

KANSAS FARMER

Volume XLV. Number 3

TOPEKA, KANSAS, JANUARY 17, 1907

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KANSAS FARMER.

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THE KANSAS FARMER waste-basket is again receiving a good many inquiries which would receive the careful attention of the editor if they had been signed with the real names of the writers. Sign whatever you write to a paper. If you prefer that your name be not printed, your request to that effect will be respected; but sign.

The U. S. Department of Agriculture has just issued Bulletin 173, the Evolution of Corn-Harvesting Machinery, by C. J. Zintheo. In the principal corn-growing region of the United States, as a rule only the grain is harvested, the stalks being left in the field to be eaten by live stock, or raked and burned. It is estimated that in this way nearly one-half the food value of the corn-plant is wasted. This bulletin describes the various machines which have been developed for harvesting the corn-plant and preparing it for stock feed. It gives statements of cost, the length of service which may be expected under ordinary conditions, and the work which can be done with the various machines. Application for this bulletin should be made to the Director of the Office of Experiment Station, Washington, D. C.

APPROPRIATIONS.

One of the important problems to which almost every Legislature addresses itself is that of keeping appropriations within reasonable limits. A very large part of all appropriations goes to pay salaries of officials and other employees of the State. After all the competition and turmoil might imagine that every position, at its pay, is desirable. But no sooner does the incumbent begin to get his office accustomed to his presence than he concludes that the compensation is entirely inadequate as compared with the value of his services. There comes to the Legislature a mighty demand for increased appropriations. This is backed by the showing that the increase necessary to suitably recompense John Doe and Richard Roe for their self-sacrificing devotion to the public service would add but an inappreciable increment to the taxes of Smith and Brown and the other several contributors to the public purse.

It is proper for legislators to observe that the money they are asked to provide and to appropriate is earned, the wealth is created, by the sweat and toil of constituents at home, who are too busy, and most of them too poor, to come up to the capital and advise about

the appropriation of what their labor has produced.

There is a view, however, which it is well to take. Members of the English Commons receive no pay. Therefore, only a rich man can afford to accept election to the Commons, unless indeed his living and expenses be provided from some source. That they might be represented in the Commons, English labor organizations have, in recent years, contributed from their treasuries for these representatives' support. But the general effect of the English system is against the representation of the poorer people by persons who know their needs and their views by having shared them. It is not desirable, it is scarcely safe, in this country to have compensation for official service reduced to a figure that would make it possible for rich persons only to take office.

There are some employments in the service of the State that need careful and broad-minded consideration. Eastern educational institutions have long been in the habit of casting their eyes over Kansas educational institutions when in need of a strong man for an important chair. They have had no difficulty in offering salaries so greatly in advance of what we have paid that our men could not, as a rule, in justice to their families decline to make the change. This is especially true of the employees of the Agricultural College. Kansas is able to pay such salaries as will keep the best for the instruction of her farmers' sons and daughters, and for the performance of the work of the Agricultural Experiment Station.

THE KANSAS STATE BOARD OF AGRICULTURE.

The Kansas State Board of Agriculture, held its thirty-sixth annual meeting in the Capitol building at Topeka on January 9, 10, and 11, 1907. Like all of its recent predecessors, this was a great meeting. On the program were several eminent persons of this and other States. The more valuable of the papers presented will appear in this and subsequent numbers of THE KANSAS FARMER. In the discussions, the venerable gentlemen who have come up to these annual meetings for many years, were possibly a little less combative than a decade or two ago, but they enjoyed their thrusts and their love-feast even more than formerly.

Every two years for a long time Ex-Governor Glick has honestly tried to dissuade his fellow members of the board from electing him as his own successor, saying that a younger man, a man actually engaged in farming, should take his place. His arguments were this year, as formerly, set at naught, as the others told how they loved him and valued his presence and would feel a great loss without him. Then followed his unanimous reelection. Hon. Edwin Taylor, who has been an aggressive member, was this year detained by sickness. His term expired, but he was elected his own successor by the usual unanimous vote. There came near being a slip of the machinery in the case of Hon. J. W. Robison. It was time for him to retire from the presidency of the board. Now, the officers are members only ex-officio. The retiring vice-president, A. L. Sponsler, had been elected president. Charles E. Sutton had been elected vice-president. These elections had vacated Mr. Sutton's membership and had left Colonel Robison out of both office and membership. When it came to the election of a successor to Mr. Sutton, a man from the north central portion of the State, the portion from which Mr. Sutton hailed when elected, was nominated and numerously seconded. Then it was suggested what would happen to Mr. Robison, and there was consternation. The trouble was quickly obviated, however, by the declaration of the new man in favor of Colonel Robison.

The election of officers and members resulted as follows:

OFFICERS.

A. L. Sponsler, president, Hutchinson; Chas. E. Sutton, vice-president, Lawrence; Edwin Snyder, treasurer, Oskaloosa; F. D. Coburn, secretary, Topeka.

MEMBERS.

E. W. Hoch, Governor, Topeka; C. E. Denton, Secretary of State, Topeka; W. R. Dowling, Norcatur, Decatur County; Thos. M. Potter, Peabody, Marion County; A. W. Smith, Groveland, McPherson County; I. L. Diesem, Garden City, Finney County; T. A. Hubbard, Wellington, Sumner County; J. T. Treadway, LaHarpe, Allen County; G. W. Glick, Atchison, Atchison County; Edwin Taylor, Edwardsville, Wyandotte County; J. W. Robison, Eldorado, Butler County; Geo. W. Hanna, Clay Center, Clay County.

*Holds over; election of successor next year.

†Ex-officio.

dotte County; J. W. Robison, Eldorado, Butler County; Geo. W. Hanna, Clay Center, Clay County.

On the program of the meeting was Gov. E. W. Hoch, who being unable to attend and deliver the address of welcome, was ably represented by the newly elected Attorney-General, F. S. Jackson. An address of welcome on behalf of the city of Topeka was delivered by Mayor W. H. Davis. To these addresses fitting response was given by President J. W. Robison. The session of the first evening was concluded with the reading of an able paper on "Improved Live Stock a Necessary Adjunct to Successful Farming," by S. F. Lockridge, ex-president of the American Shorthorn Breeders' Association, Greencastle, Ind.

The session of Thursday morning was opened with the presentation of an excellent practical paper on "Corn-Growing," by M. Mathewson, a Shawnee County farmer. Following this was a paper on "Why not Sheep in Kansas?" by Geo. M. Wilber, president Ohio Live Stock Association, Marysville. The afternoon session began with an address on "Tuberculosis in Cattle," by H. L. Russell, professor of bacteriology, Wisconsin College of Agriculture, Madison. Next came a paper on "The Sugar-Beet Industry in Kansas," by E. C. Sharer, Colorado Springs, Col.

The evening session of this, the second day, was devoted to consideration of matters closely related to practical problems, but not exactly the problems of production nor yet of marketing. The first of these able papers was by Dr. C. W. Burkett, director of the Kansas Experiment Station, who considered "What More May Kansas Farmers Do?" This excellent address was warmly commended. It was a strong presentation of the farmers' view of the relations, duties, and opportunities of the times. To get an adequate idea of the paper the reader will await its publication in THE KANSAS FARMER. The last paper of the day was "A Message from a Kansas Club Woman," by Mrs. Catharine A. Hoffman, Enterprise. Mrs. Hoffman got into immediate touch with her auditors in telling of her difficulties in arranging to leave home. One of her cares was her Jersey cow which she herself milks. Then the load of alfalfa came when she should have been getting ready, and there was neither man nor boy about the place to help put the hay in the barn properly. The man with the hay did what he thought was proper and got the hay all inside the barn. But to make sure that all was well with the Jersey cow, Mrs. Hoffman went to the barn where she found it necessary to remove a lot of the hay so that the Jersey cow could not eat too much of it. She suspected that in her subsequent hurry she had not gotten the alfalfa leaves all out of her hair. Her paper was a delight to her hearers, who gave her an enthusiastic vote of thanks.

Friday's session opened with one of the most important addresses of the meeting on "The Conservation of Soil Moisture," by J. G. Mosier, professor of soil physics, Illinois College of Agriculture, Urbana. The "Paramount Need of this Time" was presented by Frank Cooper, Kansas City, Mo.

