

KANSAS FARMER

Volume XLV. Number 1 TOPEKA, KANSAS, JANUARY 3, 1907 Established 1863. \$1 a Year

LET PROSPERITY ABOUND IN 1907.

The year 1906 which has just passed into history has been a year of prosperity to the industrious in America. Kansas has had a full share of this prosperity. True, the person who has lived on a salary that has continued the same for the last ten years has found it increasingly difficult to meet expenses. So too those who have depended upon interest or other fixed income have found the dollar less potent than formerly to command the results of labor. The depreciation of money produces industrial and business activity. Its appreciation produces lassitude of industry and of business.

There are no indications of any impending change from the present condition of accelerated activity. Values of property, including commodities, seem likely on the average to continue to advance. To this probability is added, in the case of the producer of foodstuffs, the fact that the world's productive areas are more closely occupied than ever before, while the increase of mouths to be fed continues without abatement. The position of the farmer is therefore becoming more favored than that of other producers. The outlook for the Kansas farmer is good from the fact that his fall-sown crops are in fine condition; his live stock is healthy; and his soil is well moistened for the good of the 1907 growth.

INSPECTION OF FEEDS, FERTILIZERS, AND SEEDS.

The time is now here when the interests of the farmers of Kansas need the protection of laws providing for official inspection of commercial feeds, commercial fertilizers, and of commercial seeds. During pioneer days this need was not felt. To obtain stock enough to eat up the feed that was annually going to waste was the first problem. Now a considerable quantity of manufactured feeds is bought and used, and the demand is increasing. In pioneer days one of the troublesome problems was how to get the stable away from the manure or the manure away from the stable. The land boomer was proclaiming that Kansas soil possessed inexhaustible fertility and needed only to be tickled with the hoe to cause it to laugh with a harvest, now and forevermore. The oft repetition of this declaration produced a contempt for fertilization. While fairly good use is now made of the stable manure, the use of commercial fertilizers is only at the beginning. It has been found necessary in States older than Kansas to guard by inspection against the ever-present cupidity of the manufacturer and the dealer, which too often leads them to place on the markets both feeds and fertilizers very inferior to what they purport to be. Except by expert examination, or analysis, such fraud can not generally be detected.

The adulteration of seeds is so common a practise that the honest seedsmen is at a disadvantage in the competition for trade. The loss to Kansas farmers from buying what they do not want, from buying sometimes what they would not knowingly plant under any consideration is great.

The experience of older States along these lines has led them to place the inspection of feeds, fertilizers, and seeds upon the experiment station. The director of the Kansas Station may well be made the inspector for these goods. The cost of the work would then be merely that of the analyses which may be properly provided for by fixing a small inspection fee, say 25

cents per ton for feeds and fertilizers and some suitable fee for the inspection of seeds.

The attention of the Legislature is invited to this subject in the hope that suitable legislation will be enacted.

STATE HORTICULTURISTS IN FORTIETH ANNUAL SESSION.

The fortieth annual meeting of the Kansas State Horticultural Society was held at the rooms of the society in the State House, December 27, 28, and 29, 1906. The attendance was the largest since the founding of the society. The membership has shown a great increase in the last few years. The interest was fine and the enthusiasm reflected the effects of the great fruit-crop of the season.

The fruit exhibit was surprising. While other sections showed abundance of fine specimens, the contributions from the Arkansas Valley were many, and those who were looking for perfect apples were not disappointed. These perfect specimens from the Arkansas Valley justified the claim put up from that section that natural conditions are there right for the production of the finest fruit, and they also proved the advantage of applying the teachings of science to fruit-culture. The large orchardists of this valley had in previous years tried spraying for protection against the ravages of insect pests and had met with fair success. A year ago they entered into a more careful study of the subject, calling on the Experiment Station at Manhattan for directions and availing themselves of the bulletins of other State stations and of the United States Department of Agriculture. As a result they sprayed intelligently and effectively and produced abundance of apples without spot or blemish.

There were 199 plates and boxes of fruit. The committee awards were as follows:

AWARDS.	
Blackmore, C. A. Sharon, Kans..	\$5.00
Blair, G. A., Mulvane,	7.50
Dickinson, A. E., North Topeka..	5.00
Dixon, Frank, Holton.....	1.00
Eames, W. B., Delphos.....	1.00
Furgas, J. B., Kincald.....	2.50
Gilmore, W. W., Topeka.....	1.50
Gray, Alfred, Paxico,	5.00
Newlin, Wm., Hutchinson.....	10.00
Smith, C. L., Topeka.....	1.40
Van Orsdal, B. F., Topeka.....	1.00
Weith, S. H., LaHarpe.....	2.00
Wellhouse, Walter, Topeka.....	1.00
Wheeler, J. B., Oskaloosa.....	.50
Whitaker, E. J., Topeka.....	.50
Whitaker Bros., Topeka, not entered for award.	
Arkansas Valley Horticultural Society,	4.00
Sedgwick County Horticultural Society,	4.00

The papers and discussions were of high character and of great interest. One of the papers appears in this issue of THE KANSAS FARMER and others will be published as rapidly as our space will admit.

The election of officers resulted in a new deal all around. Secretary W. H. Barnes had announced a year ago that he would not be a candidate for reelection at this time. Other officers are ineligible for reelection under the by-laws. The following were elected:

President, Edwin Taylor, Edwardsville; vice-president, Edwin Snyder, Oskaloosa; treasurer, E. G. Hoover, Wichita; secretary, Walter Wellhouse, Topeka.

Secretary Barnes will hold the office until July 1. He has brought to the office great energy and fidelity to the work. At the date of his retirement he will have administered the office for twelve years. In these years several notable exhibits of Kansas fruits have been made beyond State lines, and the

enthusiasm of the secretary for horticultural advancement has kept abreast of that of the orchardists and gardeners.

The incoming secretary is a well-known horticulturist. He is the junior partner in the great Wellhouse orchards. To his knowledge of the business and attention to details, and to his thorough business methods, is due much of the fame of Kansas as an orchard State and the prominence of his father as the "apple king." His knowledge of horticulture from both the practical and the theoretical sides is thorough. He has a very full and perfectly classified and indexed horticultural library. As a writer, he is one of the very few whose manuscripts may be put into print exactly as written without making his friends ashamed of his use of the English language, and his attention to such details as spelling, capitalization, and punctuation. Mr. Wellhouse has also the good fortune to know when he has finished either writing or talking about a subject and stopping at such point. The society's expectation of results from his incumbency of the chief executive office of this great body is not likely to met with disappointment.

SAN JOSE SCALE.

Kansas has now an immediate and urgent interest in the San Jose scale. This destructive orchard pest has gained a hold at two places in the State. The most serious infestation is at Dodge City where this scale exists in great numbers and is demonstrating its ability to damage fruit and ornamental trees, hedges, etc. A very few trees are infested at Alden in Rice County. The indications are that the scale was brought to these places on fruit-trees or ornamental trees or on shrubs shipped in, possibly by mail. It is morally certain that it was not introduced on Kansas-grown trees, for the entomologists have examined the Kansas nurseries and find them free from the scale.

This pest multiplies very rapidly, is difficult to combat, and it destroys orchards if left unchecked. When very young the scale is an active little insect. Presently it locates on a branch or twig where it feeds upon the juices of the bark, protects itself with a scaly covering, and, if female, produces living young in great numbers. These young repeat the record of their parents.

While young and active the insects are able to crawl upon the feet of birds that chance to alight near them and to be carried to other more or less remote trees and orchards.

The only safe procedure is to attack this enemy vigorously and exterminate it from Kansas soil. To do this may require the destruction of affected trees. The owners will not willingly destroy them because few realize that an infested tree is generally doomed. It has been found that careful spraying with the lime and sulfur preparation greatly reduces the scale. Under vigorous treatment orchards may be saved. They are, however, centers of infestation and it would be the best policy for the Legislature to make a small appropriation to pay the expense of thorough eradication now at the beginning of the invasion. It may be necessary to pay an appraised value for some trees, but the heroic treatment is sure to be cheapest in the long run.

The State Horticultural Society at its meeting last week appointed a committee consisting of President Edwin Taylor, Edwardsville; Secretary-elect Walter Wellhouse, Topeka; E. E.

Yaggy, Hutchinson; W. H. Underwood, Hutchinson; J. F. Cecil, Topeka, to present the gravity of the San Jose scale invasion to the Legislature and ask suitable provisions, for checking it. The plan suggested contemplates the appointment of a tree-inspector who shall be given the necessary authority and provided with the necessary means. The low estimate of \$3,000 has been placed on the entire cost. If \$10,000 should be required to make the work effective, it would be worth many times this cost to have the State free from this, the most destructive pest that ever visited an orchard.

SENATORIAL.

Ex-Governor Bailey, of Baileyville, has finally consented to be a receptive candidate for United States Senator. Governor Bailey has several times been called from his farm to public service. His experience as a member of the National House of Representatives adds to his qualifications for the Senatorship. He is fully identified with Kansas agricultural interests and would do yeoman service for the American farmer if elected.

Hon. J. L. Bristow, of Selma, is in the race for United States Senator. He is the man who brought cargoes of grief to evil-doers in the postal service. "Honest, efficient, and an untiring worker" may be written opposite his name and he will justify the endorsement in any public service to which he may be called.

Hon. Charles Curtis, of Topeka, is recognized as the man whom the other candidates have to defeat before there is a chance for any of the others to be elected to the United States Senate. Mr. Curtis has long been a member of the House and has a good standing with his fellow members and with the President. He has a record for promptness in responding to the calls of his constituents.

Hon. Victor Murdock, of Wichita, goes into the Senatorial contest with a splendid record for doing things in Congress. His heart is with the Kansas people and no amount of "influence" can turn him away from the work of securing the square deal for his people. To his efforts is due the success of the denatured alcohol measure. He has just uncovered a lot of graft in the matter of mail contracts. If both halls of Congress were filled with just such aggressive honesty as actuates Victor Murdock, it would mean millions to common people.

W. R. Stubbs, of Lawrence, who was speaker of the Kansas House of Representatives in 1905, has announced his candidacy for election to the United States Senate. Mr. Stubbs is one of Kansas' strong men. His announced platform is in harmony with the Roosevelt ideas. A fuller outline of this platform would have been given in this paper but for sudden and unexpected demands for space for some of our advertising friends. Mr. Stubbs is one of the best organizers in Kansas. He would be a power on the right side in the Senate.

The delegation of dairy commissioners, professors in dairying, and creamerymen, of which Professor Erf, of Manhattan, and W. F. Jensen, of Topeka, were members, had their hearing before Secretary Wilson December 19 with very satisfactory results. Secretary Wilson assured the committee that

the standard of 82½ per cent fat in butter would not be insisted upon, and that it would be changed as soon as possible. It developed that the standard of 82½ per cent fat in butter and 4¼ per cent in milk was established more as an average standard than as a minimum standard. Butter-makers in Kansas can continue to manufacture their butter as heretofore with 80 per cent or more of fat, and with this the delegation has Secretary Wilson's assurance that no prosecutions will be made under the pure food law.

ADVERTISING WISDOM.

Manager H. A. Heath, of THE KANSAS FARMER, lays claim to only one bit of original poetry as shown in the following lines:

He is best learned and most wise,
Who knows when and how to advertise.

President Ripley of the Santa Fe has given notice of the introduction of a system of "pensions to be granted to loyal and worthy employees."

BLOCKS OF TWO.

Every opportunity to do a favor to a friend or neighbor should be improved. The subscription price of THE KANSAS FARMER is \$1 per year. It is worth the money. But the publishers are extending the circulation rapidly by means of their blocks of two proposition. It is this:

Every old subscriber on sending his dollar for renewal is authorized to send the name and address of some one not now taking THE KANSAS FARMER and the dollar will pay for both subscriptions for one year. Address, The Kansas Farmer Company, Topeka, Kans.

Miscellany

Farm and Dairy Short Courses at the Kansas State Agricultural College.

The farmers, stockmen, and dairymen of Kansas are having great opportunities these days for receiving help in their work. What with the agricultural college going out to the farmers with two hundred institutes a year, the State institute, a nine-day school in corn- and stock-judging, and then a ten-weeks' short course term in farm and stock work and farm dairying, the gospel of good farming ought to spread. Besides these the college "train" work reaches thousands.

The short courses open on January 8, when the regular work begins, and lasts ten weeks, thus allowing the young farmers to return to their home work early in March. Last year one hundred sixty-five men took the short courses, men ranging in age from eighteen to fifty-five. One farmer and his son, both practical farmers, took work side by side for the term last winter. All work is planned to be practical, ample practise in both grain- and stock-judging being given every day.

THE FARMERS' COURSE.

This always has the largest group of students with the greatest variation in age. The course includes crop-production, feeds and feeding, breeds of live stock, farm management, diseases of farm animals, carpentry, and blacksmithing. Crop-production includes a discussion of the different soils, different crops, soil moisture, tillage, cultivation of crops, soil fertility, methods of planting and seeding, etc. Farm management includes lectures on rotation of crops, handling farm machinery, laying out of farms, farm buildings, farm accounts, drainage, etc. The animal husbandry work includes lectures on breeds of stock, horses, cattle, hogs, and sheep, with daily drill in judging. Another class includes instruction in feeding, the balanced ration for growing and fattening animals, for milch cows, etc. Ten weeks in carpentry will be of great practical value to all farmers.

THE DAIRY COURSES.

These courses, one for farmers who are doing considerable dairy work and the other for those who intend to take up either dairy or creamery work, have attracted a good many men. The former includes crop-production, breeds of stock and feeding, and also dairying and dairy practise, while the special dairy course devotes more time to creamery work, butter- and cheese-making, boiler and engine work, etc. Every student who took this special work last winter had a position before the term ended or soon after its close

either in a creamery or on a dairy-farm.

Special attention will be given in all this work to practise in judging stock, grain, and butter with a view not only to fitting the students for doing their own judging, but also training them for expert work at the fairs, contests, etc. The attendance promises to be much larger this winter than heretofore, especially of older men and farm employees. Several farmers now taking the State institute work have arranged for their farm-hands to come for the short course. The coming of these farmers to the college every winter is not only good for the men who come, but good for the regular student body as it dignifies the whole idea of scientific farming.

Speaker of the Kansas House.

EDITOR KANSAS FARMER:—If it is not out of place I should like to call the attention of your readers, especially the stockmen of Kansas, to the candidacy of C. A. Stannard, of Emporia, Kans., for the Speaker of the next

present Legislature through, that laws we need may be enacted and not placed secondary to the election of a United States Senator, who should be, and after this session I hope will be, elected by the people. X. X. X.
Wabaunsee County.

Multimillionaire—Causes and Remedies.

Railroad presidents are always men of force. They possess ideas. They are capable observers. They sometimes analyze closely. They sometimes go wide of the mark. What they say is likely to be worth reading and worth thinking about. But do not expect to agree with all that any one of them says.

In an address delivered last week at New York, M. E. Ingalls, president of the Cleveland, Cincinnati, Chicago, and St. Louis railroad expressed some thoughts worth repeating. He said in part:

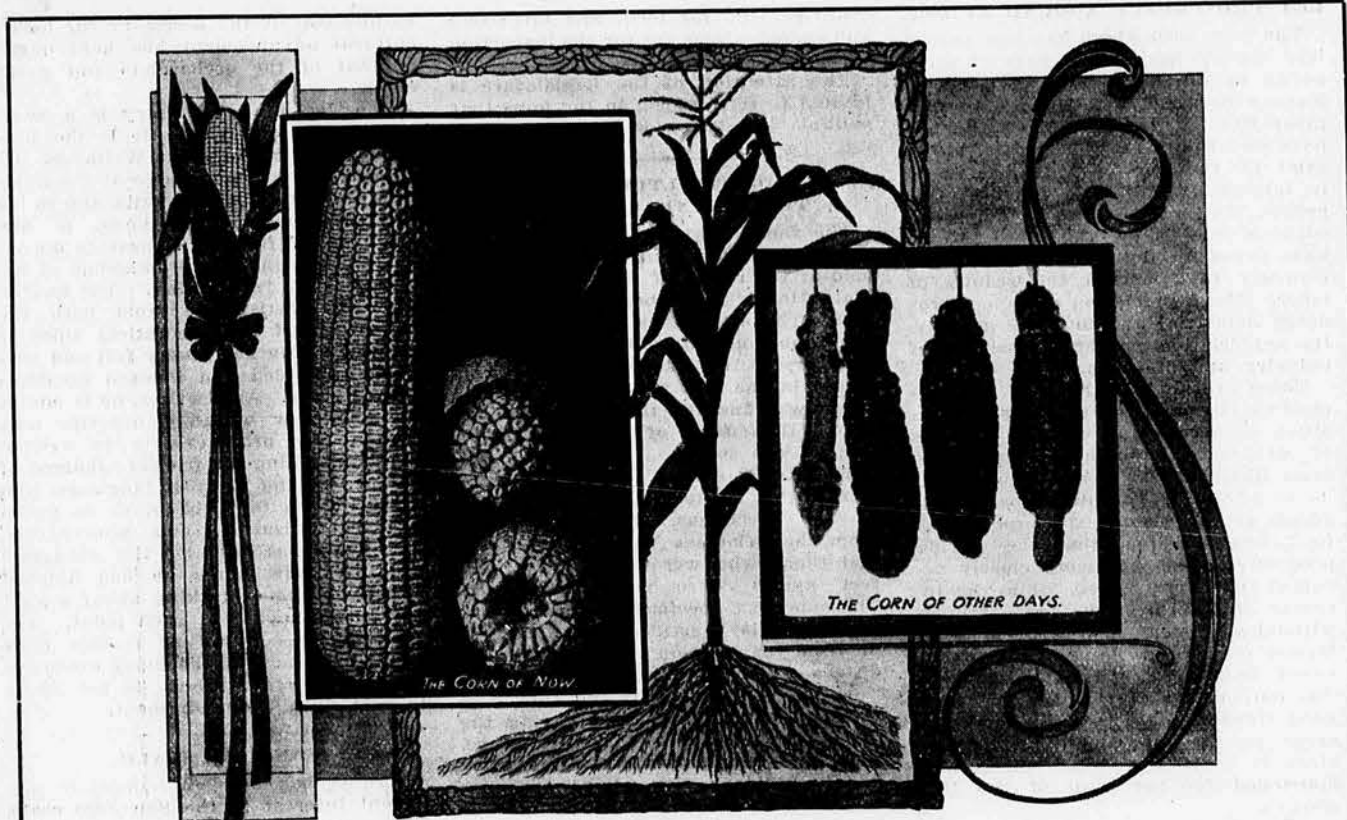
The real thought, I think, running in the minds of the people is: Are the large individual fortunes which have been and are being made to-day, a

favor the large shippers by corrupt contracts—in many cases the railway officials being interested with the shippers—and it grew to immense proportions so that a few years since the shipments at variations from the tariff rate were probably more than those at the authorized rate.

RAILROADS RESEMBLE THE GOVERNMENT.

The railway officials could not and did not realize that they were public institutions and could not conduct their business as private individuals conduct their own affairs, but they must deal like the government—the same with all. It has taken many years finally to convince railway owners and managers that they were not private parties in the management of these great institutions and that they must be conducted in a different manner from the way private business was managed, and that it was a violation of the law to make less rates to one party than to another, and that all secret rates were a violation of the law.

The end seems to have come and the



KING CORN.

This backing of Secretary Coburn's Christmas card is a telling representation of work that is now going on in the improvement of corn. Without seed selection one might plant corn from such ears as those shown on the right. The corn-breeder has ears as perfect as those shown on the left, and is devoting his energies to making such ears available for general planting. That a more profitable crop may be expected from the improved seed will not be questioned.

House of Representatives. If there ever was an opportunity offered the stockmen of Kansas, whereby their best interests could be subserved, it is in this coming assembly, where a goodly percentage of the Senators and Representatives are either stockmen or farmers on a broad scale, men who know the necessity, the positive need of an annual agricultural and stock exhibit for the State, commonly called a State fair, to be under the control of the State Board of Agriculture. For years past the stock-breeders of this State have pleaded with the members of our general assembly for appropriations sufficient to start such a project, but have failed up to this time. If C. A. Stannard can be chosen Speaker of the House, it will be the first stepping-stone in the desired direction, for with him rests the responsibility of naming the various committees. Many look upon the present assembly as meeting largely for the purpose of electing our U. S. Senator. The fight for Speaker seems to be along those lines, but while Mr. Stannard will take part in the above election, if elected Speaker he would not allow the work of the House to be delayed or put aside until the Senator was named.

C. A. Stannard would make an ideal presiding officer of the House, because he has not declared himself in favor of any candidate for the United States Senate. He is fair, honest, honorable, and one who would rule impartially—without fear, without favor. He is a man who has had experience sufficient to make him capable. He is a practical, successful business man with an untarnished reputation.

He is loyal to his friends. Here is a time when his friends can reciprocate this loyalty by urgently requesting their representatives to cast their votes for him for Speaker, and by so doing assist in pushing the work of

menace to the prosperity of our country, and if so, how can they be limited?

There have been in the last few years three prolific sources of multimillionaires which are open to criticism.

The first, in the minds of some of us, is the tariff. It has made possible combinations which have produced colossal fortunes, and the first thing to do, as we look at it, is to modify it. It is no use to talk against large fortunes derived from combinations and how to prevent them, when you keep the mother that breeds and nurses them alive in full force.

It is not a question of protection or free trade, but it is a question of so modifying the tariff as to protect legitimate business, and prevent extortion and unfair combinations. The mass of the people in this country have made up their minds that there should be some modification. The powers in control will be wise if they heed it and amend it before the evil grows so bad that it will be turned over for amendment and, possibly, destruction by hostile hands.

The second cause of the growth of these large fortunes has been illegal favors and contracts given to shippers by the railways. In many cases they have been wrung from the railways by the shippers. This also has been used in combination with the tariff. The high tariff and railway rebates in the last few years have produced more multimillionaires than any of us dreamed could exist in any country.

This cause—illegal favoritism by the railways—I trust is happily ended. The end is more welcome to the railway managers than to the people. The system started many years ago grew up under the theory that it was right and proper to favor the large shippers more than the small ones. It was an easy step, after this was begun, to

railways are adapting themselves to the new condition of affairs. The shippers who have lived and thrived and prospered on rebates and secret contracts will soon learn that they are equally wrong with the railways, and we will get upon a better basis of doing business. That will remove the second cause.

The third cause of the production of large fortunes has been the securing, by means which were questionable, of contracts at nominal prices for the use of the streets of various cities for the purpose of transportation and lighting.

In the beginning of the street car system and of electric lighting and gas plants the cities were so anxious to get the benefit of these companies that they made great concessions—made long contracts and reserved to themselves no right to control the prices charged and reserved no interest or share for themselves in the profits of the future. The promoters of these companies have bought what ought neither to be purchased nor sold—they have corrupted legislatures and city governments and have thereby obtained special privileges which have enabled them to amass great fortunes.

THE PUBLIC AWAKENING.

There has been, however, a great awakening of the people in the last few years, on this subject and they are now alive to the fact that they must not give away their streets—that corrupt officials who attempt to do so must be turned out of office and punished.

There are two remedies. One is to make contracts such as a private individual would make for the use of the

TO CURE A COLD IN ONE DAY

Take LAXATIVE BROMO Quinine Tablets. Druggists refund money if it fails to cure. E. W. GROVE'S signature is on each box. 25c.

streets, reserving proper rentals and a proper division of the profits for the future; and the other is for the municipalities to take possession of the lighting and street transportation and manage it the same way as they do the water works and sewerage system—for the benefit of the people.

With these three changes the number of multimillionaires for the future would be much lessened, although the increase of property and growth of fortunes by legitimate means is to be found all over the world, and I do not suppose it is the thought of any one to limit the increase of wealth by proper and honest means. A man who has brains, coupled with thrift and energy, should have the profit that comes from that combination.

With reference to limiting these fortunes by an income tax, let me say that after considering the subject carefully I have in the last few years come to the conclusion that it is the best and fairest tax that can be levied—but as a tax, like other taxes, for the support of this Government—not for the purpose of destroying property—that would be Socialistic—for the purpose of making wealth pay its share of the burdens of the people.

NOT FOR A GRADUATED TAX.

I don't believe in a graduated income tax, for I think that would be putting a tax on thrift and energy. I would tax all incomes of \$1,000 or over on a fixed percentage. Under \$1,000 the income from the tax would not be enough to pay for the cost of collection.

The inheritance tax has already been taken up by the different States—some of them with a graded tax and others with a straight tax. I am in favor of the inheritance tax as a tax for paying the expenses of the State like other taxes.

I would also enact legislation, either by the National Government or by the States, that no man should have the right to dispose of the bulk of his property by will, but that when he dies it shall be divided equally among his heirs, as the law directs. I would take away from the citizen the right to tie up his property in trust for one life or any time. It is simply a continuance of the old law of entail under another form and holds these immense fortunes together, when, if they were divided

equally among the heirs, they would soon scatter and be harmless. Let them be distributed. If some of the heirs waste the inheritance, the public will gain—the property is not lost by distribution and nothing, in my judgment, will so protect our future against large accumulations of wealth as this.

DANGER OF HYSTERIA.

There is danger in the present condition of public opinion that we will drift into a hysteria that will enact legislation that will seriously hurt our business and produce disaster. The real menace, to my mind, is the Sherman anti-trust law, so-called. I happen to know that the distinguished author of this law, when it was passed, did not think it applied to the railways and in their conduct of their business.

The history of this condition is this: In 1896 the condition of rates among the trunk lines was so bad that we got together and made what was known as the Joint Tariff Association. I had the honor to prepare that agreement, and it never occurred to me that there was any danger of violating the Sherman anti-trust law. We drew the agreement so it would aid and maintain the interstate commerce law. But the Supreme Court thought otherwise, and when in 1897 they made their decision that the agreement was a conspiracy and violated the Sherman law, there was then left no power or right among the railways to contract among themselves—to agree upon rates, to sue and be sued. In other words, that decision had the effect of turning them into pariahs, with every man's hand against them, and no right to conduct their business legitimately among themselves.

The result was anarchy; no agreements could be made or enforced; tariffs were disregarded; secret understandings and rebates were the order of the day.

There was not enough business to go around, and it was a scramble to see who could get ahead of his competitor. Wages were reduced, not only of the railway employees, but of the coal miner, the ore handler and laborer everywhere. Then Mr. Morgan started his "community of interests" and out of chaos order began to appear, wages were increased and rates better maintained. This plan was partially broken

up by the Northern Securities decision. Business, however, had grown to such proportions that rates continued to be fairly maintained. Large shippers, however, were still able to wring from the railways concessions.

REBATES AT AN END, HE SAYS.

With the enforcement of the law and probably the new legislation and the growth of public sentiment rebates have ceased. Can this last when times get dull and business decreases, as it surely will? I doubt it. The fear of punishment will prevent secret rebates, but the business of the country will drift to the strong lines and the weak ones will have to reduce their tariffs to get their share, and these reductions will be met, and it will be a survival of the fittest and this will bring lower wages, poor track and equipment, bankruptcy and receiverships, depression in business, panic, and suffering.

The same reasoning in many cases applies to other classes of business. Almost everything now is construed to be a trust and every one seems to believe that prima facie a trust is wrong. The fact is this: A trust is nothing but a combination of people for doing business more cheaply and more of it; it is the evolution of the corporation, just as the corporation was the evolution of the partnership, and partnership was the evolution from the days of the shepherd when each man tended his own flock. The trust properly conducted is not the enemy of the people, and in the fanaticism of the hour it should not be condemned if properly managed.

There is hardly an agreement between employers but what in the end under this law will be called a restraint of trade. Your stock exchanges that fix prices for commissions, your associations of different trades that agree upon prices no matter how reasonable those prices may be, all are violations of the law. Business can not long survive such restrictions.

THE CASE OF LABOR UNIONS.

Take labor unions, for instance. Do you suppose there is any sane man who reads the Sherman law and then reads the agreements made by some of the unions but who will say that they are agreements in restraint of trade and every man who makes them is subject to fine and imprisonment, and yet who will not concede that labor unions are

beneficial, that properly conducted they are of great assistance to the workingman to better his condition and increase his wages.

Are you willing to take the risk of a law like this? Nobody desires it; nobody wishes it. The law should be taken up and amended to suit business conditions of the twentieth century. As I said before, unfair conditions and ruinous competition should be stopped, but proper business methods should be encouraged and promoted.

We have had in the last year a great awakening of the public conscience in this country—a reform of great value to this Nation and which we owe more to President Roosevelt than any other man. Let us not leave our laws such that our property, our business, can not be continued in harmony with this new condition. Let us not force business enterprise to suffer and lose, or else violate the law. Let us, rather, have the laws so amended that this great moral uprising may continue and go on hand in hand with our present business prosperity; that capital may be secured and receive its fair return, and the wages of the great mass of toilers be increased, rather than diminished.

FILES CURED IN 6 TO 14 DAYS.

PAZO OINTMENT is guaranteed to cure any case of Itching, Blind, Bleeding or Protruding Files in 6 to 14 days or money refunded. 50c.

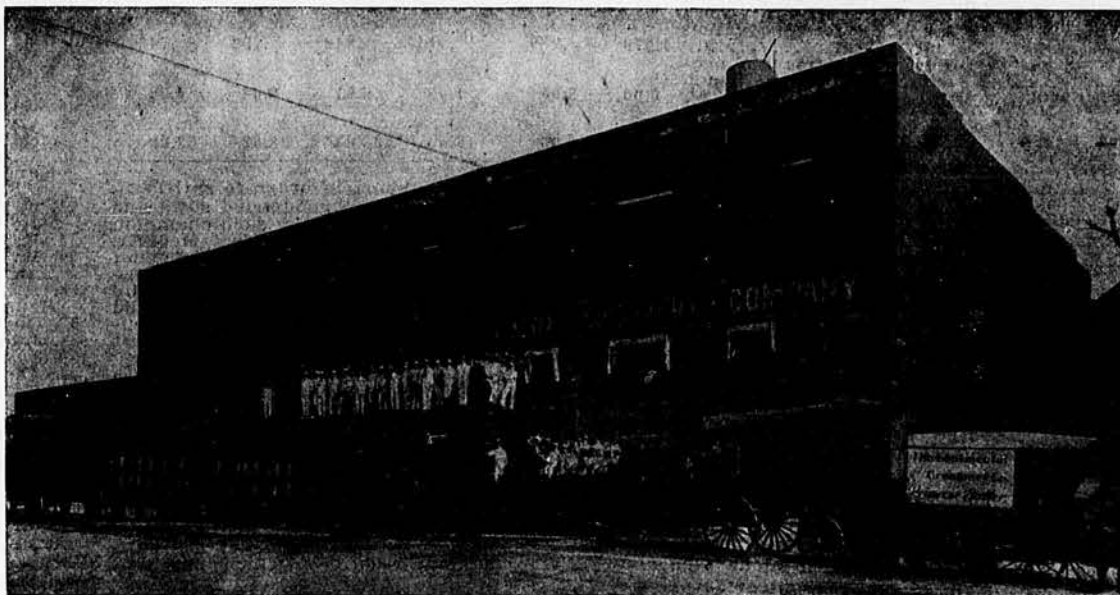
"The Book of Alfalfa."

On another page of this number of THE KANSAS FARMER will be found liberal excerpts from Secretary Coburn's latest work. These give a correct idea of the thoroughness with which the subject is treated. But these excerpts constitute less than a chapter of the book and there are 26 chapters in all. Every chapter is filled with information that is valuable to every farmer. The book is published by the Orange Judd Company, which fact is a guaranty of its excellence. The regular price of the book is \$2. Believing that its wide distribution among readers of THE KANSAS FARMER will assist them in augmenting their prosperity, we have arranged for such discounts from the regular price that we are able to make the following combination offer:

The Kansas Farmer 1 year.....\$1.00
The Book of Alfalfa..... 2.00
Total for both\$3.00
Combination price.\$2.50
Send orders to THE KANSAS FARMER,
Topeka, Kans.

Butter Fat 30 Cents

This is the price you can get for butter fat in first-class hand separator cream delivered at our station in your town. This is net to you—no charges for transportation—we furnish the cars and assume all loss in shipment. We maintain in your town an agent who takes care of your interests as well as ours. He is your neighbor and should have your patronage.



This entire building owned and occupied by The Continental Creamery Company, Topeka, Kans.

TO OUR PATRONS:

At the close of the old year, we heartily thank all of our patrons and friends for their patronage during the year just past. The year 1906 has been a season of high prices, still we have continued to extend the demand for our butter not only in this country, but also in foreign lands. Consequently, we find at the present time we can use more cream than we are getting, so we start the new year by offering you the price quoted above. Never in the many years we have done business in Kansas have we been able to offer such high prices at this time of the year. The prospects for the coming year look most bright for the dairy business and we have every reason to believe you will get good prices for your cream. We hope you will sell us more cream than ever before and recommend us to your neighbors and friends. We wish you all a Happy and Prosperous New Year.

Yours very truly,

Topeka, Kans., Jan. 1, 1907.

The Continental Creamery Company

Stock Interests

PURE-BRED STOCK SALES.

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

January 4, 1907—Poland-Chinas, B. M. Bell, Beatrice, Kansas.
 January 9, 1907—Shawnee Breeders Association, sale of Shorthorns, at Topeka State Fair grounds, I. D. Graham, secretary.
 January 9-10-11, 1907—Percheron, French Draft, Shire and Clydesdale stallions, mares and fillies at Bloomington, Ill. D. Augustin, Carlock, Ill., and C. W. Hurt, Arrowsmith, Ill.
 January 10, 1907—R. B. Marshall, Willard, Kans., Duroc-Jerseys.
 January 11, 1907—Grade Draft, Coach, Trotting bred, All Purpose and Saddle horses, mares and gelding, at Bloomington, Ill. D. Augustin, Carlock, Ill., C. W. Hurt, Arrowsmith, Ill.
 January 12, 1907—W. R. Peacock, Sedgwick, Kans., Poland-China bred sow sale.
 Jan. 17, 18 and 19, 1907—Shorthorns, Aberdeen-Angus and Herefords, South Omaha, Neb., W. C. McGavock, Mgr., Springfield, Ill.
 January 22, 1907—Peerless Perfection and Grand Perfection Poland-China bred sow sale. Harry E. Lunt, Burden, Kans.
 January 29, 1907—Grant Chapin, Greene, Clay County, Duroc-Jerseys.
 February 5, 1907—C. A. Cook, Salem, Nebr., Duroc-Jerseys.
 February 6, 1907—E. M. Jenkins & Son, Byron, Nebr., Poland-Chinas.
 February 6, 1907—Wm. Brandon, Humboldt, Neb., Duroc-Jerseys.
 February 7, 1907—R. F. Miner, Tecumseh, Nebr., Duroc-Jerseys.
 Feb. 7, 1907—Ward Bros., Republic, Kans., Duroc-Jerseys.
 February 8, 1907—T. J. Charles, Republic, Kans., Poland-Chinas.
 February 8, 1907—A. J. Russell, Crab Orchard, Nebr., Duroc-Jerseys.
 February 9, 1907—Poland-Chinas, C. O. Parsons Clearwater, Kans.
 February 12, 1907—John Morrison & Son, College View, Neb., Poland-Chinas.
 February 12, 1907—Kant-be-Beat bred sow sale of Duroc-Jerseys. John M. Morrison & Sons, College View, Neb.
 February 12, 1907—Duroc-Jerseys, T. P. Teagarden, Wayne, Kans.
 February 12, 13, 14, 15, 1907—Interstate Breeders' St. Valentine sale of all beef breeds. D. R. Mills, Manager, Des Moines, Iowa.
 February 13, 1907—Poland-Chinas, H. B. Walters, Wayne, Kans., at Concordia, Kans.
 February 13, 1907—J. B. Davis & Son, Fairview, Kans., Duroc-Jerseys.
 February 13, 1907—W. A. Kirkpatrick, Lincoln, Neb., Duroc-Jerseys.
 February 14, 1907—Gliber Van Patten, Sutton, Neb., Duroc-Jerseys.
 February 14, 1907—Poland-China bred sow sale at Abilene, Kans. L. D. Arnold, Route 1, Enterprise, Kans.
 February 15, 1907—Frank Dawley, Salina, Kas., Poland-Chinas.
 February 15, 1907—Geo. Briggs & Son, Clay Center, Neb., Duroc-Jerseys.
 February 16, 1907—Roberts & Harter, Hebron, Nebr., Duroc-Jerseys.
 Feb. 18, 1907—C. W. Taylor, Pearl, Kans., Duroc-Jerseys.
 February 19, 1907—Jno. W. Jones & Son, Concordia, Duroc-Jerseys.
 February 19, 1907—Sixth annual sale of Whitewater Falls Percheron stallions and mares at Wichita, Kans. J. W. & J. C. Robison, Towanda, Kans.
 February 19, 20, 21, 1907—Sixth annual sale of Percherons, Shorthorns and Herefords at Wichita, Kans. J. C. Robison, Mgr., Towanda, Kans.
 February 20, 1907—Sixth annual sale of Silver Creek Shorthorns at Wichita, Kans. J. F. Stodder, owner, Burden, Kans.
 February 22, 1907—Poland-Chinas, Lemon Ford, Minneapolis, Kans.
 Feb. 20, 1907—J. E. Jones, Clyde, Kansas, Duroc-Jerseys.
 Feb. 21, 1907—Leon Carter & Co., Asherville, Kans Duroc-Jerseys.
 February 22, 1907—J. C. Larrimer, Derby, Kans., Poland-Chinas.
 February 23, 1907—Poland-Chinas, Bollin & Aaron, Leavenworth, Kans.
 February 23, 1907—G. E. Avery, at Kansas State Agricultural College, Manhattan, Kans., Aberdeen-Angus cattle.
 February 26, 1907—Poland-Chinas, Holmes & McDaniel, Edmund, Kans.
 February 26, 1907—Poland-China hogs, C. P. Brown, Whiting, Kans.
 February 27, 1907—Poland-Chinas, W. H. Bullen, Belleville, Kans.
 February 27 and 28, 1907—W. H. Cottingham & Son, McPherson, Kans., horses, Shorthorn cattle and Poland-China hogs.
 March 5, 1907—Sunny Slope Berkshire sale. C. A. Stannard, Emporia, Kans.
 March 21, 1907—Elderlawn Shorthorns at Manhattan, Kans. T. K. Tomson & Sons, Dover, Kans.
 April 3, 4 and 5, 1907—Herefords, Aberdeen-Angus and Shorthorns, Kansas City, Mo., W. C. McGavock, Mgr., Springfield, Ill.
 May 12 and 13, 1907—Aberdeen-Angus, Shorthorns and Herefords, South Omaha, Neb., W. C. McGavock, Mgr., Springfield, Ill.
 Improved Stock Breeders Association of the Wheat Belt—Feb. 13, 14, 15, 1907, at Caldwell, Kans. Chas. M. Johnston, Caldwell, Kans., manager.

Relation of Initial Weight of Feeding Cattle to Profits.

COPYRIGHT, 1906, H. W. MUMFORD.

