, New Mexico, and Colorado.

Special one-way Southwest excursions Feb. 21 and March 21—one-half of one fare, plus \$2.

The Rock Island Agent will tell you about it and supply literature descriptive of the section which interests you.

A. M. FULLER,
City Passenger Agent,
Rock Island Depot.

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BARBER ITCH
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PHONETA. Sample post-paid, only 10 cents.

PHONETA CHEMICAL COMPANY, 1012 Paddock Building, BOSTON, MASS.

Why be troubled with dandruff, when by using PHONETA SCALP REMEDY you can obtain a speedy and permanent cure. How loathsome one's face looks when disfigured by barber itch. PHONETA will positively cure, and in a shorter space of time than anything on the market. DRY ECZEMA, that troublesome disease which disfigures the face and scalp, can be cured by using PHONETA. Sample post-paid, only 10 cents.

HORSES.

Percheron Horses

HENRY AVERY & SON, Wakefield, Kans.

**PERCHERON and SHIRE STALLIONS**

When you go to buy a horse, stop at Lincoln, Nebraska, and see Watson, Woods Bros. & Kelley's Percherons and Shires. Fifty head on hand. Send for beautiful photographs of latest importation and price list. These are free to all who mention Kansas Farmer. Address

WATSON, WOODS BROS. & KELLEY, Lincoln, Neb.

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Parties desiring to buy Percheron, Belgium or German Coach Stallions on a self-earning, easy-payment plan, guaranteed to live and be satisfactory breeders, should correspond with

J. W. FERGUSON, Route 1, Topeka, Kans.

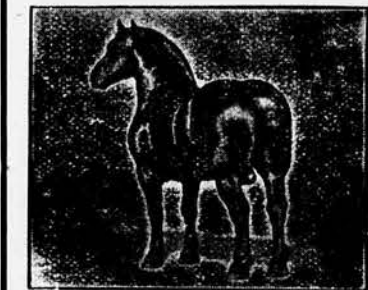
Reference Kansas Farmer.

CHEYENNE VALLEY STOCK FARM**Percheron Stallions and Bred Mares**

FOR SALE at reduced prices for quick sale. Won 38 prizes out of 39 competed for in 1902-'03, and 28 prizes in leading Kansas and Oklahoma fairs for 1904.

Write me for prices.

F. H. SCHREPEL, Ellinwood, Barton Co., Kansas.

**ROBISON'S PERCHERONS**

AT AUCTION

Wichita, Kans., Feb. 1, 1905

45 Stallions and Mares. World's Fair winners. Mares all bred to Casino. Send for catalogue to

J. W. & J. C. ROBISON, Towanda, Kans.

America's Leading Horse Importers

We have brought to this country nearly every first, second, third and fourth prize winner in every Percheron stallion class in every Government show held in France since the Paris Exposition 1900.

Our horses won every first and nearly every prize down to fifth at the St. Louis World's Fair.

On account of bringing the best our trade is increasing so that we bring the largest number. We made five importations in 1904, bringing more Percherons and French Coaches than have been imported by all others combined.

If you want the best write

McLAUGHLIN BROS.,

Columbus, O. Kansas City, Mo. St. Paul, Minn.

HORSES.

Iams' Stallions

Get busy, quick, Mr. Horseman—It's "16 to 1" that to-day is the "BEST TIME EVER" to begin breeding first-class DRAFT and COACHERS. Don't wait until the OTHER FELLOW "GATHERS THE CREAM." "BUT IN," Put in your thumb, buy a "PLUM-GOOD ONE" of IAMS. His "PEACHES AND CREAM" are ripe. "IT'S A CINCH" that you will save \$1,000 there and get BETTER stallions. Iams' "SENSATIONAL BLACK BOYS" are "WHIRLWINDS" in a "SHOWYARD." They won every first, second, and Championship prize (over all) on PERCHERONS, BELGIANS and COACHERS at Nebraska State Fair 1904. Iams' RESERVE BEST stallions were there for exhibition—not shown for prizes. None of his SPECIAL TRAIN of 100 stallions received August 18, 1904, were shown. At the