Besides the election of officers at the afternoon session a paper on "Feeding Beet Pulp to Cattle" was read by Jas. A. Lockart, Colorado Springs, Col. Mr. Lockhart is a successful feeder of this by-product of the sugar-factory, but he is not a "boomer." He candidly showed the limitations to its profitable use. It is a low-grade feed which may supplement other feeds, but its value is too low to admit of hauling it to any considerable distance. Indeed, it must be fed at or very near to the factory.

The last evening session was opened with an address by Hon. Joseph G. Waters, of Topeka. It was a characteristic effort. In it he enlarged upon the excellent work of the secretary of the board as only Joe Waters can. The closing paper of the meeting was one of patriotism, "The Man with the Flag," by Mrs. H. O. Garvey, Topeka. This paper, replete with noble thoughts, will appear in THE KANSAS FARMER next week.

SENATOR CURTIS.

It was determined at the caucus of the Republican members of the Kansas Legislature last Friday evening that Congressman Charles Curtis, of Topeka, shall be the candidate of his party for election to the office of United States Senator to succeed J. R. Burton. Since the Republicans have a great majority in each branch of the Legislature, this nomination is considered equivalent to election.

Mr. Curtis has represented the first Kansas district in Congress for nearly fourteen years. He is a native Kansan.

His birthplace is North Topeka. He is 47 years old. He is a quarter-blood Indian of the Kaw tribe. As a boy he had a severe struggle with poverty, but is reported to have been always a hustler and ready for any kind of work. Riding race-horses and driving a bus are named as two of his occupations in those days. He used his spare time on the bus for study. He managed to go through the grades and finally the high school in Topeka, and then succeeded in getting into a law-office, working for the lawyer to pay for his instruction.

Mr. Curtis later came into prominence by being elected county attorney. Topeka had saloons and joints when the young county attorney took office. While he has since held a more exalted position, his biographer will probably record to his credit nothing of which his children will have more reason to be proud than of the fact that he closed the saloons and joints and kept them closed.

As a Congressman, Mr. Curtis has been a diligent worker. Since President Roosevelt has been outlining the "square deal," Mr. Curtis has been a uniform supporter of his proposals.

Kansas people need have no fear that Senator Curtis will ever bring disgrace upon his State. THE KANSAS FARMER believes him to be honest in his purposes and clean in his methods.

Neither Senator Long nor Senator Curtis would have been selected as railroad "baters." It is probably true that they are quite satisfactory to the railroads, at least to such railroad managers as are willing to concede the right of Congress to regulate railroads, their operation and charges, within constitutional limits. It is not likely that either would favor Government ownership of railroads. Certainly each will stand for regulation rather than ownership, unless and until driven to the more socialistic position by an overwhelming demand from his Kansas constituency.

On the important question of foreign markets, both Senators occupy advanced positions and can be expected to favor such modification of tariffs as will improve our opportunities to sell Kansas food products in old world markets.

Kansas has now in Senators Long and Curtis a strong representation in the upper house of Congress, one that compares favorably with that of Senators Ingalls and Plumb.

AGAINST A CONSTITUTIONAL CONVENTION.

The proposition to call a constitutional convention has again been introduced in the Kansas Legislature. There are no new arguments in favor of this expensive luxury. In fact, several of the points in which the constitution needed changing have received attention in the way of amendments submitted by the Legislature and adopted by vote of the people at recent elections. Three of such amendments were adopted at the last election. If there are other changes that ought to be made, they may with little expense be submitted and adopted in this simple manner.

As a matter of fact the demand for a constitutional convention comes mainly from two classes of individuals, namely, first, those who hope for personal profit as possible members of the proposed constitutional convention or on account of the added litigation that must result in the readjustment of laws and customs to the new organic law, and, second, those who hope that the prohibitory provision may be left out of the new fundamental law.

The hope of those who desire to put the people to a great expense the schemers may profit ought surely to be disappointed. How great this expense would be can be only approximately estimated. To make a new constitution it would be necessary to call a convention. To this would be elected a lot of high-priced and low-priced lawyers and perhaps a lot of substantial citizens. These would all have to be paid, and if paid according to their own estimate of the value of their services, the aggregate would not be a small one. The publication of the new instrument and its submission to vote would be another expense. If it should fall of adoption, of this expense would be wasted. If a new constitution were adopted, the expenses would then begin to earn. The laws would have to be made conform to the new constitution. An estimate of the expense of this confirmation of the laws can be made. It would involve more or less tedious work of the Legislature and the expense of printing new copies of the laws for every officer in the State.

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would involve the expense of litigation through the lower courts and the Supreme Court to determine the meaning of the new constitution, the meaning of the new laws, and their constitutionality. These points have been fairly well determined under the present constitution and laws at an expense of millions of dollars. Tax-payers should consider well whether they are willing to be saddled with these unnecessary expenses.

So far as the demand for a constitutional convention is prompted by a desire to get at the prohibitory provision of the present instrument, it may well be remembered that such a move would bring the prohibitory question into politics with an intensity never yet experienced in Kansas. The plea that is sometimes made for the elimination of this question from politics does not harmonize with the demand for a constitutional convention. Friends of prohibition are satisfied with the constitution as it stands. They should resist every attempt to recede from the advanced position the State has occupied for a quarter of a century.

Those who are opposed to saddling the State with a useless expense of unknown but vast proportions, and those who are opposed to a turbulent campaign for and against a retrograde movement on the temperance question should write their Senators and Representatives in the Legislature now in session at Topeka and should make plain their views on these important matters. Those whose labor and care produce the wealth of Kansas can not afford such foolishness.

TEMPORARY POWER TO THE EXECUTIVE, PENDING GENERAL TARIFF REVISION, PROPOSED.

In his address before the National Foreign Trade Convention, now being held at Washington, D. C., Mr. Alvin H. Sanders, chairman of the American Reciprocal Tariff League, urged that if general tariff reform and revision is to be put off until 1909, some temporary grant of authority should be made to the President to enable him to avert the German difficulty and conclude such agreements as will bridge over existing troubles until such time as Congress takes up the whole matter. He said: "A joint resolution of Congress, authorizing the President to concede for a period of five years 20 per cent of existing duties to any country extending to us its minimum or most-favored nation rates for a like period, is simple, automatic in its action, in line with the spirit and intent of the framers of the Dingley law, and requires only a Presidential proclamation to make it immediately effective. It would perhaps meet fairly well the situation as relates to nations using the dual-tariff system, but something more is needed in other cases.

"A bill like that proposed by Representative Curtis, of Kansas, (H. R. 15,725), authorizing the executive to negotiate and proclaim special agreements on similar terms for a like period, would be more effective and would clarify the situation without opening up interminable hearings and wrangling in House or Senate.

"Neither of these propositions exceeds the limit of concession written into the present law by those who enacted it, and either would rid Congress of trouble, which both branches, one would think, would be glad to be rid of.

"The authorization of the appointment of a permanent disinterested, non-partisan board of commission to study at all times the currents of international trade and report necessary or desirable changes would put the arbitration of matters in dispute in the hands of men not under the duress of selfish local demands or the exigencies of practical politics.

"In the event of the rejection this winter of these or some similar plans, the business interests of the country will, beyond all question, have to undergo during the next few years the throes of an extended political campaign waged with tariff reform as the burning issue, with the outcome shrouded in doubt. Is that to be desired or avoided?"

"By the way, sir, asked the waiter, 'how would you like to have your steak?'"

"Very much, indeed," replied the mild man, who had been patiently waiting for twenty minutes.

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Kansas Improved Stock Breeders' Association

Seventeenth Annual Meeting.

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Secretary-Treas...H. A. Heath, Topeka
Asst-Secretary...I. D. Graham, Topeka

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E. Harrington.....Baker
A. C. Shinn.....Ottawa
S. C. Hanna.....Howard
James Mains.....Oskaloosa
Geo. A. Blair.....Mulvane

In point of enthusiasm, attendance, and excellence of program, the seventeenth annual meeting of the Kansas Improved Stock-Breeders' Association was a record-breaker. This association has always had good meetings, and with each succeeding year they have seemed to improve in quality, until the climax was reached in the meeting which opened in the Supreme Court chambers in the State House on Monday afternoon of January 7.

Although disappointed by the failure of some of the prominent speakers to reach Topeka, the program was conceded by all to have been the best in the history of this association. It was distinctly a live-stock meeting, and had the merit of being intensely Kansan. Very few people from outside the State were invited to participate, and the meeting was by Kansas men and for Kansas interests.