The initial weight of feeding cattle has a direct bearing upon possible profits in cattle-feeding. In practice it is difficult to secure examples where differences in initial weight of feeding cattle selected for the feed-lot are the only differences. In other words, it is not likely that a 750-pound feeding steer will be the same age, have the same thrift, condition, and quality, and bring the same price of a 1,050-pound steer. In most instances differences other than differences in initial weight would also have a direct bearing upon the feeding qualities and possibilities of feeding cattle. In order, however, to make clear the principle involved in variations in initial weight of feeding cattle, it will be necessary to assume that we are dealing with this factor only. Perhaps the best way to consider this question is to compare two financial statements, one on the basis of starting with the 800-pound feeder and the other a 1,000-pound feeding steer. Assuming that the total gains and cost of gains would be the same in either case the statement would be something as follows:

One 800-pound choice feeding steer at \$4.50 per cwt. \$36.00
 66 bu. corn at 40c per bu. 26.40
 One ton clover hay at \$7.50 per

ton. 7.50

Total disbursements. \$69.90
 Credit 75 lbs. pork at \$5 per cwt. 3.75

Net cost of steer at time of marketing \$66.15

Granting that the 800-pound feeder would gain 405 pounds in a six-months' feeding period, during which time each steer received 66 bushels of corn and one ton of hay, the steer when finished and ready for the market would weigh 1,205 pounds. According to the statement of expenditures made above, this 1,205-pound steer would have cost at time of marketing \$66.15, and in order that the cattle-feeder should come out even, that is, neither make nor lose by the enterprise, the steer would have to net approximately \$5.49 per hundred-weight in the feed-lots at home. Since it was assumed that the steer cost \$4.50 per hundredweight this would mean a 99 cents margin between buying and selling price. For sake of a comparison let us now assume that we buy a 1,000-pound feeding steer, of same quality, for finishing:

One 1,000-pound choice feeding steer at \$4.50 per cwt. \$45.00
 66 bu. corn at 40c per bu. 26.40
 One ton clover hay at \$7.50 per ton. 7.50

Total disbursements. \$78.90
 Credit 75 lbs. pork at \$5 per cwt. 3.75

Net cost of steer at time of marketing. \$75.15

Starting with a 1,000-pound steer that gains 405 pounds in six months, a 1,205-pound steer is produced which, to meet above disbursements, would have to sell for about \$5.34, or 84 cents per hundredweight above cost. Putting it in another way it might be said that other things being equal, a 1,000-pound feeding steer can be finished on a 15-cent smaller margin than a steer weighing but 800 pounds at the start. The reader should bear in mind that in making these financial statements the writer has adopted for demonstrating this and other phases of the cattle-finishing business one of the simplest methods of feeding calculated to produce cheap gains, and where cheap gains prevail, as we have shown in a previous article, the necessary margin between buying and selling price is reduced to the minimum. The labor involved and interest on investment is not charged nor is any credit given for fertilizer produced. For purposes of this discussion it is sufficient to assume that the value of the fertilizer is equal to interest on investment and labor involved.

The accompanying table shows the effect of differences in initial weight of feeding cattle from 700 to 1,200 pounds.

Initial weight of Feeding cattle	700 Pounds	800 Pounds	900 Pounds	1000 Pounds	1100 Pounds	1200 Pounds
Initial cost of steer at \$4.50 per cwt.	\$31.50	\$36.00	\$40.50	\$45.00	\$49.50	\$54.00
Net cost of feed (total cost less \$3.75 for pork)	30.15	30.15	30.15	30.15	30.15	30.15
Final cost of fat steer per cwt.	5.579	5.490	5.414	5.349	5.292	5.246
Margin required between buying and selling price home or feed-lot values and weights.	1.079	.989	.914	.849	.792	.746
Differences in margin necessary between each weight in cents.	0.00	8.95	7.58	6.51	5.64	4.62
Total difference between 700 lbs. and each larger weight in cents.	0.00	8.95	16.53	23.04	28.68	33.30

Perhaps the importance of this factor would be more quickly seen if the first-named example were taken, namely, a comparison of the 800- and 1,000-pound feeding steers. Suppose when the cattle are marketed a \$1.50 per hundredweight margin over cost price is secured in each instance, then the total value of the 800 + 405 = 1,205-pound steer would be \$72.30. The net cost of this steer, including feed less value of pork product, was \$66.15. This would leave a profit per steer of \$6.15. In case of the 1,000 + 405 = 1,405-pound steer, the value at marketing time would be \$84.30. The net cost was \$75.15, leaving a profit per steer of \$9.15, this item alone then showing a difference in profit of \$3 per steer.

The Kansas Improved Stock Breeders' Association, Seventeenth Annual Meeting.

Never, in the seventeen years of its existence, has the Kansas Improved Stock Breeders' Association been able to present a better program nor one more brimful of interest than the one offered for its seventeenth annual meeting which begins on Monday, January 7, 1907, at 2 o'clock.

Through the courtesy of the Supreme Court, the court chambers in the State House will be used for these meetings. Among the names of prominent men which appear on the program are: Col. W. A. Harris, who is known wherever good Shorthorn blood flows; W. W. Marple, ex-president of the Missouri State Dairy Association; Dr. C. W. Burkett, the newly elected director of the Kansas Experiment Station; A. J. Knollin, of the Union Stock Yards, Chicago; Frank Cooper,



Let Me Quote You My Direct Prices On Split Hickory Buggies

I am willing to take all chances on your not liking one of my Split Hickory vehicles. Every buggy I sell goes out on trial, subject to being returned, and refunding every cent of money, if not satisfactory. My FREE catalog of Split Hickory Buggies shows over 15 different styles of buggies, and a complete line of High-Grade Harness. I want you to have this book. No matter where you buy, you ought to read what I have to say about my direct method of selling at prices that are from 30% to 50% lower than you can buy a buggy of as high quality elsewhere. All my Split Hickory vehicles are guaranteed 2 years. The Buggy shown in this picture is my 1907 Split Hickory Special. I have an entire factory devoted to the making of this one job. Write today for catalog. A postage and harness made. Address me personally.

H. C. Phelps
 President Ohio Carriage Mfg. Company,
 Station 251 Cincinnati, Ohio.



of the Union Stock Yards, Kansas City; Prof. T. L. Haacker, of Minnesota, the greatest Northern authority on dairying; Prof. R. J. Kinzer, head of the animal husbandry department of the Kansas Agricultural College; and Prof. H. R. Smith, head of the same department of the Nebraska Agricultural College; A. T. Garth, of Larned, who owns the largest herd of O. I. C. swine in Kansas; W. R. Dowling, of Norcatur, member of the State Board of Agriculture and an old-time swine-breeder; Geo. W. Berry, of Emporia, famous as the breeder of Masterpiece, the \$5,000 Berkshire boar; T. H. Terry, of Bavaria; Fred Norris, of Topeka; and J. T. Axtell, of Newton, who will discuss the horse in his various phases; T. A. Borman, of the Continental Creamery Co., who is the best posted dairymen in the State; S. F. Lockridge, of Greencastle, Ind., ex-president of the American Shorthorn Breeders' Association; H. L. Pellet, of Eudora, breeder of Red Polled cattle; Geo. Stevenson, of Waterville, president of the American Aberdeen-Angus Association; W. F. Baird, of LaCygne, breeder of Oxford sheep; Prof. G. C. Wheeler, in charge of feeding experiments at the Kansas Experiment Station; H. E. Bachelder, a noted breeder and sale manager of Fredonia; Dr. Schoenleber, at the head of the department of veterinary science of the Kansas Agricultural College and Experiment Station. Surely no richer program was ever offered in Kansas.

Immediately after the closing session on Wednesday noon there will be held a Shorthorn sale by the Shawnee Breeders' Association at the State Fair Grounds.

Beginning at 4 o'clock on Wednesday, January 9, 1907, the Kansas State Board of Agriculture will hold its thirty-sixth annual session. Secretary Coburn has fairly excelled himself in gathering good things for this meeting.

Railroad rates for these meetings are one fare plus 50 cents for the round trip, tickets on sale January 5 to 12 inclusive, good to return until January 14, 1907.

Be sure to buy reduced round-trip tickets.

Fredonia Breeders.

There are several breeders of pure-bred stock, located in the vicinity of Fredonia, Wilson County, Kansas, that have some good stuff, and are making a nice showing.

Stryker Bros. have some rich blooded Poland-Chinas and are rapidly coming to the front as breeders of the best. They have about seventy-five head in their herd at the present time. They report a very active demand this fall, and they have been obliged to sell

the market with a fine offering a little later.

Clark & Clark, the veteran Shorthorn breeders, are also at Fredonia. The Clear Creek Herd now numbers about seventy-five head of Scotch and Scotch-topped cattle. At the head of this herd is the pure Scotch bull, Roseleaf. He is a bull of marked individuality, of great scale and quality, and a herdsman in every sense of the word. Clark & Clark are breeding forty cows to this fine bull, and can reasonably expect some of the very best to offer the public. These gentlemen at the present time have ten fine yearling bulls for sale. It runs in this family to raise good Shorthorns. Clark & Clark are father and son, and D. M. Clark, father and grandfather of this firm, is still raising Shorthorns, at 82 years of age. He is considered one of the best judges of Shorthorn cattle in the country. He has judged at a number of the leading fairs and cattle shows of the State.

The Snyder Poland-China Sale.

Col. John D. Snyder, of Winfield, reports a splendid sale of his Poland-Chinas at the home place on November 28. A large crowd was in attendance and many of them were breeders from a distance. The local attendance was excellent.

Following is a report taken from sale book:

1. Jos. I. Roy, Peck, Kans.	\$134.00
2. A. P. Wright, Valley Center, Kans.	42.00
3. C. E. Moore, Caldwell, Kans.	45.00
4. Harry E. Lunt, Burden, Kans.	50.00
5. I. E. Knox, Clair, Okla.	59.00
6. C. B. Jones, Ames, Okla.	70.00
7. C. B. Jones,	64.00
11. Frank Giltner, Winfield, Kans.	25.00
12. John Thibbets, Winfield, Kans.	26.00
13. C. E. Elliott, Wilmot, Kans.	47.00
14. Fred C. DeMotte, Arkansas City, Kans.	38.00
15. Frank Giltner,	33.00
16. J. R. Roberts, Deer Creek, Okla.	35.00
17. Stryker Bros., Fredonia, Kans.	28.00
18. C. T. Elliott,	81.00
19. F. C. DeMotte,	68.00
20. Wm. Foster, Elmdale, Kans.	25.00
21. I. E. Sunderland, Winfield, Kans.	31.00
22. Geo. Lerman, Winfield, Kans.	15.00
23. John Thibbets,	30.00
24. T. W. Fritchman, Wellington, Kans.	37.00
25. J. F. Thomas, Maple City, Kans.	31.00
26. C. A. Shields, Derby, Kans.	26.00
27. R. Cox, Rose Hill, Kans.	27.50
28. M. L. McPherson, Winfield, Kans.	26.00
29. John Thibbets,	26.00
30. Cliff Peden, Winfield, Kans.	25.00
31. Abe Skinner, Winfield, Kans.	17.00
32. John Thibbets,	21.00
33. Frank Giltner,	33.00
34. Ed Pray, Augusta, Kans.	23.00
35. C. A. Shields, Derby, Kans.	22.00
36. F. W. Smith, Winfield, Kans.	13.00
37. S. Stewart, Winfield, Kans.	13.00
38. John Thibbets,	11.00
39. A. P. Wright,	23.00
40. E. Cranston, Tisdale, Kans.	18.00
41. C. Lambrecht, Winfield, Kans.	9.00
42. H. Cuen, Ashland, Kans.	10.00
44. W. B. Seyler, Arkansas City, Kans.	36.00
45. B. Swantz, Winfield, Kans.	31.00
46. Ed Pray,	31.00
47. Wm. Foster,	24.00
48. E. Cranston,	23.00
49. W. R. Nichols, Winfield, Kans.	20.00
50. C. T. Elliot,	19.00
51. E. C. Morton, Rock, Kans.	20.00
52. John Thibbets,	17.00
53. F. W. Smith,	18.00
54. W. J. Marshal, Winfield, Kans.	19.00
56. R. D. La Foon, Winfield, Kans.	6.00
57. Geo. Lerman,	9.00
58. John Thibbets,	20.00
59. J. A. Ramsay, Arkansas City, Kans.	21.00
61. L. E. Parsons, Udall, Kans.	25.00
62. W. P. Wimmer, Mound Valley, Kans.	35.00
63. T. T. Cox, Rose Hill, Kans.	125.00
64. J. E. Delmar, Arkansas City, Kans.	32.00
65. John Thibbets,	34.00
66. W. B. Harris, Burden, Kans.	30.00

Stadt's Duroc Bred-Sow Sale.

On January 19, 1907, at 1 p. m., J. F. Stadt will hold a bred-sow sale in the sale pavilion at Ottawa, Kans., where he will sell forty of his choicest sows and gilts. These sows are an extra fine lot of the smooth, roomy kind that farrow large litters and raise them. They are by some of the best boars known to the breed, such as Orion 5293, who has sired more State fair winners than any other boar; Nelson's Model 22095, first in class at Nebraska State Fair, where he competed against more than sixty of the best in the State; Arion 22587, the 1,000-pound winner at Iowa and Nebraska State Fairs; King Wonder 24 30471, prize-winner and first in class at Ottawa Fair 1905-06; and Oricle by Orion, and the good grandson of Ohio Chief. These choice sows will be safe in pig by Mr. Stadt's great herd-boars, Long Wonder 21867 and Nelson's Model 22095. Long Wonder is a grandson of Pilot Wonder champion hog at the Chicago International, 1903. He will weight 1,000 pounds in breed-

ing condition, but is as smooth and active as a pig. He is a hog of great length, strong back, big bone, good feet, and heavy hams. He was a winner at Nebraska State Fair 1906, and won first and grand sweepstakes at several leading Nebraska shows, winning over a number of State fair winners. His get have splendid style and finish, together with immense size.

Nelson's Model 22095 (first in class of over sixty at Nebraska State Fair 1906), the second boar in service, is a great boar in every respect, with a set of legs on the mill-post order. He is built like a Norman horse, has lots of style and finish, and is a great breeder. This sale will be held rain or shine, and don't forget the date and place.

Mr. Staadt's advertisement appears in this issue of THE KANSAS FARMER. Read it carefully and write for a catalogue, which may be had for the asking. Don't fail to attend and get some of the bargains that will be offered. In writing for catalogue please mention THE KANSAS FARMER.

McLaughlin Bros.' Winnings.

Although we have mentioned the winnings made by McLaughlin Bros., of Kansas City, Columbus, and St. Paul, at the various fairs and shows this fall, the following letter shows the results of their show season in more condensed form:

"The year that is now ending has been very prosperous with us in every way, but in no way have we been more successful than we have in exhibiting our horses at the great horse shows both in France and in America. In France our stallions won every first prize, both at the Paris Show and at the show held under the auspices of the Societe Hippique Percheronne de France. The first exhibition we made with our horses, after their arrival in this country, was at the Ohio State Fair, where our French Coach stallions won every possible prize and our Percherons won a very large majority in all of the stallion classes, including championships with both breeds. We won every first prize and championship, with our Percheron and French Coach stallions, at the Iowa State Fair and at the Missouri State Fair; also at the Interstate Live Stock Show held at St. Joseph, Mo., and at the American Royal in Kansas City. At the Kansas City Horse Show, in competition with German Coaches, Hackneys, and every other coach breed, our French Coach stallion, Chandernagor, won the grand championship prize. The final contest of the year came last week at the International Live Stock Exposition at Chicago. Every importer who prides himself on having good horses enters into the contest there. Competition is the keenest because the prizes are the most sought after and most valuable. In the class 'Four years old and over,' our Etrageant won first prize, Sam third; in the class 'Three years old and under 4,' we won second and third; in the class 'Two years old and under 3,' our Dragon won first prize. Finally, when the championship contest came, all of the first-prize winners came into competition and the first-prize 3-year-old was so inferior to the other two that Etrageant and Dragon were immediately selected for championship and reserve. It was a difficult matter for the judge to finally determine which horse was entitled to the highest honor but it finally fell upon Etrageant, and Dragon carried off the reserve. It is a remarkable coincidence to state that these two stallions, Etrageant and Dragon, won first prize in their respective classes at the Ohio State Fair, and Etrageant has won first prize at every show and every contest where he has been entered this year.

In the French Coach classes, at the International, six stallions were shown by us: two in the aged class, three in the 3-year-old class, and one in the 2-year-old class. In the aged class, Chandernagor won first prize and Crasville third. In the 3-year-old class, our three entries won first, second, and third; in the 2-year-old class, ours won first prize. Of course, ours were the only competitors for championship, because no one else won any first prizes. This great honor was won by Chandernagor, and the 3-year-old won the reserve. Finally, to sum up, at the International last week, both in the Percheron and French Coach stallion classes, we won every championship and reserve championship. No such record as this was ever made by any single exhibitor since the first International."

Drybread's Herefords and Durocs.

In the six years that Samuel Drybread, of Elk City, Kans., has been breeding pure-bred stock, he has clearly demonstrated his right to be classed among the most successful breeders in the State. Starting with only a few head of the best, he has built up a herd of Herefords that any breeder could well be proud of. At the head of his herd is the magnificent bull, Judge Spencer 97224. He was sired by the fine imported bull, Sedan, and is of great scale and quality, being long and deep and broad, with good back and very heavy bone. He is a sure breeder, and his calves testify to his splendid breeding qualities. He has won many firsts at some of the best shows and fairs. Mr. Drybread's cows have been carefully selected, and he has some fine individuals from some of the best families of the breed. He has two cows by Java that are very fine, and three that are granddaughters of Alger who won second at the World's Fair.

Annett, a granddaughter of the great bull, St. Louis, with fine calf at foot, has just been sold for \$225.

Mr. Drybread has one fine cow which he bought in 1900, when she was 1 year old, paying \$150 for her. He has sold four of her calves for \$462.50 and he has the cow, a fine young bull, and a heifer calf left. It does not take very long to see that this is more profitable than raising scrubs.

His increase this year has been thirty fine calves from thirty-two cows. This certainly proves the splendid breeding qualities of his herd. His

calves are a very choice lot, and he has a number of extra topky young bulls, old enough for service, for sale at living prices. Mr. Drybread's Durocs are in keeping with his Herefords. He has about 100 of these, twenty-two of which are tried sows and gilts of breeding age. These are being bred to his fine young boar, Star Wonder, by Mc's Pride, which he recently bought from Marshall Bros., of Burden, Kans.

His prospects are good for a fine crop of pigs of early spring farrow. He also has some good boars and gilts of early fall farrow, that will be ready for the spring trade.

Cinderella, a sow of extra quality, was purchased by Mr. Drybread at the American Royal this fall. She weighed 620 pounds at 18 months old, and won fourth in her class.

Truman's New Horse Importation.

Mr. J. G. Truman, manager of Truman's Pioneer Stud at Bushnell, Ill., writes THE KANSAS FARMER as follows: "I am very pleased to say that our second importation of stallions this fall arrived here in good condition last night. This importation consists of Shire and Hackney stallions, but I am advised by Mr. J. H. Truman that he has another consignment of Shires and Percherons ready to leave England as soon as we cable him to ship them. Just at this time our stables are absolutely filled. Every stall we have has a first-class imported stallion in it. To any of our readers that are anticipating purchasing a stallion this season in order to move a few of these at as early a date as possible, will make very close prices.

"We have recently issued our twenty-ninth annual catalogue, which contains drawings from life of upwards of sixty stallions, all of which are for sale at very reasonable prices.

"With our superior advantages, having a resident buyer in England, we are in a position to sell Shire and Hackney stallions at considerable less money than our competitors. The proof of the pudding is in the eating of it, and if any prospective buyer of either draft or coach stallion will call and inspect our horses and get our prices, I feel certain that we can trade with him.

"Our trade this month has been better than any in the history of our twenty-nine years in the importing business, and from the inquiries that are coming in I see no reason why it should not continue this way.

"With grade Shire fillies selling as they do in this county at from \$250 to \$300 each, I see nothing that a farmer can do that will pay him better than to raise a few grade Shires. The American people are beginning to appreciate what the Shire horse does for them when crossed on our American-bred mares.

"Our importations will arrive from now on in January, February, March, and April to supply our spring trade."

Words of Advice from Mr. Stannard.

Mr. C. A. Stannard, of Emporia, Kans., offers some timely advice to cattlemen in his letter, which follows:

"In about six weeks or two months the hair will commence to come off your cattle in patches and they will look ragged and bad, rubbing and scratching and becoming sore and raw on account of the lice which are working on them, and in the country where mange is prevalent, the mange and lice together will cause the loss of many.

"If you are intending to sell your cattle in a sale in the spring, it is very important to you that they retain their coats as long as possible in order that they may show to good advantage in the sale-ring. If you will commence now to dip your cattle or dress them with a brush, you will kill the lice and prevent their ravages, and if there is any mange you will cure it and your cattle will come out in the spring sleek and smooth and many pounds heavier than they would without having used a dip.

"My advice to all cattlemen would be to buy your dip now and use it now, not wait until the hair commences to come off and the cattle commence to rub and scratch. And in this connection I would like to have you try a barrel of my Processed Crude Oil. There is no dip on the market as effective in killing lice and curing mange as this preparation. One application of it will do more to rid your cattle of lice than three applications of any other dip on the market, for the reason that it not only kills the lice but the nits also. It is a combination of lime, sulfur, and carbon with pure crude oil as a base. Being an oily substance, it spreads all over the animal and remains there for four or five weeks, thereby thoroughly cleaning them with one application. (See advertisement on page 17.)

Manrose Milking Shorthorns.

N. Manrose, of Ottawa, Kans., is making a reputation among the breeders of the State as a breeder of Shorthorns of the very highest quality. Mr. Manrose realizes that there is a growing demand for the dual-purpose cow, that is, one that will produce both beef and milk, consequently he has been breeding along these lines, and his judgment as a breeder is amply demonstrated in the fine animals he has produced. He has some heifers by Giltspur Knight 171591, and out of his heavy milking cows that are strictly fancy. They are Scotch-topped, and are individuals that would be hard to compete against in the show-ring. Giltspur Knight was a great breeder, as his get will show. He was sired by Golden Knight of Enterprise 43815. His dam was Victoria 2d, she by Prince Victoria 116918, out of Victoria Giltspur, by Prince Victoria of Hickory Park 94481, out of Viscountess Giltspur, by Giltspur 92520. Mr. Manrose has recently bought the fine young bull, Charmer 2d 269195. He is a splendid individual, and of the very best breeding. He was bred by Wolf & Son, of Ottawa, Kans. His sire was Scotland's Charm 127264, his dam 2d Duch-



HAVE YOU ANY SEED

which contains obnoxious weeds and is

UNFIT TO PLANT OR TO SELL

To get good results you need the best mill obtainable. The Perfection is that mill. It handles all kinds of seed, and grades it at the same time.

WHAT F. D. COBURN,

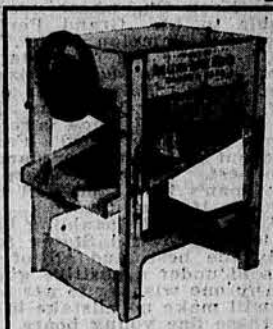
Secretary of the Kansas State Board of Agriculture said of the "Perfection" in sworn testimony given at a recent court proceedings:

"It was nearer perfection than anything of the kind I had ever seen and far more so than I had supposed possible. I couldn't have believed it without seeing it."

Raise More Corn

Our new corn grader will enable you to do it. This machine will grade your corn to an absolute size and thickness, so that your drill will drop the corn 98 per cent perfect instead of 73 per cent, an increase in your corn crop from 15 to 25 per cent with no more cost of production. It means something, Mr. Farmer, figure it out for yourself. For full information and prices write

THE LEWIS-TUTTLE MFG. CO.,
305 C. Kansas Ave., Topeka, Kansas



Profitable Stock Feeding

By H. R. SMITH, of the Nebraska Experiment Station.

Is a Winner

A second and larger edition has just been printed. It has been adopted as a textbook in the Agricultural colleges of Twenty States. As a compendium of facts for the farmer it is universally pronounced to be the best book of the kind ever printed. It is more fascinating than a novel to all interested in the feeding and judging of live stock. It contains more than 400 pages of clear cut information concerning the feeding of Cattle, Horses, Hogs, Sheep and Poultry. The parts devoted to judging animals are profusely illustrated. Bound in Vellum de Lux; printed on the best grade of paper.

Price, Postage Paid - - - \$1.50.

In order that this book may have a wide distribution The Kansas Farmer Company makes the following special offer, good until January 1, 1907:

Profitable Stock Feeding	- - - - -	\$1.50
One Year's Subscription to The Kansas Farmer	- - - - -	\$1.00
Total	- - - - -	\$2.50

ALL FOR \$1.80.

Address, THE KANSAS FARMER CO.,

625 Jackson St.

Topeka, Kansas

\$31,500,000 at Risks

30,000 Members

The Farmer's Alliance Insurance Company of McPherson, Kansas

We furnish insurance at cost; 18 years of successful business. Why carry your insurance with others when you can get it in this company at much less cost. Write for full particulars of our plan.

C. F. Mingenback, Sec., McPherson, Kansas

AGRICULTURAL COLLEGE FINE STOCK

SHORTHORNS—Ravenwood Admiration 186157, by the champion Lavender Viscount. Also one of his good sons and some heifers.
HEREFORDS—Soldier Creek Columbus 4th 253179 by the \$5,100 Columbus 17th. Also two good bulls sired by him.
Also one good ANGUS coming yearling bull.
HOGS—A few of the best from 200 spring pigs—**DUROC-JERSEYS**, **POLAND-CHINAS**, **BERKSHIRES**, **TAMWORTHS**, and **YORKSHIRES**. Only the tops will be sent out on order.
Department of Animal Husbandry, Agricultural College, Manhattan, Kansas

WHEN WRITING OUR ADVERTISERS PLEASE MENTION THIS PAPER.

ess of Glendale, she by Glendon 119370; second dam, 2d Duchess of Vinewood, by Armourbearer 114272. This fine young bull has three good Scotch-tops, and is from a heavy-milking dam. Bred to Glitspur Knight's fine heifers, we predict he will get some fine calves. Mr. Manrose has some young bulls for sale at reasonable prices that are the equal of his heifers. His card may be found in each issue of THE KANSAS FARMER. Any one desiring the very best should write Mr. Manrose at once.

Some Good Boars.

Dietrich & Spaulding, of Richmond, Kans., have three extra fine boars for sale. They are of early spring farrow, and way up on quality. Look at their breeding! Two of them are by Grand Perfection 77899, who is one of the best boars in the country. He is a grandson of Chief Perfection 2d and a half-brother to the great prize-winner, Keep On, whose successor he is liable to be. Grand Perfection took first and champion at the Topeka State Fair, and at the Iowa State Fair. He won over the second-prize winner at the World's Fair. Their dam is Keep On Fashion by Keep On. The other is by Perfection I Know, sire of the Iowa State Fair and World's Fair champion and out of a Corrector dam as good as the best. These boars are fit to head any man's herd, and will be sold reasonable if bought soon.

Dietrich & Spaulding have a reputation in several States for handling only the best, and all of their stock is sold under a positive guarantee. Any one wishing to get a herd-head will make no mistake in buying one of these fine young boars. Write Dietrich and Spaulding at once or you may be too late. Mention THE KANSAS FARMER.

Dietrich & Spaulding.

This firm needs no introduction to the breeders of the State. The quality of their Poland-Chinas, coupled with the fact that they produce only the best, has given them a reputation among their fellow breeders that is second to none. They recently held a very successful sale, but have plenty of good stuff left. They have an exceptionally fine lot of brood-sows. These sows are of the large, smooth, roomy type, that farrow large litters and raise them, and are nearly all by champion and prize-winning boars, such as Meddler 2d, Perfection I Know, Perfection E. L., Corrector, Keep On, U. C. Perfection, and others among the best-known to the breed. Their bears are herd-headers and bred along the most fashionable lines. Grand Perfection 77899, owned by Dietrich & Spaulding and Lunt, can easily be classed among the few great boars in the country. He is by Perfect Perfection, he by Chief Perfection 2d out of a good Perfection sow. Chief On and On is another good one. He is by the great On and On and his dam is Lady Mascot 2d. He is owned by Dietrich & Spaulding and Hebbard. Outlaw by Meddler out of a Corrector dam is strictly fancy. He is considered Meddler's second greatest boar, and bids fair to be his greatest. He is already a prize-winner, having captured third prize at Illinois State Fair in a hotly contested class, when he was less than a year old, and had he been highly fleshed, he would have given a hard fight for first.

Dietrich & Spaulding will hold a bred-sow sale February 23, 1907. Mr. Dietrich has rented his farm at Richmond and will move to Ottawa, where he will continue in the business of raising Poland-Chinas.

Hill's Shorthorns.

H. M. Hill, of Lafontaine, Kans., is probably one of the most experienced and persistent breeders in the State. In the many years that he has been breeding pure-bred horses and cattle, he has scattered an immense amount of good stock over the country, and more than one breeder has been benefited, for the quality of his stuff is of the best. Although the prices for pure-bred cattle are far from being satisfactory, Mr. Hill is not discouraged, for he has passed through such depressions before, only to win out in the end. As evidence of his faith, that better conditions will prevail in the near future, Mr. Hill has at the present time 150 head of Shorthorn cattle. Fifty of these are pure Scotch and the rest are all Scotch-topped. At the head of his herd he has three pure Scotch bulls that are as good as money can buy. He is breeding his cows to these fine bulls and is looking for a great crop of calves.

Mr. Hill was a contributor to the Coffeyville sale, and he expects to join with S. C. Hanna, of Howard, in a sale in the spring.

Peck & Putman's Duroc-Jersey Sale.

On January 23, 1907, Peck & Putman, of Tecumseh, Neb., will put up an offering of Duroc-Jersey hogs that will be an attraction for breeders. The entire lot will be top-notchers, stuff that is good enough to go into any herd at attractive prices. In looking their herd over, last week, we were surprised at the new blood that they have recently added to it and at the individuals as well as the blood lines that are represented in the stuff that goes on the auction block. Among them we found Banner's Top 119100, who is one of the best daughters of Tip Top Notcher, and she will go into the sale, safe in pig to old Kant Be Beat; a gilt out of Banner's Top bred to Lincoln Top by Morrison's Bell Top and whose dam is the famous Nebraska Belle; one of the best gilts from Geo. Brigg's herd bred to Higgins Model; one gilt sired by Billy K. and bred to Tom Davis, winner of first under 6 months at Iowa and Nebraska State Fairs last year; two Ohio Chief gilts, one bred to Tip Top Notcher, Jr., the other to Young Hanly; Nellie E. 100194 by Corrector by Liberty Jim Morrison's Queen 121196 by Dorothy's Surprise, Gifford's Pride by Duroc Reformer, Crimson Belle by Crimson Wonder, Russell's Best 95370, and a score of other good ones. No

breeder who is in need of good stuff should fall to attend this sale. It will be a hummer and at the same time one that will disperse one of the best Nebraska herds and scatter good seed over the country. Write for catalogue and attend the sale.

Dawley Gets the Best.

For some years Frank A. Dawley, of Waldo, Kans., has been buying the very best Poland-China hogs that he could get for his 1,500-acre breeding farm. Some of his friends were pessimistic and told him that it would be impossible to succeed as a swine-breeder in Russell County, which is on the edge of what was once known as the "short grass" country. That Dawley has succeeded is shown by the remarkable record he made at his sale a few weeks ago when his offering averaged nearly \$86 per head. His success is also shown by the fact that he now has one of the best-bred and best-known herds of Poland-Chinas in the West. Dawley is, however, looking for other worlds to conquer, and he has just purchased a half interest in S. P.'s Perfection for use as a herd-boar. This boar won first prize and sweepstakes at the Iowa State Fair last fall and one-half interest in him cost Mr. Dawley just an even \$1,500. Handled as Mr. Dawley will handle him and bred to such sows as he owns, this boar will be cheap at the price. Mr. Dawley is a graduate of the Kansas State Agricultural College and the training he received at that institution has landed him a winner in a very short time.

The National Poland-China Record Company.

Secretary A. M. Brown, of the National Poland-China Record Company, calls attention to the fact that his office has been removed to Winchester, Ind. This association is the result of the combination of the Ohio Poland-China Record Company, established in 1877, and the Central Poland-China Record Association, established in 1880. The combination was effected in January, 1906.

Truman's New Horse Barn.

In order to better accommodate his many buyers in the West, Mr. J. G. Truman announces that the Truman Pioneer Stud Farm, of Bushnell, Ill., has secured the big horse barn No. 10 on Genesee St., Kansas City, for their Western headquarters. They will ship at once a splendid lot of Shire, Percheron, and Hackney stallions to this barn for the inspection of buyers. Those



The Great Prize-Winning Boar, owned by Dawson & Sons, Endicott, Neb.

who desire to purchase horses of either breed can save a lot of money by going to this barn where they can have the advantage of an opportunity to select from a large number. Stallions that would easily sell for \$2,500 elsewhere may be had at this barn for \$1,200. It is cheaper for you to go to Kansas City than for them to send a horse to show you, and they will make it an object for you to do so. Notice change in their advertisement.

Get Davis's Prices.

It will pay every cow-owner to write for price, also for a catalogue showing the 1907 Davis cream-separator, manufactured by the Davis Cream Separator Company, 540 North Clinton St., Chicago. Their 1907 model has been improved so that it easily gets the last drop of cream and will skim just as heavy cream as you want to secure the highest prices from creamery companies or may be adjusted to skim a medium or thin cream if desired.

The 1907 Davis is the result of twenty years of thought, all worked out by the nine Davis Brothers, the manufacturers. You may buy one of these machines direct from their factory at wholesale prices if you write them today addressing as above, mentioning this paper, and you will receive their money-saving catalogue free, postpaid.

The Shawnee Breeders' Sale.

Requests for catalogues of the Shorthorn sale, to be held at the State fair grounds, Topeka, on Wednesday, January 9, are coming in by every mail, and the prospects for a good sale are excellent. It ought to be a good sale as the breeding represented is of the best and the individuals offered are good ones. The meeting of the Kansas Improved Stock Breeders' Association and of the State Board of Agriculture, and the special reduced

SPECIAL MASTER'S PUBLIC SALE

In the Circuit Court of the United States for the District of Kansas: First Division.

No. 8172.

JOHN J. BERRY, Complainant,

VS.
CHARLES H. HAPGOOD, Defendant.

Pursuant to a decree in the above entitled cause, dated and filed October 27, 1906, the undersigned Special Master, will on

Tuesday, the 15th day of January, 1907,

at 2 o'clock p. m. of said day, at the front door of the Court House in the City of Marion, Marion County, Kansas, sell at public auction, to the highest bidder, for cash in hand, the following described property:

MARION COUNTY—Section 11 and northwest quarter of section 14, township 20, range 5 east. Northeast quarter of section 14, township 20, range 5 east. Northwest quarter of section 23, township 19, range 5. South half of southeast quarter and the southeast quarter of the southwest quarter of section 4, township 20, range 5 east. West half of section 9, township 20, range 5 east.

CHASE COUNTY—Section 17, township 20, range 6 east. East half of section 7, township 20, range 6 east. Northwest quarter of section 7, township 20, range 6 east. The northwest quarter, west half of southwest quarter and northeast quarter of southwest quarter of section 6, township 20, range 6 east. Section 5 and north half and southwest quarter of section 6, sections 7, 8, 17, 18, 19, township 18, range 6 east.

Said lands will be sold in tracts to suit purchasers.

William P. Hackney, Special Master

Keller & Dean and Geo. W. Hurd, Attorneys for Complainant.

railroad rates, will be special inducements and will make it easy to attend this sale. Secretary I. D. Graham, Topeka, will send a free catalogue upon request.

The American National Live-Stock Association.

President Murdo Mackenzie has issued a call for the tenth annual meeting of the American National Live Stock Association to be held at Denver, Col., January 22-23, 1907.

Some very important matters are docketed for discussion at this meeting. Among them is the railroad service now available to the live stock live stock and meat products, the forest reserves, the meat inspection, ser-

ed by the dairy business. Just read the advertisement of the Continental Creamery Co. in this issue and think it over.

Greatest Dairy Country.

A contributor to and a reader of this journal, asks: "By what standard do you make out that Holland is the most remarkable dairy country on earth?" Well, we may not be able to give exact comparative figures to prove the statement, but here is a pointer: Holland reports 324 cattle to each 100 acres of cultivated land, and the milk cows among the "cattle" average over 9,000 pounds of milk per head per year.

We can not say that no other country can equal that remarkable showing, but, Yankee-like, we can answer our correspondent's question by asking another question, namely, What other country reports 3.24 cattle per acre, and the production of 29,160 pounds, or 13,563 quarts of milk per acre per year?

If there is such a country, we have not discovered it, but we would like to know it. Our correspondent, who is owner of some choice Jerseys and Guernseys, will please bear in mind that Holland has 3.24 Holstein-Friesian cows to each cultivated acre. That is great farming, great milk-production, great management, great dairying in every way. We believe it to be the greatest dairying on earth.—Holstein-Friesian Register.

Asthma Conquered.—Pupil of Dr. Stofella Makes Startling Discovery.

The entire medical world watches with much interest any advance made in the cure of respiratory diseases. Now comes the news that an eminent physician, under the tutelage of Dr. Stofella, the dean of the University of Vienna, has discovered a combination of drugs that will cure the lesser diseases of respiration, namely, asthma, bronchitis, and catarrh.

This remedy has withstood many severe tests and the large percentage of permanent cures it has effected gives it an important place among the famous medical discoveries. Toxiclo is the distinctive name given to the remedy, and the Toxiclo Laboratory, 1269 Broadway, New York City, have agreed to send a sample free by mail to any sufferer writing for same.

"Profitable Stock-Feeding" a Favorite With All.

In speaking of Professor Smith's great book, "Profitable Stock-Feeding," the breeders are all of one mind. The opinions of a few who are interested are given here:

Henry Wallace, of Wallace's Farmer: "It will be an invaluable hand-book for the feeder, whether he is taking his first lessons or whether he is rounding out his career. It would save the farmers of the West vast sums of money if they would follow your suggestions."

E. E. Laughlin, president of the Missouri Corn-Growers' Association, Rich Hill, Mo.:

"Profitable Stock-Feeding" has been on the desk from constant use ever since it came. Such a wealth of useful information placed in readable form for the stock farmer! Good farming can not be carried on without these books on feeding, of which this is the latest and best for the common stock-grower."

Ex-Congressman A. C. Shallenberger, president Nebraska Live-Stock Association:

"I have been reading your new work upon 'Profitable Feeding' and find it the best and most practical thing upon the subject that I have ever read. It is of great value to the breeder who would feed his herd in an intelligent manner, as well as the man who feeds for the market and the block. Every breeder and feeder should have a copy and study it in his spare moments. It will bring him big returns."

Jos. E. Wing, farmer and agricultural correspondent, Mechanicsburg, O.: "It is not only the best thing yet published for the practical, everyday feeder, but it is really indispensable to the man who keeps animals on the farm. It gives in plain language a multitude of details absolutely essential to success."

The book is written in a popular

Butter-Fat Is Worth 30 Cents.

The year 1906 has been the most prosperous in the history of Kansas. Never have her fields yielded so well, her orchards and gardens produced so bountifully, and her cattle and hogs been so numerous and valuable. Her mines have been profitable and her oil and gas wells have gushed forth wealth. Kansas is rich and she knows it and other States know it. Her horticultural and garden products alone amounted to \$1,989,075; her oil and gas twice as much more, and her milk cows produced more cash than all these put together. When we boast of our resources, as all Kansans are fond of doing, we are apt to overlook some important factors. For instance, the milk products of Kansas that were sold and of which a record was kept, amounted, in 1906, to \$9,192,745.39. This does not include milk, butter, cheese, etc., that was used on the farm.

Nine million dollars a year is a nice little income from an industry that is only in its infancy. That this industry is yet young and growing is shown by the fact that the Continental Creamery Co., of Topeka, which is the largest creamery in the world, is now offering 30 cents per pound for butter-fat. With such a price for butter-fat and the market constantly growing there are few better opportunities for money-making offered to the young man of to-day than that afford-

style eminently suited for public libraries and home reading. It describes in detail and in an extremely interesting manner how cattle, horses, sheep, swine, and poultry may be fed for highest profits. There are in all 420 pages attractively bound in brown "vellum de lux," and those chapters devoted to the judging of the different classes of farm animals are well illustrated with photographs taken from life.

If all farmers were in a position to realize how the observance of the facts given in this book will add materially to the profits from feeding animals, they would not be without it under any circumstances.

The price per copy, \$1.50 postpaid, is insignificant compared with its real value to the farmer. Notice our special offer.

The Crude Oil Power Company.

The oil industry in Kansas is an important one, one that is destined to add largely to the resources of the State. The development of the same has been phenomenal, but the future success of this industry depends largely on the utilization of the product. Therefore, it is gratifying at this time to call attention to the page announcement in this issue of the Crude Oil Power Company, of Kansas City. We earnestly invite our readers to carefully peruse what they have to say, and advise their hearty cooperation. THE KANSAS FARMER believes them to be safe and reliable, and they deserve congratulations for their enterprise in establishing this mammoth new industry at Kansas City.

The chief promoters in this enterprise are E. E. Richardson, who for thirty-two years has been the secretary and treasurer of the Kansas City Stock Yards Company, and his able assistant, Maj. F. C. Vincent, a successful financier and organizer of a number of the large and successful industrial institutions in the West.