HOME OF THE WINNERS

Buyers throng his barns and say: Hello, New York; I'm Pete, of California. Say, Iams has the BEST LOT of stallions, and most of them, I ever saw. CHEAP, TOO. Yes; see those ten 2-year-old 2,000-pound "BLACK BOYS"—"RIPPERS." Iams' stallions are choice goods. WIE GEHTS? HANS, of OHIO. I'm Zeke, of Montana. See this barn of forty 2,100-pound 3-year-olds. All "TOP-NOTCHERS." Sure; dot vas dot vide-as-a-wagon stallion. Iams has one "HORSE SHOW more big as dot "ROYAL," and he saves me MORE as \$1,000. SURE TING. No studs like dot in Ohio. Mr. Illinois, I'm Peabody of Colorado. Iams has the GREAT-EST and LARGEST establishment of first-class stallions owned by one man in U. S. "HUMMERS, TOO." See those twenty 2,200-pound 4-year-olds LINED UP. "BLUE-RIBBON BOYS." None to compare with them in bone, big size, quality and finish at "INTERNATIONAL." You see stallions at IAMS JUST AS YOU READ ABOUT. Mr. Missouri, I'm "SOCKLESS JERRY," of Kansas. This DAILY HORSE SHOW of IAMS' beats any State Fair I ever saw. It's an "EYE-OPENER" to any man to see Iams' stallions. Best I ever saw. He sells these "TOP-NOTCHERS" at \$1,000 and \$1,500. Hello, Iowa, I'm Louie, of Minnesota. To see Iams' CHAMPION PERCHERON, BELGIAN and COACH STALLION, they are the "HOTTEST PROPOSITION" (to competitors) I ever saw. Iams makes competitors "HOLLER"—and he "BUTTS IN," sells MORE stallions each year. Yes, saved me \$1,000. Mr. Indiana, I'm Hogg, of Texas. I came 2,000 miles to see Iams' 5,100 pound pair of "PEACHES AND CREAM." They are a "SENSATIONAL PAIR." Better than the pictures. SIMPLY IMMENSE. Iams is a HOT ADVERTISER. His horses are better than he advertises. AT LET-LIVE PRICES, too, Mr. Unbeliever.

\$100 WILL BE PAID YOU \$100

If you visit Iams and do not find every statement in ads or catalogue TRUE. Horses good as pictures in catalogue. "NOW WILL YOU BE GOOD, MR. KNOCKER?" Doc, I don't wonder at Iams' competitors wanting his horses barred from ROYAL or INTERNATIONAL. "SOMETHING DOING" when Iams makes HORSE SHOW. He always has "Rippers and in SHOW SHAPE. Tom, Mr. Utah bought that 2,000-pound 3-year-old at \$1,200 of Iams. Better than one my neighbors paid \$3,600 for. Kitty, Ain't Iams' Coaches "SWELL?" Iams handles only the "TOPS." Coaches that look over the house, and step high as a "red wagon." George, dear, buy a stallion of Iams. They are 50 per cent better than one our neighbor paid those Ohio men \$4,000 for. (Then I can wear the diamonds.) Iams has

149 BLACK PERCHERONS, BELGIANS AND COACHERS 149

90 per cent blacks; 50 per cent ton horses—IAMS speaks the languages, buys DIRECT from breeders, pays NO BUYER, SALESMAN or INTERPRETERS. Has no THREE to TEN MEN as partners to share profits with. His twenty-two years SUCCESSFUL BUSINESS makes him a safe man to do business with. Iams guarantees to sell you a BETTER STALLION at \$1,000 and \$1,400 than are sold to stock companies for \$2,500 to \$4,000 by SLICK SALESMEN, or pay your fare and \$25 PER DAY FOR TROUBLE, you the judge. IAMS PAYS HORSES' freight and buyers' fare, gives 50 per cent breeding guarantees. Write for EYE-OPENER and catalogue.

References: St. Paul State Bank and Citizens National Bank.

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St. Paul, Nebraska.**Pine Ridge Stock Farm**

The Biggest and Best Horse Barn in the United States, and the Biggest and Best

Percheron and French Draft Horses

SAMSON AT HEAD OF HERD.