Director C. W. Burkett, of the Kansas Agricultural Experiment Station, was present at this meeting for the first time. Dr. Burkett is a new man in Kansas, who has been placed in charge of all of the experimental work now under control of the Kansas Agricultural College, and this was his first introduction to the men with whom he will be brought into the closest relations. No association in any State more fully appreciates the good work that has been done by the Experiment Station than does the Kansas Improved Stock-Breeders' Association, and the welcome accorded to Dr. Burkett was a royal one. His lecture upon "Some Truths of Breeding that the Breeders Most Heed" was one of the good things of a good session.

The same may be said of Dr. Schoenleber, who is professor of veterinary science at the State Agricultural College and State Veterinarian of Kansas, and his report upon the condition of live stock in Kansas was received with much satisfaction by the members.

Following out the plans of previous meetings, the program was so divided that one session was given each to beef cattle, the horse, the hog, the dairy, general feeding, and the business session. The horse session included "A Review of the Horse, Past, Present and Future," by T. H. Terry, of Bavaria; "The American Carriage Horse," Fred W. Norris, Topeka; and "Colt Raising in Kansas," Dr. J. T. Axtell, Newton.

The swine session is always given by the Kansas State Swine-Breeders' Association. It included "Mistakes in the Pure-bred Swine Business," W. R. Dowling, Norcat; "A Plea For More White Hogs in Kansas," A. T. Garth, Larned; "Pig-Feeding Experiments," Prof. G. C. Wheeler, Kansas Experiment Station; and a swine symposium led by Geo. W. Berry, Emporia.

This year more attention was given to the sheep than usual, for the reason that the officers and members of this association recognize the present value of the sheep on the Kansas farms, and desire to encourage its breeding and development within the State. The program was as follows: "The Place of Sheep on the Kansas Farm," W. F. Baird, LaCygne; "Sheep-Raising in Kansas—A Neglected Industry," A. J. Knollin, Union Stock Yards, Chicago; "Some Problems of Sheep Husbandry," Prof. R. J. Kinzer, Kansas Agricultural College.

The officers of this association also recognize the vast importance of the dairy industry in Kansas. The Kansas State Board of Agriculture reports over 700,000 milk-cows in Kansas, whose annual product is much lower than the general average for the United States, and yet whose money value to the State, according to Government estimates, is more than \$17,000,000 per year. In order to emphasize the importance of this industry and to properly present its merits before the association, two very strong men were placed on the program to represent the dairy-cow in Kansas. Mr. T. A. Borman, of the Continental

Creamery Company, Topeka, who is perhaps more familiar with dairy problems in all phases in Kansas than any other man, presented, "A Sane View of Farming in Kansas." Mr. W. W. Marple, of the Blue Valley Company, of Chicago, gave one of the most eloquent tributes to the cow that was ever made. Mr. Marple is a master of poetic English, and his address was at once a revelation and a satisfaction to his auditors.

The association was particularly fortunate in securing Prof. H. R. Smith, of the Nebraska Experiment Station, and author of the popular work, "Profitable Stock-Feeding," to appear on the program. Professor Smith was scheduled for the meeting of the Missouri State Board of Agriculture, but kindly consented to stop over between trains, and his address on "Some Problems in Cattle-Feeding" proved immensely valuable.

The seventeenth annual meeting of this association will linger in the memories of those who were present to attend its session, as one of immense value to the live-stock interests of the State. At its close each one felt that his time had been well spent, and that the facts gained at this meeting and carried home would many times repay for the trouble and expense of attending, while the acquaintances formed with other breeders served to add to the interest, pleasure, and profit of the meeting.

The afternoon of Wednesday was devoted to a combination Shorthorn sale by the Shawnee Breeders' Association, which is reported elsewhere in this paper.

A social session was held on Wednesday evening in the Masonic Temple, where the members of this association, of the State Board of Agriculture, and of the Legislature, now in session, assembled to participate in a musical entertainment and banquet furnished by The Kansas Farmer Company. The large hall was filled to its capacity, and the crowd was entertained by some of the best musical talent of the city, which included the famous Modocs, headed by Major Tom Anderson, who rendered a number of songs in their inimitable manner. After the musical numbers light refreshments were served, and the social hour spent in this manner was unanimously voted a fitting end to the most profitable and interesting meeting ever held by the Kansas Improved Stock-Breeders' Association. The proceedings, together with the papers read, will appear in the columns of THE KANSAS FARMER.

Resolutions.

Resolved, that we favor the abolition of railroad passes in Kansas, except for railroad employees and families, and for persons subjects of charity, and for shippers of live stock to return to their homes after accompanying stock to market.

Whereas, Kansas is by her position, peopling, and natural genius necessarily engaged in producing grasses, clovers, and grain, with her greatest source of wealth in her live animals, her horses, cattle, swine, sheep, and poultry and

Whereas, to create and maintain a supremacy in producing the best of horses, cattle, and other live stock, it is essential that Kansas farmers have high and correct ideals, which they can get only by knowing what other men have done, so that familiarity with the best work of other breeders is the first requisite of success to the Kansas grower of live animals, and

Whereas, the medium of the State fair is the best, easiest, and cheapest means of presenting to our people these splendid examples of what the best breeders of the world have achieved, and

Whereas, the use of a rightly organized and conducted State fair brings great pleasure, as well as instruction and profit to the country people of a State, being only second in its educational value to an agricultural college, and

Whereas, we do not believe that the farmers and stockmen of Kansas can soon attain to the degree of greatness and success that is by right of nature and inheritance theirs without the aid of a live, clean, progressive State fair, we the Kansas Improved Stock Breeders' Association do hereby

Resolve, That we most respectfully but earnestly petition our Representatives and Senators in Legislature assembled that they give the matter the consideration that its importance deserves, and that they enact such laws and make such appropriations as will inaugurate and maintain a fair worthy the State of Kansas and the enterprising stockmen thereof.

Whereas, the live-stock interests of Kansas represent such an enormous

relative amount of capital within the State, and

Whereas, the board of regents of our State Agricultural College ask for an appropriation for a building of veterinary science at the college; therefore, be it

Resolved, That the members of this, the Kansas Improved Stock Breeders' Association, individually work for an appropriation for such a building which will be commensurate with the live-stock interests, and that such an appropriation be not less than one hundred thousand dollars.

To Governor E. W. Hoch:

Whereas, there will be three vacancies upon the board of regents of the Agricultural College to be filled at this session of the Legislature; and

Whereas, the agricultural and live-stock interests of the State should be represented in the management of the affairs of the college; be it

Resolved, By the Kansas Improved Stock Breeders' Association that we respectfully request the appointment upon the said board of regents, of an actual representative breeder of live stock.

To Governor Hoch:

The Kansas Improved Stock Breeders' Association in seventeenth annual session, in behalf of the future welfare of the Kansas State Agricultural College recommends to you, Mr. S. C. Hanna, president of our association, of Howard, Kans., as the unanimous choice of our association for a place on your board of regents of the Agricultural College, and trust that you may see fit to recognize the importance of such action.

Resolved, That we express our appreciation of the valuable work done by the farmers' institutes which have been held throughout the State, but realizing the inadequate funds provided by the State for carrying on this work, herewith resolve that it is the sense of this meeting that more ample funds should be appropriated by our State Legislature for the farmers' institute work, said sum to be not less than \$10,000 per annum.

Resolved, That this association earnestly petition the President of the United States and the Kansas Representatives and Senators in Congress to make all possible efforts to preserve to American live-stock growers our present foreign markets which we are now in danger of losing, and that the President, Representatives, and Senators are urged to gain by equitable and just reciprocal tariff treaties or legislation, access to the markets of such countries as now exclude our live-stock products or discriminate against them.

Resolved, That our Legislature be requested to enact such laws as will provide for the proper licensing of qualified veterinarians and the control of veterinary practice within the State.

Resolved, That a law is positively needed for the protection of the feeding-stuffs against adulterations of various kinds, and that a law be passed defining the sale and inspection of feeding-stuffs, the inspection of the same being vested with the Kansas State Agricultural Experiment Station.

Resolved, That we respectfully request the Legislature to appropriate the sum of \$500 per year for the publication and distribution of the proceedings of this association.

Whereas, the ease of adulterating many kinds of agricultural seeds has permitted unscrupulous dealers, either consciously or otherwise, to introduce in the State noxious weeds, and other deleterious materials; seeds that are low in vitality and that are low in purity; be it

Resolved, By the Kansas Improved Stock Breeders' Association, that the Legislature now in session be urged to enact a law that shall put the inspection of agricultural seeds among the duties of the Kansas Agricultural Experiment Station.