E. E. RICHARDSON,
Vice-president and Manager of the
Crude Oil Power Co.

The plant of the Crude Oil Power Company is located at the junction of the Missouri Pacific and Mexican and Orient Belt Line Railways in Kansas City, Kans. Already \$100,000 has been expended in establishing this industry, as shown in their page announcement.

The Crude Oil Power Company will, however, occupy a unique place, as the company proposes to manufacture an engine that will eventually supersede all engines now operated by gasoline, alcohol, naphtha, and in some instances by steam. This remarkable invention uses, as the name of the company implies, ordinary crude oil as fuel. The company claims to produce as much power from a barrel of crude oil as can be produced from a barrel of gasoline. Inasmuch as a barrel of gasoline costs about \$6.50 and crude oil only about 60 cents per barrel, power can be generated by this crude oil engine for about 10 per cent of the cost of operating a gasoline-engine. Another, and perhaps more important invention will be manufactured by this company. It is called the portable refiner. Its inventor and the company claim for it that it can be attached to the pumping apparatus at the oil well, no matter how great or small



MAJOR F. C. VINCENT,
Fiscal Agent of the Crude Oil Power
Company.

the flow of oil, and that it will refine the crude oil as it flows from the well. This latter invention should prove a veritable boon to the independent operator, for it will enable him to refine his own product and market it, the company says, at 50 per cent less cost than by any other method of refining oils. At present Kansas City has no

manufacturers of cast steel and malleable iron castings. Heretofore all such products were purchased in Chicago or St. Louis, and as the Eastern factories were generally from six to eight months behind with their orders, Kansas City users of this material have been greatly inconvenienced and forced to pay extraordinary large prices for same. The Crude Oil Power Company is building an up-to-date, first-class foundry for the manufacture of cast steel and malleable iron castings, and by so doing is filling a long-felt want in this community. The company is already assured of orders that will tax the full capacity of this department of its works. The Crude Oil Power Company will undoubtedly be of great benefit to the West. Kansas City needs industries of this character. The officers of the company are: President, G. W. Fitzpatrick; vice-president, E. E. Richardson; treasurer, W. C. Howe; secretary, A. A. Osborn. Mr. F. C. Vincent is acting as financial agent for the company, and is in charge of the offices. It is expected that the company's plant will be in operation this month. In justice to its readers it is the policy of this paper not to accept advertising of this character, without first thoroughly investigating the legitimacy of the enterprise. This paper is personally acquainted with the officials of the Crude Oil Power Company, and does not hesitate to give this enterprise its fullest endorsement and co-operation.

The Great Western Land Co.

The young man who wants a home where a good living is assured, the middle-aged man who is seeking a profitable investment, and the old man who would provide comfort for his declining years may all find satisfaction in the great Arkansas Valley near Garden City, Kans.

This valley, which was once thought to be of little value, is now known to be one of the most productive and valuable in the West. The recent establishment of the million-dollar sugar-beet factory at Garden City has served to attract attention to this valley and to open the eyes of those who were not familiar with its possibilities. The land in this vicinity is especially adapted to sugar-beet culture, alfalfa, wheat, fruits, garden truck, and garden seeds, and is rapidly increasing in value.

The Great Western Land Co. has the choicest of this land, both under and above the irrigation ditch, for sale. They own the land they sell and, with the opening of the Government irrigation system and the planting of the Government forest reserve of 5,000,000 trees in the spring, this land is sure to advance in value if not double in value.

The Great Western Land Co. has an office in the Blossom House just opposite the Union Depot at Kansas City, as well as at Garden City, where they have a large number of automobiles in which they transport their customers about to inspect the land. They also run a Pullman sleeping-car from Chicago to Garden City twice a week for the free accommodation of their customers. It is well worth a trip out to see this wonderful country, even though you do not buy land. If you go, however, you are sure to want a piece of land. Read their big page advertisement in this issue and write them. They will put you next to the best proposition in land that can be had.

Sure Hatch Book a Hummer.

The Sure Hatch people have gotten out what they call the Sure Hatch Book, which is certainly the finest book of its kind we have ever seen. It's a good big book of 102 pages, with a cover in three colors that is a gem of art. The Sure Hatch Book is mighty well written, and scattered all through it



DR. HESS, M.D., D.V.S.
IN HIS
LABORATORY

Knowledge— not guesswork

Dr. Hess (M.D., D.V.S.) who formulated Dr. Hess Stock Food is a regularly licensed Doctor of Medicine and a Veterinary Surgeon. He is a graduate of the University of Wooster, Cleveland, Ohio; a graduate of College of Physicians and Surgeons, Baltimore, Md., and a graduate of the Chicago Veterinary College, and in addition is a practical stock feeder of many years' experience. Dr. Hess Stock Food is a medicinal food prepared from a highly successful prescription used by Dr. Hess in his many years regular practice before the food was put on the market. It requires only common sense to see that unprofessional manufacturers cannot equal a preparation formulated by a practical physician and based upon accurate knowledge, long experience and observation. Furthermore,

DR HESS STOCK FOOD

FOR CATTLE, HOGS, SHEEP AND HORSES

is sold under a positive guarantee to do all that is claimed for it. It contains tonics for the digestion, iron for the blood, nitrates to expel poisonous materials from the system, laxatives to regulate the bowels. It has the recommendation of the Veterinary Colleges, the Farm Papers, is recognized as a medicinal tonic and laxative by our own Government, and is sold on a written guarantee at

100 lbs. \$5.00
25 lb. pall \$1.60

Except in Canada
and extreme
West and South.

Smaller quantities at a slight advance.

Where Dr. Hess Stock Food differs is in the dose—it's small and fed but twice a day, which proves it has the most digestive strength to the pound. Our Government recognizes Dr. Hess Stock Food as a medicinal tonic and this paper is back of the guarantee.

Veterinary advice given free. From the 1st to the 10th of each month by naming this paper, stating what stock you have and what Stock Food you have fed, we will furnish you free veterinary advice and prescriptions. Enclose two cent stamp for reply. Dr. Hess 96 page Veterinary Book will be mailed free for giving the above information.

DR. HESS & CLARK, Ashland, Ohio.

Also Manufacturers of Dr. Hess Poultry Pan-a-c-e-a and Instant Louse Killer.

Instant Louse Killer Kills Lice.

Stadt's Long Wonder 21867 and Nelson's Model 22091 DUROC-JERSEY BROOD SOW SALE January 19, 1907.

Send for catalogue to

J. F. STAADT, Ottawa, Kansas

are fine pictures that add immensely to its attractiveness.

The man who wrote it knew how to make everything clear and plain. It is more than a mere incubator and brooder catalogue. It is really a condensed encyclopedia of poultry-raising. It covers the whole subject thoroughly and interestingly; tells how the best incubators and brooders are made; how to operate them profitably; how to have "early hatched" chickens; how to build practical "hen houses"; how to build a "colony house"; how to build a "double poultry house" and "scratch shed."

There is no need of any one spending several dollars for books on poultry-raising when you can get the Sure Hatch Book absolutely free for a postal. You can depend on what the Sure Hatch Book tells you—for its publishers, the Sure Hatch Incubator Company, are recognized authorities on everything pertaining to incubators, brooders, and poultry-raising. The Sure Hatch Incubator is the high-water mark of incubator-making. It is a wonderful hatcher, used and recommended by a vast army of poultry-raisers. Be sure to get a free copy of the Sure Hatch Book. Just drop a postal to The Sure Hatch Incubator Co., Box 42, Fremont, Neb., or to their Eastern office, Dept. 42, Indianapolis, Ind., and they will send you the Sure Hatch Book free, postpaid, by return mail.

Cream-Separators Free.

To introduce their cream-separator, the People's Supply Company, department 187, Kansas City, Mo., is offering to give one of their machines free in each neighborhood with the understanding that the owner will show it to his neighbors, which the makers think sufficient to induce those who need a separator to buy their machine.

Free Subscription to the Large Illustrated Paper for Dairymen—The Separator News.

This is a big paper, handsomely illustrated in colors, entirely devoted to the success, prosperity, and protection of separator-users and intending separator purchasers. Every issue is brimful of special illustrations and information—what might be called inside facts—that will help you to decide whether a cream-separator will pay you, how large a separator you should have, and how to care for a cream-separator so as to get the most out of it. These are articles guarding you against the "patent can" fraud and against the mistakes of buying a too cheap or a too complicated separator; articles telling what State experiment stations say of cream-separators; articles comparing different kinds of cream-separators—in fact, a whole paper devoted to cream-separator news. Would you like to receive every future issue—without a cent of expense to you? Then write to the publishers,

The Sharples Separator Co., of West Chester, Pa., asking them to put your name on their mailing list. But don't forget to mention that you saw this offer in THE KANSAS FARMER.

Plant Gregory's Seeds.—They're Honest Seeds, Safe and Sure, and Sold at a Reasonable Price.

Year after year, for over half a century, thousands of practical gardeners and planters, both in the United States and Canada, have been planting Gregory's Seeds, and they have done so because they know that these seeds have all been thoroughly tested, and that the three warrants under which Gregory's seeds are sold cover all seed risks.

Just think of it! Over two thousand tests of the vitality of both vegetable and flower seeds are made every season, and thousands of dollars' worth of seed are thrown away, though most of it is better than box seed will average. Messrs. Gregory & Son have produced many new varieties of vegetables, of one introducing more than all other dealers combined. They distribute free among their customers tubers of the famous Eldorado potato which sold in England three years ago for over a thousand dollars a pound.

All growers of vegetables, flowers, and fruits should secure a copy of Gregory's new catalogue for 1907. It is rich in practical instruction.

Write to-day, so that you will be sure of getting a copy. Address J. J. H. Gregory & Son, Marblehead, Mass.

Attention is called to the advertisement of the Indiana and Ohio Live-Stock Insurance Company, of Crawfordsville, Ind., on the stock-breeders' page of this issue. This is the only stock company of the kind doing business in the United States. It has on deposit with the Auditor of State \$100,000 in bonds for the protection of its policy-holders. It insures horses, mules, and cattle against death from any cause. It pays losses promptly. The rates are as low as can conservatively be made. It wants an agent in every town in this State. For full information write O. P. Updegraff, State Agent for Kansas, at 1130 Western Avenue, Topeka.

"Highways and Byways of the Mississippi Valley," a new book by Clifton Johnson, has just arrived at this office. The book, which is handsomely bound and which is illustrated by photographs by the author, was gotten out by the Macmillan Company, New York. The book consists of a series of stories of the people along the Mississippi River. It brings out the peculiarities of the people of each State from Louisiana to Minnesota, and gives a very interesting description of their manner of living. The book is well worth reading.

A Plan for the Improvement of Cattle

R. S. SHAW, EXPERIMENTER WITH LIVE STOCK, MICHIGAN EXPERIMENT STATION, IN BULLETIN 241.

The presentation of this publication, at the present time, is designed to serve a two-fold purpose. First, it is intended to be preliminary to reports of animal-breeding experiments of an important practical nature either now in progress at this institution, or about to be taken up. Some of this work has been under way for more than eighteen months, and many more months and several years, even, must needs elapse before other phases can be completed and reported. These investigations are being pursued with the idea of securing more definite data relating to some of the problems hereinafter discussed. In the second place, it is hoped that the following discussion may lead to the adoption of better methods in some of the commoner practices of animal-breeding, the principles of which are frequently grossly violated, quite as often through carelessness and indifference as through a lack of knowledge of them.

THE TWO CLASSES ENGAGED IN THE LIVE-STOCK INDUSTRY TO-DAY.

For the purpose of the discussion that is to follow, we shall divide the producers of cattle into two classes. First, there is that class comprising the small minority engaged largely in the production of pedigreed animals to be offered for sale for purposes of improvement; we have no criticism or suggestion to offer this class. They are by far too few and do not receive

ordinary producer of meats and milk (not breeder) seems determined not to pay more than about meat prices for males to infuse improved blood in his herd, and the breeder can not make a living producing them at such prices. Failing to secure improved males at these low prices, many producers fall back on the grade or even the scrub, and frequently combine with this in-breeding, especially where the males are chosen within the herd. The greatest and most pressing needs of to-day in live-stock improvement, are more breeders, more good males, and more men willing to pay remunerative prices for them, and cease admixing blood, and using grade and scrub sires.

INFERIORITY OF THE COMMON STOCKS.

The chief fault of the common cattle found to-day is their lack of quality and uniformity; this is not due so much to the lack of infusion of good blood as to the indiscriminate admixture of the blood of breeds of both beef and dairy types. It is not necessary for us to attempt to present and establish proof of this assertion, as every live-stock producer can secure abundant evidence for himself in a short time, by simply exercising the faculty of observation. In traveling about by wagon, road, or rail, note the number of animals in each herd seen, also the variation in type, form, and more particularly, color. Except for the herds of the few growers of pure-bred, or

The man who offers for sale nineteen good steers and one inferior one bearing undesirable color, is at a great disadvantage; the scrub steer is ever under the nose of the prospective purchaser, and offers him a strong pretext for lowering his bid.

A large percentage of the best cattle fed in Michigan to-day, by good feeders, are secured from without the State, at Western stockyards; the feeders of these cattle claim that it is difficult to secure feeding cattle of good quality and uniformity at home; one has to purchase the culls along with the good ones in order to get any. Close inspection of consignments of cattle from this State is not necessary to convince one of their lack of breeding; the drover who picks up a few market cattle here and there, until a load or two is made up for shipment, is the man who gathers together the motley combination representing the large aggregate; the man who breeds, buys, and feeds a good car or more of steers usually markets them himself.

SOME CAUSES OF LACK OF BREEDING IN CATTLE.

The indiscriminate admixture of the blood of the various breeds has been one of the most direct causes of the production of inferior stocks. This has not been restricted to the breeds within the beef and dairy classes, but includes admixture of the blood of the two classes. With the rise in prices of dairy products, the common cows have been bred to dairy bulls; with depreciated values for dairy products, these same cows and their female progeny have been bred back to beef sires, and so on. On the other hand, there are plenty of instances where herds possessed of cows of a small type, pro-

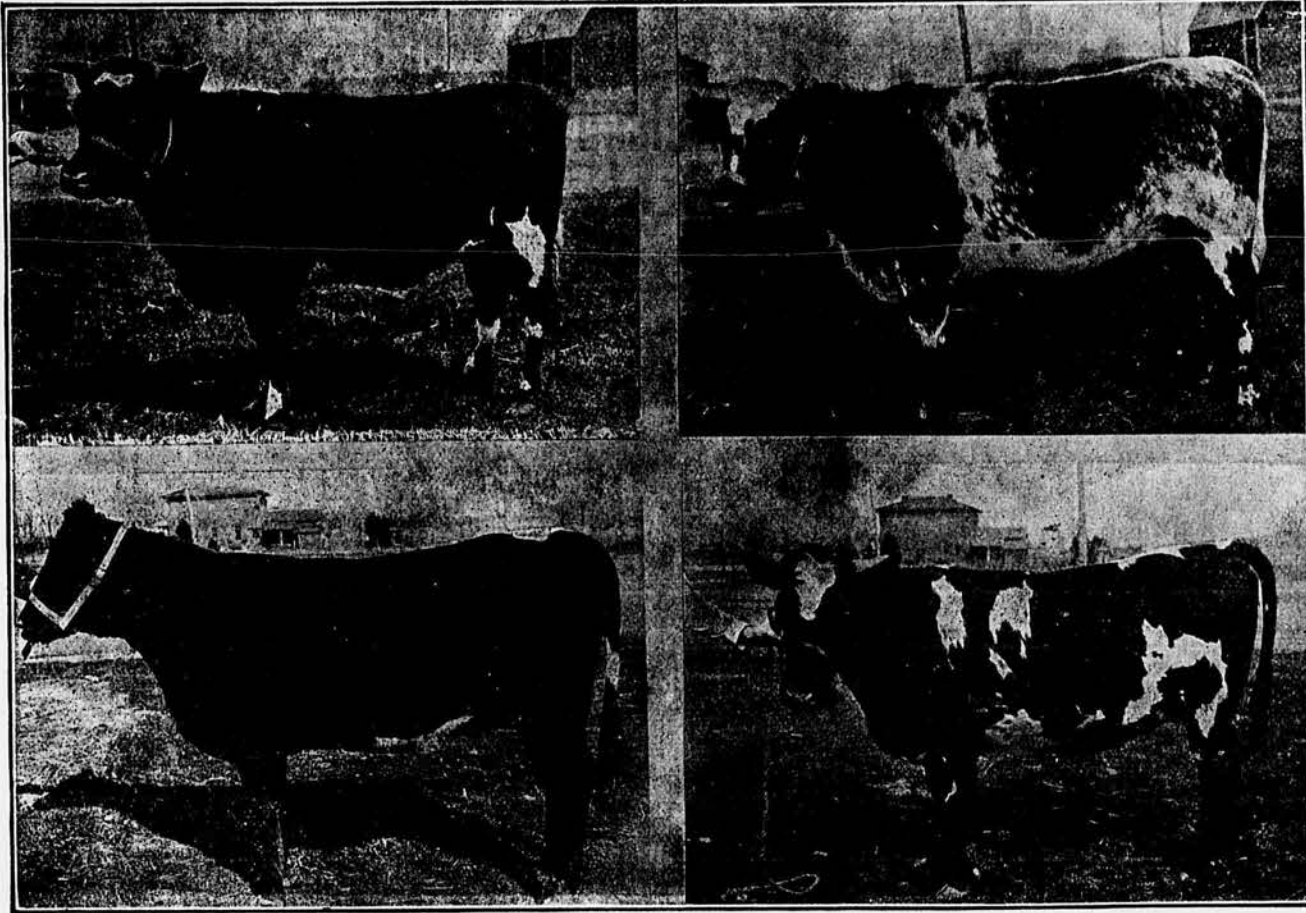


Illustration No. 1.

the support and encouragement their efforts deserve. There are a few who undoubtedly own pure-bred animals, but have not been keeping the registration up. On the other hand the list of owners of registered animals must include some who own but a single recorded animal, namely, a bull. The fact that these men own recorded stock is evidence enough that they are interested in live-stock improvement, and are familiar with, and are practicing good methods of live-stock breeding.

The second class, comprising by far the great majority, is the one in whose hands the inferior stocks are to be found. Because this last class comprises such an overwhelming majority of stock-owners, and because it produces nearly all the animals and animal products marketed, its influence in determining the character and reputation of Michigan meat and milk products is very far reaching. It is in the hands of some of this class that the scrub and animal of badly mixed breeding are to be found. After the few breeders of pure-bred animals have expended large sums of money for good foundation stocks, and offered good young pure-bred males at moderate prices, it can not be denied that they are extremely slow of sale. The

high-grade cattle, the common bunches will be found to include a great variety of color and types. In some herds red, white, black, brindle, and all conceivable combinations of these colors are to be found; at the same time some individuals will conform in a measure to strictly beef form, others quite markedly to dairy form, with all gradations between these two. The indications of blood, as seen in color, will undoubtedly attract the attention of the casual observer more readily than other features. In other words, the presence and admixture of so many colors in common herds indicates that Shorthorn, Holstein, Jersey, and, less frequently, Hereford and Ayrshire blood has been freely admixed. The seriousness of this lack of uniformity in breeding, quality, color, form, etc., is not fully appreciated. For the past ten or twelve years, with one or two exceptions, the Chicago market has been topped by a certain breed of cattle sold in car-load lots. The reasons for this are found in the word uniformity. They have been uniform in size, color, form, finish, and quality; in fact, as much alike as so many peas; you see one and you see them all. This prime requisite of uniformity can never be secured through mixed breeding.

ducing a small flow of rich milk, have been bred to a bull of a larger breed noted for heavy milk flow, and vice versa. There are too many animals in our yards to-day saved from bulls bred to females for no other purpose than to "freshen them again."

Another potent force tending toward the production of inferior cattle is found in the too prevalent use of grade and scrub bulls.

LIVE-STOCK IMPROVEMENT NOT DIFFICULT.

Questions of breeding are generally regarded as being obscure, intricate, and extremely difficult, except to those skilled in the art through long years of training. It is true that we are obliged to look back upon the achievements of the "master breeders" of history with feelings akin to reverence, for their tasks of type-founding, breed-forming, and breed-improvement were difficult, requiring a whole lifetime in some instances to gain the mastery, and in others two whole generations to attain the highest success. But the initial step in live-stock breeding for improvement confronting us to-day, is an exceedingly simple one; we do not need to undertake the establishment of new types or breeds, as there are plenty now in existence to

Horse Owners! Use GOMBAULT'S Caustic Balsam

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

THE Otto Weiss Alfalfa Stock Food

A Balanced Ration Equal to Oil Meal.

EVERY-DAY EGG-PRODUCER, an alfalfa mash for laying hens. ALFALFA Poultry FOOD, in 2½ lb. packages, best and cheapest egg producer in the world. ALFALFA HOG CHOLERA CURE, the best preventive and only cure for hog cholera. Largest alfalfa mill in the world. All kinds of Poultry Supplies. Send for free circular.

The Otto Weiss Alfalfa Stock Food Co.

221-227 So. Santa Fe, Wichita, Kans., U. S. A.



Sanitary Hog Troughs

Will not rust or rot out and will last a life time. Every breeder should use them. Prices furnished on application.

Blue Valley Mfg. Company
Manhattan, Kansas

Don't Sacrifice Your Hides & Pelts

You can tan them yourself. My up-to-date formulas and complete instructions enable you to train anyone to handle and tan any hide or pelt, and be positive certain of a soft pliable leather every time. The tan liquors are so successfully compounded that their full action is to simply tan. They cannot hurt any skin. No machinery used. These are the only successful, all-around formulas in existence today, which I am in a position to prove to anyone. Write for full particulars and references. My formulas and complete instructions are only \$4.00.

Edwin Dixon, Taxidermist and Tanner,
Unionville, Ontario, Canada.



\$600 IN TWO MONTHS

Write for free booklet
Capt. Jones of Kansas baled 14 tons of hay with one mule in 12 hours. He made \$600 in two months with
The Auto-Fedan Hay Press
Two horses bale 15 tons in 10 hours. Can't smash feet. Fed with a fork, feeder does rest.
Auto-Fedan Hay Press Co., Box 1084 Topeka, Kansas.



STEREOSCOPES FOR NAMES OF FARMERS

The Farm Magazine Co. wants names of farmers likely to be interested in their big, handsomely illustrated farm paper. For 5 names they will allow our readers 25c and a stereoscopic outfit. The subscription price is 50c. Send 5 names and addresses of farmers and 25c. The publishers will enter you as a subscriber fully paid for 1 year. They will mail you FREE a boys' and girls' stereoscope and 50 views.
Address, FARM MAGAZINE CO., BOX OMAHA, NEB.

choose from, which, judiciously chosen, will respond favorably to the conditions to which they are adapted. The first step in the line of live-stock improvement must come from the census.

tion of the practise of admixing the blood of the various breeds, and of using grade and scrub sires.

PLAN FOR LIVE-STOCK IMPROVEMENT.

Before introducing the plan of live-stock improvement, known as up-grading, we wish to state that it should be the ambition of every man owning live stock to eventually get into some line of pure-bred live-stock breeding. The plan we have to suggest and discuss for the improvement of the common stocks of the country, is that known as up-grading, which consists in ingrafting the characteristics of a superior breed upon animals of common, or mixed breeding for the purpose of improving them. This improvement is due to the superior quality of the males used, and chiefly their prepotency, or power, of transmitting accurately these qualities to their offspring. This plan differs from cross-breeding, in that pure blood is used on the sire's side, and females of mixed blood, or no blood, on the dam's side. Thus we have the prepotency concentrated in the bull, and the very opposite in the females, as the more mixed the breeding, the less stable are the inherent characteristics of the individual, and therefore the less resistant to improvement. It would be absolutely impractical to advise all owners of common cattle to send their stocks to the block and purchase pure-bred foundation stocks; only a few could do this for the following reasons: First, if the great majority now possessed of common stocks were to simultaneously seek to purchase pure-bred foundation stocks, they could not get them; they are not in existence, for only about one per cent of the cattle in the United States are possessed of pedigrees. Second, the finances of a great many holders of common stock are not such as to allow them to make extensive purchases of pedigreed animals, and replacement is out of the question, as it would require the returns from the sale of three or four common animals to purchase one pedigreed one. Third, it is highly desirable for breeders to grow into any line of pure breeding rather than to buy into it suddenly, and take up a work in which experience is necessary.

In general, then, it is necessary for the majority of holders of common stock to make the best use of the animals on hand, with a view to improving them. Let us suppose the case of a herd of common, or mixed cattle of say eighteen head, and apply a plan of improvement. The first thing for the owner of this herd to do, is to decide upon some one line of production, either beef or dairy, and then stand by the resolution. Without this he can not improve his herd, for the animals of mixed breeding are largely the result of frequent change of purpose. Suppose in this case, that the owner has decided to go into the dairy business; that being the case, the next thing to do will be to look over the herd of eighteen, and decide which ones are so possessed of dairy type and characteristics, as to warrant their being used in the business. They can be divided into three classes, such as best, medium, and inferior from a dairy standpoint. Then, in the majority of cases, it will be found to be a decided advantage to send the six inferior ones to the block and use the remaining twelve for the foundation herd. Having selected the females to be retained, the next and one of the most important steps is to decide upon the breed to be used in improvement. In this, adaptability of the breed to the conditions, and the question of personal preference, are the two important factors; the decision of this question is also an important factor, for a change of mind after the work has begun, and the use of other blood, is more apt to result in retrogression for a time, than improvement. Having decided upon the breed to be used for improvement, suppose it is the Holstein, then purchase the best Holstein bull that the pocketbook will allow. Mate this bull with the twelve selected cows, and use him two seasons, after which his progeny will be old enough to breed. At this point secure another Holstein bull, a better one than the first if possible; follow him with others of the same breed, indefinitely. Let it be Holstein bull after Holstein bull, nothing but Holstein bulls. We have cited the Holstein merely for the purpose of this illustration. The same plan must be used, no matter what the breed is.

We may expect, after a few top-crosses in up-grading, that the progeny will resemble the type of the sires used in improvement quite closely, both as to form and general characteristics; in fact, so much so that the high grade may eventually equal the pure blood improver from a standpoint of utility

Make More Money Keep Your Stock Thrifty

Here's the Whole Truth of the Matter.

You cannot make the most money from your Live Stock unless you keep your animals in a vigorous, healthy, thrifty condition. You are willing to employ any **ECONOMICAL** means to keep your animals in that condition.

We offer you Standard Stock Food with the guarantee that it will do more to induce and maintain a condition of thrift in your Live Stock than any other means you can employ.

Moreover, Standard Stock Food will give you better results **AT LESS COST TO YOU**, than will any other stock food.

STANDARD STOCK FOOD is not a medicine, a drug, or a "dope."

It is a condimental food; a "seasoning" which takes the same place in the animal's ration that salt and pepper and mustard and sage and flavors and sauces take in *your* diet.

The animal needs this condiment just as you need condiments.

Because, first, it flavors and seasons the ration and makes it taste better.

So that the animal eats with a keener appetite and a greater relish.

That means a greater flow of saliva in the animal's mouth, a greater flow of all the juices and fluids in the digestive organs.

Hence the animal digests its feed more *easily*, more *quickly* and more *thoroughly*.

It gets more good from every pound of grain and hay it eats, and less of the ration is wasted by passing through the animal undigested.

But that is not all. The *tonic* properties of Standard Stock Food quicken the circulation, aid in assimilation, tone up the entire digestive system, and produce that healthy, vigorous condition which means greater thrift in animals and bigger profits for you.

Honestly now, don't you believe, don't you *know*, that a stock food which will do this, will make money for you?

Standard Stock Food *will* do it. There is no "theory" about it. More than 400,000 of the best farmers, feeders, and breeders in the world use Standard Stock Food—and have proved that it does make stock thrive.

As to Quality.

Standard Stock Food is good all the way through—every particle in it has honest stock food value.

If you will just compare it with any other stock food made,—look at it, smell it, taste it—you can see and smell and taste its superiority.



STANDARD STOCK FOOD
"IT MAKES STOCK THRIVE"

It is stronger, purer, more concentrated.

That's why it goes so much farther than other stock foods.

That's why it *costs you less* to use Standard Stock Food than to use any other.

A dollar's worth of it contains more feeds than a dollar's worth of any other.

Simply compare the feeding directions on packages of various makes and you can see this for yourself.

It costs you less per animal, per month, than any other.

We want you to try Standard Stock Food, not because we want to make a single sale to you, but because we know that if you give it a fair test you will become an enthusiastic, permanent customer.

More than 400,000 farmers and feeders have *proved* that "It Makes Stock Thrive."

We will sell it to you on a square deal, money-back guaranty—your money back if it does not do all we claim it will do.

You run no risk in trying it, and its use means bigger profits to you.

GO TO YOUR DEALER

and ask him to supply you. If he cannot, do not take a substitute but send to us direct.

We will ship immediately and protect you with our square-deal, money-back guaranty.

FREE TO YOU.

Our big stock book, "The Standard Feeder," 160 pages, 200 illustrations, 12 chapters on the feeding, care and handling of all kinds of live stock. Regular price 50 cents, and you could not buy its equal at several times the price. But free to you if you give us the name of your dealer and tell us how much stock you keep.

Standard Stock Food Co., 1517 Howard St., Omaha, Neb.

in meat- or milk-making, as the case may be. There is some question as to the number of crosses that must be produced before this high standard of excellence will be secured in the grade. This will be somewhat dependent on the duration of the purity of the improving blood, the prepotency of the individual sires, and the plasticity of the common females. Instances are on record where ideal high grades have resulted from the third cross; in general, one would be safe in counting on at least the fifth. We must not, however, lose sight of the fact that while a high grade may eventually equal the improving breed from a standpoint of meat- or milk-making, that it can never be possessed of a pedigree, nor equal the full bloods from a standpoint of prepotency in breeding; this is the principal argument used against grade sires.

In illustration No. 1 four yearling females are shown. The two in the upper row are pedigreed Shorthorns bred from college stocks; the one in the upper left hand corner, Sharon Princess, sired by Grenallen 38892, out of College Sharon, Vol. 49, page 949; the one in the upper right-hand corner is Mysie's Opal, sired by Gwenallen, and out of College Mysie 5th, Vol. 40, page 753. The two females in the lower row are simply high-grade Shorthorns which are out of Shorthorn grade cows purchased in Tuscola County, Michigan, by the Michigan Agricultural College in the fall of 1904; as the cows were in calf at the time of purchase and as the carload was picked up one by one, it was not possible to trace the sires of individual

calves. While these two grade heifers illustrate well the possibilities of up-grading, it is unfortunate that the number of generations since their improvement began can not be determined. We again remind our readers of the statement made in a preceding paragraph relative to the possibilities through up-grading, and leave them to judge for themselves to what extent the illustration bears out our argument.

Breeding experiments are now in progress at this college to determine how many generations must be produced before animals can be secured equal to the improving breed, from a standpoint of utility, but some years must elapse before results can be secured.

We also suggest that at the time of the purchase of the pure-bred sire, one cow, or possibly two of the same breed be secured. The progeny of these two or three registered animals should grow into a nice little herd at the end of ten years, which could be used to replace the poorer of the high grades. That the high grade can be successfully produced as described, can not be disputed, and its values have already been clearly demonstrated. The high grade forms the bulk of the Western feeders coming to our feed-lots; it makes up almost the sum total of the 400,000 prime steers which annually cross the Atlantic; it has occupied no mean place in the list of awards in fat classes at State, National, and international live-stock shows.

We desire at this point to emphasize the fact that the use of improved methods of breeding alone will not

avail; it is absolutely necessary for these to be supplemented by liberal feeding and proper care and management.

THE GRADE SIRE.

Attention has been directed to the fact that high-grade animals may be eventually produced capable of equaling those of the pure-breed used in their improvement, insofar as meat or milk production are concerned, but at the same time they can never equal them in prepotency, nor become possessed of pedigrees, except in rare instances. So far as external form and indications of quality are concerned, a high-grade sire may look equally as good as a pure-bred one, and still this is no justification for his use. Though an animal may be an exceptionally good individual, if he is lacking in prepotency, as the grade derived from mixed blood on the dam's side is sure to be, his offspring can not equal those of the pure male. And so in actual practise, except in rare instances, grade sires fail to produce offspring possessed of the marked uniformity and quality of those from the pure-bred male. We call attention just here to the fact that the quality of prepotency more markedly manifest in the breeds of most ancient origin has been developed through centuries; we must not expect to develop it in high grades in one decade. It would be useless to say that no grade sires should be used at all, for if 27,800 bulls are needed in Michigan, as indicated by the last State census, only a portion of this number could possibly be made up of pure breeds, as they are

not to be had. Therefore, the only rational thing to advocate is the utilization of all pure-bred bulls to their fullest extent, the use of the fewest possible high-grade sires for the present, the use of the best of this class and the replacement of these by pedigree animals as rapidly as possible. Occasionally, in purchasing, a man hesitates between two sires, the one a grade, the other a pure bred; the former perhaps about as good as the latter in individuality, judging from appearances. On this basis, the purchaser secures the grade because it is at least one-half cheaper, but in considering the final results we should not lose sight of the fact that the superiority of a crop of ten calves from a pure-bred sire is almost sure to be so much greater than the same number

used to excess. Three- and 4-year-old bulls can generally be secured at very reasonable prices. Some of the best show cattle we have seen were sired by bulls far past the mature stage. The expert breeder appreciates the value of mature sires. Attention is directed to the Shorthorn bull, Gwenallen, shown in another column, now 10 years old and in active service in the college herd; also Count Colantha Alban, 8 years old, illustration No. 3, at the head of the college Holstein herd.

EVIL EFFECTS OF BREEDING IMMATURE FEMALES.

During the past decade or two, there has been a growing tendency to breed heifers at an early age; this is particularly true among the dairy breeds. The men who advocate and practise the

718 pounds, when in about the same condition of flesh as that shown in the illustration. Ten or fifteen years ago when dairy-cattle were not bred to produce at such early ages as at present, the average weight of mature Ayrshire cows was about 1,000 pounds.

CROSS-BREEDING.

A cross-bred is the progeny of two distinct breeds. Though there has been an indiscriminate mixing up of the blood of various breeds, cross-breeding in its strictest sense is not prevalent, owing to the small number of pure-bred females in existence. The grades of the various breeds, however, are crossed frequently. The practise has been stimulated by sudden and somewhat prolonged fluctuations in market values; a depressed dairy market leads to more or less crossing of beef blood upon dairy types and vice versa; an increased price for the longer and coarser staples of wool always causes more or less crossing of coarse wools upon fine wools, or the reverse, as the case may be. No breeder can make such radical changes as these, frequently, for every time he alters his breeding operations so radically in trying to meet market fluctuations, he introduces factors leading to the final deterioration of his breeding stocks. It is much safer to choose some definite line of production, and stand by that through the temporary ups and downs of the market; the men who have done this have made a success of animal-breeding. It would not be sensible to say that no changes should be made in one's breeding operations; if a man is sure he has made a mistake, the only rational thing to do is to make a change, but these should not be made often, as they are usually attended by some loss. The progeny from some first-class crosses have shown highly desirable results, and while cross-breeding is more justifiable in the production of market animals, it can not be employed continuously in the production of breeding stocks. From the breeder's standpoint, each succeeding cross becomes less and less satisfactory. Cross-breeding is more justifiable among those classes of animals such as swine, which reproduce quickly and abundantly, and mature early, for in such cases it is easily possible to return to the original types for breeding animals. While we must admit that cross-breeding has rendered valuable service, in the form of single out crosses, in the formation of new breeds and types, still, it should not be practised among cattle on the ordinary farm for three reasons, viz.: (1) It would tend to destroy the identity of breeds; (2) the results are in many cases uncertain; (3) it might render pure-bred females less capable of breeding true to type.

IN-AND-IN BREEDING.

Because of the fact that the several terms used in connection with the

LUMBAGO AND SCIATICA



ST. JACOBS OIL

Penetrates to the Spot
Right on the dot.

Price 25c and 50c

Line breeding implies the breeding of animals within the members of one family, or one or more related families. It is virtually a continuation of in-and-in breeding, the relationships being less close.

It is astonishing the extent to which in-and-in breeding and in-breeding are allowed among the common stocks of the country, and this, too, by some persons who realize fully the seriousness of the practise. It arises, of course, from the selection of sires from among the offspring of the herd; in some cases, it may be due to a lack of means to make a suitable purchase, but in general, it is due to carelessness or indifference. When in-and-in breeding is carried too far, the following evils are likely to result, viz.: loss of size, delicacy of constitution, impaired reproductive powers, and in fact general deterioration.

The practise of in-and-in breeding, and in-breeding, should not be denounced entirely, for they may become useful factors when employed by those skilled in the art of breeding; they must almost necessarily be used in the formation of new breeds, where it is the aim to fix new characters in animals, and secure uniformity and permanence in the transmission of the same. But, on the other hand, the improver of common stocks has no occasion to resort to close breeding. He is not going to become a former of new breeds or types, but is going to improve his common stocks through up-

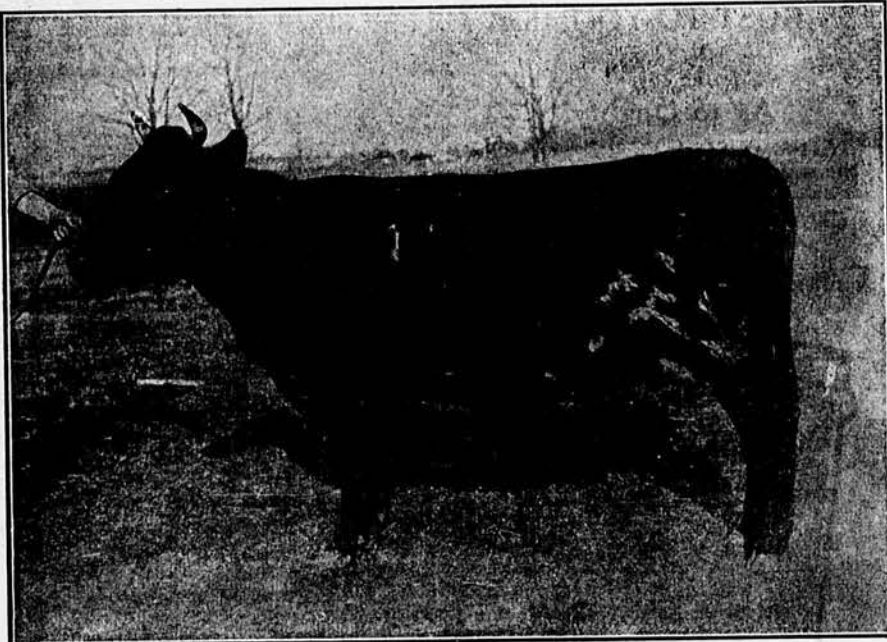


Illustration No. 2.

from a high grade, that the difference in the purchase price of the two sires may be more than made up in a single season.

DISCARDING THE SO-CALLED AGED BULL.

In general, it can scarcely be said of a bull, that he has reached full maturity until 4 years of age, though this perfect stage of development is commonly regarded as being attained at a somewhat earlier age among some breeds. It has been a common practise for years, among farmers, to send the 3- or 4-year-old bulls to the block, largely because there is no sale for them as breeders. The general rule among prospective purchasers is to search for nothing but young bulls, yearlings or less, with the idea that they will grow into money for them, if they can dispose of them before maturity. It is false economy to purchase on this basis solely and take more or less chance on a young, untried animal when the actual results from a mature animal may be ascertained. There are two principal reasons why sires are usually sent to the block at 3 or 4 years of age. First, it is claimed that their dispositions do not mellow with age, and second, they become too large, heavy, and clumsy, and it may lead to impotency. In answer to the first of these objections, we believe that except for the inheritance of mean, treacherous dispositions, bulls, in general, return on the points of their horns only that which is dealt out to them on the points of the fork, or in other words, the bull responds to the character of the treatment and management given him. Mature bulls should not have a tendency toward impotency if properly fed, managed, and exercised, but because of the fact that the bull is isolated, he is frequently neglected to a greater extent than any other animal on the farm. Too many bulls are fed irregularly and improperly, and confined constantly for long periods in small, dark, filthy box stalls; these conditions are not conducive to good breeding qualities.