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He weighs 2,464 pounds, with more bone and quality than can be found in any other one horse in the United States. We can show more bone, size and quality than any other one firm in the country. Prices below competition. Call on or address

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Of Prize-winning Champions of two state fairs. Percheron Stallions and Mares, Coaches, Saddlers, Big Black Mammoth Jacks and Jennets. Write for catalogue to

S. A. SPRIGGS, Westphalia, Kans.

**The Lincoln Importing Horse Co.**

Of Lincoln, Nebraska

The largest and oldest importers in all the West of Percheron, Shire, Belgian and German Coach Stallions. Prospective buyers should visit our barns or write us for illustrated catalogue of our last importation, which arrived in October and are now thoroughly acclimated.

A. L. SULLIVAN, Secretary and Manager.

**THE WILLOWDALE BERKSHIRES**

Lord Premier 50001, the sire of more show hogs than any boar in the world, at head. Six June boars by Lord Premier and a few sows bred to him for sale. Also three aged herd boars and young stock of both sexes. Write or call.

G. G. COUNCIL, - - VANDALIA, ILLINOIS

Farmers and Breeders! We Will Insure Your Hogs Against Death by Cholera

And other malignant blood diseases. Don't waste time and money experimenting with cheap stock food. Use a medicine prepared especially for the hog. Twenty years' test without a failure. We run all risk and in case THE GERMAN SWINE POWDERS fail to eradicate the disease from your herd, we refund your money. The greatest conditioner and growth-promoter ever discovered, and the biggest money-maker for hog-raisers known. Prices: 100 lbs., \$2.50; 25 lbs., \$1.00; 10 lbs., \$3.00; 5 lbs., \$1.75; 2 1/2 lbs., \$1.00. Send for our Treatise on Swine—it's free. Make all checks and drafts payable to

LON ELLER, Manager and Proprietor of

The German Swine and Poultry Merchandise Co., Topeka, Kans.

The Great Wheat Belt Association

Annual Sales at Hawkins's Barn, Caldwell, Kans.

Thursday, February 16,

46 Representative Shorthorns, Both Sexes 46

Friday, February 17,

40 Choicely Bred Herefords, Both Sexes 40

And a few Galloways.

Saturday, February 18

60 Head Poland-China, Duroc-Jersey, O. I. C. Swine 60

Sale under cover. Separate catalogues for each breed mailed free. Six months' time without interest, or 5 per cent discount for cash.

CHAS. M. JOHNSTON Mgr., Caldwell, Kans.

Jas. W. Sparks and R. L. Harriman, Auctioneers.

SHORTHORNS AT AUCTION

Wednesday, Feb. 16, 1905

At the new Sale Barn, Hope, Kans., I will sell

45 HEAD OF SHORTHORNS 45

Comprising choice young cows and heifers, and fifteen yearling bulls, Scotch-topped on Bates and Booth foundations. Cows will be bred to the Scotch bull, Rosemond Victor 12th 136313, and Ruby's Victor 171602. Heifers will be bred to Viola's Prince. This offering includes the tops from a large herd. No culls. For catalogues address

GEO. CHANNON, Hope, Kans.

Col. Jas. W. Sparks, Auctioneer.

Poland-China Bred Sow Sale

At Asherville, Kans., Tuesday, Feb. 21, 1905.

42 SELECT INDIVIDUALS 42

10 tried and recorded sows, 14 fall and winter yearlings, and 18 spring gilts, sired by Hadley I Know 21402, P. W. K. 24441, Black Perfection 28241, Kansas Lad 31301.

These will be bred to First Choice 34181, the highest-priced hog sold at F. M. Lail's fall sale, B. B. Perfection 24779 by Chief Perfection 2d, King Victor by Victor X. L., who won second at the World's Fair.

Breeders from a distance stop at Commercial Hotel at Simpson or Pennsylvania or Oxford Hotels at Beloit. There will be no postponement. Auctioneers: John Brennen, R. E. Martin, and J. V. Thompson.

Send for catalogues to W. A. PREWETT, Asherville, Kans.