Resolved, That we request the Legislature, now in session, to pass a law creating the office of State Dairy Commissioner whose duties shall be in part to inspect all milk products and manufacturing plants, give instruction and expert advice where needed, and to have police powers for the enforcement of the pure-food laws relating to dairy products.

Resolved, That for the purpose of making the office of dairy commissioner nonpartisan, we recommend the creation of a special dairy commission, consisting of the president of the Kansas State Agricultural College, the president of the State Board of Agriculture, and the president of the State Dairy Association, who shall name the State Dairy Commissioner, and define his duties, where not provided for by law.

Whereas, the Kansas Experiment Station has proved itself to be invaluable to our people, and

Whereas, the great good it has done in the past has been wholly without cost to the State,

Resolved, That we earnestly and urgently request the Legislature to make a liberal appropriation for the Agricultural Experiment Station, at Manhattan, for the biennial period, to the end that the magnificent work it is now doing may not be hampered for the want of funds.

Resolved, That we express our appreciation of the valuable work done by the farmers' institutes which have been held throughout the State, but realizing the inadequate funds provided by the State for carrying on this work, herewith resolve that it is the sense of this meeting that more ample funds should be appropriated by our State Legislature for the farmers' institute work, said sum to be not less than ten thousand dollars per annum.

Resolved, That we congratulate the management of the American Royal Live Stock Show on the success of the

swine department of this great breeders' exhibition in 1906, and we urge the swine-breeders of Kansas to give this show the cordial support which has been given it by the cattle, horse, and mule-breeders of the State. We commend the efforts of the American Royal management to add a sheep department to the show, and urge the sheep-breeders of Kansas to give them their hearty support in this work.

President's Annual Address.

S. C. HANNA, HOWARD.

I am indeed proud to have the honor of welcoming you to our seventeenth annual meeting. Our other sessions have been held under varying circumstances and conditions, in recent years, perhaps, more favorable than otherwise, but I think you will sustain me in the statement that there has been no time in all its history when every industry represented in our association has been so generally prosperous. And I believe it is within the limits of reasonable expectation to predict, that, with an average crop-production, this prosperity will continue for a number of years to come.

Although Eastern misapprehension may have provoked the inquiry, there has never been anything "the matter" with Kansas or her people. She has the same rich and productive soil, and the same brave people she has always had. I can understand why the brilliant editor who, for the merriment of thoughtless banqueters, tried to answer the question, "What's the matter with Kansas?" should now be ashamed of it, for the suggestion of such a toast would be no more impertinent now than it was then. There is nothing the matter with Kansas, or her people, and there never was, unless it is a serious ailment to be found in the fore-front of progress in all matters that pertain to the advancement of our moral and material welfare. We might make a whole lot of comparisons with older States that would not be to our advantage, but, as we have an able member of this association who occasionally invites their attention to our superiority in some particulars, I will confine myself to those matters that come within the special province of the Improved Stock-Breeders' Association.

Our secretary informs me that this is the largest, and most successful organization of its kind in existence. We have a membership of over nine-hundred, representing every breed of live stock in the State. He informs me that he has attended these association meetings in a number of the most important agricultural States in the Union, and has found none where the membership and attendance was as large, or where the programs and discussions were more useful and interesting, than those held at our meetings.

It is but simple justice to say that the success of this organization is very largely due to the efforts of our able and energetic secretary, and his able assistant, with the cooperation of those officers and members who have been constant in their attendance, and unremitting in their efforts to make the programs and discussions profitable.

BENEFITS TO BE DERIVED FROM THE STOCK-BREEDERS' ASSOCIATION.

While this association has made a remarkable growth, and has had a far-reaching influence, it has not yet reached the limit of its usefulness. Every owner of a pure-bred animal in the State of Kansas should become a member of this association. It affords an opportunity for those who are engaged in the breeding of pure-bred stock, of every description, to come in personal contact with each other, exchange experiences, and formulate plans for the advancement of the great industry we represent. As our numbers increase, we extend our influence and power to secure a proper recognition of the great live-stock interest of the State in legislation, and in other directions where this great industry has been neglected. When a large majority of our breeders become members of this association, we will not ask the Legislature in vain to provide us a fund for the publication and distribution of our proceedings. We would then secure the recognition we are entitled to, as a very important auxiliary of the State Board of Agriculture; the foundation, in fact, upon which the success of all our agricultural interests must finally rest. As our membership is larger, our personal influence must be more far-reaching than that of the State Board of Agriculture, and would be constantly directed in cooperating with the State Board toward the advancement of the agricultural interests of the State.

IMPORTANCE OF OUR AGRICULTURAL COLLEGE.

Our Agricultural College, from the standpoint of material interest, is by far the most important educational in-

stitution in the State. It represents those industries which must, for all time, be the foundation of the State prosperity. It is of far greater importance to the human race, and to the people of Kansas, that its citizens have an intimate knowledge of the roots of plants, and the causes which contribute to their thrift or decay, than for them to have a knowledge of the roots of words derived from languages long since dead. While I would not wish to be understood as depreciating the value of a liberal education, I do not think that the importance to the people, of a scientific knowledge of things, and the great value of practical experience in applying this knowledge, has always been properly appreciated by our lawmakers. This may be due to the fact that a majority of our legislators have been lawyers, and like every one else, are prone to magnify the importance of their occupation. At any rate, they have been more liberal in their appropriation for the State University than for the Agricultural College, when from every standpoint of material interest the latter is of the most importance to the welfare of the State. Almost every department of the Agricultural College feels the need of more liberal appropriations. The department of animal husbandry has been especially hampered for lack of funds. Notwithstanding this fact, this department is doing a great work for the live-stock interests of Kansas, and the same may be said of every department of the Agricultural College. If the Legislature could visit the institution and see what I have seen during the past week, they would realize the importance of being more liberal in their appropriations.

The members of the Improved Stock Breeders' Association may well be proud of the work that is being done by the department of animal husbandry at the Agricultural College. They are inculcating a more correct knowledge of the essential points of excellence in our different breeds of live stock. The effect of these teachings must be of incalculable benefit to the hundreds of young men who attend this institution. It can not but inspire in them an ambition to raise better live stock. The young men who have attended Prof. Kinzer's classes in live-stock judging will never again be satisfied with a scrub.

IMPORTANCE OF A STATE FAIR.

Kansas is the only great agricultural State in the Union where the lawmakers have not been able to appreciate the importance of maintaining a State fair. They have failed to see that an institution of this kind, established by the State Government and maintained by liberal appropriations, is the most appropriate summit and crown to our present system of agricultural education. Such institutions as the State fairs of Iowa, Illinois, Missouri, and other States represent the annual blossom and fruitage of their year's work in the science of agriculture and improved live stock.

We should continue to urge upon our legislators the importance of providing for a State fair. The question of location should not be permitted to confuse the issue. That is a matter that can be determined by a duly authorized commission, as in the location of other State institutions.

It would be of great advantage to the live-stock interests of the State if we would, in every manner possible, encourage the organization of county associations. Organization and cooperation are the watchwords of modern progress.

I would also urge upon the members of the different breed associations, that they make the occasion of this annual meeting simply the time for their business meetings, so that their meetings may conflict as little as possible with the program of this meeting. Their meetings at this time make them valuable auxiliaries to the State Association, and their programs should form a part of the general program.

Kansas is destined to be the leading agricultural, and live-stock State in the Union. Her vast expanse of fertile soil, extending along those parallels of latitude that afford the most favorable conditions for human advancement, are a permanent assurance to future generations of this great State's ascendancy in all matters pertaining to human progress, and the breeders of improved live stock will always be the most important factor in this development.

Improved live stock inevitably means better food, better raiment, better homes, and better people. Let not the breeder of pure-bred stock be discouraged. He may meet with many disappointments. His efforts may not always be appreciated in the community

in which he lives, but his labors are for the uplift of the centuries, and will be appreciated by future generations.

Every step of progress that the breeder makes in the development of his favorite breed is the result of infinite patience and care. He may well feel repaid for his labors if his efforts to improve his favorite breed will advance it a little nearer perfection. He will have his reward, or "the gift is to the giver and comes back most to him." Therefore, be not discouraged.

"Men perished in winter winds till one smote fire from flint stones,
Coldly hiding what they held,—the red spark treasured from the kindling sun;
They gorged on flesh like wolves, till one sowed corn,
Which grew a weed, yet makes the life of man;
They moved and babbled till some tongue struck speech,
And patient fingers framed the lettered sound.
What good gift have my brothers, but it came
From search and strife, and loving sacrifice?"