There are some decided advantages in purchasing mature bulls. One of the greatest of these is found in the fact that the buyer can ascertain something relative to the character of their get; this is most important to the breeder of dairy stock. Another advantage arises from the fact that there is always more or less uncertainty regarding the future development of the bull calf, while this factor is entirely eliminated in the purchase of a mature sire. It is also not unreasonable to conclude that a mature sire will beget more vigorous offspring, especially because the young ones are frequently

breeding of heifers so as to produce calves under or at about 20 months of age, are extremely numerous. In fact, the practise has been carried to such an extreme that in many localities mature cows of some of the dairy breeds can not be found bearing the same size that these types did twenty years ago. This practise is supported chiefly on the following grounds, viz.: First, that the earlier a heifer is made to produce, the sooner she begins to make some financial return for her keep, and second, the capabilities of the dairy-cow can be increased if stimulated at an early age. There are those who claim not to object to lack of size in dairy-cows, and also that the smaller cows are more profitable, but this latter claim has not yet been proven. The relative value of small versus large dairy-cows as economic producers has not been determined, though much discussed. It is a notable fact, however, that the world's record-makers and the majority of the cows entered in the various advanced registry associations, are, in general, considerably above the average as to size. It is also a notable fact that the twenty-five Jersey cows entered in the dairy-cow demonstration at St. Louis in 1904 were large cows, the average weight for the twenty-five at the beginning of the test was 911.2 pounds, and at the close 983 pounds. These figures place them considerably above the average of the cows of this breed in general use in many dairy sections to-day. These cows were used in a test where comparative economic production was one of the main features. Some expert dairy-breeders are inclining more and more to the belief that heifers should be allowed greater maturity before dropping the first calves and are also permitting them to lay on more flesh than has been thought to be safe; these men are demonstrating the accuracy of their theories in the results produced. While it is clearly apparent that immature breeding has reduced the size of many of our dairy-cattle, it has not been proven that diminished constitutional vigor has accompanied this loss of size, though many hold to that view. It is rational to assume that in unduly immature breeding some of the physiological laws of nature must be violated, and this can not occur without being followed by some evil results. No fixed age can be given for the breeding of heifers, it should be dependent on the rapidity and character of the development of the individual.

Illustration No. 2 represents an Ayrshire cow calved September 20, 1900. By the time this cow was 37 months of age she had produced her second calf. In October, 1903, this cow weighed but

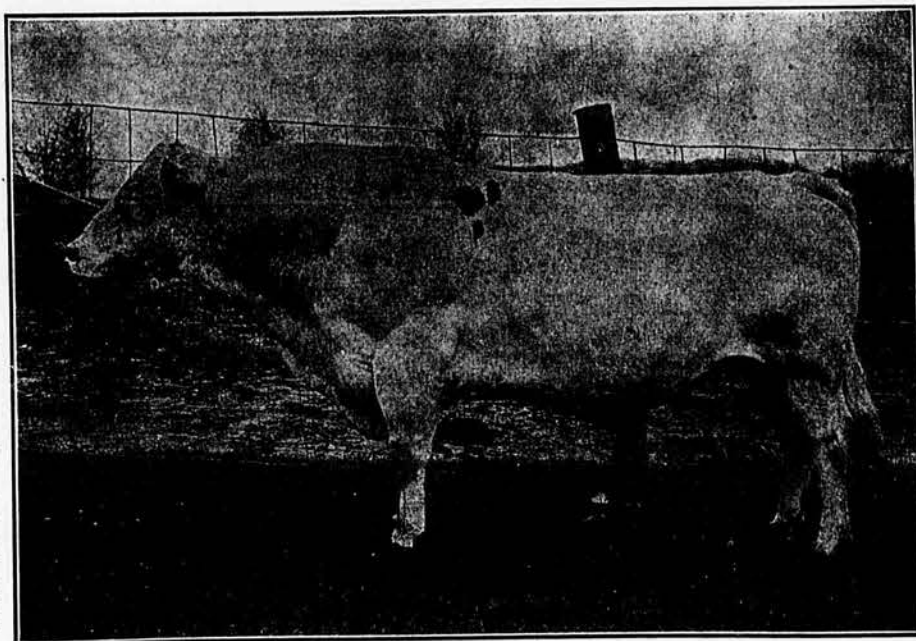


Illustration No. 3.

breeding of variously related animals are not always properly used, or understood, it may be well to define them. (1) In-and-in breeding implies the mating of animals closely related, for a number of successive generations; it includes close relationships and continuous repetition. (2) In-breeding implies the mating of related animals in a single instance, or at intervals among the generations, without much regard for the closeness of the relationship. (3) Close breeding merely implies that closeness of relationship existed between the animals mated. (4)

grading, in which he will rely solely on the prepotency of the sires chosen to work the transformations by which each succeeding generation will be brought more near to his own standard of excellence.

PREPOTENCY.

What is prepotency? "Strictly speaking, prepotency is the superior power which one parent has over the other in determining the character of the offspring. But the term is more commonly used to indicate that power which an animal has to transmit its own

qualities." "If a pure male were to beget progeny from females of the same breed, which bear a close resemblance to the male parent, this result would be a stronger evidence of prepotency in the male, than a similar result produced by mating him with females of mixed breeding, since the resistance to modification in the progeny of the females in the first instance would be stronger than resistance to the same in females in the second instance." This quality in a sire is one of the most important factors stimulating rapid improvement in any process of up-grading. It is more important in the sire than the dam, as the effect on the sire's side is more far-reaching. Probably one of the most

istic Holstein type of all four calves in the illustration and individual prepotency especially in the likeness of the two calves from the pure-bred cows to their sire.

DESIRABILITY OF COOPERATION OF BREEDERS.

It would seem highly desirable that some forms of cooperation, in breeding methods, should be established by communities, such for instance as the joint ownership and use of males by several parties rather than one. In theory this proposition sounds well, but in actual practice it has not worked satisfactorily in the majority of instances, as illustrated by the universally undesirable results from the formation of stock companies in the ownership of

who introduces a good male and offers his services at a reasonable price, does not greatly benefit his community, as the prevailing practice is to patronize the sire offered at the smallest fee, and this is always the grade or scrub. The scrub is likely to flourish and continue to be used until such times as National or State legislation places a prohibitive tax on him. The form of cooperation discussed would be particularly suited to thickly settled communities where the farms and holdings of cattle are small, and consequently close together. In general, it is the men with the smaller holdings of cattle who resort most to mixed breeding, and who are in greatest need of good sires.

It is highly desirable for the vari-

Your Tongue is Coated! Watch for Symptoms!

LOOK in your pocket-mirror!
Or inside the lid of your watch-case!
Fur coat on your tongue? Bad business.

What you been Eating?

What were you drinking?

What kind of Lazy Chair did you take exercise in?

Now don't think it doesn't matter!

Because, it's your Bowels that talk now, every time you open your Mouth.

That doesn't help your Popularity, nor your Earning capacity.

Besides, a person with bad Bowels is in a bad way.

* * *

Go and take a Ten Mile Walk, for Exercise!

Haven't time? Too Lazy?

Well, there is another Way.

Take Artificial Exercise for your Bowels.

That's—**CASCARETS.**

They rouse the Bowel Muscles, just as a Cold Bath freshens Athletic Muscles.

Waken them up, Strengthen them so they Contract and Expand the Bowels and Intestines in a healthy, active manner.

That's how these muscles work the Food along, through your thirty feet of Intestines, to its Finish.

That's how they squeeze Gastric Juice into the food, to Digest it.

That's how they make the millions of little Suckers in the Intestines draw the Nutrition out of Food, and transform it into Blood, Brawn, Brain and Bone.

* * *

One tablet taken whenever you suspect you need it will insure you against 90 per cent of all other ills likely to attack you.

Cascarets don't purge, don't weaken, don't irritate, nor upset your stomach. 75¢

Ten Cents, at all Druggists. Be very careful to get the genuine, made only by the Sterling Remedy Company, and never sold in bulk. Every tablet stamped "CCC."

Probably it would not be wise to advocate a single breed of cattle, for instance, for each community, but it would unquestionably be wise to limit the breeds to those only which are peculiarly adapted to the conditions of each community and the lines of production therein pursued. The greatest success that has been achieved in the

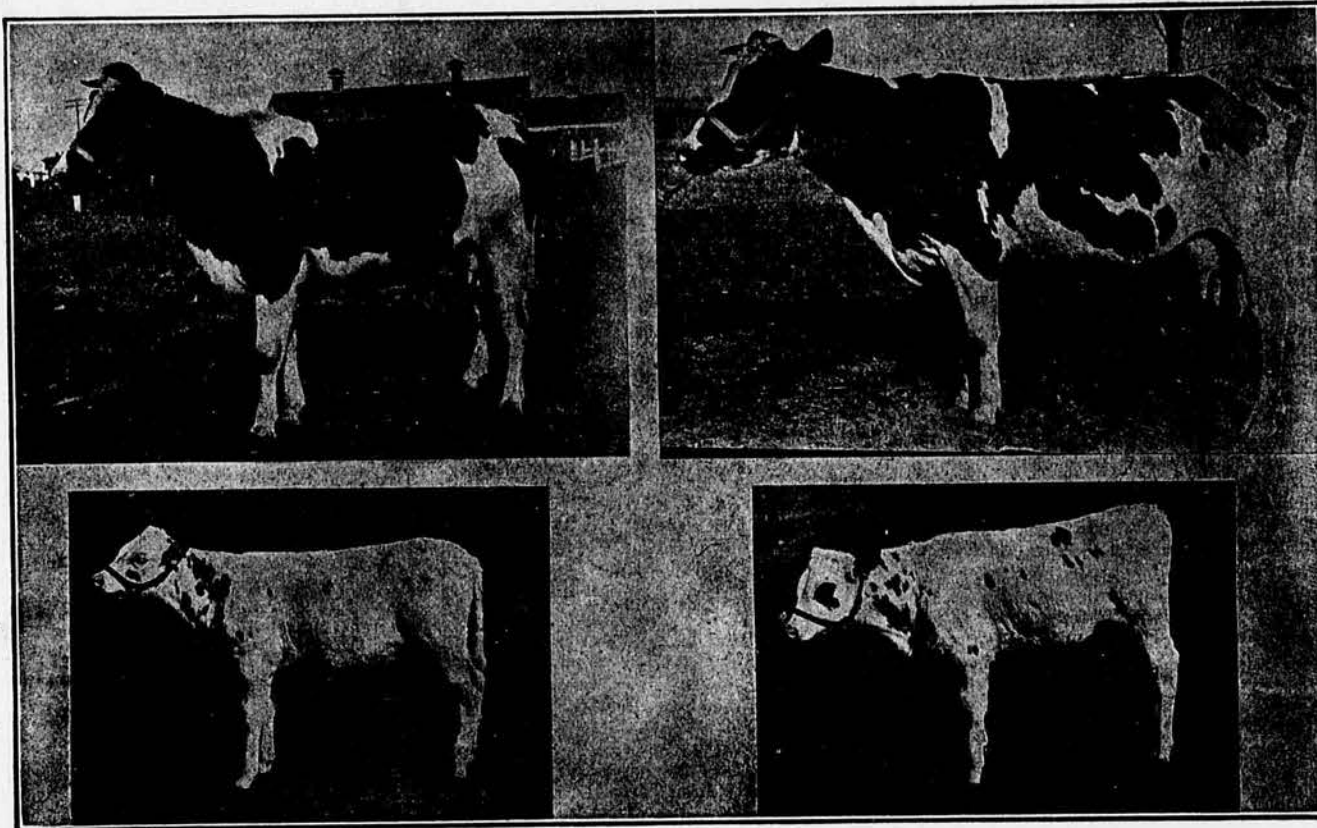


Illustration No. 4.

difficult things in animal-breeding is to determine whether a sire is possessed of prepotency or not. It is conceded by some, that prepotency is the result of certain lines of breeding, and that certain visible characteristics must accompany it. The following are some influences tending to produce prepotency, viz.: (1) duration of purity of breeding without admixture of alien blood; (2) uniformity of type and results from animals in pedigree; (3) inherent vigor of type, race, or individual; (4) line breeding. To illustrate the first point; it is well known that it matters little with what breed or type a Holstein bull is mated, the offspring is almost sure to resemble the sire markedly in characteristics, and particularly in color; it is doubtful if any breed of cattle has been bred pure for a longer period than the Holstein, and the inherent vigor of the breed is indisputable. The ability of the Hereford, also, to transmit uniformly its characteristic color markings, especially the white face, is an evidence of prepotency, the result of a long period of pure breeding. In selecting a prepotent sire, it is well to study the pedigree and ascertain as far as possible what is known relative to the performance of the ancestry as breeders, for an animal the progeny of prepotent ancestry, is certainly likely to be more prepotent than an animal whose ancestors have not been prepotent.

Illustrations Nos. 3, 4, and 5 must be considered not singly but as a group. The upper row of illustration No. 4 represents two pedigreed Holstein cows and, below, their calves sired by the Holstein bull, Count Colantha Alban 25148, shown in illustration No. 3.

The upper row of figure 5 represents two Shorthorn grade cows purchased for the college grade dairy-herd in 1904; directly beneath these cows is to be seen their calves sired by the Holstein bull, Count Colantha Alban (illustration 3). We wish to direct the attention of our readers just here to the fact that in this case a Holstein bull was bred to two cows of his own breed, and two high grades of another breed, and that all four calves show Holstein type in marked degree. It is unfortunate that all the breed type characteristics existing in these individuals can not be brought out by the camera. This group of illustrations demonstrates the quality known as prepotency in no small degree. Breed prepotency is shown in the character-

stallions. In this instance, however, it is only fair to venture the assertion that the initial troubles among these companies is generally the fault of the organizer or promoter, the seller of males, who unloads something on the company that does not prove satisfactory. One can not conceive of any logical reasons why several men in a community could not form a copartnership in the ownership and use of good sires. If such a plan could be followed, the good influences of superior sires would become more far-reaching and fewer

cus breeders in a community to cooperate in other ways in addition to that just referred to. Great advantages would accrue from unity of purpose and methods in breeding. One of the great difficulties existing to-day is found in the fact that the blood of altogether too many breeds of a given species is to be found in each community; this facilitates the admixture of the blood of various breeds. There is really no occasion for the use of so many breeds; in fact there are some notable disadvantages. There is no

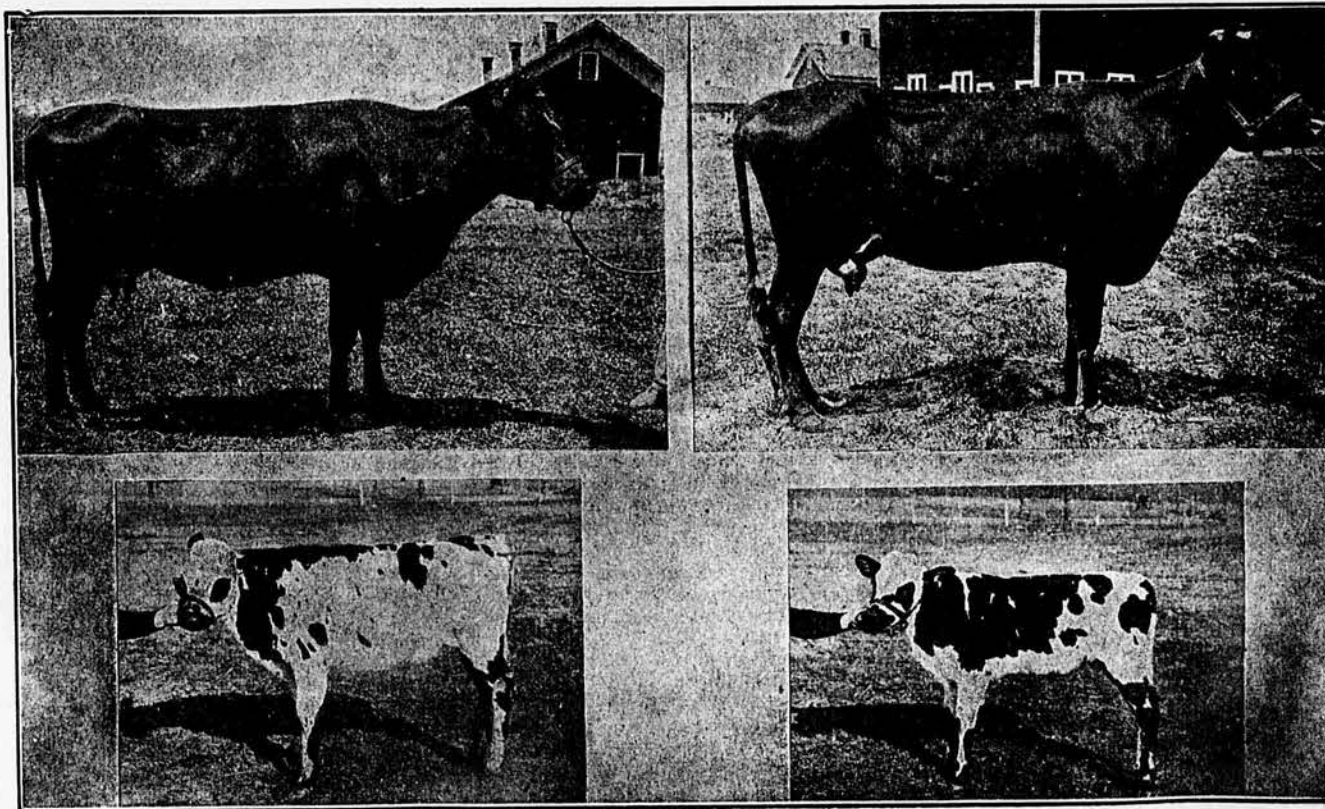


Illustration No. 5.

males in all would be needed than in the case of individual ownership. At present pedigreed males are usually introduced into a community by individuals. These men usually possess small herds and the one sire could be used upon a number of other herds, providing the neighboring owners could but see the advantage to be gained thereby. But at present the man

disputing the fact that individual likes and dislikes vary greatly, but it nevertheless seems to be the case, that if one man introduces a certain breed, his nearest neighbor will at once introduce another, apparently for no other purpose than to have something different, whereas, if they were both using the same blood it would work to their mutual advantage.

history of animal-breeding has occurred where there were harmonious community interests, and but one principal line of breeding. Examples are numerous; for instance, Jerseys only have been bred on the Isle of Jersey, Holsteins in Holland, and all the leading breeds of cattle and sheep in England and Scotland were each developed

(Continued on page 14.)

Horticulture

Some Desirable Trees Not Native.

A. T. DANIELS, BEFORE THE STATE HORTICULTURAL SOCIETY.

There are in the United States growing spontaneously in our forests more than five hundred species of trees that grow to a height of twenty-five feet or more, and in the forests of the State of Kansas are found about seventy species.

It is a fact somewhat surprising that few States have a greater number of trees than Kansas; Oregon, Washington, and perhaps some other States, with a much greater forest area than Kansas, have fewer kinds of trees, whole forests being taken up with two or three species.

There are some very desirable trees, however, native to other States or countries that are not found in our forests, but that may be successfully grown here, and that are desirable for a variety of form, or foliage, or other characteristics.

I take it that it is a part of the work of this society to encourage the introduction and culture of every tree that may possibly be grown here, as well as to recommend a new fruit, vegetable, or flower, and that the discussions and papers which are given here each year are such as may help each other and our neighbors to a better acquaintance with everything that grows out of the ground.

The members of this society are probably all familiar with the appearance and characteristics of our native trees, and can recognize them at sight anywhere in the woods or on the street, but there are many people who have not had the opportunity to become so well acquainted with the trees and who could hardly tell a cottonwood from a box-elder.

That there are trees not indigenous to this locality that are desirable, is already shown by the planting of large numbers of certain species, as the Osage orange for hedges and posts, the catalpa speciosa for posts, shade and timber belts, the Russian mulberry for windbreaks, and some others for ornament; but there are others not so well-known that deserve a better acquaintance.

I have found that there are now growing in Shawnee County, more than thirty species of trees, besides the evergreens that are not native to this locality.

Some of these are the hard maple, the red maple, the pecan, the persimmon, the sassafras, the red or river birch, the white birch and some of its varieties, the sweet gum, or liquidambar, the bald or deciduous cypress, the white wood or tulip tree, the cucumber tree, the yellow wood, the chestnut, the butternut, the mountain ash, the Russian olive, the wafer ash, the ginkgo or maidenhair tree, the sapindus or soapberry tree, the white mulberry, the Japan Sophora, the Bolleana poplar, the Lombardy poplar, the silver-leaf poplar, besides the Osage orange, catalpa of two or three species, the Russian mulberry, and the Ailantus.

One of the best known trees, not native to this county but found in some counties of the State, is the hard or sugar maple, a tree so well known that it hardly needs description. For dense shade and solid mass of beautiful foliage, no tree can surpass it. It is a conspicuous tree of Eastern forests or village streets and is closely associated with our Eastern and Northern civilization. It does not deserve, however, its reputation as a slow grower, for in good soil, with proper care and attention, it soon reaches a good size.

The soft or red maple is a more rapid grower, with not so dense a head. It takes on the most beautiful colors in autumn.

The pecan and persimmon have both been grown in this county and are both desirable for variety.

The sassafras is found, I believe, in only one county in this State, but when once established here is perfectly at home. This tree has clean, handsome foliage, which is seldom disturbed by insects, and which takes on a vivid red in the autumn, unequalled by any other tree. I have found that the young sprouts can not be transplanted successfully and believe that the sprouts should be left to get a good size before attempting removal.

The whitewood, or tulip tree, is quite easily grown and makes a rapid growth in rich soil that is not too dry, the leaves are of peculiar and attractive shape, and it produces its tulip-like

blossoms five or six years from the nursery row. It is perfectly hardy, but the wood is rather brittle and it should have some protection from high winds.

The magnolia acuminata, or cucumber tree, has been grown in Topeka, but I do not know of a living specimen at the present time. I have planted several specimens of this tree without success, and believe that it will require especial care.

Several other species of magnolia are successfully grown in Central Park, in Topeka, and have endured three winters and summers, have blossomed each spring, and I am quite certain that they will flourish, but as a rule magnolias are difficult to transplant successfully.

The Virgilia or yellow wood is a handsome, medium-size tree, a native of Kentucky and Tennessee, and grows rapidly and seems to be perfectly at home here.

The Koelreuteria, or varnish tree, is a native of Japan and with its compound lobed leaves and clusters of yellow blossoms, followed by its seed pods, in conspicuous clusters, it is a very pretty ornament and is very easily grown.

The Sophora, or pagoda tree, another native of Japan, is an attractive medium-size tree with compound leaves, perfectly hardy and easily grown.

The ginkgo, or maidenhair tree, has been quite extensively grown in the East, especially in Washington, for shade trees. It seems perfectly adapted to this climate and soil, and is a very interesting tree for its peculiar leaves, which somewhat resemble the leaves of a maidenhair fern.

The Ptella, or wafer ash, is a desirable small tree, a native of farther east, and with its bunches of water-like seeds and trifoliate leaves in the summer, is quite interesting and attractive.

The Russian olive with its pretty silvery foliage is grown very successfully, especially in the Arkansas Valley.

The Bolleana poplar is a rapid-growing, upright tree with beautiful foliage, silvery on the under side of the leaves.

The Ailantus, or tree of heaven, is a native of China and has been planted quite frequently here, as it grows anywhere and sprouts readily, which habit, with the disagreeable odor of the staminate blossoms makes this tree quite objectionable. Where the pistillate trees can be procured, the objection of the odor is obviated.

The red or river birch is found in a few counties in this State, and while usually found near streams, can be grown on dry ground. It is not so handsome a tree as the white birch, but is good to have in a collection.

The bald or deciduous cypress, a native of Southern swamps, is perfectly hardy in Eastern Kansas, and while it prefers a moist location, grows very well on dry ground. It is a deciduous conifer and with its light green feathery foliage and its symmetrical, pyramidal shape, it is a distinct and highly ornamental tree.

The American larch or tamarack of our Eastern and Northern swamps can be grown here, but the European larch is a larger and handsomer tree and more easily grown, even in dry ground.

The sweet gum, or liquidambar, also a native of the Southern States, is usually found near streams and in damp situations, but under culture grows very well on dry ground and in rich soil. With good cultivation it soon attains a size well suited for street shade. This tree has a symmetrical, upright shape and attractive leaves, which take on brilliant colors in autumn.

The sweet chestnut is a beautiful tree and not difficult to grow. Several specimens near Topeka have borne nuts for several years. In one cherry orchard chestnut-trees are being planted as the cherry-trees die out. They seem to grow as easily in the Kansas River bottom-land as in their native Alleghany hills.

At Manhattan on the college grounds are some fine specimens of blue beech and water beech. These trees are not large, but show a luxuriant growth and are distinct and very ornamental.

It is quite rare to see an oak transplanted or growing outside of an original forest, and while we have the following nine species in Kansas, few of them are transplanted, or are ever seen on a lawn or on a street.

These species include the white oak, the post oak, the burr oak, the chestnut oak, the red oak, the black oak, the black jack oak, the pin oak, and the laurel or shingle oak.

For beautiful oaks, we do not need to go outside of the above list, as the chestnut oak, red oak, pin oak, and the

laurel oak are as handsome trees as one can desire and furnish a variety of form and foliage, with the sturdy character common to the oaks.

Besides the trees mentioned, there are a great number of nurseryman's varieties of different species, many of them having desirable and distinct features.

Some of the leading firms of growers of ornamental trees catalogue nearly four hundred varieties of ornamental trees, each having some peculiar or distinct characteristic of form or foliage.

Of these different varieties we may mention Wier's cut-leaf weeping maple; with drooping branches and finely divided leaves it is a most graceful and handsome tree and is a rapid and easy grower.

Schwerdler's maple is one of the handsomest trees grown, with foliage bright red in the spring and bronze or russet hue during the whole season through.

There are also some desirable varieties of the linn or basswood, with pretty silvery leaves.

Of the trees that can not be grown at all here, or with only the greatest care, we may mention the beech, with its several varieties, the magnolias, the sour gum or tupelo, the American and English holly, and the paulownia, or purple catalpa. This beautiful tree may be grown in the southern part of the State, and one has been grown at Manhattan, but the branches are killed down to the ground almost every winter.

Of evergreen trees, the number of species that may be grown with ordinary care is somewhat limited.

None of them, except the red cedar, is found growing wild in this State, although in Eastern Kansas the Norway spruce, the white, the Scotch, and the Austrian pines, the arbor vitae of two or three varieties, and the white spruce are sometimes grown with fair success.

It is greatly to be hoped that further effort will result in producing varieties or methods of growing that will enable us to grow evergreens as easily and luxuriantly as those seen growing in some of the Eastern States.

I think that the members of this society who have room to plant trees for experimental purposes should be urged to do so, so that as soon as possible we may find out what trees can be grown in each locality.

It would also add largely to the attractiveness of the school grounds to have as large a variety of trees as possible planted where the children could become acquainted with varieties besides those which grow in our own forest.

I would like to suggest that those who have been successful in growing any rare tree or shrub or plant, report their experiences and the methods by which they have attained success to the secretary of this society, and that the members of this society do carry on as much experimental work as possible in testing trees suitable to their localities.

Miscellany

RUSSIA BEHIND THE VEIL.

VI.
WHY THE JEWS ARE DISLIKED—THEIR DOMINATION OF COMMERCIAL AFFAIRS WITHIN THEIR PALE.

Less than 12 per cent of the people of Russia reside more or less in the towns, and not 20 per cent are near enough to them to be affected by urban life. This proportion, small as it is, would be considerably reduced if we regarded only the population of purely Russian race. Nearly all the foreigners living in Russia—Germans, Austrians, Belgians, French, Greeks, Armenians, etc.—settle in or near the towns. Besides this, the empire, exclusive of Poland, contains over 3,500,000 Jews, and the great majority of these reside in towns of greater or less importance, forming, in fact, fully one-fourth of the total town population in Russia. More than a third of the balance of the people in the towns are foreigners, whose life has little or nothing in common with that of the Russians, and the foreigners occupy the superior positions of merchants, dealers, manufacturers, employees, or skilled artisans, while the unskilled workmen are of Russian race. The Jews reside almost exclusively within the "Jewish pale of settlement," consisting of nearly the whole of Western Russia from the frontier of Cour-



NITRO CLUB SHELLS

Moderate priced game loads of the highest quality. Any standard Smokeless Powder—any standard load. Consult the most experienced sportsman you know and buy of your home dealer.

THE UNION METALLIC CARTRIDGE COMPANY
BRIDGEPORT, CONN.

Agency, 313 Broadway, New York City.
Sales Office, San Francisco, Cal.

HEALTHY TREES HONEST IN QUALITY
WE PAY FREIGHT
Grafted apple 4c, budded peach 4c, budded cherry 15c. Concord grapes \$2 per 100. Black Locust \$1 per 1000. Complete colored cat. free. Galbraith Nurseries, Box 22, Fairbury, Neb.

2c CONCORD GRAPE VINES
All healthy, vigorous, true to name.
25 Grafted Apple Trees \$1.00 25c due-bill and cata-
25 Budded Peach Trees \$1.00 log free. Freight paid
50 Concord Grape Vines \$1.00 on \$10.00 orders.
FAIRBURY NURSERIES, Box 1, Fairbury, Neb.

Fruit Trees and Plants True to the name. Highest quality, guaranteed to live. Materially less than agent's price. Illustrated Catalogue Free. Box 26.
CHATTANOOGA NURSERIES Chattanooga, Tenn.

SEEDS As good as grown. 5 Pkts. Giant Cyclamen, Mammoth Verbena, Crimson California Poppy, Wonder Primrose and Gorgeous Pink; also 10 varieties Annual Flowers, all for 10c. 5 Pkts. Vervain, 10c. Plants, 3 each, 25c. 5 Geraniums, 25c. 5 Begonias, 25c. 5 Fuchsias, 25c. 5 Chrysanthemums, 25c. 4 Pteris, 25c. Catalog and Pkt. Royal Giant Penny free.
A. C. ANDERSON, COLUMBUS, NEBRASKA.

TREES THAT GROW
Apples 4c, Peach 5c, Plums 12c, Cherries 15c. Best quality good bearers, grafted stock, not seedlings. Concord Grapes 2c. Forest Tree Seedlings \$1.00 per 1,000 up. We pay the freight.
GERMAN NURSERIES & SEED HOUSE, PROP.
CARL SONDEREGGER, Prop.
a complete line of Vegetables, Flowers and Farm Seeds. Our large illustrated catalogue free.
GERMAN NURSERIES, Box 9, BEATRICE, Neb.

HARDY CHESTNUT TREE FREE
To introduce this tree and gain new friends we offer a 1 yr. tree free to property owners. Mailing expense 5 cts. A postal will bring it and our catalogue with 64 colored plates. Write today.
The Gardner Nursery Co., Box 740, Osage, Ia.

FIELD'S SEED CORN
Sold ear or shelled. All graded, tested, proven—then guaranteed. No better at any price. Test it in your sprouting box. If you don't like it—fire it back. You'll get your money back double quick. "Guaranteed-pure" Clover seed. Garden seeds that will really grow. Catalogue and samples free.
HENRY FIELD, SEEDSMAN, BOX 55, SHENANDOAH, IA.

FERRY'S SEEDS
have stood the test for over 50 years, and are still in the lead. Their absolute certainty of growth, their uncommonly large yields of delicious vegetables and beautiful flowers, make them the most reliable and the most popular everywhere. Sold by all dealers. 1907 Seed Annual free on request.
D. M. FERRY & CO., Detroit, Mich.

Let Us Help You
Let us help you make your planting a success. Our seed experience of over fifty years enables us to give you expert advice on the raising of various vegetables. This you will find scattered throughout our catalog. You need good seed to start with. We raise and sell only that kind, and guarantee all we sell to be fresh and reliable. Catalogue Free.
J. J. H. GREGORY & SON Marblehead, Mass.
GREGORY'S SEED CATALOGUE FOR 1907

land in the north to the Crimea. Within this immense area, nearly a thousand miles in length, and three hundred miles wide, comprising fifteen governments, the Jews form over 80 per cent of the population in four towns, between 70 and 80 in fourteen, from 50 to 70 in sixty-eight, and between 20 and 50 per cent in twenty-eight towns.

Both the Jews and the lower class of Russians have the deepest attachment to their respective religious faiths, for which they would submit to almost any sacrifice, but the unfortunate relations existing between Jews and Christians are not due to religious differences alone, or to their complete divergence of character. The trouble lies chiefly in the fact that the Jews have, through their keener business acumen, acquired a monopoly of the trades and commerce of the country within the Jewish pale. Between the inhabitants of town and country—Jewish traders on the one hand and Russian peasants on the other—there is a great gulf fixed, which keeps them morally as far apart as if they dwelt in different planets. Of course, all this in no way excuses the system of persecution to which the Russian Jews have so often been subjected, but it explains simply how it is that their presence in Russia has given rise to difficulties for which no parallel can be found in Western countries. The regulations relating to the Jews are by no means generally understood abroad, and, indeed, they are hardly understood in Russia, as new regulations and edicts are frequently issued by the Government without revoking others. The consequence of this is that the local administrations, while carrying out the intentions of the government, do not really execute the actual letter of the law. For instance, in strict law Jews were prohibited from settling outside the urban districts within the Jewish pale, with the sole exception of members of Jewish colonies who had long been established as agriculturists. To have carried out the law would have been a physical impossibility, since, it would have resulted in the expulsion of so great a number that it would have completely dislocated country life and worked as much injury to the Russian inhabitants as the Jews. The local officers, therefore, generally acted as though the law demanded the expulsion from the country district of those Jews whose residence there was the least desirable; as for the others, their existence was simply ignored. Undoubtedly there was often great hardships and injustice in this rough and ready mode of compromising the matter, but in many cases the rapid increase in the Jewish population had so greatly exceeded the means of obtaining profitable employment, that the Jews who remained found their position considerably improved.

INFLUENCE OF THE JEWS IN RUSSIA.

When the enforcement of the edicts led to the emigration of thousands of their poorer co-religionists, the wealthier Jews were very rarely disturbed. Even when, as a mere formality, they were "expelled" from the country districts, they generally returned a few weeks later, when the storms had blown over, and thereafter remained unmolested. Many of these financial Jews are large capitalists, and are chiefly engaged in trading and money-lending operations—the last-named, however, being in the minority. The anti-Semitic Russians—and this means practically the entire nation—maintain that, could the Jews be gotten rid of, Russian traders would take their place. It may be doubted, however, whether they would do so to the extent supposed, for in many parts of the empire, where Jews are not permitted to reside, an increasing proportion of the internal trade of the country is falling into the hands of foreigners, among whom the most influential are of German, Belgian, and French origin. Throughout the whole of the Jewish pale, in nearly every district the only wholesale dealers in all the necessities of life, from drapery and clothing to agricultural implements, tools, and groceries, are members of the same Jewish family. So, too, are the sole purchasers of agricultural produce of all kinds, as well as the only timber merchant in the district, who, by the contracts he has made and partly paid for in advance has secured the right to cut all the timber available in the forests of all the landowners in the vicinity for many years to come. All the village shops and inns are kept by Jews appointed by members of the same family and exclusively supplied by them with goods from their own wholesale stores. All the vodka breweries are in their hands, and so, too, are the flour mills and a large number


of farms, though the presence in this region of the new Jewish settlers, by whom they are occupied, is illegal. The family ring is too powerful and has too strong a hold upon the local officials to fear any interference from them. An intending purchaser would have to take a journey of at least twenty miles to avoid dealing with them; and even then he would be no gainer, as he would merely have entered another district, the trade of which is controlled in precisely the same way by another financial group. Long credit is the rule in Russia; but this can be safely given, as members of the ring are the only purchasers of the produce of the land, and the corn, butter, cheese, or timber sold by a landowner or farmer to any member of the family is held as a guaranty for the payment of any goods that may previously have been supplied to the agriculturist by some other member of the ring.

It is easy to realize the consequences of this complete monopoly of the rural trade in the hands of a relatively small number of shrewd business men, throughout almost the whole of the Jewish pale. Its injurious effects upon Russia are greatly increased by the fact that most of these Jewish traders are the representatives of influential commercial associations in Germany, formed by manufacturers of goods exported to Russia, and wholesale dealers in Russian rural produce. Competition is thus rendered almost impossible; and the prices paid to the agriculturist for his produce, as well as those he is compelled to pay for all the manufactured articles he needs, are really fixed by the powerful association of foreign manufacturers and dealers. Indeed, throughout the rural districts of the Jewish pale articles of Russian manufacture can hardly ever be obtained. The pressure that these foreign rings are able to bring to bear upon Russian officials is far greater than might be supposed. It is a matter of personal importance to each official that everything in his district should go upon oiled wheels, and, above all, that the revenue and taxes should not fall off. It is only necessary for the rings in any particular district to refrain from buying any country produce for a few months, to produce a state of things in which almost any concession would be granted them.

THE KAHAL.

It is by no means easy in Russia for a Jew to be educated in any of the higher-class schools, as Jews must in no case form more than 10 per cent of the total number of pupils. Very many of the richer Jews are therefore educated at home. While there is much in the character of the artisan Jews that one can not help admiring—their devotion to their religion, and their untiring industry and perseverance in the face of restrictions that would have crushed an ordinary race—it is difficult to entertain the same feeling for the wealthier class of Jews in Russia. The rigorous government of the empire is not the only authority which the poor Russian Jew must implicitly obey. There is another, controlled almost exclusively by the financial classes of his own people, which he dare not dream of resisting. The power of the kahal—the court of the congregation, a religious organization—though it has no legal force to support it, is for him more potent and far-reaching than that of the Czar himself. It has the right to control every act of his existence, both civil and religious. If he desires to follow his calling in any particular locality, the kahal may forbid it, if it would be injurious to the interests of another Jew. If a small Jew trader gave credit to a Christian upon easier terms than his neighbors, or sold any of his wares below the price fixed by the ring controlling the trade of his district, the kahal might inflict the severest punishment. The least infraction of any ordinances of the law, such as the carrying of any object in the hand on the Sabbath, if seen by two Jewish witnesses who could swear to the act, would place the offender entirely in their power, as it would enable them to denounce him to the kahal. This organization may order a man to divorce his wife, or to marry the daughter of his bitterest enemy; and his choice would lie between obedience, and what, to the majority of the Jews, would be worse than death, the renunciation of his faith and expulsion from the synagogue.

As it is by the richer classes that the rabbis and talmudists are chiefly supported, the kahal is practically in their hands. A poor Jew who has fallen into the clutches of one of his richer brethren is, in fact, far worse off in Russia than a Christian would



The best tools you have ever bought
Same prices you have always paid

That's what the "True Temper" Label on your Farm and Garden Hand-Tools Stands for

STUDY it well. Because the better you know "True Temper," the more you will appreciate how much it means to you.

The Forks, Hoes and Rakes we manufacture have long been famous for their excellence. Some of our brands are nearly three-quarters of a century old.

But we also make many other Hand-Tools of valuable special-purpose features which are not generally known.

Moreover, farmers and gardeners need them and are anxious to have them, when their time, labor and money saving advantages are known and appreciated.

For that reason we adopted advertising to tell you about our hundreds of Farm and Garden Hand-Tools.

But first the combined knowledge and skill of all our manufacturers were called into council, and the best process for making each kind of tool was formulated and adopted. In fitting testimony of the high quality represented by this standard process, it was named "True Temper."

All tools must pass tests and inspections, and only those which prove true in quality, construction, "hang" and temper are labeled "True Temper."

That is why "you know a tool is just right when it is "True Temper."

Every farmer and gardener knows the importance of the "hang" of a Hand-Tool. If it is correct, the tool helps in the work. If it is awkward, the tool hinders. "True Temper" tools are the kind that help.

"True Temper" tools also have those rare qualities of toughness and elasticity of temper which are so much sought after by makers and users of tools.

The line includes Forks, Hoes, Rakes, Hooks, Weeders, Cultivators, Beet Tools, Floral Tools—every desirable pattern of Hand-Tools.

Ask Your Dealer For TRUE TEMPER Tools

Write for our FREE BOOK, "Tools and Their Uses." It shows hundreds of special-purpose tools and tells you how to save time, labor and money. Just drop us a postal today.

American Fork & Hoe Company,
136 American Trust Bldg., Cleveland, Ohio

C. W. PECKHAM, President.
Haven, Kans.

R. R. BEALL, Manager,
Kansas City, Mo.

The National Grain & Elevator Co.