F. P. Cooke will sell Shorthorns at Beloit on Wednesday, February 22.

BREEDERS' SECOND ANNUAL COMBINATION SALE

FREDONIA, KANSAS

FRIDAY, FEBRUARY 17, 1905

68-HEAD PURE-BRED SWINE-68

Poland-Chinas by E. E. Walte, A. G. Lamb, J. A. M. Dwyer, Leeper Bros. and Stricker Bros. Duroc-Jerseys by S. Drybread, Robt. Hall, E. V. Whitely, Benf. & Son, T. I. Woodall, Mitchell Bros. and Milton Belter. English Berkshires by H. M. Starns.

Sale at Fair Grounds in heated tent. Terms cash, or time as agreed with owner. Write J. W. SHEETZ, Fredonia, Kans., for catalogue.

SATURDAY, FEBRUARY 18, 1905

50 HEAD CHOICE, USEFUL CATTLE

Shorthorns by H. M. Hill, Hanna & Co., D. O. Rip, H. K. Bachelder, W. W. Duham, A. A. Clark, S. D. Lokan, W. B. Long and E. S. Myers. Herefords by S. Drybread, Brown & Son. Polled Angus by C. A. Long. Red Polls by Walter J. Burtis.

STOCK SALE

Second Annual Sale of the Harvey Co. Breeders' Association

Will Be Held at Newton, Kans., Feb. 21-22, 1905

50 CATTLE 50—100 HOGS 100

Sale will be under cover. Write the undersigned for catalogue.

O. A. SEAMAN, Sedgwick, Kans.

Remember

The 26th semi-annual and greatest Jack and Jennet Sale ever held in the United States will take place at

LIMESTONE VALLEY FARM

Six miles east of Sedalia and two miles north of Smithton, Pettis County, Missouri.

Tuesday, March 7th, 1905

65 HEAD of all black registered Jacks and Jennets, including 24 head of World's Fair prize-winners; also a few Saddle Stallions. We sell nothing but our own stock, and every animal guaranteed as represented. We will show you the best herd in the United States or pay all your railroad fare. Nothing priced or sold privately. Write for catalogue.



L. M. MONSEES & SONS
Smithton, Missouri.

Auctioneers: Cols. E. W. Stevens, R. L. Harriman, Jas. W. Sparks, J. Z. Wells, C. J. Hieronymus

MILL CREEK VALLEY HERD

GRAND SALE OF

Registered Poland-Chinas

At Alma, Kans., Monday, February 6, 1905.

FORTY-FIVE CHOICELY BRED SOWS AND GILTS—The blood of Perfect Tecumseh, Corwin, U. S., Sunshine, and others of up-to-date breeding. Sows and gilts bred to Perfect's Perfection 29222, an extra good son of Proud Perfection; to Compromise 88203, a choice son of Ideal Sunshine, and to Ideal U. S., a son of Chief Ideal 2d. All in the finest condition. Perfect's Perfection and Ideal U. S. will be sold.

Sale under cover. No postponement. Farm two miles northeast of Alma. Sale begins at 1 o'clock sharp. Buyers met at trains at either Alma or McFarland. Write for catalogue and come to the sale.

A. & P. SCHMITZ, Alma, Kans.

Cols. Bert Fisher and H. B. Channell, Auctioneers.

Mail bids may be sent to either auctioneer, or to I. U. Graham of the Kansas Farm

YOU'RE NEEDED

The Southwest is really in need of nothing save people. More men are needed—you're needed. There are vast areas of unimproved land—land not yielding the crops of which it is capable. The same thing in a different way is true of the towns. Few lines of business are adequately represented. There are openings for mills and manufacturing plants, small stores, banks, newspapers and lumber yards. The oil and gas fields of Kansas, Indian Territory and Oklahoma, are practically new and offer wonderful opportunities for development along commercial lines.

THE OPPORTUNITY IS NOW.

The M. K. & T. has no lands for sale, we are simply interested in the upbuilding of the country. We believe in the Southwest, and know that with its present needs and opportunities, the prospects are brighter and the future more hopeful than in the older and more densely populated States. We want you to investigate conditions and satisfy yourself of the truthfulness of this.