Secretary's Annual Report.

H. A. HEATH, TOPEKA.

The year 1906 was a prosperous one generally for all breeders of improved stock. Sales have been remunerative and satisfactory. The public sales of pure-bred swine have made the highest averages ever known. Horses sold at private and public sales have realized higher prices than ever before, and the business is flourishing. The sales of cattle of the various breeds have realized, for the breeder remunerative prices, but nothing fancy, however has prevailed, simply a healthy and favorable condition has been maintained. This is particularly the situation as to the beef breeds. Dairy-cattle have met with an unprecedented demand, and the demand, even at good prices, could not be supplied. The future for the breeder of dairy-cattle is very promising.

Sheep husbandry, a neglected Kansas industry, is looking up, and while the Kansas sheep-breeder has not been as conspicuous as the breeders of other classes of stock, the Kansas sheepman has been a buyer rather than a seller. All sheep that have been sold by our own breeders have been taken by local buyers. The transactions in pure-bred sheep have been confined largely to the middle-wools, and includes those that have been bought by Kansas people for breeding and foundation stock and those brought into the State by feeders. More pure-bred sheep have been purchased during 1906 than for many years, so that the limited operations of sheepmen have been mainly along the line of establishing new flocks, and these men will undoubtedly be heard from later on.

Since our last Annual was published, we have added to our rolls forty-four new members as follows:

NEW MEMBERS FOR 1907.

C. E. Booker, Beloit, Shorthorns and Poland-Chinas.
W. T. Carlisle, Stafford, Polled Durhams, Shorthorns, and Poland-Chinas.
R. A. Elward, Castleton, Herefords and Duroc-Jerseys.
Dick Hayes, Bazaar, Poland-Chinas.
Col. Geo. R. Hungate, Topeka, Stock auctioneer.
D. F. Jones, Cimarron, Shires and Percherons and Chester Whites.
D. C. Moser, Oberlin, Shorthorns.
E. W. Rankin, Topeka, Topeka Mail and Breeze.
Frank D. Tomson, Cedar Rapids, Iowa, Breeder's Gazette.
A. W. Toews, Inman, Ohio Improved Chesters.
F. W. Ashley, Jamestown, Herefords and Poland-Chinas.
L. M. Bard, Florence, Shorthorns and Percherons.
J. T. Bayer, Yates Center, Percherons and Berkshires.
E. S. Cowee, Soranton, Duroc-Jerseys.
Mrs. C. S. Cross, Emporia, Herefords and Berkshires.
Deming Ranch, Oswego, Shorthorns, Herefords, and Poland-Chinas.
H. Davidson, Waverly, Poland-Chinas.
J. M. Fulton, Argonia, Draft horses, Shorthorns, and Poland-Chinas.
Geo. Fetrow, Attica, Red Polls and Duroc-Jerseys.
E. Forward & Son, Bayneville, Ohio Improved Chesters.
E. W. Hall, Plainville, Shorthorns.
John M. Hazelton, Stock Yards, Kansas City, Mo.
W. R. Hildreth, Altamont, Poland-Chinas and Shropshires.
W. E. Vincent, Hutchinson, Shorthorns.
D. M. Whitehead, Walnut, Polled Durhams and Shorthorns.
J. C. Larrimer, Derby, Poland-Chinas.
Homer Myers, Hutchinson, Percherons.
J. T. Morton, Hanover, Poland-Chinas.
Jas. Neelands & Sons, St. John, Shorthorns.
A. L. Nitcher, Oberlin, Standard-breds, Duroc-Jerseys, and Poland-Chinas.
E. R. Nichols, President Kansas State Agri. College, Manhattan, Kans.
V. L. Polson, Fredonia, Shorthorns and Poland-Chinas.
Ed. N. Regnier, Westmoreland, Shorthorns and Poland-Chinas.

Good Harness

How You Can Buy a Fine \$35 Set Direct from the Maker for \$24.00

SHIPPED ON APPROVAL

Why should you pay an extra profit on harness to the dealer or mail order house, when you can save at least one-third by buying direct from the maker?

I make 50 styles of good harness. My line is complete. Each set that leaves my shop is the product of workmen highly skilled in the harness maker's art, and guaranteed to be from the best oak tanned leather,—the only kind I use.

I save you 30 to 50%, because I sell direct,—no agents, salesmen, dealers or middlemen of any kind stand between you and my goods; you get better harness, a greater selection and the maker's guarantee of perfect satisfaction or your money back.

And you take no risk dealing with me, because my word is good, and the Company of which I am President, is responsible for any promises I make; look them up in the Commercial Agency books, or ask any bank or express Company where we are best known here in our home town.

Now, about my "leader,"—the \$35 set for \$24.00. The cut gives you a fair idea of it. This is a genuine bargain,—a splendidly made 1½ inch team harness, strong, stylish in appearance, and made of the very best grade oak tanned leather. And it is actually worth more today than it was when we made it up, because leather is advancing in price, as you know.

So, if you want this special harness value, please order promptly, as I shall probably not be able to advertise the set again at \$24.00. Just send me the money and the harness will go to you at once with the distinct understanding that I will refund the price and pay charges both ways, if you are not perfectly satisfied.

My big free Harness Book is full of money saving offers. Send for it and compare our prices, styles and qualities with what your dealer offers. Write me today. Address R. M. Knox, Pres., Western Harness & Supply Co., 601 Main Street, Waterloo, Iowa.



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These are not "razor backs" but pedigreed pigs, Elgible to Register and F.W.B., except Express to any live man (boy). One or more can be easily secured. For full particulars and a copy of the Best Swine Magazine Pub. Address SWINE NEWS, Box 33, Freeport, Ill.

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McMILLAN FUR & WOOL CO.
DEALERS IN FURS, HIDES, PILLS, AND ALL THE LATEST FASHIONS IN FURS AND WOOL.

The only fence perpetually taut. The crimp in the wire does it. Can't sag, bulge or loosen from the tie wires. Made of high carbon, crimped, spring steel wire. Never needs repair.
SHIMER SPRING FARM FENCE
Requires only half the usual number of posts. Agents Wanted in every community to take orders for Shimer fence. Permanent employment. Liberal profits. Write for proposition. Address nearest factory.
Coffeyville-Shimer Woven Wire Fence & Mfg. Co. Box 210, Coffeyville, Kan., or Spring Steel Fence & Wire Co. Box 210, Anderson, Ind.

SAFETY HATCH

Has proven itself a hatcher with big hatches and strong healthy chicks. Automatic in every detail. Turn the eggs and fill the lamp—the Safety Hatch does the work without watching. 1907 catalog tells all, with our 90 days trial offer. Write today.

CLAY CENTER INCUBATOR CO., CLAY CENTER, KANSAS.

L. E. Scott & Son, Piper, Percherons.
Ralph Snyder, Winfield, Percherons.
Jno. D. Snyder, Winfield, Percherons.
Chas. Shaffer, Milan, Shorthorns and Poland-Chinas.
J. H. Tenge, Newton, Percherons.
H. O. Tudor, Holton, Shorthorns.
A. K. Thompson, Densmore, Poland-Chinas.
H. A. Thomas, Freeport, Red Polls and Poland-Chinas.

Your secretary regrets to report the death of H. N. Kirkpatrick, Hon. S. S. Benedict, Scott A. Spriggs, Thos. Hansen, and Chas. C. Slason. There may be others, but such have not been reported to me. A suitable committee should be appointed to draft appropriate resolutions.

Twenty-five members have also withdrawn from the association for various reasons. The list is as follows: A. C. Braunsdorf, D. B. Burdick, C. G. Beal, Albert Casement, Calvin Dean, S. A. Clugston, S. C. Day, J. A. Darrow, D. W. Evans, A. M. Jordan, Geo. M. Kelley, C. S. Kelley, W. P. Landon, O. E. Matson, Merritt & Wilhide, H. A. Naber, G. W. Priest, R. W. Preston, Wm. Stephens, E. C. Stratton, G. D. Stratton, W. P. Wimmer & Son, and Windsor Brothers.

As heretofore, I desire to call special attention to the importance of every member filling out the membership blanks for 1907, so that your secretary may have the necessary data for the Stock-Breeders' Annual for 1907. I wish further to urge every member to take a more active interest in increasing the membership in his own county; also to send the names of such breeders and stockmen to whom the executive committee may issue an invitation to become members of the Kansas Improved Stock Breeders' Association, the best, largest, and most active organization of the kind in the United States.