Receivers and Shippers of Grain.

This Company is conducted on the cooperative plan by the Independent Cooperative Elevators. We are the terminal for Farmers and Independent Elevators and solicit your membership and patronage.

ARE YOU POSTED

on the recent development in the Grain Trust investigation by the Interstate Commerce Commission? IF NOT, ASK US. Why don't you farmers fight the Trust? We will help you, if you will help yourselves.

DO YOU KNOW

that the President of the Kansas City Board of Trade admitted in his testimony at the hearing of the Interstate Commerce Commission that they had boycotted The Independent Farmers' Terminal Co.?

The National Grain & Elevator Co.
Kansas City, Mo.

References—The Editor of this paper.

A HOME ORCHARD \$3.48

FREIGHT PREPAID

To any point in Iowa, Illinois, Nebraska, Kansas, Missouri, Oklahoma and South Dakota.

6 APPLES	4 CHERRIES	2 PEACHES
1 Dutchess	2 Early Richmond	1 Bailey
1 Wealthy	1 Montmorency	1 Elberta
1 N. W. Greening	1 English Morello	
1 Gano		
1 Transparent	4 PLUMS	2 PEARS
1 Jonathan	2 Weaver	1 Dutchess
2 Russian Mulberry	2 Wyant	1 Keiffer

WE WANT YOUR ORDER NOW

This offer will only hold good for 30 days, but for all orders received this month we will give

SIX SHADE TREES FOR PREMIUM

2 Soft Maples 2 Carolina Poplars 2 Catalpa
IOWA NURSERY CO., 430 East Locust Street, Des Moines, Iowa

Kentucky Blue-grass Seed

For a beautiful as well as a most profitable pasture sow Blue-grass. The genuine Kentucky seed is what you want, and from September until June is the proper time to sow. For pure seed of our own raising, and full particulars write MT. AIRY SEED FARM, PARIS, KENTUCKY.

SHAWNEE NURSERY CO., TOPEKA, KANS.

Fruit and ornamental trees, shrubs, small fruits, hedge plants, roses, bulbs, herbaeous plants, etc. We employ no agents.

We sell direct to the planter at reduced prices.
Send for catalogue and price list.

be. The latter might always count upon a certain amount of protection from the official classes, while the poor Jew would have none, except in the event of his turning Christian. In this case he would at once be absolutely safe, as by law no Jew can appear as a witness against another who has entered the orthodox church. The moment he became a Christian he would have permission to settle wherever he pleased in Russia; he would receive a gratuity in money from the government to make a new start in life; he would be granted the right to divorce his wife and marry again, while the discarded wife would have but a poor chance of recovering any portion of her dowry. The inducements to embrace Christianity offered by the Russian government certainly appeal to the least estimable features in the Jewish character; and it is to the credit of the Jews that not more than about a thousand annually are tempted to abjure their faith. Perhaps the orthodox church is hardly to be congratulated upon the relatively small number who do enter its portals. Until quite recently, a converted Jew had the right to claim the right of a noble, and assume a name that would conceal his Semitic origin. To this day, any person who converts a certain number of Jews to the orthodox faith is entitled by law to an order of knighthood. The case is recalled of a young girl who turned Christian in order to marry a Russian peasant. Her parents were asked if she was happy in her new home. Their reply was, "She is dead to us." The Jews of the neighborhood were warned that they would be expelled if she were in any way molested.

A Plan for the Improvement of Cattle.

(Continued from page 11.)

largely within one or more counties or shires, to the almost total exclusion of other breeds of the same species. That county in Michigan, noted more than any other to-day for its Holstein cattle, is the one possessed of the greatest number of Holstein breeders, who are organized and possess some unity of purpose. When a given community is specializing in the production of some one or two breeds of cattle, it soon becomes noted for these breeds, and prospective purchasers are attracted thereby to the mutual interest of all those cooperating in the work.

There is a great lack of proper organization among Michigan stockmen to-day. It is true that a State live-stock breeders' organization exists, and also that there are a number of breeders' associations, and one or two county live-stock organizations. It would seem highly desirable for most counties and perhaps some townships, to organize live-stock breeders' organizations. It would seem possible through such organizations, to bring the live-stock breeders into closer touch with one another, and thereby present favorable opportunities for the discussion and adoption of methods of breeding best suited to the interests of the community.

Agriculture

Alfalfa—Soil and Seeding Variate, Yet Uniform.

FROM THE BOOK OF ALFALFA BY F. D. COBURN.

In this double title we have a case of the widest variations and the most positive and rigid uniformity. Alfalfa may be grown in almost every possible kind of soil and under almost all soil conditions (save two), but omitting these the second, including the tilth of the ground, is based, so far as any future success is concerned, on perfect cultivation. The dictum, "Alfalfa must have a dry, warm, sandy loam, very rich" has become obsolete, as already pointed out.

There are just two soil conditions that seem absolute against the growth of alfalfa. The first is a soil constantly wet. The common remark, "Alfalfa will not stand 'wet feet,'" seems to be the expression of a law. It does not do well where water is nearer to the surface than six feet, or where in winter water will stand on the ground for over forty-eight hours. This invariably smothers the plants; in fact it usually kills any crop. If water flows over the field for some such time, due to a freshet, the alfalfa is often found uninjured, if too much soil has not been deposited on and around the plants. Even in such instances fields have been saved by a disking once or twice, but it is wholly unwise to sow on a field sub-

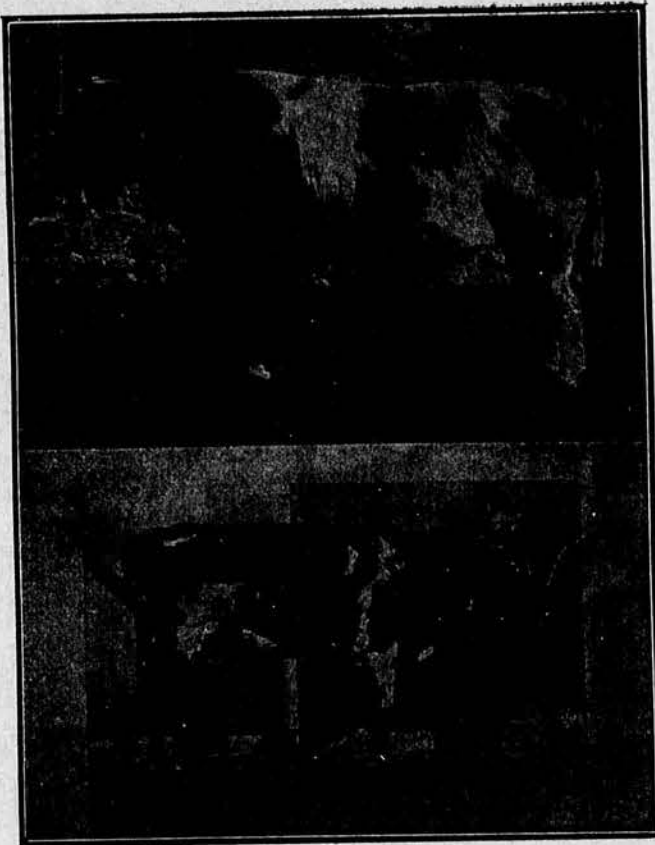
ject to overflow, or one where water rises to the surface in winter or in spring; likewise on a field so flat that water will not run off in time of a heavy rain or promptly drain out through the sub-surface. The time is rapidly coming everywhere when the intelligent farmer will not try to raise any crop on such a field, undrained. The alfalfa-roots will find their way to moisture if given the right surface conditions. There are profitable alfalfa meadows in parts of Kansas where it is eighty feet to water, but there has not yet been found one that is prosperous where water comes close to the surface, or where it stands on the ground all winter.

The other kind of soil where alfalfa refuses to grow is that in which there is too much acidity. This is often the case where corn and wheat have been

bacteria for the alfalfa. The cow-pea, being a legume, prepares the way for alfalfa, its near relative.

KEEP DOWN THE WEEDS.

It is always timely to emphasize the very great importance of keeping down weeds in the corn-field where alfalfa is to be sowed the next spring. If corn is husked from the field, the stalks should not be pastured except when the ground is fully frozen. Later they should be thoroughly broken, raked, and burned, to leave the land in the best condition for spring work. If the corn is cut and fodder hauled off, the stubs should be broken in cold weather by a pole or other drag, and raked and burned as recommended for the stalks. This adapts the ground for disking and harrowing early in March. Then every ten days the field should be disked or



Shorthorn Bull Gwennallen 38892, Weight 2,150 Pounds.—2-Year Scrub Bull, Weight 751 Pounds.—Two Herd-headers, Which Would You Prefer?

raised for many years, thus robbing the soil of much lime; a condition that may be remedied by an application of lime to the land just before sowing the alfalfa, harrowing it in beforehand or, if the seed is to be broadcasted, the lime may be applied just before sowing, when one harrowing will suffice for both, or it may be sown with a drill—500 to 1000 pounds per acre.

A simple test for acidity is to make a deep cut in the ground with a knife, pressing the earth slightly apart; then push a piece of litmus paper into the opening and press the earth together. Leave the paper there for a few hours. If, upon examination, the litmus paper has a pink appearance, it is proof of acidity, and this, as already said, may best be remedied with lime.

SOIL PREPARATION.

With the only negative points considered, the more important conditions upon which success will depend may be discussed. One chief essential is the advance preparation. Many of the most successful growers begin their preparations two or three years before they sow the seed. There must be, by rights, the most perfect physical condition of the soil. It should have been plowed deep for at least two years, and in most fields in the Central and Northern States a two- or three-inch sub-soiling along with a seven- or eight-inch plowing will be very helpful.

If corn is to precede a spring sowing, the ground should have a liberal dressing of stable manure plowed under for humus, to encourage earthworms and to introduce the particular bacteria so essential to alfalfa's welfare or at least furnish favorable conditions for bacteria, and the harrow should follow the plow each day. The soil's condition should be like that for a garden. Care should be taken never to work with the ground when too wet, as such working almost inevitably results in clods and a baked soil. The corn should be cultivated often, and a liberal sowing of cow-peas just before the last cultivation, which should be shallow, has been found quite helpful. This crop will repress and take the place of weeds, furnish a rich food for fattening pigs or lambs after the corn is cut, add fertility to the soil, and also introduce bacteria similar to the

harrowed to conserve moisture, to start weeds and then kill them, and to bring the ground into the desirable tilth. Ordinarily, in the Central States, sowing may be done early in April, while in the South this may be done by the middle of March, and in Wisconsin and Canada by the last of April or early in May, although the dates are variable. Many report seeding in Kansas the middle of May, obtaining a clipping in July and a hay-crop in September. Others report sowing in March and cutting a hay-crop in June. Some Wisconsin reports say that the first of June is early enough, while others in that State and in Minnesota prefer to sow two or three weeks earlier, and others in Wisconsin sow in April. The important things to keep in mind are to have the soil right and the weeds disposed of, and to sow when the weather and moisture conditions are right. Alfalfa is a child of the sun; permanent shade from any source is its enemy, and when young it is not a good fighter against adversaries of any sort. More failures are due to weeds than to any other one cause, and unfortunately all the weeds do not grow on the land of the farmer who is shiftless or neglectful. The latter is so benevolent as to permit his weeds to scatter their seeds to the fields of his neighbors.

If a spring sowing is to be made on wheat ground, the land will be helped by a liberal dressing of manure immediately after the harvest, and by plowing and harrowing at once; then sow about the last of August to rye or wheat for fall and winter pasturage, and to prevent the soil from leaching or washing. In the spring the land should be disked and harrowed for alfalfa, keeping in mind the point emphasized in the preceding paragraph. Instead of rye or wheat, cow-peas may be sowed after the wheat harvest; thus both fertility and bacteria will be added to the soil, and the farmer have a valuable pasture-crop for pigs or lambs. If the season is extremely favorable, a hay-crop may be cut early in October.

If potatoes are to precede a spring sowing of alfalfa, more than usual care should be taken to keep the field clean of weeds. Some farmers do well by sowing millet with the last cultivation

WAGON SENSE
Don't break your back and kill your horses with a high wheel wagon. For comfort's sake get an **Electric Handy Wagon.** It will save you time and money. A set of Electric Steel Wheels will make your old wagon new at small cost. Write for catalogue. It is free. **ELECTRIC WHEEL CO., Box 48, Quincy, Ill.**

Well Drills and Drillers' Supplies
The best on the market. Manufactured by **THATCHER & SONS, Stillwater, Oklahoma.** Write for circulars and prices.

CEMENT POST MOLDS. Send for free catalogue describing different styles. Prices from \$5.00 up. C. L. Catherman, Elkhart, Ind.

FENCE STRONGEST MADE. Built strong and light. Sold to the Farmer at Wholesale Price. Fully warranted. Catalogue free. **COILED SPRING FENCE CO., Box 255 Winchester, Indiana.**

SCALES ALL STYLES LOWEST PRICES
30 DAYS FREE TRIAL
AMERICAN SCALE CO., 204 HOLLY STREET BLDG., KANSAS CITY, MO.

THE LARGEST AND BEST LINE OF WELL DRILLING MACHINERY in America. We have been making it for over 20 years. Do not buy until you see our new Illustrated Catalogue No. 4. Send for it now. It is FREE.
Austin Manufacturing Co., Chicago

\$10.00 Sweep Feed Grinder. \$14.00 Galvanized Steel Wind Mill.
We manufacture all sizes and styles. It will pay you to investigate. Write for catalogue and price list.
CURRIE WIND MILL CO., Topeka, Kansas.

Don't Eat Glucose.

Use our Percolator (the family size and with the simple use of granulated sugar and cold water, make the purest and best syrup in the world, at a much less cost than you are paying for glucose or corn syrup. Operation perfectly automatic. Syrup cannot sour or crystallize. No waste. Price \$2.50. Write for full information.
Ever-Ready Syrup Percolator Co., 188 C. Monroe St. Chicago. Agents wanted.

PAGE Poultry Fence
Strongest, best on the market. Fences poultry in, stock out, and lasts. Costs less erected than common netting, because it requires no boards at top or bottom and so few posts—one every 50 feet. You can't afford to buy poultry fence without investigating Page. Write for descriptions.
Page Woven Wire Fence Co., Box 786, Adrian, Mich.

COILED SPRING FENCE
Closely Woven. Can not Sag. Every wire and every twist is a brace to all other wires and twists full height of the fence. Horse-high, Bull-strong, Pig-tight. Every rod guaranteed.
30 DAYS FREE TRIAL and sold direct to farmer, freight prepaid, at lowest factory price. Our Catalogue tells how Wire is made—how it is galvanized—why some is good and some is bad. Its brilliancy of fence facts. You should have this information. Write for it today. It is free.
KITSELMAN BROS., Box 61, MUNCIE, INDIANA.

The Old Reliable Anti-Friction Four Burr Mills. (Double the capacity of other mills.)



Two horse mill has 24 ft. grinding burrs all grinding at once and grinds from 25 to 50 bu. per hour. Four horse mill has 30 ft. of grinding burrs and grinds from 60 to 80 bu. per hour.

30,000 Bushels With One Set of Burrs.
"I have used a Mogul No. 1 mill for seven years and it has ground, without set of burrs, more than 30,000 bushels of corn and the burrs are still in good condition."—F. F. Craig, Mt. Carroll, Ill. Absolutely no friction on gearing. Will earn cost price in three days. The largest ears of corn to these mills are like pop corn to other mills. We manufacture the most durable and fastest grinding line of mills sold, including our Famous Iowa No. 2 for \$12.50. Send for our free catalogue. **Bovee Grind-ers & Furnace Works, Waterloo, Iowa.**

LEARN VETERINARY DENTISTRY and make **\$2000** a year. We teach you at home in three months of your spare time by illustrated lectures and grant diploma with degree. Particulars free. **The Detroit Veterinary Dental College, Detroit, Mich.**

of potatoes, leaving the potatoes in the ground until after the millet is harvested, and when the crop is dug the land is free from weeds. Then it may be harrowed or disked and seeded to rye for winter pasture. Some plow the potato ground in the fall and sow to wheat or rye. Certainly if weeds are present the ground should be plowed as soon as the potatoes are dug. The idea is to secure a fine seed-bed and have the ground free from weeds, the great curse of the American farm. All things considered, there is probably no crop which leaves the soil in finer physical condition for alfalfa-sowing than millet, and none that is more unsatisfactory for a like purpose than sorghum or Kafir-corn that was planted in hills or rows.

In some States a clover sod is plowed under for alfalfa. If this is for a spring sowing, the sod should be plowed in September or October, disked or harrowed, and not infrequently a light sowing of rye for winter pasture is feasible. Then in early spring the land may be put in order with disk and tooth harrows. It is excellent if a liberal application of rotted stable manure is plowed under with the clover sod.

FALL SOWING.

Fall seeding presents fewer difficulties than spring sowing. Corn is not the preceding crop and hence the weed problem is not so formidable. Usually a fall sowing follows millet or oats, cow-peas or potatoes. Almost any crop except the sorghums may be grown to precede alfalfa for a fall sowing; these should not be as they consume too much moisture. The land should have, if possible, a dressing of stable manure the preceding winter; then in spring be plowed deep and worked to a fine tilth for the summer crop. South of the latitude of forty degrees cow-peas is one of the best. They are legumes, and the bacteria that live on their roots are similar to those upon the alfalfa-roots; they are also nitrogen-gatherers, taking nitrogen from the air as does the alfalfa, and thus they prepare the soil for alfalfa. Besides, cow-peas are a valuable forage, the hay being worth almost as much, pound for pound, as that of alfalfa. When cut off they leave the ground ready for disking and other preparation. Millet is also excellent for this purpose, leaving the soil unusually friable. Potatoes make a satisfactory preparatory crop, but the danger from them too often is neglect to keep the weeds down. As soon as the land is free, it should be disked and harrowed, and this repeated about every ten days until the time for sowing.

RECENT PLOWING NOT DESIRABLE.

It is seen that plowing for alfalfa just preceding seeding is not recommended. Plowing leaves the sub-surface too loose, thus depriving the roots of a sufficiently firm footing and making a fall sowing more liable to harm from freezing and thawing, and the spring sowing to harm from a dry summer. The necessity of the most perfect surface conditions can not be often emphasized, and this, too, includes considerable compactness rather than a too light or ashy condition. There must be no clods, no stiff and stubborn lumps.

If alfalfa is to follow clover, and to be seeded in the fall, the sod should be broken early after the clover is harvested and each day's plowing harrowed that day; the field disked and cross-disked and harrowed again. After that it should be disked, lapping half, every ten or fifteen days until time for seeding. Alfalfa may follow timothy if the sod is not too old and stubborn, and it may be treated the same as clover sod.

INTRODUCE BACTERIA BY PREPARATORY SOWING.

Another form of preparation followed by many successful growers, men who do not complain about alfalfa not doing well "here," is the sowing of a few pounds of alfalfa-seed on the field two three years before it is intended to sow for a permanent crop. Mr. Joseph E. Wing, of Central Western Ohio, a widely known farmer, stockman, and writer on matters agricultural, uses alfalfa in a regular rotation, and two years before he is ready to sow it on a given field as a main crop, sows clover and timothy along with two or three pounds of alfalfa-seed, for a pasture-crop. Thus the bacteria are introduced, and when the pasture is plowed for the full sowing of alfalfa, the disking and harrowing that follow distributes the bacteria throughout the soil, and the probabilities of a good stand are greatly enhanced. He sometimes sows two or three pounds of alfalfa-seed to the acre with a wheat-crop two years before he is to sow the field entirely to alfalfa.



O. L. Chase
St. Louis, Mo.

I AM the paint man. I have a new way of manufacturing and selling paints. It's unique—it's better. It revolutionized the paint business of this country last year. Before my plan was invented paint was sold in two ways—either ready-mixed or the ingredients were bought and mixed by the painter. Ready-mixed paint settles on the shelves, forming a sediment at the bottom of the can. The chemical action in ready-mixed paint, when standing in oil, eats the life out of the oil. The oil is the very life of all paints. Paint made by the painter cannot be properly made on account of lack of the heavy mixing machine. My paint is unlike any other paint in the world. It is ready to use, but not ready-mixed. My paint is made to order after each order is received, packed in hermetically sealed cans with the very day it is made stamped on each can by my factory inspector.

NOTE—My 8 Year Guarantee Backed by \$50,000 Bond.

I Am the Paint Man

2 Full Gallons Free to Try—6 Months Time to Pay

I Guarantee Freight Charges.

I ship my thick pigment, which has double strength, freshly ground, in separate cans, and in another can, I ship the pure, old process Linseed Oil—the kind you used to buy years ago. Any child can stir them together. I sell my paint direct from my factory to user; you pay no dealer or middleman profits.

My \$100.00 Cash Guarantee

I guarantee, under \$100 Cash Forfeit, that the paint I am offering you does not contain water, benzine, whiting, or barytes—and that my Oil is pure, old-fashioned linseed oil and contains absolutely no foreign substance whatever.

I guarantee the freight on six gallons or over. My paint is so good that I make this wonderful fair test offer:

When you receive your shipment of paint, you can use two full gallons—that will cover 600 square feet of wall—two coats.

If, after you have used that much of my paint, you are not perfectly satisfied with it in

every detail, you can return the remainder of your order and the two gallons will not cost you one penny.

No other paint manufacturer ever made such a liberal offer.

It is because I manufacture the finest paint, put up in the best way, that I can make this offer.

I go even further. I sell all of my paint on six months' time, if desired.

This gives you an opportunity to paint your buildings when they need it, and pay for the paint at your convenience.

Back of my paint stands my Eight-Year officially signed, iron-clad Guarantee.

For further particulars regarding my plan of selling, and complete color card of all colors, send a postal to O. L. Chase, St. Louis, Mo. I will send my paint book—the most complete book of its kind ever published—absolutely free. Also my instruction book entitled "This Little Book Tells How to Paint" and copy of my 8-year guarantee.

O. L. CHASE, The Paint Man.
Dept. 31 St. Louis, Mo.

Another, in a State where the experiment station director still declares alfalfa-raising to be doubtful, writes that he has not had a failure in a decade, and his plan is to precede alfalfa with winter wheat, sowing a little alfalfa-seed with the wheat, probably three pounds to the acre, and the next fall after giving the land a thorough preparation he sows fifteen pounds of alfalfa-seed to the acre. Another reports pleasing results in two different fields by sowing in the spring five pounds of alfalfa-seed with clover; in two years the alfalfa stood thick on the ground, having crowded out the clover. If these plans introduce the bacteria into the soil, it may be wondered why it would not be equally helpful to sow two or three pounds of alfalfa-seed per acre with the oats or millet in the spring, preparatory to the thorough seeding to alfalfa in the fall.

Another man, whose profit in raising alfalfa has been marked, reports that his soil is very waxy and hard to deal with. He has met this trouble by listing his ground in the fall and leaving it thus open for hard freezing throughout the winter. He then disks and cross-disks in the spring, putting the soil in fine tilth, and sowing millet as a preparatory crop. He has occasionally sowed alfalfa in the spring, following the fall listing and later freezing of his ground.

ALL CROPS DEMAND CONDITIONS.

Alfalfa, like corn and cotton, demands certain conditions of the soil and certain constituents in that soil. Every crop demands its certain foods. All crops, except alfalfa and the other legumes, obtain practically all their food, including nitrogen, from the soil. The latter crops use nitrogen, but get it from the air. Alfalfa takes nitrogen from the soil only during the first few months of its growth, and thereafter not only takes its own necessary supply from the air, but a large surplus which it stores in the soil, available for whatever crop may follow. Other crops take much nitrogen from the soil, but contribute nothing to its enrichment.

SPRING OR FALL SOWING—WHICH?

This has been a much argued question with experimenters. Possibly it will be found to be of minor importance in itself, depending more upon other conditions than the season.

From the northern tier of States many reports favor spring sowing, yet from each come letters in favor of fall sowing. Several experiment stations in the South are in favor of spring sowing, yet report satisfactory results from fall seeding. It seems pretty well established, however, that fall sowing is safer in the central latitude States, say including Ohio, Nebraska, Missouri, Kansas, Colorado, and Utah, and States within the same parallels.

In other States prevailing opinions favor spring sowing. Nevertheless, when all conditions are understood, fall sowing seems likely to become the established practice throughout the United States. This is in line with the system for the more staple crops and common rotation; it gives opportunity to bring the ground into better condition; the preparation and sowing come at the most convenient season, and one of relatively greater leisure; there is less interruption by unfavorable weather; the soil, responding more readily to surface cultivation, permits the work to be done with less danger of surface water retarding normal root development, and the annual weeds being dead they can not interfere with the first growth of the alfalfa. Sown in

Best Baker Built

THE
TOLMAN
STEEL RANGE

"Queen of the Kitchen"

SOLD DIRECT from FACTORY at WHOLESALE PRICE

We save you from \$15 to \$40 when we sell you a Hand-Made Steel Range direct from our factory at our low wholesale price, besides we give you the best range on the market. The Tolman Steel Range is the "best baker built," is very economical in fuel consumption, constructed of the best materials money can buy and will give you splendid satisfaction and years of service. We ship any style range and give you one year free decision trial. We prove to you in your own home, at our risk, by actual test, that Tolman Ranges are superior to any range made, and that our way of selling direct at wholesale prices actually saves you money. Don't buy until you get our complete catalog of stoves and ranges. A moment's time and a postal card will bring it to you and save you money. Write for it today—ask for catalog "G."

JUDSON A. TOLMAN CO.,
7738 Woodlawn Ave., Chicago, Ill.

fall, with time to secure some growth for winter protection, alfalfa will be ready to respond to the first call of spring, and for the mower early in June. Moreover, if it fails from freezing or other cause, little crop-time is lost. The farmer has but to disk and harrow in April and May, and sow half as much seed as he sowed in the fall and he will have prospect of a cutting in eighty or ninety days, at an expenditure of but a few pounds of seed and a little labor.

DISADVANTAGES OF SPRING SOWING.

Ordinarily, if a farmer sows in the spring, he has his old enemy, the weeds, to contend with. If the season be damp and cloudy, the alfalfa may not grow fast, but weeds will. Therefore, June may see him mowing to retard a rampant growth of weeds instead of gathering a profitable cutting of prime hay. It is not improbable that he may be doing the same in July or in September, thus losing a whole season. Again, the spring preparation comes when the farmer needs to be working his corn and potato land; hence he is likely to slight or neglect the careful preparation of the alfalfa ground and so do a poor job, with, in such cases, the usual result of a "poor stand." Then, too, the frequent rains interfere with regular disking and harrowing and the weeds may obtain a start the farmer can not check. In most cases fall sowing means three cuttings the following year. In many instances spring sowing means no crop the first season, although better farming will gain a September crop, while the best farming, with no weeds, may give two or three crops; not heavy ones, perhaps, but of no inconsiderable value.

Commenting on spring sowing in the more Northern States, Henry Wallace, editor of Wallace's Farmer, says: "Our own experience in growing alfalfa, both in Nebraska and Iowa, has taught us that it is a waste of time and labor to sow in the spring. If sown in the spring without a nurse-crop, it will have to be mowed twice, probably three times, to keep down the weeds, and even then it will not be in as good condition as if a crop of early corn or even oats was taken off, and the ground put in fine condition and seeded in August.

"In 1904 we sowed in the spring 250 acres of alfalfa on our Nebraska farm, and some twenty or thirty acres of it was washed in ridges by a very heavy rain immediately after. We reseeded the vacant spaces in the fall and later could see no difference between the fall sowing and the spring sowing. We did the same thing on one of our Iowa farms, sowing in the spring, and mowing three times. Another piece was sowed in August. The August sowing was

MORE CORN MONEY

INCREASE Your CORN PROFIT
By Planting Sorted Corn



No idle ground; no missing hills: big yield sure when you sort your seed with this machine.

It all depends upon the stand

We want to show you how you can make more money out of your next season's corn crop. All you have to do is to make sure of a perfect stand—get a uniform number of grains in every hill.

We manufacture the ONLY machine that will sort your seed corn so evenly that your planter MUST DROP a given number of grains every time.

"Morecorn" Seed Sorter does the work. It was put through the most critical tests at Iowa, Illinois and other state fairs. Thousands of corn growers sorted seed with it so perfectly that an edge-drop planter dropped 99 per cent PERFECT three kernels at each drop.

If you can get your corn fields planted like that next year won't it give you the biggest crop of corn that you ever raised? You can do it if you sort your seed corn with the "Morecorn" sorter. It can be done no other way.

No planter has ever been, or ever will be made that can drop an even number of kernels at a drop without the kernels being uniform in size. You cannot get uniform kernels without sorting your corn.

Don't think of planting corn again without investigating the work of the "Morecorn." It will pay for itself twice over every year and last a lifetime if taken care of.

Let us tell you more about it. Write us today.

THE MONARCH SELF-FEEDER CO.,
Cedar Falls, Iowa.

much better than the spring sowing. It should be said, however, that the land was richer and the difference was, therefore, not all due to the time of sowing. So long as Kansas farmers continued to sow their alfalfa in the spring, they had but partial success, owing to the fact that crab-grass and other grasses will come up in the early fall and smother out the spring sowing. By using some other crop the first part of the season, then putting the land in fine condition in the month of August or even by September 1, an alfalfa crop can be started which will have a strong enough growth to smother out the weeds the next spring. "We don't know that we would insist on this so strongly for Northern Iowa and Minnesota, but certainly from the latitude of the Northwestern railroad in Iowa, south, and corresponding latitude in other States, we would abandon spring sowing and sow alfalfa on well-prepared ground in August. We would not, however, plow

(Continued on page 18.)

Home Departments

CONDUCTED BY RUTH COWGILL.

Opportunity.

One searched the town and country through,
In winter's snows and summer's heat,
Nor was there any path but knew
The pangs of his weary feet.
He watched throughout the lingering night,
With lamp well trimmed and door ajar,
And listened lest some footfall light,
Should hint the freakish god afar.

The god came not. But there was one
Who recked not of the fitting days,
Nor any thoughts of deeds undone
Disturbed the tenor of his ways.
He tolled not, sought no goodly prize;
E'en as he slept the god came there
And poured before his dream-dimmed eyes,
His store of treasure, rich and fair.
—F. O'Neill Gallagher.

Opportunity.

Master of human destinies am I;
Fame, Love, and Fortune on my footsteps wait,
Cities and fields I walk; I penetrate
Deserts and seas remote, and, passing by
Hovel and mart and palace, soon or late,
I knock unbidden once at every gate.
If sleeping, wake; if feasting, rise before
I turn away. It is the hour of fate,
And they who follow me, reach every state
Mortals desire, and conquer every foe
Save death; but those who doubt or hesitate,
Condemned to failure, penury, and woe,
Seek me in vain and uselessly implore;
I answer not and I return no more.
—John J. Ingalls.

Opportunity.

Possibly everybody has taken a backward look over the year just finished, and only the most self-satisfied is satisfied with it. He who is satisfied is in a condition where he can not advance; he is stagnated. Contentment is an excellent quality in one's character so long as it pertains to things which one can not make better by his own exertions; but when it is applied to circumstances over which he has control, it amounts to indolence and indifference. The self-satisfied man sees only where his neighbor may improve; observes his neighbor's mistakes and notes his lost opportunities. It is better, however, to look forward than backward, and not dwell upon the mistakes of the past; to make a fresh start with a renewed determination to improve by past experiences, and to embrace every opportunity that presents itself. John J. Ingalls, in his famous poem, declares that opportunity comes but once in a man's lifetime, and long ages before John J. Ingalls some sage remarked the same thing. Perhaps at the time when it was first uttered opportunity was dormant, and only awakened or became active occasionally, but now it is surely different. He not only knocks once, but all the time, and presents himself in some form or other begging to be accepted. If he is not heard, it is because the ears are dulled or the noise of strife is so great that he can not be heard; or perhaps he who hears, like the slug-gard, turns away for "a little more slumber, and a little more folding of the hands in sleep."

Jails and penitentiaries can not bar him from entering. He comes uninvited. He is looking for the willing and ready wherever he may be. John J. Ingalls probably supposed he had made his visit to the occupants of these places before they entered, for he does not mention jails or penitentiaries; but to prove that they are not exempt, I quote the following incident, told by Elbert Hubbard in his paper, The Philistine. This is only one case in many:

"In the Michigan State Penitentiary at Jackson, I saw in a convict's cell three architect's designs tacked to the wall, and on a shelf were several books from the International Correspondence School at Scranton, Pa. 'Is it possible,' I asked Dr. Pray, the prison doctor, 'is it possible that a convict is taking a correspondence course in architecture?'"

"Not only that," was the reply, "but a good many of our men are studying hard to better their mental condition. This particular man has gotten beyond the amateur stage. You see he has been working at this course for three years. He draws plans for us and is doing work for parties outside."

"Then we hunted up the map and found him in the marble shop. He

seemed please to know that I had noticed his work. 'You see,' he said, 'I only work six hours a day for the State, and after that my time is my own and I try to improve it. There are no bowling alleys, pool rooms, nor saloons here—no place to go!'"

"And he smiled. I tried to, but couldn't—my eyes were filled with tears. A convict getting a practical education, and so many of us who think we are free frittering away our time."

He who shuts his ears to the knocking of this visitor, or hearing him lets him pass unheeded, will have fewer and still fewer chances to succeed, for one opportunity improved leads to another until there are more, oftentimes, than one can use. It is as in the story of the talents, the more one uses what he has, the more they will increase. There is no excuse now for any one standing around waiting for something to turn up. The world is full of things waiting to be done. What the world wants is people who can and will do things and do them thoroughly and well, and "whosoever will, may."

Among the Foot-Hills.

CLARA A. GEBHARDT, TRINIDAD, COLO.

Looking down from the rock crest of "Prospect Point," over a stretch of valley of Southern Colorado, what of the view? Purgatory River, like a silver cord, winding its entire length on into the dim unknown distance; "Fisher's Peak" to the southeast, an elevation of 11,000 feet, its sides spotted with clusters of pine and cedar, its snow heights beyond, sun and cloud crowned; "Simpson's Rest" towers like a grim sentinel north of the city of Trinidad, and "Reservoir Hill," a lesser elevation, to the south, all decked with the ever-green verdure of the mountain pine.

Our point of vantage lies to the west of the valley. Away to the south can be seen the smoke of coal and coke camps, the car-line extending thereto lined with the adobe dwellings of the miners. This car-line passes through the little towns of Sopris and Starkville, centers of activity for the workmen. The imposing hospital buildings of the Sisters of Charity nestle on the eastern slope in the outskirts of the city. To our right, fifty miles distant, looms the Snowy Range, and still farther in the rear the Spanish Peaks, the tops in full view, looking like huge pyramids of glistening crystals in the sunlight.

Trinidad, a city of 11,000 inhabitants, climbs from the modern stone depot and large wool mills in the dip of the valley up the slopes in every direction, Commercial and Main Streets intersecting each other midway. Residences palatial, commonplace, rustic, or otherwise are perched promiscuously upon irregular terraces on the hillsides or level at the option of the builders.

The streets are alive with business people, pleasure-seekers, Mexicans, Japanese, Italians, burros, and schoolchildren.

The educational element is in possession of six fine school buildings, with a \$35,000 structure in process of building to accommodate the overflow; while on an eminence, which serves as a landmark—for the tenderfoot from Kansas, stands a large square brick edifice which spells "Business College."

There are seven churches, including two Catholic and a Jewish synagogue, a public library, and five business blocks. The streets look narrow and ill-kept to a Kansan, and squads of men with the stamp of sin upon their faces hover about the entrance of dozens of saloons.

It can not be truthfully said that Trinidad is strictly an up-to-date city in every respect, but she is fast awakening to her opportunities. The thoroughfares and street-car service are under improvement, and pure mountain water is being piped from sixty miles distance.

Howbeit, nature is lavish in her expenditures, the mountain air invigorating, and if one is seeking for a beautiful, rustic, health-reviving resort, let him turn southwest from La Junta and seek it among the foot-hills of the Rockies in Southern Colorado.

Moral Training for Children.

The absolute essentials in moral training may be summed up in two words—obedience and truth. Yet mothers are sometimes overzealous in

the methods they pursue when they cultivate these qualities, says Margaret E. Sangster in the Woman's Home Companion for January. The first is taught tenderly and lovingly, when tiny hands are held away from a forbidden object, and when a little child, by frequent iteration learns the meaning of the word "No." The second, which is the keystone in the arch of character, depends almost entirely on the mental habit and daily practice of the parent. If you are invariably sincere yourself, if you expect truth from a child and never deceive it in any way, your child will be true. Some of us are so literal that we never make allowances as we ought for the vivid imaginations of children in a world where everything to them is new. Both obedience and truth may be taught with the minimum of punishment. Discipline is needful, but harshness is no part of discipline. Alas, parental vanity often keeps pace with parental anxiety, and the first child comes in for an amount of discipline far too deeply colored by severity. Never punish a child in anger or by depriving it of food or by thrusting it into the dark. Terror of darkness is a specter that shadows too many an infantile life. The dark is dear and friendly and sweet if a child has been taught aright. The old notion that a child's will must be broken is worthy of savagery, but not of civilization. The will is not to be broken, but to be trained and guided. If I could persuade every mother who reads this that the object of punishment is to emphasize attention and not to inflict pain, I would rejoice. More and more it has come to be that many children suffer keenly from misunderstanding and injustice, and from the mistaken desire of parents to have them appear models of good behavior, and the whole sum of the matter is an infringement of the rights and privileges of childhood. At best, childhood soon passes. Let us make the child happy while we can.

The Young Folks

Young Women's Christian Association.

Any Young Woman who is planning to come to Topeka, will find peculiar advantages at the rooms of the Young Women's Christian Association, 623 Jackson Street. Rest rooms, reading room and lunch room are at the disposal of all women at any time. A boarding house directory is kept at the rooms, and also an employment bureau, free of charge. On each Sunday afternoon, at 4:15, a gospel meeting held to which all women are invited. The first week of October is the time set for the opening of the club work, and the classes in Bible Study, in English, Parliamentary Law, Sewing, Water Color and Travel. The Gymnasium also opens then, with classes in Physical Training under a competent instructor. The printed announcements will be mailed on application to the General Secretary. A cordial invitation is extended to out-of-town women, especially to make use of the rooms.

Just Keep on Keepin' On.

If the day looks kinder gloomy,
An' your chances kinder slim!
If the situation's puzzlin',
An' the prospects awful grim,
An' perplexities keep pressin',
Till all hope is nearly gone,
Jus' bristle up an' grit your teeth,
An' keep on keepin' on.

Fumin' never wins a fight,
An' frettin' never pays;
There ain't no good of broodin' in
These pessimistic ways—
Smile just kinder cheerfully
When hope is nearly gone,
An' bristle up, an' grit your teeth,
An' keep on keepin' on.

There ain't no use in growlin'
An' grumblin' all the time
When music's ringin' everywhere
An' everything's a rhyme—
Jus' keep on smilin' cheerfully
If hope is nearly gone,
An' bristle up, an' grit your teeth,
An' keep on keepin' on.

—New Orleans Times-Democrat.

A Hunt in the Bad Lands.

"Bang!" The smoke cleared from the muzzle of Jack's rifle, and he saw the mountain sheep tumble over the edge of the precipice and fall into one of those deep pockets so frequently found in the depths of the Bad Lands. Jack and Tod had been out for three days and their knapsacks were almost empty. They were forty miles from the nearest ranch or Indian camp. This sheep was the first they had seen on their long tramp. They must secure the game. By precarious climbing from peak to wall they finally reached the top of the narrow tooth-like ridge on which the animal was standing when shot. The hunters looked down into the chasm whose walls were inaccessible.

"Get your rope ready, Jack," said Tod, "I am going down after him." Jack unwound the small rope about fifty feet long which he carried over his shoulder. Tod tied one end around

A MATTER OF HEALTH



ROYAL
BAKING POWDER
Absolutely Pure
A Cream of Tartar Powder,
free from alum or phosphoric acid

HAS NO SUBSTITUTE

INVEST YOUR MONEY — IN A — BUSINESS EDUCATION

By doing this you acquire a working capital that no one can take from you.

The Northwestern Business College

of Beatrice, Nebraska, offers the young man or woman a splendid opportunity to obtain a practical business education at a nominal cost. Fill out the following blank and mail them for their catalogue.