On February 21st and March 21st, the M. K. & T. Ry. will sell excursion tickets from St. Louis, Hannibal and Kansas City to Indian Territory, Oklahoma and Central and Eastern Texas at

\$15 For the Round Trip

One way second class COLONIST tickets will be sold on the same dates at one-half the standard one-way rate, plus \$2.00.

You should take advantage of this opportunity to see the Southwest for yourself.



We are in possession of all sorts of information valuable alike to the investor and homeseeker. If you are interested, tell us what you want, how much you have to invest, and we will gladly furnish the information.

Write today for a copy of our book "Business Chance." It's free. Address

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ESTABLISHED 1876

Wholesale and Retail Dealers in Garden, Field and Flower Seeds, Seed-Corn, Kafir-Corn, Cane Seed and Millet

All kinds of winter and summer blooming plants and bulbs. Hardy flowering shrubs and climbing vines, hardy ever-blooming Roses a specialty. Choice Fruit Trees, Small Fruits and Grape Vines, Palms and Ferns. Goldfish and Aquarium Supplies. Poultry Supplies, Oyster-shell, Gits, Bone, and all kinds of Poultry Cures. Send for our catalogues and give us a trial order. Call on or address

S. H. DOWNS, Mgr., 306 Kansas Ave., Topeka, Kans.

... BEE KEEPERS' SUPPLIES ...

Latest improved Hives, Sections, Comb Foundation, Smokers, Bee Vests and all kinds of supplies at low prices. Send for free catalog; don't be afraid to write. Information cheerfully given. LEAHY MANUFACTURING CO., 1730 S. 13th St., Omaha, Neb.

WHEN WRITING OUR ADVERTISERS PLEASE MENTION THIS PAPER.

W. H. COTTINGHAM & SONS

Will Hold Their Ninth Annual
PUBLIC SALE OF PURE-BRED STOCK
In their Private Sale Barn at McPherson, Kas., Feb. 15 and 16, 1905

40 HORSES, Draft and Roadsters 40

Will Be Sold February 15.

The draft horses will include geldings and mares, some matched teams. The roadsters will include some fancy matched pairs and single drivers.

All lovers of good stock are invited to attend this sale. Parties from a distance entertained free. For pedigrees and particulars see field notes and write for catalogue. COL. J. W. SHEETS, Auctioneer.

50 Head of Pure-Bred Poland-Chinas 50

Will Be Sold February 16.

The offering will include 30 useful, tried brood sows, 15 spring gilts and 5 serviceable boars. The sows will be bred to 3 good boars, Grand Tecumseh, Hadley I Know and Sealey's Harry.

W. H. COTTINGHAM & SONS, McPherson, Kans.

BLUE RIBBON SALE

OFFERING THE

Champions of Two State Fairs



40 HEAD 40



Percheron Stallions and Mares

Coach Stallions and Saddle Stallions

Big Black Mammoth Jacks and Jennets

WEDNESDAY, FEBRUARY 15, '05

12 O'clock m., at WESTPHALIA, KANS., on K. & A. Div. Mo. Pac. Ry.

In this sale I offer my Show Herd of 1904, they were never defeated—showed in hot competition—several of them champions of two state fairs. To any one intending the purchase of breeding stock, I would say this is the opportunity of a lifetime to buy stock of this class at your own bid. If interested write for catalog. Excursion rates in effect.

S. A. SPRIGGS.

Auctioneers { Col. Jas. Sparks, Marshall, Mo.
Col. L. F. Burger, Wellington, Kan.
Col. H. H. Green, Homewood, Kan.

The Plainville Breeder's Association

Will Hold Their Second Annual Sale of

40 REGISTERED SHORTHORNS

At Plainville, Kans., Thursday, February 23, 1905

30 Good Young Bulls and 10 Cows will be contributed to this sale by the following breeders: J. A. Leshar, Codell; Wm. Mellott, Plainville; A. W. Hall, Plainville; R. L. Ordway, Plainville; Tucker & Gaunt, Natoma; Arthur Cooper, Natoma; C. G. Cochran & Sons, Plainville; N. F. Shaw, Plainville, C. C. Slason, Plainville.