Our executive committee has been an ideal one and has rendered valuable assistance and counsel to your secretary and assistant secretary. Upon their advice, it was deemed best not to incur the extra expense of getting out an annual and directory for the past year, but to combine this year's proceedings with the last and issue as soon as possible after this meeting. It is the fond, and perhaps vain, hope that the present Legislature will properly provide for the publication and distribution of our proceedings the same as for similar State organizations. It is a shame not to do it. These reports are valuable and needed for constant reference by the farmers who pay the bulk of the taxes.

The executive committee ordered the secretary not to drop any members from the rolls except on request, but to bill each member for arrears. This was done and only one call was made with fair response. At the present time there are 385 members in arrears for one year or more, but these are coming in fairly well and the odds are in favor of the secretary getting a big back salary grab.

FINANCIAL REPORTS.

RECEIPTS.

From arrears, due previous to 1906. \$40.00
From 1906 dues. 279.00

Total receipts. \$319.00

EXPENDITURES FOR 1906.

As per itemized account of expense for executive committee: Including expense of sixteenth annual meeting, banquet, stationery, printing, clerical help, etc. \$140.38
Printed proceedings of sixteenth annual session. 60.00
Deficit from 1905. 86.00

Total expenditure. \$286.38
Balance on hand Dec. 31, 1906. 32.62

THE KANSAS SWINE-BREEDERS' ASSOCIATION.

According to custom, the Kansas Swine-Breeders' Association rendered its program as a part of that of the Kansas Improved Stock Breeders' Association, of which it has one section. The business meeting was held at the office of THE KANSAS FARMER and was presided over by Mr. James Mains, of Oskaloosa, who was elected to fill the chair in the absence of the president, who has removed to another State. The important business of the meeting was the election of officers, which resulted in the unanimous choice of the persons named below:

President, E. D. King, Burlington; secretary-treasurer, I. D. Graham, Topeka; vice-president for Duroc-Jerseys, John W. Jones, Concordia; vice-president for Poland-Chinas, Geo. Ross, Alden; vice-president for Berkshires, E. W. Melville, Eudora; vice-president for Tamworths, Mr. Frelove, Carbon-dale.

By vote, the president and secretary, with the vice-presidents, shall constitute the executive committee. Action was taken on various matters as follows:

The efforts of the management of the American Royal to have a creditable swine show were endorsed. Kansas breeders were urged to exhibit in it.

A recommendation that all fair associations be requested to designate their premiums by properly colored ribbons, instead of cards as is now done at some of them, was endorsed.

The executive committee of this association was instructed to look after the interests of Kansas breeders at the American Royal show.

The executive committee was instructed to wait upon the Governor, and secure, if possible, his active cooperation in the establishment of a State fair in Kansas.

The executive committee was also instructed to have all the different breeds represented on the program of the next annual meeting.

A permanent committee on fair classification, consisting of Geo. W. Berry, Emporia, Geo. Ross, Alden, and E. W. Melville, Eudora, was appointed. Each member was urged, and the executive committee was instructed, to use every legitimate effort to secure for members of this association all swine-breeders of Kansas.

After a general discussion of matters pertaining to the swine industry in Kansas, the association adjourned to attend the reception and banquet tendered by THE KANSAS FARMER COMPANY.

State Veterinarian Meeting.

EDITOR KANSAS FARMER:—The third annual meeting of the Kansas State Veterinary Medical Association, was held in Topeka, Tuesday, January 8.

Such matters as tuberculosis in hogs, cattle, and sheep, and the slaughtering of diseased animals at the different localities over the State where there is no Federal inspection, were discussed. Judging from the discussion brought out, it is very evident that the veterinarians are well aware of facts that are simply appalling. To listen to their discussion convinces one that Kansas certainly needs a law governing the slaughtering of animals for local consumption, and it is to be hoped that the Legislature now in session will pass such a law. There is no reason why people in Kansas should eat animals that are unfit for inspection at the packing-houses; and it is high time for the meat-eating people to take cognizance of the fact.

The veterinarians passed resolutions to this effect, that will be furnished to any paper wishing to publish them, by applying to Dr. Hugh S. Maxwell, secretary, of Salina. These resolutions were handed to the State Board of Health.

The method favored by the leading veterinarians is simple and very practical. They demand that each city of 5,000 inhabitants or over shall have a common slaughtering place, and that every beast slaughtered for public consumption be killed there under inspection, governed by such rules and regulations as the Federal inspection laws. In localities where there are no cities of 5,000 inhabitants, there should be county abattoirs. This method is now in force in Germany and should be here. The veterinarians are and should be the guardians of public health on account of their being constantly in contact with the meat-producing animals, and being able to recognize unhealthy animals.

Wednesday's session was more of a business meeting, although there was a short and very interesting program rendered. There were about sixty in attendance at the meeting, and all went home exceedingly well paid for making the trip. The meeting adjourned to meet in January, 1908, at Manhattan, at the request of the faculty of the veterinary department of the State Agricultural College.

DR. HUGH S. MAXWELL, Secretary.

Secretary's Report, Kansas Branch of Red Polled Cattle Club.

The third annual meeting of the Red Polled Cattle Club was held in the rooms of The Kansas Farmer Company, on Tuesday, January 9. The president, Wilkie Blair, presided. An increased interest was manifested in the improvement of our chosen breed, along with all other breeds. A discussion of beef, dairy, or dual-purpose cattle as a standard was held. The general-purpose type has the most advocates, but the dairy interests prevailed over those of beef.

The club has many reasons to believe that this breed will play an important part in bettering and uplifting the Kansas farmer in the near future. A request to the National Club was presented, asking a showing of these dual-

\$59.50

Freight
Prepaid

30 Days'
Free Trial

Wagon-Box
Manure Spreader

Only Endless Apron Force Feed Spreader Made.

JUST that:
It's been a long time getting here—but I've got it.
The Only Endless Apron Force Feed Manure Spreader in the World.

The Only Wagon-Box Manure Spreader on the market.

Think of the combination!—Just the two things in a manure spreader the farmer has always wanted.

The wise ones said it couldn't be done. I've disappointed them.

First—they said a wagon-box spreader wouldn't work.—My hundreds of well satisfied customers have already stopped that talk.

Then—when it came to an endless apron force feed machine—they said, "impossible". Did you have free mail delivery, telephone or a cream separator ten years ago? Nothing is impossible! You will say so when you see how simple and how wonderfully effective my great new improvement is.

It is simply turning the spreader business right end to and giving the farmer a chance.

Every farmer can afford a Galloway Wagon-Box Spreader.

I want every farmer in the United States to own one.

That's why I sell it direct to you, saving you every cent. (Tell your neighbors.)

Right at the start I am selling this machine for \$59.50, freight prepaid. At retail it would cost you \$75.00. I also save you tying up \$50.00 to \$70.00 in a spreader truck useless eleven months in the year.

My guarantee is the broadest possible—I back it up to show you that I mean business by a \$25,000 legal bond.

Then to absolutely convince you I say, "try one of my spreaders for 30 days on my free

"THE ONLY WAY IS THE GALLOWAY—FROM FACTORY TO FARM."



plan." Let me send you one to take out in the field to use, or abuse if you want to, for 30 days. If it's not worth more than my price—take it to the depot—ship it back—and I'll return your money.

Why not get everything that's coming to you out of your land? That manure heap outside of your barn will buy my spreader twice over for you.

Every farmer has been saying,—"I must own a spreader."

Forty-nine out of fifty say the old style horse-killing machine is too high in price. Isn't that a fact?

Now, I claim the Galloway is right in every particular. Made in three sizes—capacity 50 to 60 bushels. Fits any truck, narrow or wide tread. Lightest draft and simplest machine made and the work it does under all conditions is perfect.

Why not let me send you a machine—and let you be convinced by the machine itself, without sending me a cent? I'll do it today if you will write me.

I have just this further clincher to offer you. For a limited time I will make a proposition to the first farmer owning a Galloway Spreader in every community whereby he can

partly or entirely pay for his machine without a bit of work done. It's a strictly business proposition and will positively hold good only for the first few farmers buying. Either send in your check pinned to this ad, telling me the style of truck you use, or write me at once, postal or letter, so I can send you by return mail my free booklet. Address me personally.

WILLIAM GALLOWAY, President,
WILLIAM GALLOWAY COMPANY
389 Jefferson St., Waterloo, Iowa.
Ask me also for my large Farm Implement Catalog.