Northwestern Business College,
Beatrice, Nebr.

Kindly mail me your catalogue No. A., which tells all about your college.

Name _____

Address _____

The Kansas State Agricultural College

OFFERS courses in Agriculture, Domestic Science, General Science, Mechanical Engineering, Electrical Engineering, Architecture, and Veterinary Science. Also short courses in Agriculture, Dairying, and Domestic Science. Admission direct from the country schools. A preparatory department is maintained for persons over eighteen. Necessary expenses low. Catalogue free. Address

PRES E. R. NICHOLS,
BOX 50, MANHATTAN, KANS.

WRITING AT YOUR HOME



HELP WANTED

We want help in every neighborhood in the United States to do some writing at home, which any person can do during spare time, and we will pay cash for it. We supply an OFFICE OUTFIT for you to have in your home to work with, which includes this handsome

WRITING DESK,

just what you want to keep the work in. You can earn a few dollars or a lot of money, according to the time you devote; any person can do it, no matter

where located, and it is very interesting work. If you can do a little writing for us, send your address on postal for full particulars and see how profitable it is. Do it now before someone else gets the position in your locality. Address,

F. B. Mills Co., Seedsmen, Rose Hill, N. Y.

his waist, and Jack, bracking his feet, began to let Tod down. By the time the entire rope had passed through Jack's hands they were on fire. Tod looked down and saw that he was not over half way to the bottom of the dark mountain pocket.

"Pull me up, Jack," yelled Tod, "the rope is too short. Get me out of here quick, before you let go."

Jack was so nearly exhausted he could not raise his companion one time hand over hand. The loose shale was breaking from under his feet. Suddenly Jack slipped.

Tod shot downward at one end of the rope with Jack sprawling head over heels at the other end. They both crashed into the boughs of a tall cedar. The boys half climbed, half fell on down the tree to the ground. Their handkerchiefs were soon torn into bandages for their bleeding arms and legs.

The gash in Nature's face into which they had fallen was well covered with pines and cedars. The sheer walls on all sides shut in the whole view of the great outside world except a tiny bit of blue sky directly above. The entire floor of the mountain pocket was less than an acre in extent. Jack heard a trickling noise on the opposite side. He threaded his way through the deep underbrush, and there he discovered a minute stream of water running over the ledge above, dropping to the floor beneath, and winding its way in and out through a crevice in the rocks. By this time Tod had found the mountain sheep. With a single match which Jack found in the lining of his vest pocket, he started a fire. Soon they were each roasting a piece of meat in true Indian fashion. After they had eaten their frugal supper, Jack gathered enough pine needles for a bed. One bed was all that was necessary, for while one slept the other kept the fire going. They knew well that should the fire go out, they would go hungry.

The next morning after breakfast the boys explored the mountain fastness for some means of escape. The walls were too perpendicular for them to scale. Throughout the day at intervals they shot their rifles in hopes of attracting the attention of some straggling hunter. At the end of the third day Jack said, "Here goes the last shell. If no one hears the report I don't know what we will do."

"Bang," the report rang out on the deathly stillness. They listened. No answer came.

During the night while Tod was watching the fire he fell asleep and the fire went out. When they awoke next morning they had nothing cooked for breakfast. The meat was beginning to spoil, and moreover both were sick for lack of change of diet.

Jack had never heard Tod pray before, nor could he remember the time when he himself had done so. But he was not surprised when Tod said, "Jack, what do you say, old boy, about all I can think of is to pray right out loud like good fellows. Are you in?"

"Let her go," answered Jack. "I'm in on the deal."

Tod began, "O Lord," when a shot pierced the air directly above their heads and a huge mountain lion crashed through the trees and fell limp and lifeless at their feet.

"How—how—how—How—oh—How oh," followed by a jargon of voices, rang out on the still air.

Jack looked up and saw an Indian coming over the wall at the end of a rope, while on the ledge, holding the other end of the long rope were six other redskins. The Indian was terror-stricken when he reached the ground to find the white boys. But they soon made him understand what they wanted. He tied them fast to the end of the rope and yelled a signal to his companions.

When Jack and Tod, with the Indian and the lion, were all safely on top, they joined in the feast and Omaha dance as fast as their famished bodies would permit.—Harry Carlton Green, in *The Indian School Journal*.

The Boy Who Takes Pride in His Work.

"Don't that look just fine?"

It was no vain conceit that made a certain boy say these words one day last summer. His blue eyes were shining with honest pride because of the perfectness and trimness of the small garden he had finished weeding and hoeing. Three days before the garden had been completely overrun with weeds and grass. Some of the grass had been of the variety called "wire-grass," and if you have ever tried to hoe out or pull up grass of this kind you know as well as that boy knew, that it is mighty hard grass to tackle.

But this boy had tackled it with his teeth set and a determination to rid that garden of every spear of it, and it had disappeared root and branch. He was a small boy of French Canadian parentage whom the farmer with whom I was spending some weeks had hired for the summer, and only that day the farmer had said to me:

"I never saw a boy take so much pride in his work as Louis does. That boy will get along all right in the world. He is not only so very industrious, but he is so thorough. Everything I give him to do is done just as well as it is possible to do it. He never gives anything a lick and a promise."

Give me a boy noted for being industrious and who takes so much honest and manly pride in his work that nothing but perfection will suit him and I shall feel that I am safe in prophesying a successful future for that boy.

There is something fine and manly in the boy who takes pride in his work, who feels that it is a reflection on his character to be lazy, and who likes to put an "A one" mark on all that he does.

I remember that I once happened to be near two boys who had each been given a certain task to do. I do not know how long they had been working on it, but presently I heard one of them say to the other:

"There, Joe, that will do. It looks good enough."

"No it doesn't," the boy called Joe replied. "I'm not going to leave mine until it looks a good deal better than it looks now. I'm no slouch."

Good for Joe! The boy who sets out in life determined that he will not be a "slouch" is on the right track. Slouchy work will not pass muster in these days. If you have slouchy tendencies, boys, you'd better get rid of them just as soon as possible. Let a man acquire the reputation of being a "slouch" and he is a goner. No man wants a "slouch" around, and no man with a particle of honest, manly pride will be a person of that description. Pride in one's work, no matter what that work may be, is a tremendous help to success in life.—J. L. Harbour, in *The American Boy*.

The Little Ones

A Game of Tag.

Little Jack Frost ran out one day, And called to the brook to come and play.

"Let's play tag, and you must run, And I'll be it, and we'll have fun. Old Father Winter will think I'm lost, Hurrah!" cried little Jack Frost.

So the brook ran with merry shout, And Jack at her heels in merry rout. Down through the fields, so brown and bare,

And to the woods with piny air, Past mighty boulders so gray and mossed,

The brook led little Jack Frost.

O and alas, how tired she grew! And slow and more slow her light feet flew.

Panting hard she still ran on, Then reached the wide marsh, still and wan,

Paused for a moment and then was lost.

"Hi! tag!" cried little Jack Frost.

—Florence Evelyn Pratt.

Cooters as Pets.

"Guess what I brought for you, Boyce." Annie held up a small spool box as she spoke and there were a number of little holes punched in each end of it.

Boyce tried hard to think as he looked it over carefully. "Shake it," he said at last. "Does it rattle?"

But Annie only laughed and said he must guess without rattling. Then he cried "shells," for Annie lived on the Carolina coast and had given him a great many very beautiful ones.

"No," she said, laughing again. "It isn't shells," and she held the box quite close to his ear and kept it very still.

Boyce's eyes grew big with wonder; he could hear ever so many little scratch-scratch scratches going on inside. What could it be?

Then Annie laughed and raised the lid and he cried "Oh! Oh! Oh! For there, in the bottom of the box, were seven of the queerest little things he had ever seen in all his life. They were not as big as a silver dollar, rounded up somewhat like the half shell of an English walnut, and of a beautiful light green color, all criss-crossed over with dark streaks. They had feet—two little dark knobs poking out on each of the green shells, a tiny pointed tail stuck out of one end of



Simpson-Eddystone Solid Blacks

Fabric, color, and good appearance that endure. The standard for effective black costumes or mourning dresses.

Ask your dealer for Simpson-Eddystone Solid Blacks.

Three generations of Simpsons have made Simpson Prints.

The Eddystone Mfg. Co. (Sole Makers) Philadelphia.



YOUNG MAN

YOUNG WOMAN

—ATTEND THE—

Lawrence Business College,

LAWRENCE, KANSAS.

We give you a right start. Thousands of successful men and women secured their training in our school. The Oldest Business College in the state. It helps to secure positions. It helps to hold them. Our graduates are always in demand. No business college in Kansas has a better reputation for thoroughness and general excellence. For free copy of the finest catalogue published by any business college in the west, address

Lawrence Business College,

Lock Box F.

Lawrence, Kansas

LINCOLN BUSINESS COLLEGE

THE FARMER BOY of today is the successful business man of tomorrow. A business college education is the key to success. If obtained at the proper school it can be easily and quickly acquired.

OUR SCHOOL has graduated hundreds of young people during the past few years and they are in good paying positions. We will help you succeed. Write for catalogue \$3. It is free.

Thirteenth and P St., LINCOLN, NEBRASKA

The University of Kansas

.....Lawrence, Kansas.....

Equipment of grounds, buildings and apparatus now valued at \$1,225,000.

Campus of 170 acres; thirteen large buildings with a \$100,000 Gymnasium in course of erection. Seven Schools: Graduate; The College; Engineering (civil, electrical, mechanical, mining, chemical); Fine Arts, Law, Pharmacy and Medicine.

FACULTY OF 90 GIVE FULL TIME TO INSTRUCTION.

Over 100 eminent specialists lecture before the students of Medicine.

SEVENTEEN HUNDRED AND SIX STUDENTS IN 1905-06.

Catalogue and other information may be had by addressing

The Chancellor or Registrar, Lawrence, Kansas



St. Joseph's Best School. Equipment unsurpassed. Endorsed by the prominent business and professional men of the city. Positions secured for graduates. Catalogue free. By our plan you can live here cheaper than at home. A. R. WHITMORE, Principal - - ST. JOSEPH, MO.



\$80 TO \$175 PER MONTH

For Firemen and Brakemen, Experience unnecessary. Instructions by mail to your home. High wages guaranteed; rapid promotion. We assist you in securing a position as soon as competent. Send to day. Full particulars at once. Inclose stamp.

NATIONAL RAILWAY TRAINING SCHOOL, Inc.,

Room 612 Boston Block.

Minneapolis, Minn., U. S. A.



Established in 1879; thousands of students employed; the most thorough instruction; fine catalogue free.

E. E. GARD, Prop., 811 Edmond St., St. Joseph, Mo.

NORMAL COMMERCIAL SHORTHAND TELEGRAPHY

961 Annual Enrollment. POSITIONS SECURED or tuition refunded. Car Fare Paid by the school. Send for full information and free catalogue. State course desired. Allen Moore, Chillicothe, Mo.

Topeka Business College

The School that always gets you a good position in

BOOKKEEPING SHORTHAND TELEGRAPHY CIVIC SERVICE or PENMANSHIP.

Address

TOPEKA, KANSAS.



STANNARD'S PROCESSED CRUDE OIL Kills Lice and Cures Mange. There is no Remedy on the Market as Good or as Cheap. It not only kills all lice on cattle and hogs, but all nits, and one application does the work. Does not injure hair or skin. Can be used in vats or with brush. Also kills lice or mites on chickens. Put up in new 52-gallon barrels and sold for \$5 per barrel. I have used nearly all dips on the market and I say to you, from experience, this oil is better and more effective than any of them. Why pay \$50 per barrel when you can get a better article for \$5? I also sell a heavy Pure Crude Oil as it comes from the well that is a good lubricating oil, 52 gallons for \$3.50; an excellent grease to keep plow-shares and cultivating-shovels from rusting. Try these oils and you will always use them. When ordering, state plainly whether you want the Processed Oil or the Pure Crude. Send remittance with order. C. A. STANNARD, Emporia, Kans., Sunny Slope Farm. Please mention Kansas Farmer.

it, and a cunning snout-like head at the other.

"They are cooters, little cooters," said Annie. "Aren't they darlings?" She said the first part of "cooter" like she was going to say "cook," that is the way they pronounce it where she lives.

Then she had Boyce bring a shallow pan with some water in it, and she piled bits of rock half the size of a man's fist in the middle and put all the seven little cooters into the pan.

When she took them up between her thumb and finger, in went all the head, the tail, and all the dark little knobs as quickly as a flash.

She laid one of them in Boyce's chubby hand. How queer it was! A flat white shell underneath and a rounded green one on top, the two fitting just as snugly together as a lid and a box. Boyce turned it over, but it didn't open a bit, and there wasn't any sign of a knot anywhere about it.

—M. S. Clifford, in *Pets and Animals*.

Club Department

OFFICERS OF THE STATE FEDERATION OF WOMEN'S CLUBS.

President.....Mrs. May Belleville Brown, Salina
Vice-President.....Mrs. L. H. Wishard, Iola
Cor. Secretary.....Mrs. N. I. McDowell, Salina
Rec. Secretary.....Mrs. W. D. Atkinson, Parsons
Treasurer.....Mrs. H. B. Asher, Lawrence
Auditor.....Mrs. Grace L. Snyder, Cawker City

Our Club Roll.

Excelsior Club, Potwin, Kansas, (1902).
Women's Literary Club, Osborne, Osborne County, (1902).
Women's Club, Logan, Phillips County (1902).
Domestic Science Club, Osage, Osage County (1902).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1902).
Challaco Club, Highland Park, Shawnee County (1902).
Cultus Club, Phillipsburg, Phillips County (1902).
Literateur Club, Ford, Ford County (1902).
Star Valley Women's Club, Iola, Allen County (1902).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1902).
Fortnight Club, Grant Township, Reno County (1902).
Progressive Society, Rosalia, Butler County (1902).
Pleasant Hour Club, Wakarusa Township, Douglas County (1902).
The Lady Farmer's Institute, Marysville, Marshall County (1902).
Women's Country Club, Anthony, Harper County.
Richardson Embroidery Club, Madison, Greenwood County (1902).
Frontis Reading Club, Cawker City, Mitchell County (1902).
Cosmos Club, Russell, Kansas.
The Sunflower Club, Perry, Jefferson County (1902).
Chaldean Club, Sterling, Rice County (1904).
Jewell Reading Club, Osage County.
The Mutual Helpers, Madison, Kansas (1906).
West Side Study Club, Delphos (1906).
Domestic Science Club, Berryton, Shawnee County (1906).
Mutual Improvement Club, Vermillion, Marshall County (1906).
Centralia Reading Circle, Nemaha County.
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

Program.

Responses to roll-call—Items of interest.

- I. Beginnings.
- II. Latest scientific discoveries.
- III. Child labor.

I. This is an appropriate subject for the beginning of the year and may be treated in various ways. It could be used as the subject of a paper upon the rearing of children, showing the importance of having them started right in life, and the best means to be used. Treated in a general way the paper might pertain to the beginnings of great achievements of any kind, using examples in history and biography to illustrate.

II. This paper will require some reading on the part of the one to whom it is assigned, but it will be very helpful especially to the writer.

III. This last subject is one that is stirring the hearts of the Nation, and material is not difficult to procure. It may be read from some magazine, or better still, a comprehensive study may be made of the subject and a concise and vivid portrayal of existing conditions reproduced and read and discussed.

Anti-Trust.

The Kansas anti-trust law is iron-clad and far-reaching. It has stood the test of the courts on its constitutionality. It has been introduced in the Oklahoma convention that is framing the fundamental law for the new State as the basis for its provisions on the trust question. Following are the provisions introduced:

Section 1. A trust is a combination of capital, skill, or acts, by two or more persons, firms, corporations, or associations of persons, or either two or more of them, for either, any, or all of the following purposes:

First, to create or carry out restric-

tions in trade or commerce, or aids to commerce, or to carry out restrictions in the full and free pursuit of any business authorized or permitted by the laws of this State.

Second, to increase or reduce the price of merchandise, produce, or commodities, or to control the cost or rates of insurance.

Third, to prevent competition in the manufacture, making, transportation, sale, or purchase of merchandise, produce, or commodities, or to prevent competition in aids to commerce.

Fourth, to fix any standard or figure whereby its price to the public shall be in any manner controlled or established, any article or commodity of merchandise, produce, or commerce intended for sale, use, or consumption in this State.

Fifth, to make or enter into, or execute or carry out, any contract, obligation, or agreement of any kind or description by which they shall bind or have to bind themselves not to sell, manufacture, dispose of, or transact any article or commodity, or article of trade, use, merchandise, commerce, or consumption below a common standard figure; or by which they shall agree in any manner to keep the price of such article, commodity, or transportation at a fixed or graded figure; or by which they shall in any manner establish or settle the price of any article or commodity or transportation between them or themselves and others, to preclude a free and unrestricted competition among themselves or others in transportation, sale, or manufacture of any such article or commodity; or by which they shall agree to pool, combine, or unite any interest they may have in connection with the manufacture, sale, or transportation of any such article or commodity, that its price may in any manner be affected.

Sec. 2. Any such combinations are hereby declared to be against public policy, unlawful, and void.

Sec. 3. All persons, companies, or corporations within this State are hereby denied the right to form or to be in any manner interested, either directly or indirectly, as principal, agent, representative, consignee, or otherwise, in any trust as hereinbefore defined.

Sec. 4. The Legislature shall pass such laws from time to time as may be necessary to secure the enforcement of the constitutional provisions.

"Well, Tommy," said the visitor, "I suppose you like going to school?"

"Oh, yes," answered Tommy. "I like goin' all right, and I like comin' home, but it's stayin' there between times that makes me tired."

Cancerol Permanently Cures Cancer and Tumor.

No pain. No scar. No experiment. Convincing book will be sent on request. Address Dr. L. T. Leach, Indianapolis, Ind.

A narrow waist and a narrow mind go together.

Food to work on is food to live on.
A man works to live. He must live to work.

He does both better on

Uneeda Biscuit

the soda cracker that contains in the most properly balanced proportions a greater amount of nutriment than any food made from flour.

Uneeda Biscuit

NATIONAL BISCUIT COMPANY

5¢

Bull Dog

SUSPENDERS

MODEL B

50¢



OUR NEW MODEL "B"

BULL DOG SUSPENDERS

WILL HELP YOU TO FORGET YOUR SUSPENDER TROUBLES
THEY OUTWEAR THREE ORDINARY KINDS

ARE COMFORTABLE, DURABLE, ECONOMICAL AND
SATISFY AS NO OTHER TROUSER SUPPORT CAN

TRY A PAIR. MONEY BACK IF THEY DON'T SATISFY

NEW MODEL "B" are made with a simple, sliding back, strong cord ends that don't fray out or wear through, sliding cast offs, easily adjusted, non-rusting girth buckles and mountings, and the web have wear and service more than any other suspender made.

THEY WILL FIT ANY MAN OR BOY

Made in light or heavy weights for man or youth—Extra long for big men, or extra heavy if you need them, at no extra cost.

IF YOU WANT THE BEST TROUSER SUPPORT MADE
ASK YOUR DEALER FOR BULL DOG SUSPENDERS.
IF HE CANNOT SUPPLY YOU, WE WILL, POSTPAID, FOR 50c.

HEWES & POTTER

LARGEST SUSPENDER MAKERS IN THE WORLD

Dept. 40 87 Lincoln St., Boston, Mass.

Our useful BULL DOG SUSPENDER COME AND GONE mailed for 10c. postage. Instructive booklet, "Style, or How to Dress Correctly," free if you mention this magazine.

WICHITA OIL GAS BURNER

Patent Pending



Adapted to any heating stove or furnace; using light crude oil for fuel; makes its own gas at half the cost of coal. Clean! Steady! Nonexplosive! No coal to carry in; no ashes to carry out. We install and guarantee this burner without cost to you.

We want district managers in every county in the United States. Call and see practical demonstrations at our office.

Wichita Oil Gas Burner Co.,

ROOM 19, SHEETZ BLDG., WICHITA, KANS.

Alfalfa—Soil and Seeding Variate, Yet Uniform.

(Continued from page 15.)

the ground for this fall sowing, but out the soil in first-class condition for a spring crop, then use a disk and harrow for the fall preparation."

SEEDING BY DRILL OR BROADCAST?

Here, too, there is a variety of opinions, all based on experience. Those who object most to the drills may have used poor implements with feeding gears not well regulated, or possibly they have not known how to use the drills. Many who object to the broadcast method have had little training or skill in it. It is reasonable to suppose, however, that given soil in fine tilth, and a good drill, rightly adjusted, there will be a more even, and hence a more economical distribution and better and more uniform covering of the seed. It is also claimed that drilling secures a more uniform distribution of soil moisture. The general opinion is that by sowing with a drill, properly regulated, one can safely use five pounds less of seed per acre. Some alfalfa-raisers use a wheelbarrow seeder; others use a kind of swing seeder strapped to the sower's body; still others, who have had training in the old-fashioned method of broadcasting, declare it the best, but the experiment stations of practically all the States, and most up-to-date farmers favor the use of the press drill. A very common method when using the drill is to mix an equal quantity of wheat-bran, corn-meal, or alfalfa-meal with seed, as aids to an even distribution and a not too excessive seeding. At the Kansas Agricultural farm, success has followed broadcasting; and when the drill has been used no particular advantage from cross-drilling was discovered.

HOW MUCH SEED TO THE ACRE?

Reports of seed sown, varying from six to sixty pounds to the acre, indicate much ignorance of the nature of the alfalfa-plant; or a great recklessness and extravagance. Twenty pounds to the acre, if all seeds germinated would mean 2,500,000 to 3,000,000 plants, whereas a stand of 500,000 is ample. Most of the experiment stations favor twenty to thirty pounds to the acre, although several experts at these stations insist that fifteen pounds of clean, germinable seed to the acre is as much as should be sowed. Even if these all grew, it would give nearly forty-four plants to the foot square of land, or four or five times as many as would thrive after two years old. Of course the quantity may depend upon a variety of circumstances, such as the fertility of the seed, condition of the surface soil, condition of the subsoil as to moisture, the method of sowing, weather conditions at the time of sowing or immediately after, also the natural fertility of the soil and the bacterial life present, or at least the conditions for propagating or sustaining bacterial life. With land prepared by sowing a few pounds of seed six months or a year preceding, with a heavy application of stable manure plowed under six months before, perfect soil preparation, normal moisture, and clean seed, testing 90 per cent germinable, there should be no need for more than ten pounds to the acre. Disking that the field should have later will split the crowns and many new stalks will be sent up, so that in a few years a square foot of surface will not accommodate more than six to ten robust, vigorous plants, and having these, the ideal stand has pretty nearly been attained. One plant has been known to send out as many as 360 branches from a single main root, resembling in form a spreading bush. A successful farmer in Geary County, Kansas, who has been raising alfalfa twenty years, seldom sows more than six pounds of seed to the acre and never more than ten. A prominent Ohio farmer usually sows but ten and never over twelve or fifteen pounds to the acre, although he has always introduced alfalfa bacteria into the soil one or two years before ready to give it a full seeding. Of strictly good seed, well cleaned, twelve pounds would likely be too much rather than too little, other conditions being right.

WITH OR WITHOUT A NURSE-CROP?

The practise of sowing a nurse-crop with alfalfa was inaugurated when the nature of the plant was not as well understood as now. It was also somewhat on the theory too, that, "A half loaf is better than no bread." It began when there was a good deal of doubt about getting a "stand," and the farmers thought, no doubt, that a crop of oats or barley would pay for the plowing even if the alfalfa failed. While the practise is continued by

many, the prevalent later method is to provide no nurse-crop. Few who have abandoned the nurse-crop have returned to it. The alfalfa-plant does not need protection from the sun, nor is it bettered by dividing any of the soil moisture or fertility with those of another crop. On the other hand, if the alfalfa is sowed in the spring it is important that it obtain an early start in order that its roots can quickly work their way down into the moisture of the subsoil against the dry days of July and August. When a nurse-crop of any vigor is removed, the alfalfa-plants are likely to be found weak, spindling, and with little root growth; the nurse-crop also has taken up some of the soil nitrogen needed by the young alfalfa; or if the nurse-crop is heavy and has lodged, there will be left bare spots where the alfalfa has been smothered out.

Cutting the nurse-crop is likely to be attended with no little damage to the tender alfalfa-plants by trampling their crowns into the ground, or by breaking them off. Practically all the experiment stations favor sowing alone. With few exceptions the second and third years have brought heavier yields where no nurse-crop was used. The theory that the nurse-crop will prevent the weeds choking the alfalfa is apparently, as a rule, not well founded. In the first place, alfalfa should not be sown on foul land, and in the second place, proper disking and harrowing, at near intervals for four or six weeks before sowing, will disturb or kill far more weeds than can any nurse-crop. Besides, the oats or barley sown as a nurse will, when cut, leave weeds in good growth, or dormant and ready to spring up as fast or faster than the alfalfa. No nurse-crop is ever used with fall sowing. When ground has been thoroughly prepared for the preceding crop, and then properly cared for, and made ready for the alfalfa, by the preliminary weed destruction, it will be found advisable to sow alfalfa alone, even in the spring.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.

All things being equal, the large animal consumes exactly in proportion to size.

In horses large nostrils indicate good breathing power, good lungs, and good constitution.

Improper feeding is the cause of nine out of ten cases of sickness among horses.

Any kind of live stock will depreciate in value when cut short in its rations.

In nearly all cases, young growing animals pay much better for feeding than those fully matured.

In applying manure, it is always an item to keep it as near the surface as possible.

No matter what the business is, it needs and must have close attention to result in success.

As a rule, the finer the manure and the more evenly distributed the more accessible it is to the crops grown.

The difference between a good and an inferior caretaker is everything in the matter of success or failure in cattle-feeding.

Physical and intellectual faculties to be permanent must be fixed by transmitting from parent to progeny through a series of generations.

Valuable as the clover-crop is, the roots reaching down into the subsoil are worth quite as much for increasing fertility as the top.

Variety of live stock on the farm quite as much as variety of cropping is a source of wealth accumulation in the holding.

In order to make good beef and make it early, steady feeding of the most suitable food from the very first is absolutely necessary.

Choice goods always bring choice prices, and the clear profits in farming lies in the matter of sifting the trade and getting the best prices going.

With all stock a sudden change from liberal feeding and good shelter to poor fare and no shelter and a great increase of exertion will tell unfavorably in almost every case.

Labor is most effective when directed by intelligence and thought, and a combination of muscle and brain will do more and accomplish more than anything else.

A heavy growth plowed under every few years puts new life into the soil and adds so much to its fertility that its benefits are visible for several crops.

For rooting, the best cutting of a plant is a shoot of new growth before it grows at all fibrous, but when it will snap off clean without strings,

PEEK & PUTMAN'S

Sale of Durocs

TECUMSEH, NEB., JANUARY 23, 1907.

50—HEAD—50

Every one a topper. Two gilts by Ohio Chief bred to Hanley Jr. a son of the great prize winner, and Tip Top Notcher Jr., one of the best sons of the king of Durocs, Tip Top Notcher, the \$5000 boar; Crimson Bell by Crimson Wonder, bred to Beautiful Joe; Banners Top 119100 by Tip Top Notcher and bred to Kant Be Beat; one gilt bred to Higgins Model, one to Billy K., bred to Tom Davis, the first prize boar under 6 months at Iowa and Nebraska State Fairs this year, and a score of others as well bred, are to be sold in the sale. Every thing will be a top notcher and worthy to into any herd in the country. Catalogues now ready.

C. E. Shaffer of the Kansas Farmer will be at this sale and bids may be sent to him.

PEEK & PUTMAN,

Tecumseh

Nebraska

Col. L. W. Leonard, Auctioneer.

Breeders Shorthorn Sale

State Fair Grounds, Topeka, Kans., Jan. 9, 1907,

DURING THE

Kansas Improved Stock Breeders Association Meeting

40 Head of Choice Breeding Cattle

Contributed by the well-known breeders, C. W. Merriam, Topeka; H. W. McAfee, Topeka; H. E. Huber, Meriden; A. F. Huse, Manhattan; J. W. Ferguson, Topeka; David G. Page, Topeka. The cattle are good ones and carry the blood of Lord Mayor 112727, Violet Prince 145647, Prince Consort 187008, Mayor Valentine 224391, Imp. Prince of Perth 153879, Duke of Scott 159579, Mayor 129229, Valentine Stone 207939, and others equally good. Several pure Scotch bulls will be included in the sale, Butterfly, Phyllis, and other choice families.

Special low rates on all railroads. Terms of sale are cash except where otherwise arranged with owner.

Auctioneers: Col. Lefe Burger, Wellington; Col. Chas. Crews, Topeka; Col. Geo. R. Hungate, Topeka.

I. D. GRAHAM, Manager
Topeka, Kansas.

JOHN D. SNYDER,

Live Stock Auctioneer, Winfield, Kansas

I have made a life study of the different Pure Breeds of Horses, Cattle and Hogs. Have a wide acquaintance with breeders. Am thoroughly posted as to the best methods employed in the management of all kinds of sales. Have booked dates with the best breeders in Kansas, Missouri and Oklahoma. Will help you in arranging for your advertising. Write or wire me before claiming dates.

When writing our advertisers please mention Kansas Farmer

Dairy Interests

Dairying on High-Priced Land.

ADDRESS BY DR. JAMES WITCOMBE AT THE MEETING OF OREGON DAIRYMEN'S ASSOCIATION.

Economy of production is the motto of the exponent of dairying on high-priced land; or, in other words, the economy of high-priced land means the ability of the owner to secure maximum crops therefrom. Successful dairying is a pursuit that is cumulative in its effects; that is, within certain limitations the longer dairying is practised the greater means of production are provided. Herein lies the foundation for the statement, "the cow fattens the land." Under proper management she is certainly not a soil robber. A good cow generously fed will not only yield a handsome direct profit, but, if the by-product is properly conserved and applied to the land, three-fourth of the value of the food she consumes will be recovered in the form of plant-food. She is indeed a veritable gold mine.

It is a self-evident fact that to dairy successfully on high-priced land, it must be practised in the most modern fashion. When we refer to high-priced land we mean land worth all the way from one hundred to two hundred dollars per acre. Ordinary methods of dairying will not suffice on such land. Common cows with indifferent care would be out of place here. Even the usual system of pasturing would scarcely be profitable. Soiling should take the place of the pasture, thus maintaining three or four times more cows to a given area. Conditions are highly favorable for soiling over a large portion of Oregon. There are few winters in which green feed can not be secured in the open field all winter, west of all Cascade Mountains. This means an unbroken supply of succulent feed throughout the year. To reach this, however, the dairyman must plan a rotation that is in harmony with his environment. In alfalfa-growing sections this is an easy matter, as this forage-plant, when properly established, can be relied upon for furnishing green succulent feed for at least five months without any thought of the dairyman as to seeding or cultivation.

For Western Oregon several rotations are feasible. Perhaps the one most generally applicable to a wide range of conditions consists of vetch and rye, alfalfa, corn and kale. This rotation in an ordinary season will furnish green succulent feed the year 'round. The rye and vetch should be sown early in the fall on heavily fertilized ground. An acreage sufficient only to feed the head for two weeks should be sown of this mixture. After the rye is headed out it becomes unpalatable and is largely wasted. We advocate sowing rye with vetch for early feed from the fact that rye will grow under a lower temperature than is favorable for any other cereal, hence will grow nearly all winter and thus protect the vetch. The result is that this mixture, in an average season, will be ready to cut by the middle of April. About May 1, the alfalfa will be ready to cut. There will be three or four cuttings of this. After the alfalfa is done the early corn will be ready and then the kale, which will furnish succulent feed through an average winter and early spring, or until the vetch and rye are ready to cut.

To illustrate the possible production of cow feed from twelve acres, the following rotation and acreage are given: One acre of rye and vetch will yield ten tons of green feed and the land can be planted to corn after the spring crop is harvested and will yield five tons of forage. The two acres of alfalfa, when well established, will yield at least three cuttings, yielding in the aggregate forty tons of green feed. Two acres of fodder corn will yield twenty tons. Four acres of vetch and oat hay will yield sixteen tons. Two acres of kale will yield sixty tons, and one acre of barley will yield sixty bushels of barley and two tons of straw for bedding. This in the aggregate will give 135 tons of green feed, sixteen tons of hay, a ton and a half of barley, and two tons of straw. This is sufficient rough feed to supply fifteen cows for one year. By purchasing thirteen tons of mill feed, at a cost of \$325, the whole amount of feed required for a herd of fifteen cows for one year will be supplied. A good cow should yield a gross return of \$100 annually. Thus the ten acres can be made

to return \$1,175, annually for labor and investment.

This result may not be reached for the first few years, but with a careful selection of the herd and a thorough conservation of the by-products of the farm, even better results may be obtained.

In dairying, as in any other vocation, the personal equation of the dairyman is an important factor. Every phase of the industry must be conducted upon modern business principles. There may be, and doubtless there is, a good field for the dual-purpose cow, but not on high-priced land. The special-purpose cow is the only cow that should grace the intensive dairy-farm.

Every detail of the industry must be mastered. A full measure of cleanliness and comfort should be provided for the cows, which means that the rigid stanchion should be regarded as a relic of barbarism. The barn need not be an expensive one, but it should have plenty of light and good ventilation. Under the soiling system the cows are in the barn a goodly share of their time, thus the sanitary conditions of the building should be good.

There is no class of farming where kindness and punctuality will receive a greater reward than on the dairy-farm. The modern cow is an exceedingly complicated piece of animal mechanism. Hence for best results her guardian should by all means possess an amiable temperament. Harsh treatment will ruin any high-class herd.

It is generally conceded by observant dairyman that a cow which freshens in the fall will yield 25 per cent more profit than if she freshened in the spring. Thus from a financial point of view the bulk of the herd should freshen in the fall. Considerable depends also upon the management of the cow at the beginning of lactation. When the time for maternity approaches the cow should be placed in a clean box stall, nights. After the ordeal is over the little calf should not be permitted to remain with its dam over six hours, twelve hours at the very outside limit. This is an important item in the management of the cow. It is the opinion of many up-to-date dairymen that every day a calf is allowed to remain with its dam, up to a certain limit, it decreases the annual value of the products of the cow \$1. The cow should be fed very sparingly with concentrated feeds for several days. When she begins to regain her normal condition and the udder becomes soft and pliable, the ration of milk feed should be gradually increased until a full feed is reached.

There is no question but dairying can be made profitable on very high-priced land, but to reach maximum profits every detail of the industry must be carefully observed.

This active, pulsating, living piece of mechanism—the modern cow—is the emancipator of poverty and the harbinger of peace, prosperity, and civilization; thus henceforth let us give the place of honor to this gem of the farm.

Advice for Beginners in Dairying.

At the risk of being a little tiresome on the subject of making up a herd of good cows, let us tell the young beginner a few of the things he should not do. This is the side of that question he will get the least advice on, while it really is the most important. In the first place, don't try to buy them—they are not for sale. No man will sell his best cows for what they are worth. You must pay a higher premium for them, and that is making a bad start in the business.

In making a sale of a good cow the seller always has the advantage of the buyer, because he knows the good and bad qualities of the cow—at least he ought to. If you are wise, you will go the day before a sale and secure a sample of milk of such of the cows as you think worth buying, and have it "Babcocked," for quality is the first object in getting good cows.

The young dairyman should know that his first duty to himself is to procure good cows, and that the only way to do that is to raise them. Then, in a sense, he has to be a breeder of cows, and that takes time. If you are to carry twenty cows, it will take at least ten years to breed them. Don't figure on a day less than ten years for such a herd, and make it your life's work to have a finished job of it when you are done. To do this, and before you begin, fill your head as full of cow knowledge as you can both from books and observation. Make a keen study of a cow's bad points. Mark well the fat cow; beware of that kind of blood where more small fortunes have been wasted on trying to make a dairy-herd out of beef blood than by any other

SHARPLES' BUSINESS DAIRYING FREE

Contains all the money-making points of dairying. Among the subjects treated you will find How to Feed, What to Feed, When to Feed, What Foods Produce Most Milk, How to Take Care of Milk-Producing Foods, How to Feed Silage, the Care of the Milch Cow, and many other profitable and practical suggestions that help swell the profits of the dairyman. With the book we will send additional information telling you how and why you can get the most out of you milk by using the

Sharples Tubular Cream Separator

We guarantee that with a Tubular you can get 50 per cent more cream over the old pan method of skimming, and 6 per cent over any other cream separator made. Sharples Separators get all the cream and the Tubular is the easiest running, easiest cared for, and easiest kept clean. There is just one tiny piece in the bowl, the milk can is low and handy, the bearings are self oiling. Write for the "Business Dairying" at once stating number of cows you keep. Ask for booklet D. 165

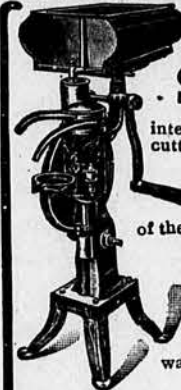


Mr. S. L. Boyer, Venetia, Pa., says "The Tubular makes me \$255.00 yearly."

The Sharples Separator Co.,
Toronto, Can. WEST CHESTER, PA. Chicago, Ill.

Get Davis' Price

If you are thinking of buying this season you will find Davis' Prices on their up-to-date improved 1907



Cream Separator

We Manufacture the Davis

B. J. Davis and His Nine Sons.

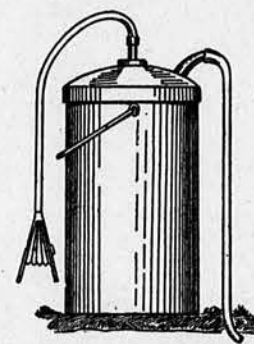
interesting. It's the cream separator that will double your dairy profits while cutting your work in two. You can buy it direct from their money saving factory at

Wholesale Factory Prices

Saving you at least twenty to fifty per cent, and it's guaranteed to be made of the best materials and by the best mechanics. We guarantee high quality and lowest prices owing to our new selling plan direct from the factory at wholesale prices. You can't afford to be without a cream separator when high grade machines are offered at such low prices. The Davis has all up-to-date improvements, low down supply tank, enclosed gearing. A bowl made perfect from the start, making it unnecessary to balance it with soft metal as is the case with all others. The Davis bowl is never out of balance, skims heavy or thin cream and is guaranteed to always get the last drop.

To those who appreciate the money making and saving possibilities of the Davis—to those who wish the best at lowest prices, we will gladly send our Money Saving Catalogue No. 125 upon request. Cut out this ad, write your name on the margin or send a postal request right now, this minute, before you forget, as this ad may not appear again. The catalogue will come to you at once FREE.

DAVIS CREAM SEPARATOR CO., 540 North Clinton St., Chicago.



Destroy the Gophers

In Your Alfalfa Fields by Using

Saunders' Gopher Exterminator

This apparatus forces a deadly gas through their runways and is warranted to kill gophers within 100 feet of operation. With it a man can clear from five to six acres of gopher-infested land in a day at a cost of twenty cents per acre. The poison we use can be gotten at any drug store. Satisfaction guaranteed or money refunded. Complete outfit for \$5.

Flint Saunders, Lincoln, Kans.
Mention the Kansas Farmer.

Save Money on Oil

We Sell Premium Machine Oil at Less Than Half the Price You Now Pay.

Our Premium Machine Oil is sold at \$3.50 per barrel. Thousands are using it and find it all right.

Every barrel guaranteed, and you be the judge. Other oils cost 35c to 40c per gal.; ours costs \$3.50 per barrel. Freight rate is 32c per barrel all points within 100 miles of Benedict, Kans. For each additional 25 miles add 2c.

After receiving and using 5 gal., if not satisfactory, return the balance, with bill of lading, and I will refund full price paid for said oil.

We Can Save You Money on Cylinder Oil. Write for Particulars.

T. C. Davis, Benedict, Kansas

DE LAVAL CREAM SEPARATORS

SAVE \$10 TO \$15 PER COW
Every Year of Use
Over all Gravity Setting Systems
AND \$5 PER COW
Over all Imitating Separators.

The De Laval Separator Co.
Randolph & Canal Sts. 74 Cortlandt St.
CHICAGO. NEW YORK.

Wouldn't You Like

to have us show you the wonderful opportunities existing in the South, and how you could improve your present condition?