In this sale will be included my herd bull Strawberry Baron 149498. He is a fine individual, a good breeder and is being sold for no fault, but simply because I cannot use him longer to advantage. He is quite gentle and well broken, and should be at the head of a good herd. He was bred by Hornsby Bros., of Eminence, Ky., weighs 2250 in only breeding condition and will be five years old on day of sale. He has never been injured in any way and will be a bargain.

The cattle in this sale are a good well bred lot that are sure to sell within the reach of all. This will be the place for the breeder, the beginner, the ranchman and the farmer to secure the right kind at their own price. Catalogue will be ready February 1st. Write me for one.

N. F. SHAW,
Plainville, Rooks County, Kansas

Auctioneers { Col. Jas. W. Sparks, Marshall, Mo.
Col. J. W. Travis and E. A. Kramer, Plainville, Kans.

WHEN WRITING OUR ADVERTISERS PLEASE MENTION THIS PAPER

GREAT WESTERN TWO-DAYS' SALE OF POLAND-CHINAS

Unparalleled offering in number and quality. 110 head from 4 herds, mostly young sows of the finest breeding and individual excellence, bred to about a half dozen of the greatest boars of the breed, and possibly a few fancy young boars and open gilts.

FEBRUARY 6 and 7, 1905.

Separate Catalogues. You can attend two sales at one expense.

Leavenworth, Kans., Feb. 6

John Bollin, Leavenworth, Kans., R. F. D. 5; Gus Aaron, Leavenworth, Kans., R. F. D. 5; H. M. Kirkpatrick, Wolcott, Kans.

Sell 60 head, all good ones. Bred to The Picket 87697 by Corrector. He headed the herd that won 3d prize in St. Louis. Sir Darkness by Chief Perfection 2d and Darkness. Corrector's Equal by Corrector, Beauty's Extension, and that peerless Perfection Now.

Many roads lead to Leavenworth and trolley cars from Kansas City every hour. If you are far from home and will be good, Bollin will pay your expenses while there. Write Kirkpatrick for catalogues.

Atchison, Kans., Feb. 7

Leon Calhoun, Potter, Kans., R. F. D. 1,

will sell 50 or 60 head of choice sows of the blood that dominates the breed. Leon Perfection by L's Perfection is the sire of many of these, bred to Kansas Chief 23175 by Chief Tecumseh 2d and Ina Wilkes. Perfection's Fancy Chief 29987. Prince Darkness by Chief Perfection 2d and Darkness, and others.

This sale will contain more close up blood to the greatest of all sow producers, L's Perfection, than was ever before offered in one sale. Write Calhoun at Potter, Kans., for catalogues. Hotels are free.

Cols. Jas. W. Sparks and John Daum, Auctioneers.

CLEAR CREEK HERD OF POLAND-CHINAS

Grand Closing Out Sale at Farm, One and One-half Miles South of Wilder, Kansas.

Tuesday, February 14, 1905

This offering comprises 24 Royally Bred tried Brood Sows, 13 bred Gilts and 13 September Gilts, also 4 Great Herd Boars, 8 young Boars ready for service, and 8 September Boars. Free transportation to and from Wilder, Holliday and Bonner Springs. Sale will be held under cover. Free lunch will be served at noon. Come whether you wish to buy or not. If you can't come, send bids to either auctioneer, or I. D. Graham, of this paper, in my care. Write for catalogue.

E. P. SHERMAN,
Route 1, Wilder, Kans.

Cols. Jas. W. Sparks and J. N. Harshberger, Auctioneers. E. H. Haskin, Clerk.

25 PERCHERONS 25

At Milan, Missouri, February 15, 1905.

On above date we will hold our Third Annual Sale of pure-bred horses. The offering will consist of stallions and mares of various ages, but mainly youngsters from 1 to 4 years old. In this sale, as in our former sales, the offering will be of the highest quality that can be produced. We have sold the highest-priced Percheron mare in America, being \$2,500; and the highest average yearlings of any sale, being \$474. The reason is simply because we had the right kind. This sale will be no exception. Send for catalogue and don't fail to attend the sale.

S. S. SPANGLER,
Mount Vernon Stock Farm, Milan, Mo.