William Galloway,
Builder of the Only Endless
Apron Force Feed Manure
Spreader in the World.



SMOKE YOUR MEATS IN THE NEW WAY, USING WRIGHT'S CONDENSED SMOKE

A liquid made from hickory wood. Imparts the delicate flavor that is peculiar to meats smoked with hickory wood. USED BY APPLYING THE CONDENSED SMOKE WITH A BRUSH. Send 10c and names of five who cure meat and we will mail you sample free. Sold only in square quart bottles with metal cap. Never in bulk. At druggists, 50c per bottle. Bottle smokes a barrel on curing meats. BE SURE TO GET "Wright's Condensed Smoke." Made by

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THE E. H. WRIGHT CO., LTD., 112 W. FOURTH STREET, KANSAS CITY, MO.

purpose cattle at the American Royal at Kansas City.

President Blair and D. F. Van Buskirk were selected as judges of these cattle at fair organizations and at the National Club.

A paper by the secretary on "Breeding Type, Advanced Registry, and Score-Card," was read and discussed. By advanced registry and the score-card an impetus would be given to reach the highest standard attainable to the breeder's art.

Short addresses by the president and secretary of the Kansas Improved Stock Breeders' Association were made, offering the club a place on the next annual program of that meeting. The club was grateful for the concession and interest manifested, and delegated that privilege to the president, Wilkie Blair. Also, through the courtesy of Secretary H. A. Heath, The Kansas Farmer Company offered a meeting place for the club next year.

The club has doubled in membership since its organization three years ago. However, it is desired that all reputable Kansas breeders become members, and help improve the breed, dignify labor, and combat diseases. The National Club increased in membership in 1906 more than at any time in the twenty-four years of its existence.

The following officers were elected for the ensuing year:

President, Wilkie Blair, Girard; vice-president, Chas. Morrison, Phillipsburg; secretary-treasurer, John E. Hinshaw, Emporia. Directors: D. F. Van Buskirk, Blue Mound; C. E. Foster, Eldorado; C. P. Butler, Farmington.

To Fine Stock Breeders.

The seventeenth annual meeting of the Kansas Improved Stock Breeders' Association was the best, in every respect, in the history of the Association. The Executive Committee have ordered the 1907 Stock Breeders' Annual published early next month. It will contain the proceedings of 1906 and 1907 and complete revised Kansas Breeders' Directory, giving the name and full address of each member of the association, classified by name and county. Each breed of stock will have a sepe-

rate classification, giving the name and address of each breeder.

An invitation has been extended to every owner of a pure-bred animal to become a member of this great organization. Each member will receive free a copy of the 1907 Stock Breeders' Annual and also have his name, address, and class of stock given space in the Kansas Breeders' Directory. The annual dues and fees are only \$1.00 a year, not one tenth the value of the benefits afforded.

Write at once to Secretary H. A. Heath, Topeka, Kansas, and enclose \$1.00, giving your name and address and class of stock you breed; also mention the class of stock you have for ready sale or desire to purchase. Secretary Heath will gladly supply membership blanks or any other information pertaining to the Kansas Improved Stock Breeders' Association.

Cancer Cured by Anointing With Oil.

Cancerol, a compound of essential oils, has been discovered which readily cures all forms of cancer and tumor. It is safe and sure and may be used at home without pain or disfigurement. Readers should write for free book to the originator, Dr. L. T. Leach, Indianapolis, Ind.

A subscriber asks what is the best shot-gun for the farmer's use. Any shot-gun made by a reputable manufacturer will give satisfaction. There is but little difference in their shooting qualities. The ease of manipulation, safety, balance, fit, and finish must decide in the choice of a gun. The writer has used practically all of the different guns that are made in this country and many foreign ones, and he unhesitatingly says that American-made guns are as good as any. Among those made in this country the writer's choice has finally fallen upon the Marlin, and of this make he uses both rifles and shot-guns. They are quick, powerful shooters, simple and safe in mechanism, nicely finished and safe, all having side ejectors. Mention THE KANSAS FARMER and write to the Marlin Fire Arms Co., New Haven, Conn., for a catalogue.

Sure Cure.

Elmira, N. Y., January 31, 1906.
Dr. B. J. Kendall Co.
Dear Sirs:—Please send me your book, "Treatise on the Horse and His Diseases." I have used your Spavin Cure for splints and spavins, and find it a sure cure. I would not be without it. Yours respectfully,
MRS. N. L. SAWYER.

Stock Interests

LIVE STOCK REPRESENTATIVES.

C. E. SHAFFER.....Northern Territory
L. K. LEWIS.....Southern Territory

PURE-BRED STOCK SALES.

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

January 22, 1907—Peerless Perfection and Grand Perfection Poland-China bred sow sale. Harry E. Lunt, Burden, Kans.
January 23, 1907—Grant Chapin, Greene, Clay County, Duroc-Jerseys.
January 30, 1907—James Mosher, Rydal, Kans., Poland-China hogs.
February 6, 1907—C. A. Cook, Salem, Nebr., Duroc-Jerseys.
February 8, 1907—E. M. Jenkins & Son, Byron, Nebr., Poland-Chinas.
February 8, 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—O. B. Smith & Sons, Cuba, Kans., Poland-Chinas.
February 13, 1907—J. B. Davis & Son, Fairview, Kans., Duroc-Jerseys.
February 13, 1907—W. A. Kirkpatrick, Lincoln, Neb., Duroc-Jerseys.
Improved Stock Breeders Association of the West Belt—Feb. 13, 14, 15, 1907, at Caldwell, Kans. Chas. M. Johnston, Caldwell, Kans., manager.
February 14, 1907—Glibber 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 14 and 15, 1907—Parkdale Training Stables, Council Grove, Kans., horses.
February 15, 1907—Frank Dawley, Salina, Kans., Poland-Chinas.
February 15, 1907—Geo. Briggs & Son, Clay Center, Neb., Duroc-Jerseys.
February 15, 1907—Roberts & Harter, Hebron, Nebr., Duroc-Jerseys.
February 15, 1907—C. M. White, Bennington, Kans., Poland-China hogs.
Feb. 15, 1907—C. W. Taylor, Pearl, Kans., Duroc-Jerseys.
February 15, 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. Robinson, Towanda, Kans.
February 19, 20, 21, 1907—Sixth annual sale of Percherons, Shorthorns and Herefords at Wichita, Kans. J. C. Robinson, 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. Joiner, 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 25, 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, 28, 1907—Combination sale of Herefords at Kansas City, Mo. C. R. Thomas, Sec.
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 5, 1907—Semi-annual sale of Limestone jacks and jennets, L. M. Mounse & Sons, Smithton Mo.
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.
April 15, 17, 18, 1907—All beef breeds at South Omaha, Neb., D. R. Mills, Mgr., Des Moines, Iowa.
May 12 and 13, 1907—Aberdeen-Angus, Shorthorns and Herefords, South Omaha, Neb., W. C. McGavock, Mgr., Springfield, Ill.
May 14, 15, 16, 1907—All beef breeds at Sioux City, Iowa, D. R. Mills, Mgr., Des Moines, Iowa.

The Shawnee Breeders' Association Shorthorn Sale.

On Wednesday, January 9, the Shawnee Breeders' Association held its second annual sale of Shorthorn cattle at the State fair grounds. There was a splendid crowd in attendance from all parts of the State and from Missouri. As the sale was held after the close of the meeting of the Kansas Improved Stock Breeders' Association, just before the meeting of the State Board of Agriculture, it added a pleasant variety to the farmers' week, which is at once the most important and the most strenuous of the year in Kansas. Col. L. F. Burger, of Wellington, conducted the sale and was assisted, on the block, by Col. Chas. Crews, of Topeka.

The offering was varied as to quality—some of the animals being well fitted, while others were brought in without any special preparation. Also some of the animals offered were quite young, and these facts serve to explain the moderate average price received.

A number of buyers from several different parts of the State were present and eager to buy, but did not find just what they wanted in the offering.

The sale was advertised thoroughly and well, and proves that Topeka can be made a great sale center for Kansas pure-bred live stock.

Mr. Hern, of Kansas City, was a good buyer and took home with him Prince Butterfly 263390 and Lord Butterfly 256435, consigned by A. F. Huse, of Manhattan, and also Sir Guilford 241520, consigned by Alysdaile Farm, owned by C. W. Merriam, of Topeka.

Col. L. S. Kent, Hutchinson, who is secretary of the Kansas Auctioneers' Association as well as a Shorthorn breeder, was the heaviest buyer. He captured ten head from the different herds represented.