THE "Seaboard Magazine"

Devoted to the agricultural and industrial development of the South, will point out the many advantages of a location in our mild climate, where life would be a greater pleasure as well as profit by reason of being able to carry on work throughout the entire year. Why battle against the elements. If you want a stock or grain farm, a fruit farm, truck farm, where lands are fertile and productive, in fact, anything, and want it in Virginia, the Carolinas, Georgia, Alabama or Florida, the Magazine will assist you. Sent FREE on request, together with other handsomely illustrated literature descriptive of the south and its wonderful resources and progress.

Special low round-trip rates for home-seekers, prospectors and investors.

J. W. WHITE, General Industrial Agent.
Portsmouth, Va.
Seaboard Air Line Railway, Dept. "X."

The CANADIAN West is The Best WEST

160 ACRES
FARMS IN
WESTERN
CANADA
FREE



GREAT ADVANTAGES

The phenomenal increase in railway mileage—main lines and branches—has put almost every portion of the country within easy reach of churches, schools, markets, cheap fuel and every modern convenience. The ninety million bushel wheat crop of this year means \$60,000,000 to the farmers of Western Canada, apart from the results of other grains as well as from cattle.

For literature and information address
Superintendent of Immigration
Ottawa, Canada,
or the authorized Canadian Government Agent,

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

NEW ZEALAND

IS THE LAND FOR
THE TRAVELLER,
THE HEALTH SEEKER,
THE HOME SEEKER,
A Beautiful Fertile Country Down in the South Seas,
Sixteen Days' Steam from San Francisco.

There is room in New Zealand for Thousands of Settlers. Rich Soil, Temperate Climate, Abundance of Water—THE IDEAL LAND FOR THE FARMER.

A pleasant country winter and summer. No snow-bound winters. No droughts.
As an Agricultural, Meat-raising and Dairying Country, New Zealand has no superior. Its Farm Produce commands the Highest Prices on the world's markets.

Cheap Transit for Farmers' Produce, Government-owned railways.
Government land is obtainable on easy terms; principal form of tenure, long leasehold. Government loans to new settlers at low rate of interest.

Government and municipal ownership of public utilities. Government telegraphs, insurance, savings banks, government trust offices, etc., etc. Government Sanatoria and Hot Mineral Water SPAS.
New Zealand's death rate is the LOWEST in the world. Its wealth per head of population is the HIGHEST in the world.

A country of strange and beautiful scenery. Marvelous geysers, Hot Lakes, Lovely Rivers, Magnificent Mountain Lakes, Grand Alpine Scenery. A splendid resort for Americans who wish to escape the winter of North America.

When it is Winter in the United States it is Summer in New Zealand. Summer-time is cool and pleasant for travel in New Zealand.
Excellent trout fishing and deer stalking. New Zealand's fishing waters, thousands of miles in extent, carry the largest trout known to anglers.

NOW is the time to visit this new and interesting country. The New Zealand International Exhibition, in the city of Christchurch, is now open, and will remain open until April, 1907. Good hotels. Cheap Transportation Rates.

Mail steamers from San Francisco to Auckland, New Zealand, every three weeks.
Write for information and free literature concerning the Colony. Address T. E. DONNE, Superintendent Government Department of Tourist and Health Resorts, Wellington, New Zealand.

ORANGE LILY cures Weakness, Ulcerations, Displacement, Painful Periods. For a free trial address Mrs. E. F. FANTER, Detroit, Mich.

er branch of poor management. A cow that is poor in flesh you can feed up often into a fine cow, but you can never starve a fat cow into a good one.

Beware of the three-teated cow. No matter what she has been, you are not in the "has been" business. They say that it takes three-fourths of what a common cow eats for maintenance, leaving only one-fourth for your profit. Now, if she has lost one-fourth of her teat power, what good is she to you?

Don't be afraid of a big ravenous eater. A good appetite is the best indication of a good constitution, while a delicate eater is sure to be a delicate cow, one of those creatures that are always off their feed—the most hopeless kind of a cow. You will have enough of three-teated cows in your herd as you go along that come by accident, without buying any of them; the same way about delicate cows.

Look out for the short milker—the cow that gives a flood of milk at calving time and drops below the profitable point at three months after calving. This is the most deceptive cow of all. You are sure to get picked up on many of these. Everybody in the neighborhood knows of the big work she does when fresh, but none of them knows when she goes dry.

Also beware of the big milker that gives only white water with no butter-fat in her milk. This is a very deceptive cow. She may even give yellow milk and yet have no fat in it. Be sure and milk at least one teat half out, and try them all to see if they are in good easy working order, and watch her behavior. If she refuses to stand, kicks, holds up, or shows any other peculiarity, then try her again on another occasion, and if she repeats a trick let her severely alone.

The great trouble in buying cows instead of raising them is that you can never tell how long they will milk. A small milker that gives rich milk is far more profitable than a large, short milker if the small milker is persistent in holding out. This you can not tell without owning her for a full season's work. When you raise the helper you have a full chance to put the scales to her, not only for quality, but you can measure her feed to see if she pays for it. You can also use the Babcock on her to tell what the quality of her milk is. When you buy the cow you have to take the chances on all these things, for it will not do to take a man's word for it. In the first place, the chances are he does not know, never having put these tests to her, and in the second place, he will not tell you of her faults any more than a man will tell you the faults of a horse.

Get a bull out of a good cow by a sire that is out of a good dam, and then you have the best chance to raise helpers from your best cows that will not only pay you for all your trouble, but will bring you in a good steady income as long as they live and reproduce their good qualities.

Here's news! For many years there has prevailed in dairy communities the idea that cows shrank in their milk in July, August, and September because they were so bothered by flies. This looked so natural that no one thought of doubting it, but here comes in this iconoclastic age two of the experiment stations making tests for two years. Prof. C. H. Eckles, of the Missouri Station, has made experiments reported in bulletin 68. Speaking of the necessity of the case, the Professor says:

"This shrinkage of milk comes at a time when the farmer needs the money the most—harvest time, with its attendant extra expenses. The devices are numerous for repelling flies and many were tried. The objects of the experiment were to determine whether the use of fly repellent on cows would influence the amount of milk and butter produced.

"The plan of the experiment was to divide the fly season into periods of two weeks and to spray the entire herd each morning with 'shoo-fly' on alternate periods. The periods were made rather long to allow all effects of the shoo-fly to be entirely removed during the period when no spraying was done."

Of course, the milk was weighed and Babcocked. The experiments were run six weeks in 1904 and throughout the summer of 1903. In the first year, sixteen cows were used; in the second, twenty-two. The bulletin gives the following summary:

"The table shows that in two of the three periods the cows gave more milk and in two of the periods much less when sprayed than the average of the preceding and following periods. In

all four comparisons the yield of fat was slightly higher during the spraying period than the average of the preceding and following periods.

"Taking the total of the four comparisons one finds the sprayed periods were 207 pounds of milk behind and 15.5 pounds of fat ahead of the average of the unsprayed period preceding and following the sprayed period."

The final conclusion was "that no important effect either upon the yield of milk or fat was brought by the use of this spray."

The further conclusion is that the well-established fact that cows do shrink in milk yield during the hot weather is owing more to the heat and dry weather and want of succulent food than to the bother of flies. This certainly is a new way to look at it, and a strong inducement to stop that loss of milk by the now well-established remedy of the summer silo that has proved an entire remedy even to the exclusion of grass altogether. The thing to do is to go right to work when the summer rush is over and before the spring work begins and build you summer silos like sensible men.—L. S. Hardin, in Pacific Homestead.

Stock Food Recommended by an Eminent Authority.

Prof. Thomas Shaw has this to say in reference to Stock Foods: "They will always be found useful when properly made. The time will never come when intelligent feeders will cease to use them. The necessity for using them and the advantage therefrom will become greater as foods become increasingly dear. Whether it will be profitable to feed them will depend upon the necessity for using them and on their cost. My special desire, however, is to show that they have a place in the economy of intelligent feeding. The question of price must be fought out between buyer and seller."

With this endorsement from one of the foremost authorities on feeding in the country, it would seem that the value of feeding tonics, etc., is unquestionable; therefore, the only problem is at what price such foods cease to become profitable.

In Bulletin No. 106 issued by the Hatch Experiment Station they recommend the use of certain medicinal tonics to be given in one tablespoonful doses once a day for ten days, then omit for three days, then give ten days more. They estimate the cost of the tonics they recommend at 20 cents per pound.

Dr. Hess Stock Food, formulated by Dr. Hess, a regular graduate of medicine and also veterinary surgery, contains the best tonics known to science, together with the salts of iron which are the greatest known blood and tissue builders, the nitrates of sodium and potassium which assist in eliminating the poisonous waste material from the system, and laxatives which regulate the bowels.

This preparation is manufactured by Dr. Hess & Clark, Ashland, Ohio, and is sold on a written guarantee at five cents per pound in 100 pound sacks, smaller quantities at a slight advance. At this price can any one question the economy of feeding such a compound? It costs less than a penny a day to feed this preparation to a horse, cow, or steer, and but three cents per month for the average hog. Consider how little additional increase in weight or milk is necessary to cover the cost of this preparation.

J. F. Dotzner, Clinton Stock Farm, Centralia, Ill., says: "I am feeding Dr. Hess Stock Food to my horses, three

"The Recollection of Quality Remains Long After the Price is Forgotten."

Trade Mark Registered

Tool Requirements

KEEN KUTTER Tools

What do you expect of a hammer—a rightly formed handle that can't work loose or come off—a face you cannot batter—the true hang and balance for straight driving? Then you must get a hammer on which this name appears.

No matter what kind of tools you want, this name signifies that every requirement in quality and service will be met.

Keen Kutter Tools include not only Carpenter Tools of all kinds but also Forks, Rakes, Shovels, Hoes, Manure-hooks, Pruning-knives, Grass-shears, and all kinds of Farm and Garden tools. Each tool is the best of its kind and is guaranteed.

If not at your dealer's, write us.

TOOL BOOKLET FREE

SIMMONS HARDWARE COMPANY,
St. Louis and New York, U. S. A.

FARMERS ACCOUNT BOOK

A scientific Account Book for farm bookkeeping. Specially prepared and adapted for all farm accounts. Contains 200 pages 10 by 13 inches with headings printed in for all farm and live stock accounts. Each account is accompanied by instructions as to what to charge of credit in that account—really an Automatic account book. Use this book and know what your expenses are and what you are making on each department of your business. Price \$2.00 prepaid to any part of the United States. Money back if you want it. Address

H. G. PHELPS & CO.,
Bozeman, Mont.

—SEND YOUR HIDES TO—

Bayer Tanning Company

to be tanned for robes, coats, rugs, harness and lace leather. Practical and technical knowledge of tanning. Superiority in workmanship and finish makes our work the kind You want. Write for new price list.

Bayer Tanning Company, Dept. C, Des Moines, Ia

Established 1882

TOP PRICES

Quick Returns

If you want your shipments to bring you good returns—money-making returns—returns that will give you satisfaction in every way, with full weights and fair selections, good prices and no delays, you will send your goods to us. BIGGS & KOCH, 1405 St. Louis Ave., Kansas City, Mo.

stallions (Hal, Gordon, pacer, brother to Star Pointer; George Geisler, trotter, out of the best blood lineage in existence; Andrew Jackson, trotting-bred coach horse, son of George Geisler, above). All three stallions in public service, stud. Also two work horses.

"I bought Dr. Hess Stock Food at Berger's Drug Store at Carlyle. I had never used any stock food before, but reading in Coleman's Rural World of Dr. Hess's professional knowledge, I purchased a sack of Dr. Hess Stock Food and fed it to five horses, and am almost surprised at its good results. Will keep it always on hand."

He who has never been tempted is a weak man still.

PLYMOUTH ROCKS.

FOR SALE—A choice lot of B. P. Rock cockerels at \$1 each. D. N. Hill, Lyons, Kans.

BARRED ROCK COCKERELS—Bradley strain. Few exhibition. Also breeding cockerels and pullets. Write for prices. Mrs. W. A. Scheler, Argonia, Kans.

BARRED ROCKS my specialty; a fine lot of cockerels from prize winners for sale reasonable. Peter Reber, Neosho Rapids, Kans.

FOR SALE—Buff Rock cockerels; good scoring birds \$1 and \$2 each. Mrs. John Bell, Ackerman, Kans.

WHITE ROCKS and WHITE WYANDOTTES—Young and old breeders for sale at attractive prices. W. L. Bates, Topeka, Kans.

B. P. ROCKS AND BUFF ORPINGTONS—Eight grand matings. Send for price list on eggs and Collier pups. W. B. Williams, Stella, Neb.

BARRED ROCKS A SPECIALTY
Also Nine Other Leading Varieties. If you want to win at the poultry shows, or make a success of poultry on the farm, we can supply you with stock. Circulars free. Write your wants. A. H. Duff, Larned, Kans.

SPECIAL SALE OF BARRED PLYMOUTH ROCKS.
I will sell 60 yearling hens to make room, at \$1.00 each. These hens are barred to the skin. All my last season's pen breeders, the kind that produce exhibition cockerels. Right here is a chance to get some No. 1 stock at a low price. Let me make up a trio or a pen that will start you right. I will also sell 10 cockerels including the 2d and 4th prize cockerels at the Kansas State show of 1906. Description, price and photographs of any winners sent free. I will also sell cockerels at \$1.50 and up, sired by my first prize males. Write for prices on exhibition stock. Satisfaction guaranteed or money refunded. A. H. Miller, Bern, Kans.

B. P. ROCKS, Exclusively

Cockerels for sale from yard headed by prize bird from Kansas State show 1906. Birds are well barred, good, even color, large bone; scored by C. H. Rhodes; out of number scored, three-fourths went 90 to 93. Also have good hens and pullets. Can mate you a breeding pen. Prices reasonable.

MRS. GEO. CLARK,

Station A, Route 6, Topeka, Kans.

White Plymouth Rocks EXCLUSIVELY.

Good for Eggs. Good to Eat and Good to look at
W. P. Rocks hold the record for egg-laying over every other variety of fowls; eight pullets averaging 289 eggs each in one year. I have bred them exclusively for twelve years and have them scoring 94 to 96k, and as good as can be found anywhere. Eggs only \$2 per 15; \$5 per 45, and I prepay expressage to any express office in the United States. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B, Topeka, Kans.

LEGHORNS.

CHOICE PURE-BRED R. C. Brown Leghorn cockerels and pullets at \$1 each. Eggs \$1 per 15. Mammoth Pekin duck eggs \$1 per 15. Reduced price on large orders. Mrs. J. E. Wright, Wilmore, Kans.

SINGLE COMB BROWN LEGHORNS—Bred for show and egg purposes. Stock and eggs for sale H. C. Short, Leavenworth, Kans.

FOR SALE—Single Comb White Leghorn cockerels. Wyckoff laying strain. Price, 75 cents and \$1. Henry Martin, Newton, Kans.

ROSE COMB BROWN LEGHORNS EGGS, 15 for \$1.50 for \$2.50, 100 for \$4. Mrs. John Holzney, Bendena, Kans.

STANDARD-BRED SINGLE-COMB BUFF LEGHORNS—Headed by first prize pen Chicago show 1906 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 801 East First street, Newton, Kans.

SINGLE-COMB WHITE LEGHORN cockerels, \$1 each; two or more 80 cents each. Fine white pure, thoroughbred birds. Also a few Barred Plymouth Rock, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more, 80 cents each. All of our customers are very well pleased. We will make reductions on large lots. Meadow Poultry Farm, Centerville, Illinois.

EGGS FOR SALE—S. C. W. Leghorns, W. Wyandottes, \$1 per 15. W. H. turkeys, \$1.50 per 9. Emden geese, 20 each. W. African guineas, \$1 per 17. All guaranteed pure-bred. A. F. Hutley, Route 2, Maple Hill, Kans.

FOR SALE—Exhibition S. C. Black Minorca cockerels, \$2. I guarantee them. Address George Kern, 817 Osage Street, Leavenworth, Kans.

Buff Leghorns Pure-bred S.C. cockerels \$1 each, 6 for \$5. J. A. Reed R. 3, Wakefield Ks

Mount View Poultry Farm

S. C. White and Brown and R. C. Brown Leghorns, winners at Kansas State Show. Young and old stock for sale. Some exceptionally fine cockerels for immediate sale at \$2 and up. A few hens at \$10 per dozen.

Mr. and Mrs. Fleming,
Route 2, Ozawie, Kans.



Examine any fowl bought of us at the express office. If not satisfied return and get your money. Less express charges one way. Our fowls are strictly tops. Buff Black and White Langshans, five varieties of Leghorns, and many other breeds to select from. Get busy or your choice will be gone. Write J. A. LOVETTE, Prop., MULLINVILLE, KANS.

COCKERELS

Of thirty-two of the leading varieties, being farm raised, no two on the same farm. To make room for winter quarters, Leghorns three for \$5, all other varieties in proportion. Address W. F. Holcomb, Mgr. Nebraska Poultry Co., Clay Center, Neb.

TURKEYS.

FOR SALE—Choice lot W. H. turkeys; toms \$4; hens \$2, if taken soon. Address Mrs. Joe Smith, Macksville, Kans.

The Poultry Yard

CONDUCTED BY THOMAS OWEN.

Missouri's Helpful Hen.

Missouri is the empire of the helpful hen, and Kansas City is the greatest egg receiving and shipping market in the world. Annually the value of poultry and eggs produced in Missouri amounts to \$80,000,000, two-thirds of which is used in home consumption and the balance is shipped to the great marts of the country. The handling of the egg product is of especial interest, and it is estimated that at least \$25,000,000 in capital is invested in the business. Kansas City has several cold storage plants, modern and up-to-date, for the handling of eggs, and it is said that in a year's time as high as 150,000 cases of eggs are handled through these cold storage houses. Each case contains 30 dozen, and it is but a matter of simple multiplication to arrive at the magnitude of the number of eggs embraced in the total.

The cold storage eggs should be figured exclusive of the general consumption of fresh ones, for be it understood that the storage product represents a very small percentage of the cold storage, at least in Kansas City, for this place being so close to the center of production that it is only at very short periods that fresh eggs are not available. This is generally during the more severe part of the winter, and this time now being here, fresh eggs are scarce articles of diet and bring good round figures by the dozen at the market and groceries. It is at times like these that cold storage eggs have their inning, and surplus stocks dwindle like the snows and ice under the warmth of a spring day sunshine. For the past two or three months the demands for storage eggs have been unusually active, and it was stated yesterday by men identified with the cold storage plants in Kansas City that there are now remaining in storage but twenty-five cars of eggs out of an estimated storage of 150,000 cases.

The handling of eggs in cold storage is an interesting one. April and May are considered the best months in which to begin storage, as during these two months the hens are particularly industrious and lay faster than the consumption requires. It is a sort of a case of supply and demand, the supply overtopping the demand. June and September also sees some storage being done, but not so general as in April and May. Great care is taken in the preparation of the eggs. Before they are piled away in the cold storage plants, the temperature of which is regulated according to the season's eccentricities, every egg is carefully candled, a tedious and particular task, and this class of employment gives work to hundreds of people. All the small, dirty, cracked, and checked eggs are discarded, and are sold for a song to bakers and candy-makers. All good eggs are placed in new cases, new fillers and flats, and in clean, dry excelsior. These are then placed in the "egg rooms" in the cold storage houses and carried at an even temperature until they are moved out.

As the seasons of the year when egg storage is the busiest the prices paid for them is regulated by the market demands. If the demands are light, the prices are correspondingly low. During the present year the eggs stored averaged approximately 15 to 16 cents a dozen. To this the cold storage men added the cost of storage, insurance and interest charges, thereby adding \$1 per case additional for the season, while there was little market for the product. Taking the total lot of 150,000 cases of eggs, which were stored in Kansas City this year, it is readily demonstrated that the storers reaped a harvest. It is a moderate estimate to say that they made one dollar on every case stored, or in other words their profits were \$150,000. The eggs selling this fall and winter at prices ranging from 20 to 22 cents were cold storage and taken as a whole, as an egg-dealer said yesterday, "the men who dealt in eggs in Kansas City this year should be satisfied with their profits."

"The market in Kansas City during the season has undoubtedly been the most satisfactory one that was ever known to the local trade," observed a dealer. "The fact that Kansas City's market ruled higher than St. Louis and Chicago and practically equal to New

York, on both fresh and storage stock, makes Kansas City rank among the best produce markets of the country.

"Heretofore practically all of the storage stock in this city has moved to Eastern points. This year a great deal of stock has moved west to Arizona, New Mexico, Colorado, and other Western States at satisfactory prices. This has made Kansas City a competitive market not enjoyed by any other city. In the cases of New York or other seaboard cities if the prices happened to be a little off, the stocks on hand can be moved West to advantage. The business this year is only a beginning of what this market will mean in future years. Kansas City's railroad facilities are unequaled as a distributing point. The business would be a great deal larger in the South and Southeast territory but for the fact that Chicago enjoys a lower freight rate, a lower minimum, and no icing charges, which makes a larger discrimination against what should rightfully belong to Kansas City."—Kansas City Journal.

There is food for thought in the above article, and the first thought that would strike the average reader would be: Why do the farmers of this country allow the cold storage men to make a fortune yearly on products that they ought to provide at the proper season and reap the benefit themselves. If the farmers would only go to work and provide themselves suitable winter quarters for their poultry, and feed them properly for eggs, they could provide the public with eggs in the coldest weather and thus get the benefit of the high prices paid them in winter. They would not only earn this \$150,000, that the cold storage men make annually, but also the difference in price between the cold storage and fresh eggs, which would be quite considerable. That this is feasible is easily demonstrated. A prize article on "Getting Eggs in Winter" in last week's KANSAS FARMER, tells how it can be accomplished. This article was duly endorsed by expert poultrymen and its methods were pronounced feasible and practical and can be followed by any farmer with a very small outlay for suitable buildings.

Feather-Eating Hens, etc.

A correspondent from Western Kansas writes: "Please publish in THE KANSAS FARMER what to feed chickens to prevent feather-eating, also if barley is a good feed for laying hens?"

Answer.—After fowls once get the habit of plucking and eating feathers, it is a very hard matter to break them from it. It is the blood in the quill of the feather that they like, therefore, meat of any kind will satisfy their craving for blood and help break them of the habit of feather-eating. The blood also has a salty taste, and if the chickens' food is well salted every time mash feed is given them, it will help matters. Barley makes a very good feed for laying hens, and while not as fattening as corn, it has a higher nutritive value, and is therefore better for the layers. We would advise soaking barley over night for chickens, the same as we do oats. If more oats and more barley were fed to hens, there would be lots more eggs than when corn alone is fed to them.

Worms and Bugs and Your Poultry Profits.

Old Mother Nature probably knew what she was about when she gave to cock, hen, and chick an insatiable appetite for worms and grubs and bugs.

We may not approve of the taste of the hen which gobbles up a nice juicy grub or the "early worm" with a cluck of satisfaction, but the more we learn about henology and the physiology of fowls the more we see wherein she shows good hen sense in grabbing every bit of animal food that comes her way.

She—and all her relations on both sides of the house—crave such food because they need it.

We are going to show you why. The modern hen—the bird we are forcing every year to lay more and more eggs—has developed into a pretty fair sort of egg-making machine.

The food she eats goes first to make blood and muscle and bone and fat for her own body. Then if she is in the right condition, and the food is of the

WYANDOTTES.

WHITE WYANDOTTES—Several dozen hens 75c each, pullets 50c, cockerels \$1. Several White Holland turkeys. Mrs. E. F. Ney, Bonner Springs, Kans.

POULTRY BARGAINS.

White Wyandotte cockerels \$1 each. White African Guinea \$2 pair. Indian Runner Ducks \$2.50 pair. Choice farm-raised stock. Some prize winners. L. D. Arnold, R. F. D., Enterprise, Kans.

GILT EDGE POULTRY CO.

We have special bargains in S. L. Wyandottes, S. C. Brown Leghorns, Buff Wyandottes and B. P. Rocks, if taken at once. Write for catalogue. Walter Hogue, - Fairfield, Neb.

WHITE WYANDOTTES.

If you need the highest quality for breeders or show birds at reasonable prices write me. Cockerels now ready for shipment. Illustrated catalogue free. Address G. A. Wiebe, Box 4, Beatrice, Neb.

SILVER LACED WYANDOTTES—Thoroughbred cockerels \$2; pullets \$1.50. Jewett Bros. Dighton, Kans.

WYANDOTTES—Pure white. Young stock at \$1 each. L. E. Brown, Norton, Kans.

WHITE WYANDOTTE COCKERELS—Show birds or choice breeders at \$1.00 to \$5.00 each. S. W. Arts, Larned, Kans.

BLACK LANGSHANS.

PURE-BRED WHITE LANGSHANS for sale. Hens \$1.25, pullets \$1 each; also a few Silver Spangled Hamburg cockerels. Mrs. John Cooke, Greeley, Kans.

BLACK LANGSHAN cockerels and pullets for prize winner, \$1 each, if taken at once. Mrs. Geo. W. King, Solomon, Kans., Route 1, box 4.

BLACK LANGSHANS

which will please you at prices that will satisfy you. Bred from stock from such breeders as Mrs. M. A. Smith, Ben S. Myers, Ashe, Hettich, King, etc. Write for prices and descriptions.

MRS. E. S. MYERS,

Box 174, Chanute, Kans.

RHODE ISLAND REDS.

RHODE ISLAND REDS—Cockerels, S. C. B. I. Reds from prize winners. Red to the skin. Eggs in season. Good Hope Fruit & Poultry Farm, Troy, Kans.

ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

BUFF ORPINGTONS.

BUFF ORPINGTONS AND BUFF LEGHORNS. Catalogue free. W. H. Maxwell 1240 Quincy St., Topeka, Kans.

BRAHMAS.

LIGHT BRAHMAS

More prizes than any breeder in the state; 10 first this season. Eggs \$1.50. Cockerels \$2 to \$4. T. F. WEAVER, - Blue Mound, Kans.

Light Brahma Chickens

Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kas., Route 4

SILVER CUP WINNERS

(Extra Large)

Mammoth Bronze turkeys and Barred Plymouth Rock chickens. Forty-four premiums on six exhibits; three silver cups; four sweepstakes; one trophy; 22 firsts; 15 seconds and 10 thirds. —Address—

Col. E. Walters, Cunningham, Kans.

MISCELLANEOUS.

AGENTS—to sell and advertise our Poultry Compend: \$35 weekly; rig furnished. Franklin Manufacturing Company, Norwalk, Ohio.

BEE SUPPLIES

We can furnish you bees and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and save you freight. Send for our catalogue with discount sheet for early orders. Topeka Supply House 7th and Quincy, Topeka, Kansas



Subscription 25 Cents a Year.

"OUT THERE IN KANSAS"

All about the chicken industry in Kansas, the bees and pigeons. Full of information illustrated and made plain for the people. Practical, by and for practical people. The paper that reaches the chicken folks. If you are interested in poultry, bees, or pigeons, THE HEN will interest you. Address THE HELPFUL HEN, Topeka, Kans.

When writing advertisers, please mention this paper.

The Talbott Poultry Farm

Breeders of the best in the world. Strain of Buff, Brown and White Leghorns, Barred Rocks and White Wyandottes. My birds have won at Chicago, Galesburg, Moline, Illinois, Fremont, Hebron and State Poultry Show of Nebraska, and they will win for you. 800 old birds for sale at \$1.50 each; also 1,000 youngsters at \$1.00 and up.

W. R. TALBOTT, Prop. Hebron, Nebr.

INCUBATORS AND BROODERS.

Let Me Quote You a Price on CHATHAM Before You Buy an Incubator

It will take one penny for a postal, and a minute of your time, to write for Special Prices on 1907 Chatham Incubators and Brooders. No matter what kind of a machine you have in mind—no matter where you intend buying, or when—TODAY you should send me a postal and get my catalog and prices.

My book will post you on the best way to make money out of poultry—and my prices on Chatham Incubators and Brooders will show you how to start in the poultry business for a small amount of money.

Chatham Incubators are sold on **84 Days FREE**

trial, freight prepaid, and are guaranteed 5 years. Chatham Incubators are the best possible to make. They are tested, and known to produce the largest percentage of strong, healthy chickens.

If you are most ready to buy a machine now, put it off for a day or two, until you can get my price and catalog. Then decide.

We have warehouses in all the leading trade centers—where Chatham Incubators and Brooders are kept in stock—insuring prompt delivery.

I invite you to write for my price and book. I can save you money on an incubator.

MANSON CAMPBELL,
President Manson
Campbell Co., Ltd.,
378 Wesson Ave.,
Detroit, Mich.

If you live west of the Mississippi River, address me Box 376
Topeka, Kan.



right kind, the rest goes to making eggs.

But mark this:

The best hen in the world can't make eggs from thin air.

The egg isn't created in her ovary in some mysterious manner from nothingness.

But every ounce, every iota, every atom in the egg comes directly from the food she eats.

Like every other machine you have to feed the raw material in at one end, to get the finished product at the other.

Now, it happens that the hen's bones and muscles and feathers are all made very largely of the same chemical elements—that an egg is made of.

A group of these elements, which make the white of the egg and the lean meat and which enter very largely into the bone and almost exclusively into the feathers, are called "protein," by the professors who know all about such things.

Her fat—which you don't care about in your laying hen—comes from another group of elements called "carbohydrates."

And it also happens, in the wise dispensations of Providence, that protein, which the fowl so greatly needs in sustaining life, in perpetrating her kind, and in providing her lordly master with omelets and custards is the food element that is scarcest in the vegetable world.

Wheat is rich in protein; clover has a fair share of it; oats has some, but corn is largely a fat-making food—and altogether the grains usually served to Mr. and Mrs. Chicken and their family of chicklets, are sadly deficient in what they most need—protein.

But the worm and the bug and the grub are composed almost exclusively of protein.

Do you wonder then that fowls go crazy with delight when a nice fat form comes squirming into sight, or that they chase a juicy bug or grasshopper clear across the poultry yard?

Just suppose you had been kept on a steady diet of hoe-cake, corn-pone, and Indian pudding for three months?

What would you do to a nice porterhouse steak if you got a chance at it? Well, that's why poultry needs animal food in some shape or other.

Of course fowls get some protein from the grain they eat, but under even the best conditions, not as much as they ought to have; not as much as they can use to advantage.

Consequently poultry-raisers—wise in their generation—began a good many years ago, to hunt around for something that would take the place of the wild meat the fowls captured in the chase in the good, old summer time.

They didn't feel like buying porterhouse steak from the beef trust for even their best hens, but they knew that they could not get the best results so long as their flock lacked animal food.

Finally a genius who had the faculty of putting two and two together so as to make four—examined the make-up of fresh, green bone—such as comes from the butcher's block—the trimmings—bones of beef, pork, or lamb, with adhering meat and gristle—and found that this bone contained in almost the exact proportions the very food elements needed in place of the worms and bugs the hens couldn't find in the winter.

More than that:

It was soon demonstrated that the protein and other food elements in green bone, were in an exceptionally available form—that is, poultry could utilize it to better advantage, digest it more easily, and so get more good and quicker results from it.

Probably this is partly due to the fact that poultry relish green food so much, for in all animal life a thing that tastes good is more easily, more quickly, and more thoroughly digested, than is food that may be equally nourishing, but not so palatable.

It isn't hard to see, then, why fresh cut green bone has given such phenomenally successful results to poultry-raisers, the world over.

There's no "hocus-pocus" or mystery or "patent medicine" about it.

It simply is the most available food product that has yet been discovered to supply fowls with the elements most difficult to get from grain and most needed to make bone, muscle, feathers, eggs, and to maintain health, vigor, and vitality.

That's why green bone doubles the egg-yield.—It contains more than four times the egg-producing value of grain.

That's why green bone makes eggs

INCUBATORS AND BROODERS.

INCUBATORS AND BROODERS.

Sure Hatch is the Incubator that Hatches Most Chicks

This is an actual fact—and we'll PROVE it to you, just as we have done to the 110,000 users of the Sure Hatch, practical chicken men who are in the chicken business because it PAYS.

Those men had to be shown. We didn't talk. We sent a Sure Hatch to them for 30 days' trial—as we'll send it to you—paid the freight and offered to pay it back again—as we do now to you. Those 110,000 Sure Hatchers proved themselves, and now we are working overtime in the biggest incubator factory in the world, at Fremont, Neb., to supply the practical neighbors of those men and such men and women as you.

We send you a Sure Hatch Incubator Outfit all ready to put the eggs into. Take off two hatches and try it out. In sixty days, if you don't like it, chuck it back at our expense. You get your money back without argument. It's low priced because we deal direct with you, but it's the best made, most convenient incubator in the world every way. We guarantee it 5 years.

It's always made of Redwood—costly, and warp, shrink and split-proof—without knots. Double walled, double doors, asbestos lined. The 1907 model has our new Multiple Lever Regulator, that records the slightest change of temperature, and the Controllable Ventilator System, which also works automatically as set. Our FREE Illustrated Catalog tells all this and hundreds of other points. Write for it NOW.

Sure Hatch Incubator Co., Box 42, Fremont, Neb.; Dept. 42 Indianapolis, Ind.

more fertile.—It tones up the entire system and fills the head of the flock with vim and vitality.

That's why green bone makes stronger, livelier chicks at hatching.—Bone-fed hens lay eggs with life and vitality in them.

That's why green bone develops earlier broilers and earlier layers.—It promotes growth and the development of bone and muscle by providing abundant material for making bone and muscle.

That's why green bone makes heavier market fowls.—It gives a good framework to start with and helps lay on heavy flesh.

That's why green bone makes red combs, bright eyes, and glossy plumage.—It gives a tone to the entire system of the fowl that nothing else will.

That's why it will double your profits.—It has done it for thousands of others.

The question of winter egg-production is of vital importance to every poultry-raiser.

You want eggs for market when the prices are highest.

You want eggs when eggs are still scarce for early hatching.

We said a while ago that the hen is largely an egg-making machine, and she is if she is kept in proper working order and is given the proper materials with which to make eggs, she can't help laying even should she want to help it.

If you comply with these two things, you'll have eggs in abundance all winter long.

There is no one thing in the world that will do so much toward putting the average hen in laying condition and toward giving her the necessary materials for egg-making as fresh-cut green bone.

Of course green bone is not a cure-all—not a panacea for all the ills of poultry-keeping.

It won't rid fowls of lice.

It won't stop up the chinks in the poultry-houses which let in the drafts.

It won't keep out weasels and skunks.

It won't make a Standard-bréd hen of a dung-hill pullet.

It won't cure cholera or any other disease.

It won't take the place of judgment and prudence and commonsense in managing a flock, but it is an indispensable adjunct to the poultryman who expects to get the best results from his fowls.

You can get eggs and grow fowls without it.

But you can not get the best results and the biggest profits unless you use it.

There is no doubt about it.

And the beauty is, it costs so little. It cuts down your grain bills, but costs you little more than the labor of cutting.

It seems strange, doesn't it, that there is a poultry-raiser anywhere who is not using fresh cut green bone?

But, don't, we beg of you, get confused on the question of feeding protein.

In all foods for mankind, animals, and fowls, a very great deal depends upon the condition in which the food is used.

The good the fowl or animal gets from its food depends upon how thoroughly it can digest and assimilate and utilize it.

Lyon County Poultry Show.

The Lyon County Poultry Association held a very successful show in Emporia, December 3 to 8. Although the roads were almost impassible, the attendance was very good. All premiums were paid in full and a small amount of cash left over for another year.

Mr. O. P. Green, Bourbon, Ind., was the judge.

Hatch Chickens by Steam with the **EXCELSIOR INCUBATOR** Or WOODEN HEN

Simple, perfect, self-regulating. Hatch every fertile egg. Lowest priced first-class hatches made. **GEO. H. STAHL, Quincy, Ill.**

\$7.50 Incubator

Everybody's incubator holds 125 eggs. Self regulator, needs no moisture, powerful double heater, egg tray and new removable sanitary nursery tray. Has everything high-priced hatches have. Four walls, packed, not affected by heat or cold. Cat. free.

Gouverneur Incubator Co., 811 Main Street, Gouverneur, N. Y.

Make More Money on Fruit Crops

Everyone who grows fruit, whether a large commercial grower, or one who has only a few fruit trees, a berry patch or a garden, should be interested in knowing how to get the most profit from his crops.

THE FRUIT GROWER

ST. JOSEPH, MISSOURI

is the only magazine in America which is devoted exclusively to the interests of those who grow fruit. It is handsomely illustrated, and contains from 35 to 75 pages each month. It tells all about fruit of all kinds—and nothing but fruit—how to grow it, how to market it, how to make more money from your crops. Sample copy will be sent free. Regular price is a dollar a year, and each subscriber is entitled to a choice of any one of our series of ten "Brother Jonathan" Fruit Books—the best in existence.

Three Months Free

We are so confident The Fruit-Grower will please you that we will send it to you three months absolutely free if you will mention paper in which you saw this advertisement. If, after three months, you like the paper, we will make you a special offer for twelve months more. If you don't like it, notify us and we will take your name off the list. The three months will cost you nothing. We offer Cash Price for new subscribers—write for particulars. Write your name and address in blanks below and mail to Fruit-Grower Co., Box A, St. Joseph, Mo.

FRUIT-GROWER CO., St. Joseph, Mo.
I accept your FREE three month's trial offer. At the end of three months I will either pay for my subscription or notify you to stop paper. In either event there is to be NO charge for the three month's trial.

Name _____
Route or P. O. Box Number _____
Town _____ State _____

Established 1880. Southward & Johnston

—Dealers in—
Hides, Wool, Furs, Pelts.

WICHITA, KANS.
Branch houses—Lyons, Kans., Guthrie, Okla.

Shipping tags and price lists free on application. Write us, try us, and mention The Kansas Farmer.

Send Your Hides to Us

HIDES TANNED FOR ROBES

Horse and Cattle Hides tanned by our process make the finest of Coats and Robes. All work guaranteed. FREE booklet on hides, also shipping tags and price list. Write today.

IOWA TANNING CO.,
Des Moines, Ia.

Harvey's Dog Farm

Clay Center, Neb.

Here you can get Scotch Collies by sires that are personally imported from Europe. Have sold over 60 puppies this year. Write us for prices.

The Blossom House

Kansas City, Mo.

Opposite Union Depot. Everything first class. Cafe in connection. Cars for the Stock Yards, the uptown business and residence parts of the city and for Kansas City, Kansas, pass the door. Solid comfort at moderate prices. A trial will please you.

SCOTCH COLLIES.

COLLIES—More of those richly bred pups, ready to ship, sired by a grandson of Ormakirk Galopin. From \$4 to \$7. A. F. Chacey, North Topeka, Kans.

\$7.00 Buys the Best **120-EGG Incubator**

freight prepaid, ever made. Double cases all over; best copper tank; hot water; Best 100 chick; hot water; Brooder \$4.50. Incubator and Brooder ordered together \$11.00. Satisfaction guaranteed. Our book, "Hatching Facts" tells all about them. Mailed free. Write today.

Belle City Incubator Co., Box 18, Racine, Wis.

Victor

Write today for The Autobiography of a Hen and the Victor Book—the whole story from the chick in the egg to how to make hens lay. All about incubators for expert and beginner. Knowledge you ought to have if you are thinking of buying one. VICTOR machines are practical and well made, economical in operation and always produce the best results. Don't waste your time, eggs and oil in a poor machine. Let us tell you how to begin right. Our 40 years experience is at your service in these books. Let us send them to you and see. Write us for them today. **Geo. Eitel Co.,** Established 1867. Quincy, Ill.

Only \$12.75 and we Pay the Freight.

This 230 Egg ROYAL INCUBATOR

the world's best hatcher. Don't pay more for poorer machines. Investigate our bargain offer, our bank guarantee and our free trial. It will pay you. Incubator and poultry supply catalog, Free. Booklet, "Proper Care and Feeding of Chickens, Ducks and Turkeys," 10c; 50c poultry paper one year, 10c.

Royal Incubator Co., Drawer 66 Des Moines, Ia.

Make Your Hens Pay

Bigger Profits by getting Bigger Hatches and hatch Chickens that Live. Beginners, as well as experts, do this with the Latest Pattern **CYPHERS Incubators** and Brooders with their Patented Improvements possessed by no others. 90 days' free trial with Money Back Guarantee. Get 50c Guide to Poultry Profit FREE to you. **CYPHERS INCUBATOR COMPANY, BUFFALO,** New York, Boston, Chicago, Oakland, California, Kansas City.

The Reliable's 25th Birthday

This is our Silver Jubilee year. For 25 years Reliable Incubators have represented the latest and best in incubator building. They have stood the test of practical use all this time and are farther in the lead than ever. Send for free catalog. **Reliable Incubator & Brooder Co., Box B-62, Quincy, Ill.**

The Heart of an Incubator

is the heating apparatus. The Lindsey heating system has forced circulation. No dead air. Guaranteed as long as you use it. Free catalog tells all about it. Write for it. **LINDSEY INCUBATOR CO., Box L, Nelson, Neb.**

LEE'S 3 LEADERS

Egg Maker—An egg producer—helps hens lay lots of eggs—a profit maker. Germoxone—Best remedy for winter ills—colds, roup, frost-bitten combs, swelled head, inflammation of the throat. Lice Killer—Kills lice every louse in the house. No trouble. Free books. Write. **Geo. H. Lee Co., Omaha, Neb.**

REAL ESTATE

REAL ESTATE

REAL ESTATE

REAL ESTATE

Money to Loan

On Eastern Kansas Real Estate

Semi-annual, or annual interest, five, seven, or ten years time, with privilege of payments at any interest period.

No Delay in Furnishing Money

Merriam Mortgage Company
Columbian Bldg., Topeka, Kansas

FOR SALE—350 acre stock farm in Lyon County. Handy to station. J. C. Hume, owner, route 3, Council Grove, Kans.

BRICK HOTEL—Centrally located, 28 rooms, furnished throughout, in good town in gas belt. Good opening. Price \$6,000. A. R. Ohmart, Augusta, Kans.

ANYTHING in Northwestern Kansas land. Write us just what you want and we will get it for you. Get in on the ground floor. We have some real bargains now. O. L. Register & Co., Lenora, Kans.

THE OWNER must live in California and newly improved eastern Kansas quarter, 446 per acre, 1 1/2 miles from station, creamery and school. Near two Universities. Rural delivery, telephone, never-failing well. For particulars write F. M. Piper, Route 10, Lawrence, Kans.

FARMS FOR RENT and sale on crop payments J. Mulhall, Sioux City, Iowa.

THREE FARM BARGAINS

In east Kansas. Write today for full description. They will not be on the market long. How large a farm do you want? Send for printed list and map. Iler & Mansfield, Garnett, Kans.

WE HAVE for sale one of the best ranch and farm propositions in this section. Write us for particulars. We are in the big four country. Corn, cattle, hogs and alfalfa. J. C. Hoyt, Eldorado, Kans.

WRITE W. J. O'CONNOR, Eureka Springs, Ark., for fruit and mineral lands in Northwest Arkansas.

FOR SALE—250 acre bottom land farm on Blue River, 25 acres alfalfa; good producing land; \$50 per acre. Address Box 151, Irving, Kans.

BUY LAND OF OWNER—Save commission. Stock and Poultry farm for sale on Hickory Creek, Butler County, Kans. Address Benj. Mayfield, Latham, Kans.

FOR SALE—Fruit lands, farms and timber. Stock do well in this section. German truck farmers can make big money. I can loan your money on good security. Campbell, P. O. Box 553, Van Buren, Ark.

LAND FOR SALE in western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

FOR SALE AND EXCHANGE Merchandise and City Property, Kansas and Texas Lands. If you want any thing in this line write us. Quisenberry & Carlson, Marion, Kans.

FOR SALE—240 acres 3 1/2 miles from Glen Elder, Kans. Good six room house, stable, granary, well and windmill, well fenced and cross fenced, all smooth level land, 45 acres pasture. The best upland farm in this vicinity for sale at the price. Will sell 150 if desired. Price 240 acres, \$3,500. Reasonable terms. S. E. Hobart, Glen Elder, Kans.

FOR SALE—Dairy Farm in Loudoun County, Virginia. Between three and four hundred acres. Less than one and one-half hours' ride from Washington. Good railroad facilities. Outbuildings complete in every respect and in first-class condition. Good fencing. Large silo, filled for winter. Two dwellings on place for manager, etc. Good watering facilities with large storage tank. Excellent herd of cattle and well-equipped dairy. Good land and whole farm can be cultivated. Excellent opportunity to purchase first-class well-equipped dairy farm. M. V. Richards, Land & Industrial Agent, Washington, D. C.

MITCHELL COUNTY, KANSAS FARMS—Also thousands of acres of the choicest lands in the western counties. Soil perfect and smooth, at \$5.00 and up; 20 years resident on the ground. Special opportunity at this time in Rooks county, on line of new railroad now being built. A choice creek bottom farm, near town, at \$24.00. Write me your wants; I can produce the goods and at best prices. W. P. Curtis, Beloit, Kansas.

FOR SALE—Lands in Lyon County, Kans., and adjoining counties. Everything considered, this part of the state offers more and better inducements than any other part of the country. Farms from \$20 per acre up; grazing lands \$12.50 to \$18. Write me, stating about what you want. J. T. BURTON, Emporia, Kans.

GREENWOOD CO. LAND

The hub of corn, cattle, hogs and alfalfa country, where crop failures are unknown, and land is worth from \$12.50 to \$35 per acre. For booklet of farms and prices, write

P. D. STOUGHTON,
Madison, Kansas

Farm For Sale.

One of the most productive farms in the Wakarusa valley, five miles from Auburn, Shawnee Co.; 320 acres, 100 acres in pasture, about 20 in fine timber along the creek, balance in cultivation; is bottom and second bottom land. Fine house of eight rooms; large barn. Is a bargain at \$40 per acre. Apply to

C. W. MERRIAM,
Columbian Bldg., Topeka, Kans.

A Home in Missouri.

We have them for sale; fine, black land, which grows Corn, Wheat, Clover and Bluegrass on every acre, and located in Cass county, Mo., 35 to 40 miles south of Kansas City. Send for list or come to see us.

JOT. M. WILSON & SON,
Harrisonville, Missouri

FOR SALE Farms—Bargains; 500 farms, stock ranches. Kansas or Missouri. Before you buy, sell or exchange, write for my free lists. F. H. Humphrey, Fort Scott, Mo.

Torrence & Son, Emporia, Kansas
High-Class bottom farm, 178 acres, one-half mile from city limits. \$10,000 worth good improvements, 80 acres alfalfa, cuts 4 crops of 1 1/2 tons per acre; balance corn and wheat, price, \$100 per acre. Other farms of all kinds, from \$20 up.

Jewell County Morris & Woolsey
Randall, Kansas
Quarter section of good land at \$60 per acre; it is a bargain. Write for full particulars.

A CORN AND ALFALFA FARM.
FOR SALE—One of the richest improved farms on Prairie Dog Creek. Soil is black loam that yields big crops every year. This year an average of 60 bushels of corn, about thirty acres in pasture and timber, 15 acres in alfalfa, balance corn land. Good house and barn and other farm buildings. On account of change of business the owner desires to sell soon. Address
M. E. BEALL, Woodruff, Kans.

LOOK AT THIS AND THINK

Where is Dickinson County? It is in Central Kansas. Look at its wealth, prosperity, best of people, fine climate, and the finest dirt out of doors. Come and look at our crops and judge for yourself. We have 1600 acres of land, all fenced, abundance of water, 2 miles from town; this will make a fine stock farm and is dirt cheap. We have two sections of fine smooth grass land, cheap as dirt. We have 80 acres improved land for \$3800. Try us for anything you want. HULL BROS., Hope, Kans.

Homes in Eastern Kansas

Prices \$25 to \$50 per acre. Corn, wheat, alfalfa, timothy, clover and blue grass. Will pay ten per cent on investment. 160 acres five miles from county seat. 6-room house, fair repair, stables, lies fine, no rough land; price \$40 per acre. Owner will take rental property to amount of \$2,000 on exchange; must be worth the money. Write. I have all kinds of bargains. Eighty miles from Kansas City. W. K. Shaw & F. B. Graham, Garnett, Kan.

Arthur H. Goddard

OF ALTON, OSBORNE
COUNTY, KANSAS,

offers the best proposition for homes that can be found anywhere. Write him for list and map.

The Rogue River Valley, Ore.

offers good climate, good health, good schools. Our specialties, Spitzenbergs and Newton apples, all varieties of pears, alfalfa and timber lands. Best fruit section in west and prices have not been boomed. The growers of fancy fruits have made wonderful records recently. No cyclones, no earthquakes. Write Rogue River Land Co., Medford, Ore. Only once to live. Why not good climate.

We Are Sending Free

Pictures and descriptions of the Tree that grows Muskmelons, the Plum Tree that has fruit and no leaves, and other semi-tropical fruits. Also information about twelve million acres of rich, highly productive low cost farm, timber and grazing lands in the state of Sinaloa, Mexico. Address

SINALOA LAND COMPANY, Merchants Trust Building
Department No. 1, Los Angeles, California

Norton County Alfalfa and Corn Farms

We sell Norton County lands where wheat, corn and alfalfa grow in abundance. Write us for list of farms and full particulars.

LOWE & BOWERS,
Almena, Kansas

ANSWER THIS.

Do you want to buy a farm?
Do you want to buy a ranch?
Do you want to buy a stock of goods?
Do you want to buy western land?
Do you want to buy Texas land?
Do you want to trade for anything?
Do you want to get our list?
Do you want to sell your farm?
Do you want to sell your property?
Write today.

The Dunlap Land Co., Abilene, Kan.

ALFALFA RANCH

480 acre ranch in Scott Co., Kansas; six miles from Healy, about 100 acres creek bottom land, 3 miles running water, stone house, barn and cattle sheds, good timber. An excellent alfalfa and stock ranch. Price, \$4,000. Apply to

Albert E. Klag, McPherson, Kans.

GET A HOME IN KANSAS--SOME CHEAP ONES

80 acres, good improvements, all cultivated, \$2200. 160 acres, 60 acres bottom, 5-room house, new barn, 4 acres timber, 40 acres wheat, \$5000. 330 acres, fair buildings, large orchard, some timber, 65 acres alfalfa, nearly all level bottom land, \$40 per acre. 480 acres, 125 acres of alfalfa and blue grass, nice house, large bank barn, orchard and nice shade trees, price \$15,000; part trade considered.

Write for lists to Minneapolis, Florence or Salina, Kans.

GARRISON & STUDEBAKER.

DICKINSON COUNTY, KANSAS FARMS FOR SALE

160 acres nice improved bottom farm, corn, wheat and alfalfa farms, price \$45 per acre. 320 acres bottom land, price \$50 per acre. 160 acre farm mostly bottom land, price \$35 per acre. 320 acre farm, price only \$25 per acre. If you want a farm, write what kind you want. I have several farms for sale, owned by non-resident people, also farms owned by estates that are for sale cheap.

JAMES SHEERAN, Solomon, Kans.

Some Al Alfalfa Land

in Trego County, Kansas for \$10 an acre. This is a snap and will not last. Be quick!

STEVENS & RUBY, Stockton, Kans.

Choice McPherson County Farms and smooth level wheat land along the Rock Island line in Southern Kansas. Prices right. Roy T. Glass, Canton, Kans.

DICKINSON CO. FARMS

I have a number of choice farms for sale. Am 35 years a resident in the county. Reference, any bank or business firm in Abilene. Write
W. D. NICHOLS, Agent, Abilene, Kans.

ONE THAT WILL MAKE YOU MONEY.

324 acres, 35 miles from Wichita and 60 rods from depot at a station on the Orient Railway; 90 acres in wheat, 1/2 of which goes with the place, 115 acres in cultivation; all of this farm is good farming land, with the exception of about 60 acres, which has timber and running water; there is a good 6-room house, barn, corn crib, granary, cow barn 12x26; all fenced and cross-fenced and watered by a never-failing creek and a good well at the house; only 7 miles from another good railroad town with two roads, mill, banks and all kinds of stores. This is a very desirable home and a bargain at only \$7500. A. S. Nelson Real Estate Company, 137 N. Main, Wichita, Kans.

GREAT LAND OPENING IN SACRAMENTO VALLEY, CAL.

Complete irrigation system in operation, water enough to irrigate 200,000 acres every day in the year. Free water right. Rich black sediment soil. Every known commercial fruit and vegetable yield enormous returns. California climate; perfect title; rail and steamboat transportation; ready markets. 10, 20 and 40 acre tracts from \$50 to \$100 an acre on buyer's own terms. Write for illustrated booklet. F. E. Robinson & Co., 217 Huntington Bldg., Los Angeles, Cal.

Grain and Dairy Farms

Around Topeka. Also Fruit farms and Stock farms for cattle, hogs and horses. Raise corn, wheat, oats, alfalfa, tame grasses. Unreasonably cheap; too cheap to last. Write for particulars.

GEO. M. NOBLE & CO.
Real Estate and Loans.
OPPOSITE POSTOFFICE. TOPEKA, KANS.

Irrigated Lands

For Sale, choice Irrigated Lands, all planted with alfalfa, \$35 an acre, on Installments, Kern County, California, the finest agricultural country in the state. For particulars write, California Buyers Union, Inc., 916 Broadway, Oakland Cal.

"BARGAINS IN LAND"

320 acres well improved farm adjoining small town, all good soil, corn, wheat, and alfalfa land; 20 acres now in alfalfa; farm under fence, good pasture and meadow, fine water, good orchard; 8-room house, cattle barn, 32 by 100, horse barn, 16 by 25, granary and implement house 22 by 130, calf barn 16 by 24, several other buildings; price \$12,000; terms, one-half cash, balance on time.

200 acres farm, bottom land, mostly under cultivation; 6 miles from Lindsborg; good buildings; \$10,000.

240 acre well improved farm, 4 miles from good market; \$8,500.

160 acre farm on Smoky Hill River, 1 mile from Lindsborg; \$11,000.

180 acre farm, one-half bottom, one-half upland, buildings, fences; \$5,500.

160 acre farm, 5 miles from Lindsborg; \$3,800.

160 acre farm, 7 miles from Lindsborg; \$2,800.

80 acres farm, 3 1/2 miles from Lindsborg; \$3,300.

160 acres good land in Meade County; \$1,000.

160 acres all level land, in Logan County, will be sold cheap.

Other bargains to offer, write for list and prices.

JOSEPH A. BRANDT, Lindsborg, Kans.

WALNUT GROVE FARM

...FOR SALE...

Upon the advice of several specialists I am going to New Mexico for my health. On this account I must dispose of all my Kansas property, including the famous Walnut Grove farm, the most complete and profitable stock farm in Kansas. This includes 130 acres of the best land in Kansas, two miles from Emporia. Over 200 good O. I. C. hogs. All our Barred Plymouth Rocks, 36 Colliers, 44 head of cows, 8 head of horses, the best farm house in the State. Also one small farm house, 2 large barns, 2 large cattle-sheds, one 300-foot hen house, one 250-foot broiler house, 20 brooder houses, capacity of plant, 4,000. The best hog house in the West, double-deck cement floors; many small hog houses. This is not an experiment, but a successful stock farm. Price, \$30,000 cash.

H. D. NUTTING, Emporia, Kans.

When writing advertisers please mention this paper.

FARMERS GET RICH

What Gov. Hoch Says!

Gov. Hoch in his address, before the Trans-Mississippi Congress at Kansas City said: "Gentlemen, the Sugar Beet Industry is one of the industries that will make our empire."

Alfalfa Great Feed

You can raise stock cheaper on alfalfa than on any other feed and bring the stock to market finished in better shape.

Growing Alfalfa and Sugar Beets in the GREAT ARKANSAS VALLEY IN WESTERN KANSAS

Land that will raise Alfalfa is going to be an object in the future. The same with Sugar Beet land.

We have 30,000 acres of the best Farm Lands out of doors at poor man's prices. This land is in the Great Arkansas Valley in Western Kansas. Good Irrigated Alfalfa and Sugar Beet lands at \$40 to \$75 per acre. Alfalfa pays from \$40 to \$75 per acre and Sugar Beets from \$50 to \$90.

Lands in the Arkansas Valley will advance 50 per cent in the next six months. This is the time to buy. You'll never buy land cheaper than you can now.

Our excursion dates are the first and third Tuesdays of each month from Iowa, Illinois and Missouri points. From Kansas City the first and third Wednesdays of each month.

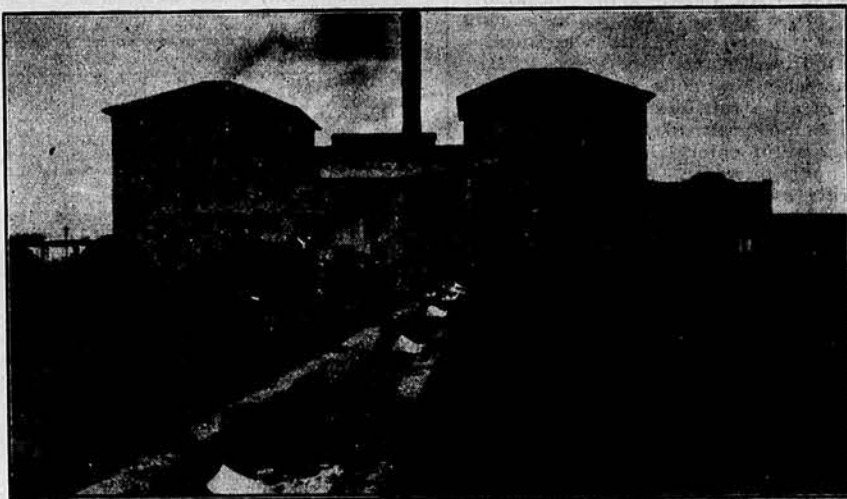
The U.S. Gov. is spending \$250,000 on an irrigation plant near Garden City

Crops Grown in the Arkansas Valley

The Arkansas Valley of Colorado produces sugar beets which make a profit of from \$50 to \$90 per acre, wheat, corn, barley, alfalfa, wild hay, sorghum, flax, oats, potatoes, watermelons, cantaloupes, apples, peaches, plums, nectarines, prunes, and bush fruits; and all in great abundance. The wheat crop is enough to bread the inhabitants and some over for shipment. It is the best milling wheat, and weighs 64 pounds to the bushel. The yield is 40 bushels per acre and there is one record of seventy.

In the West you can say for the country that it is an alfalfa country. This we can certainly apply to Finney County, for, until we found that we could do with the sugar beets, alfalfa was our best crop. Alfalfa is a splendid crop to grow in connection with sugar beets. After the sugar beets are thinned, which is the busy season in beet culture, alfalfa takes its turn—the first of June to the first of October, with a period of six weeks between each cutting, which gives all the time necessary for the cultivation of the other crops, and it is out of the way by the time the beet harvest begins.

Instead of one crop, it gives three or four every season, and, in short, a piece of land in alfalfa assures a perpetual income to the owner. It yields about 2½ tons per acre each cutting, and the hay sells for \$4.50 to \$8 per ton in the stack, but if fed to hogs or stock instead of sold, it gives the owner about \$10 per ton. The second cutting is usually used for seed, and gives about seven bushels to the acre, though cases are numerous of much higher yields. The seed sells from \$6 to \$10 per bushel, and the straw can either be fed or sold for about \$4 per ton. Sheep do especially well on the straw.



MILLION DOLLAR BEET SUGAR FACTORY AT GARDEN CITY, KANSAS. THIS FACTORY CONTRACTS TO TAKE ALL THE BEETS FARMERS RAISE AT \$5.00 PER TON.

Remember we have 30,000 acres of Arkansas Valley land to sell at poor man's prices. Do you want a part of it? We make very easy terms. Some cash, balance in three to five years.

Why You Ought to Buy Land in the Arkansas Valley

The increase in value alone will make you rich. Then there is no failure of crops. The average rainfall has been twenty inches for the past fifteen years and there is plenty of water for irrigating. Good, pure drinking water can be had at from fifteen to fifty feet. You will find here a healthful climate, pure, dry air. In a few years the same irrigated land we offer you at \$40 to \$75 per acre will be worth \$300 to \$700 per acre. This has been proven in Colorado in countries similar to the Arkansas Valley. In the meantime you can make from \$30 to \$125 per acre, the land raising alfalfa, sugar beets, cantaloupes, etc.

Can you do this in the country where you now live? And the above statements we stand ready to prove to you if you will go with us to Garden City and talk to farmers who are in the locality. No matter whether you want land for a home or for investment, we offer you an opportunity which has never been equaled, and which you will never have again, for the reason that land is getting too scarce in this country, and the man or woman who owns a piece of dirt is going to be king in the future. And why should you pay \$100 to \$150 an acre for land that will not pay 6 per cent on the investment when you can buy land for less money that will produce four or five times as much? And we stand ready to prove these statements by the experience of those already on the ground. Why raise one crop of corn when you can raise four crops of alfalfa? And the alfalfa seed alone from one crop is worth as much or more than the average crop of corn, or raise one crop of sugar beets that is worth as much as four crops of corn? Or you can raise one crop of cantaloupes that will pay from \$100 to \$125 per acre. Think this over. You'll want to quit work one of these days.

Poor Man's Opportunities

Mr. Farmer:—You don't have to be rich to go into the Arkansas Valley and make money. It's a poor man's country. We can prove to you that you can make more money on 40 acres here than you can on 160 acres of ordinary land, and do it with less work and less money invested in farm machinery, and you can buy land now for less money per acre. Don't you think it's your move?

Land Increasing in Value

Don't do as many have done in the past—wait until the prices go up, until it gets beyond your reach. Buy now, for the lands near Garden City are increasing in value faster than anywhere in the United States. The same kinds of irrigated land we will sell you for \$40 to \$75 per acre is selling in Colorado for \$300 to \$700 per acre. Our lands will make you rich on the increase in value alone, because they produce the crops.

We Own the Land

The Great Western Land Company owns the land. We bought it months ago when the prices were much lower than they are now, and we can sell you good land cheaper than any firm in the Arkansas Valley. We get our profit from the raise in value and you get the land cheaper than others are offering it. But don't wait if you want the benefit of these low prices. Get it now.

Opportunity for Investors

Mr. Investor:—Why let your money lie in the bank at 3 or 4 per cent when you can buy land in the Arkansas Valley and rent it and get 20 per cent interest on your investment in addition to the increase in value, which will amount to 25 per cent a year for the next ten years? Others are doing this now. Why not you? We can furnish large or small tracts. We can prove the above statements.

Go with us in our own private dining and sleeping cars, next excursion date and see this land from our automobiles.

If you would like to know more about the great Arkansas Valley, write us now and we will send descriptive literature, map of Kansas, etc., free. Or if you prefer we will have our nearest agent call on you, and tell you all about it. But don't wait as the lands are advancing in price very rapidly. Every day counts. We have an office in the Blossom House, opposite Union depot, in Kansas City. Call on us when here.

Write us now or tear this page out for future referencing.

THE GREAT WESTERN LAND CO.
1048 UNION AVE., KANSAS CITY, MO.

Western Office,

Garden City, Kansas

A million emigrants a year coming into the U.S. One reason why land is advancing.

The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of The Kansas Farmer. Kindly give the age, color, and sex of the animal, stating symptoms accurately, and 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 full name and should be addressed to the Veterinarian Department of The Kansas Farmer, Topeka, Kansas, or to Dr. C. L. Barnes, Veterinarian Department, Kansas State Agricultural College, Manhattan, Kansas. If in addition to having the letter answered in The Kansas Farmer, an immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across top of letter: "To be answered in Kansas Farmer."

Supposed Strangles.—I am writing you regarding my 5-year-old bay driving mare that raised a colt this summer and became somewhat thin and out of condition. Then about three weeks ago, with others, got cold distemper. I kept their bowels well open with bran mash and raw linseed-oil, also gave condition powders and others got well rapidly but she still coughs and does not do well. Her cough at times is a kind of a grunt or roar, something like a horse with heaves although she does not heave in breathing. At present her main grain feed is bran mash and I keep her in stable and turn in yard in daytime. O. G. J.

Scott City, Kans.
Answer.—We are sending you an Agricultural Review which contains an article on strangles that will give you, I think, the necessary information in properly treating your animal.

Ailing Cow.—I have a cow, 8 years old, that has very large calves. Cow supposed to be one-half Jersey and one-half Durham. After calving three years ago made bloody water for some time but got all right. Had a calf one year ago last summer, made bloody water last winter but this summer was all right by long spells. Now she is real bad again. Is not with calf. J. H. A.

Rochester, Wash.
Answer.—I would suggest that you give your cow one teaspoonful of buchu, three times daily in bran.

A Blood Purifier.—Will you please send me a prescription for a blood purifier that is a good standard recipe and with directions for using.

Naples, N. Y.
Answer.—The following is a good receipt for a horse as a blood purifier: 1 oz nux vomica; 4 oz iron sulfate; 2 oz fenugreek; 8 oz glycyrrhiza root. One-half teaspoonful of this mixed in ground feed daily. It is oftentimes well to mix the above ingredients with about 15 pounds of oil-meal and give a teaspoonful of the mixture three times daily.

Worms.—I have a black mare, 15 years old, that has been troubled for the past four or five years with something like fits. Sometimes she will go three or four months without an attack, then will commence to jerk her head and take a few steps backward and fall over to the right and in two or three minutes will be all right again. Her appetite seems to be quite good. At times she seems to be rather dazed for a short time and the other day she had four attacks and one this morning. I have never given her anything except some stock food and black draught. P. T.

Linn, Kans.
Answer.—We are mailing you a press bulletin on Strongylus armatus worms, which I fear is causing the trouble with your mare.

Ailing Hogs.—I have some ailing hogs, one weighing about 150 pounds that can not get on its feet without help. Has been this way since July 2, and has been sick since September. When raised can not stand alone and trembles like a leaf. They all have a good appetite. Have fed turpentine and coal-oil in swill and bathed across the kidneys with same. Can you give remedy? A. S.

Wichita, Kans.
Answer.—I think you have been feeding your pigs altogether too much corn. Am sending you a press bulletin on "Some Troubles of Swine" which I think will help you in remedying the trouble with your hogs.

Sores in Fetlock.—Some time ago I wrote you in regard to a German Coach stallion that I own, having some sores in fetlock. The sores are nearly healed but there is an enlargement about the size of a hen's egg in fetlock. Will equal parts of lard and coal-oil reduce the enlargement? If not, please advise me what treatment to apply. W. M.

Minneapolis, Kans.
Answer.—I believe that if there is scar tissue on your stallion's fetlock, would advise you to remove this tissue

with a sharp knife and then sear with a hot iron. This I have found the most satisfactory way in treating such cases.

Growth on Horse's Hoof.—I have a 13-year-old bay mare that has a false growth on her hoof, growing out bunchy on top of the hoof and starting from the edge of the hair. I suppose it is what is called false quarter. I would like to know what to do for it, or if there is any cure. V. E.

Revere, W. Virginia.

Answer.—I would advise your having a competent veterinarian remove the growth from your horse's hoof as it will probably need surgical treatment.

Mare Out of Condition.—I have a bay mare, 12 years old, that is thin in flesh but eats well of soaked corn and millet hay. While eating she paws with hind feet and at nights, while in stable, she sweats very badly in flanks and at hind quarters. Seems to be weak or stiff in hind quarters when first hitched to work. Will stop several times before making water.

Ashland, Kans. A. W. B.

Answer.—For your mare that is not doing well, would advise having her teeth examined to see if there is anything that will interfere with the proper mastication of her food, then if she continues to scour give a tablespoonful of chalk in ground feed three times daily. Secure a bottle of Sanmetto. It will cost \$1.00 but think it will be well spent. Give ½ oz in 2 oz of water three times daily. You can give this medicine with a syringe.

Horse With Colic.—Will you kindly give me a remedy for colic among horses through your valuable paper?

Fall River, Kans. W. P. H.

Answer.—For colic in horses give first of all a full quart of raw linseed-oil. Immediately after giving the oil give 2 oz of chloral hydrate, dissolved in a quart of water. Add to the chloral hydrate solution 2 oz of Eucalyptol. At the end of an hour repeat the dose of chloral hydrate and Eucalyptol if the horse is not relieved. You can continue giving the chloral as long as the horse remains uneasy but when easy discontinue using the chloral. The Eucalyptol not only relieves pain but also will prevent the formation of gas.

Warts.—I have a horse about five years old with a cancerous wart on his right hind ankle joint. It has been about six months since it first came. I have taken it off several times with blood-root but it soon grows back again. There was only one at first but now there are several small ones which have made their appearance in the last eight or ten weeks and the ankle is swollen quite large. Please give me a remedy that will kill it and stop its growth. J. L. F.

Wallerville, Miss.
Answer.—Secure 4 oz of Thuja Ointment and apply to your horse's wart and I think you will have no further trouble from them.

Horse With Scratches.—Please give me a speedy and safe cure for scratches as I have a horse that has had the scratches since last fall. T. S.

Buffalo, Mo.
Answer.—I would advise your using white lotion on your horse's scratches. Keep the animal's legs clean. Use the lotion daily and once a week do not use the lotion but use tincture of iodine with the medicine dropper.

FOR SALE.

Sixteen jacks, mostly coming 3-year-old. For further particulars see or write F. W. POOS, Potter, Kansas. Barn 3 blocks north of depot.

LEGAL.

FRED C. SLATER, Lawyer,
Topeka, Kansas.
Collections made in all parts of the country. Advice given on matters by mail. Inheritances collected and estates investigated in all parts of the world.

BOWSER SWEEP MILLS

Different from all others. Grind Corn with shucks or without. Kaffir in the brand and all kinds small grain. 4 and 8 horse sizes. Geared 10 to 1 or 7 to 1. (Also make 7 sizes belt mills.)
C. N. P. Bowser Co., South Bend, Ind.

CUTS Engraving Dept. of the Mail and Breeze (Topeka) makes our CUTS.

KANSAS FARMER.

Established in 1868.

Published every Thursday by the Kansas Farmer Co., Topeka, Kansas.

SUBSCRIPTION PRICE: \$1.00 A YEAR

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

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.32 per inch per week.

Special reading notices, 30 cents per line. Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order. Electrotype must have metal base.

Objectionable 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.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement. Address all communications to KANSAS FARMER CO., 225 Jackson St., Topeka, Kans.

Special Want Column

Wanted, "For Sale," "For Exchange," and such want 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.

TWO DOUBLE STANDARD POLLED DURHAM BULLS. Extra good quality, well bred and good color. Also a good 120-acre farm for sale or rent. C. M. Albright, Overbrook, Kans.

FOR SALE—Bull calves from prize-winning Holstein cows. Good ones and cheap to early buyers. Hughes & Jones, Route 2, Topeka, Kans.

WANTED TO BUY—One bull, and four to six cows of heavy milking breed. Write to Thomas W. Houston, Leavenworth, Kans.

SPECIAL SALE—5 straight (Crutchshank) Short-horn bulls for sale at bargain prices for quality. H. W. McAfee, Topeka, Kans.

REGISTERED GUERNSEY BULLS—Ready for service. Also pure-bred Scotch Cattle puppies. Dr. J. W. Perkins, 422 Altman Bldg., Kansas City, Mo.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgewick County, Kansas.

FOR SALE—Young registered Holstein bulls from big milkers and rich milkers. Burton & Burton, Topeka, Kans.

HORSES AND MULES.

FOR SALE OR EXCHANGE FOR STOCK—One 8-year-old steel gray jack, 15½ tall. Sure colts to show. H. N. Hodges, Gardner, Kans.

FOR SALE—2 Kentucky Gaited Saddle yearlings. Both registered stallions. Burton & Burton, Topeka, Kans.

TWO JACKS FOR SALE—3 and 4 years old. Missouri bred. Address S. C. Hedrick, Tecumseh, Kans.

FOR SALE OR EXCHANGE for clear land, seven head of Standard bred race horses, mares, geldings, stallions, several cows, Shorthorn bull, also a good homestead 160 in Kansas. Wallace County. Will sell furniture and fixtures and give a lease for a term of years on the best Hotel in Nebraska. Miller Hotel Co., Wymore, Neb.

FOR SALE—At reasonable prices. Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

FOR SALE—One black team, 6 and 7 years old, weight 2600 pounds. Mr. and Mrs. Henry Schrader, Wauneta, Kans.

SWINE.

CHOICE BERKSHIRE BOARS for sale, 75 to 240 pounds in weight, of the best breeding in the land. Eleven years a breeder of this beautiful breed. G. D. Willems, Tama, Kans.

FOR SALE—Harmonizer and Hot Shot Poland-China gilts. Bred to a son of Leon Calhoun's great herd boar. Also an April boar by Hot Shot out of a Harmonizer gilt. Good enough to head any herd. James B. Zinn, Box 348, Topeka, Kans.

FOR SALE—Duroc-Jerseys. Good color, fine blood, low prices. Burton & Burton, Topeka, Kans.

FOR SALE—Young registered Duroc-Jersey boar, bred right, built right, color right, prices right. Burton & Burton, Topeka, Kans.

POULTRY.

BLACK LANGSHAN cocks, cockerels, hens and pullets from high scoring stock at \$1 to \$2.50 each. Also Pekin ducks. Thos. Hutley, Route 2, Maple Hill, Kans.

CHRIS BEARMAN, Ottawa, Kans., breeder of Barred and White Plymouth Rocks. 18 years experience. Eggs in season. Write for price.

WHITE LANGSHAN COCKERELS for sale. Pure bred \$1.25 each. Geo. Hobbs, Niles, Kans.

I WISH TO CLOSE OUT

my entire stock of Buff Leghorns and Silver Laced Wyandottes. Will sell very reasonable some very nice birds. Address Mrs. S. M. Kelper, 2410 South 16th St., St. Joseph, Mo.

COCKERELS FOR SALE

from twenty different varieties at farmer's prices. Also Toulouse geese, Pekin ducks and M. B. turkeys. Write for catalogue.

Walter Hogue, Fairfield, Neb.

When writing advertisers please mention this paper.

REAL ESTATE.

CHEAP LAND, good crops, low taxes. Johns Oklahoma. \$5 to \$8. J. A. Willis & Company, Higgins, Lipscomb County, Texas.

FOR CHEAP LAND AND HOMESTEADS write to Chas. F. Knight of Burlington, Col. He has land priced right and has a claim on several good homesteads close to town. Will not stand long, and from \$5 per acre up. Write today or come at once. Chas. F. Knight, Burlington, Colo.

FOR SALE—160 acre bottom farm 5 miles from Wichita, all smooth, 100 acres in cultivation, fenced and cross fenced, good 5 room house, barn, outbuildings, well, windmill, 60 acres wheat, 8 acres alfalfa, worth \$10,000, price \$6000. I. B. CASE & CO., Wichita, Kans.

LYON COUNTY FARMS

240 acres, 8 miles from Olpe, 18 from Emporia, 1½ miles to school, 30 acres in cultivation, 20 meadow, balance pasture, black limestone soil, bearing 80-chard, all kinds of fruit, splendid water, 7 room house, small barn, 22 acres alfalfa. Price, \$5,000. HURLEY & JENNINGS, Emporia, Kans.

A SNAP.

Here the snap of your life, a splendid bottom farm of 480 acres, nicely located; 220 acres in cultivation, balance in pasture and meadow. A splendid 2 story house of nine rooms, good barn, cattle sheds and other buildings, everything in first class condition. This is one of best farms in the county. Can be bought for \$50 per acre. Might take a stock of hardware or cattle ranch in part payment. WRITE ME QUICK for full particulars.

C. R. Cantrall, Fredonia, Kans.

SEEDS AND PLANTS.

JUST OUT—Our New Seed Catalogue for 1907. Complete from cover to cover. Latest and best novelties in vegetables and flowers. Free copy for the asking. Send for it now and tell your neighbors also. The Barteldes Seed Co., Lawrence, Kans.

WANTED—Alfalfa, Red Clover, Timothy, Millet, Cane seed and other field and grass seeds; also popcorn. If any to offer please correspond with us. The Barteldes Seed Co., 804 Mass. St., Lawrence, Kans.

MISCELLANEOUS.

WANTED—Will make an excellent offer to an honest, competent and industrious tenant who will handle a hay farm on shares in the famous Pecos Valley, New Mexico. Eli Good, Marion, Kans.

WANTED—At once, 25 apprentices for dress-making. Free instruction given by Miss Brundage of the School of Dramatic Art. Address Mrs. Mercer, care Crosby Bros., Topeka, Kans.

WANTED—Gentleman or lady to travel for met-cattle house of large capital. Territory at home or abroad to suit. If desirable the home may be used as headquarters. Weekly salary, of \$1,000 per year and expenses. Address, Jos. A. Alexander, Topeka, Kans.

A BOOKLET telling all about the Anti-Horse Thief Association free. Address N. S. Randall, R. F. D. 1, Cherokee, Kans.

HONEY—For Kansas, Missouri and Oklahoma. Two 5-gallon cans, 120 pounds net—Amber \$8.40; whitest \$9. Also small cans. Comb honey in one pound sections 12½c. Write for price list. Nothing but genuine bees honey. Reference Kansas Farmer Co. Address Cheek & Wallinger, Props, Arkansas Valley Apiaries, Los Animas, Colo.

WANTED—Energetic man to sell rubber boots and shoes on commission to country merchants in January, February, March and April. Will give as many counties around your home as you can visit in this time. A man with horse and buggy can make good pay. Samples furnished free. Address, giving particulars, Shoe Salesman, care Kansas Farmer.

PURE KANSAS SORGHUM—A good grade at following prices: 10 gallon kegs, \$4.20; 5 gallon kegs, \$2.20. F. O. B. cars at Tyro, Kans. G. R. Wheeler.

FOR SALE OR TRADE—Choice alfalfa farms, Clydesdale Horses, Shorthorn and Jersey Cattle, Poland-China, Duroc-Jersey and C. I. C. Hogs. 40 varieties of poultry and pet stock. Pure seeds and nursery stocks. Full particulars in catalogue. 10c brings it. Merchandise wanted; what have you to trade. A. Madsen & Sons, Atwood, Kans.

WANTED—Ladies to work on piece work, \$3 per dozen. All material furnished. No canvassing; steady work. Stamped on envelope. Best Mfg. Co., Champlain Bldg., Chicago, Ill.

6,000 FERRETS—Some yearlings, especially trained for rats. Book and circular free. Levi Farnsworth, New London, Ohio.

HONEY—8 cents per pound. Write A. S. Parson, 514 S. Main St., Rocky Ford, Colo.

WANTED—Non-union moulders. Call or write Topeka Foundry, 318 Jackson St., Topeka, Kans.

WANTED—A good second-hand grain separator. Dr. Barker, Chanute, Kans.

Stray List

Week Ending December 20.

Ness County—J. H. Eiting, County Clerk. MARE—Taken up, November 23, 1906, by Albert Johannes, in Nevada tp., one sorrel mare, with blaze face, valued at \$50.

Douglas County—A. Frank Kerns, County Clerk. HEIFER—Taken up, November 8, 1906, by W. C. Howard, in Palmyra tp., one dark heifer 16 months old, white face, valued at \$12.

Week ending December 25.

Bourbon County—Chas. E. Holstein, County Clerk. STEER—Taken up, December 10, 1906, by Wm. Chenoweth, in Mapleton, one 2-year-old dark red steer, underbit in both ears, valued at \$18.

Cherokee County—R. G. Holmer, County Clerk. HEIFER—Taken up, November 26, 1906, by Chas. Evers, in Garden tp., one red and white heifer, valued at \$12.

Greeley County—G. S. Hurt, County Clerk. TEAM—Taken up, December 1, 1906, by G. H. Lowrey, in Tribune tp., team of geldings; one dark bay horse, about 15 years old, right hind foot white, very little white in forehead, wire scar on back of left front foot and on front of same, leg near breast showing that at the same time all the muscle has been severed to the bone, harness marks, height 5 ft. 5 inches. One light-bay horse about as old as above, right feet and left hind foot white, strip and snip in face, left side of head carved in from center of forehead below left eye, harness marks, 66½ in. high.

Week Ending Jan. 3.

Marion County—D. D. McIntosh, County Clerk. COW—Taken up by A. H. Frobenius in Center tp., November 2, 1906, one red cow, one horn partly off, branded "R" on left hip, age 6 or 7 years, weight about 700, valued at \$25.

Finney County—W. McD. Rowan, County Clerk. MARE AND COLT—Taken up by W. H. Fant, in Garden City tp., November 27, 1906, one sorrel mare 7 years old, blaze face, collar marks on shoulder and white fore feet, valued at \$75. One bay mare colt 6 or 7 months old, valued at \$30.