E. D. Haney, of Courtland, was the

next heaviest buyer. He secured six head. Other buyers were W. W. Gregg, Howard; Frank Brown, Carbondale; W. B. Peck, Tecumseh; Jacob Dauber, Topeka; J. W. Russell, Topeka; J. F. True, Perry; and H. E. Huber, Meriden.

Every animal in the sale was disposed of and only two head were taken by Topeka buyers.

Plans are now being made for other sales by this association, including a Poland-China and a Duroc-Jersey bred-sow sale in the spring.

F. A. Hummel's Sale of Shorthorns.

February 5 in the live-stock pavilion at Humboldt, Neb., F. A. Hummel will close out his fine herd of Shorthorn and Polled-Durham cattle, consisting of twelve bulls and twenty-four females. Mr. Hummel recently sold his farm and has decided to quit the cattle business, and his sale will afford breeders the opportunity to buy some choice animals with breeding as good as the best. In the herd are a few animals we desire to give special mention. There is Thelma by Chief 1559 and whose dam is Thelma by Rob Roy. This is a deep-bodied, low-down blocky heifer, with as much quality as we ever saw in an animal. Ophelia of Sunnyslope is another good 2-year-old heifer. She is a deep red with lots of quality and is a great flesh carrier. She is a pure Scotch heifer and traces to Imported Rose of Sharon. Bright Eyes 21 is another good one. She is a very large cow, good color, smooth, and carries lots of quality. She was purchased at the Webster & Apperson sale last spring at a long price. The list of bulls includes a lot of good individuals which will be good enough to go at the head of any good herd. We will not try to describe them here as the catalogue tells all

IMPORTANT LIVE-STOCK SALES NEXT WEEK.

January 22, Poland-China bred-sow sale, Harry E. Lunt, Burden, Kans.
January 22, Poland-Chinas, Thomas and Swank, Waterville, Kans.
January 23, Duroc-Jerseys, Peek and Putnam, Tecumseh, Neb.
January 24, Duroc-Jerseys, Paul Grupe, Tecumseh, Neb.
January 24, Poland-China bred-sows, A. & P. Schmitz, Alma, Kans.
January 26, Poland-Chinas, T. P. Sheehy, Hume, Mo.

about them. If you are interested, drop Mr. Hummel a line and he will send you one. Wm. Brandow sells Duroc-Jersey hogs in the sale pavilion the next day.

Standt's Duroc-Jersey Sale.

Ottawa, Kans., has one of the finest sale pavilions in the West. This pavilion is located in beautiful Forest Park and, on Saturday, January 19, 1907, it will be the scene of a great sale of Duroc-Jerseys by J. F. Staadt, of Ottawa. This will be a bred-sow sale, and 40 head of sows and gilts will be offered that are bred to Long Wonder 21867, a 1,000-pound show hog, who topped the sale at the American Royal of 1906. He is a grandson of Pilot Wonder 9017, champion at the Chicago International of 1903. The other herd-book to which these sows are bred is Nelson's Model 22095, who was first in class at Nebraska State Fair in 1903. The sows in the sale were sired by Lady's Pride 4875, Prince 17799, Van Arsdale's Chief 28481, Arion 22587, Orion 5293, Bone 15677, King Wonder 2d 30475, Mystic Maze 41383, and the herd-book, Nelson's Model.

Catalogues are now ready and will be sent on application.

The Sale of Spring Branch Duroc-Jerseys.

Thursday, January 10, was a great day at Spring Branch Farm. On that day R. B. Marshall sold 125 head of Duroc-Jerseys from his fine herd of 350 head. Mr. Marshall has lately purchased a new farm and made this sale preparatory to moving to his new home. The crowd in attendance was very large, as the sale had been well advertised. Col. L. F. Burger, of Wellington, and Col. Geo. R. Hungate, of Topeka, conducted the sale, and the animals dispersed here will undoubtedly prove good seed on many farms that are new to the Duroc-Jersey breeding industry.

The averaged price on the catalogued swine in this sale was close upon \$30 for big and little, and the sale may be considered a distinct success.

Mr. Marshall furnishes a distinct example of success from which other young men may profit. But a few years ago he was induced to buy some Big Joe sows, and from these he has built up a great herd of over 300 head and made money enough to purchase a new farm and build a big barn upon it. Heretofore he has been in partnership with Mr. J. S. White, of Topeka, in the breeding operations, but hereafter he will maintain a distinct herd of his own, while Mr. White, who owns the farm upon which the sale was made, will continue to breed Duroc-Jerseys on two farms in different parts of the county.

It pays to breed good live stock.

James Mosher's Sale.

On January 30, James Mosher, of Rydal, Kans., proprietor of the Evergreen Herd of Poland-Chinas, will sell one of the best lots of hogs that will be offered this season. Everybody who knows Jim Mosher knows the stuff that he raises. He has been raising hogs for so long that neither he nor his family can remember when he commenced, and what he doesn't know about the business is not worth knowing. He is not so good at quoting pedigrees, but he can soon tell you the good and the bad points about an animal when he comes into the sale-ring, and when he finds one that suits his fancy, he has always made it a rule to bid until he got it. Mr. Mosher's sale will include a lot of stuff this year that has been carefully selected by him from other herds, and it will be a valuable addition to the herd of any one who gets it. The gilts are all fine individuals and royally bred, and on sale day they will all be safe in pig to high-class boars. Send for his catalogue and tell him you saw his announcement in THE KANSAS

FARMER. C. E. Shaffer, fieldman for THE KANSAS FARMER, will be in attendance at this sale and bids intrusted to him will be honorably treated.

Segrist and Stout Poland-China Sale.

January 28, 1907, Segrist and Stout, of Humboldt, Neb., will sell one of the best lot of Poland-China hogs to be offered this year. The offering will consist of aged sows, fall yearlings, and spring gilts. Here will be an opportunity for lovers of the big type to get some good stuff. Some of it is sired by Pawnee Chief 28948, McKay's Choice 33020, Socialist Expander 36988, and other good boars. All of it will be safe in pig on sale day to McKay's Duplicate 42348; Socialist Expander 36988, and King Priceless 42681. Catalogues are now ready. Write for one and look over the lot of excellent stuff they are offering. C. E. Shaffer will represent THE KANSAS FARMER at this sale.

Iams's Great Stallions.

Mr. Farmer Stockman: "Success knocks only once in a lifetime at your door." It's up to you to-day. "Sit up and take notice" that Frank Iams, of St. Paul, Neb., the "square-dealing" importer of Percherons, Belgian and Coach stallions and mares, has a "stallion proposition" "up his sleeve" for the asking that will save you \$1,000 or \$1,500 and start you on the road to prosperity and wealth. Iams is a real live nephew of your Uncle Sam. He has 160 imported black Percherons, Belgians, and Coaches, the "peaches and cream" kind of stallions and mares that are noted the world over as the "best ever." The big, lusty, rugged, wide-as-a-wagon sort of famous "black boys," 2 to 6 years old, weight 1,700 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 action. 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.

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and the richest land in the golden west; fine climate and water, good churches and schools; creamery, cannery, and dried fruit packing house. No saloons. Address

R. W. RICE,

Winters, California

DR. QUINN'S VIGORAL TABLETS

Restore lost power and stop all drains. Make weak men strong. Immediate results. By mail \$1

DR. QUINN'S PILE SALVE

Soothes and heals the most obstinate cases of internal and external piles. By mail \$1.

DR. QUINN'S RHEUMATIC TABLETS
Cure rheumatism in all its forms. Purifies the blood. By mail \$1. Write for particulars.

DR. QUINN MEDICAL INSTITUTE
515 Main St. Suite 301. Kansas City, Mo.

YIELD COUNTS

The Famous Hildreth Yellow Seed Corn, winner of first premium and sweepstakes at Hutchinson State Fair, and Corn-Breeders' Contest at Manhattan. Our corn won second in yield (103 bushels per acre) and the acre measured was not given any special treatment whatever. We have a large amount of good seed for sale. Write early for price. The Deming Ranch, J. G. Haney, Mgr., Oswego, Kans.

5

All vigorous, healthy, true-to-name. No culls, extra choice for the grade. Thousands are ready to ship at wholesale prices. No poor, brush-heep stuff. High-grade stock only. Save 40 per cent commission. Catalog and premium offer free.

WICHITA NURSERY,
Box 15, Wichita, Kan.

PEACH
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TREES

Pacing Stallion

FOR SALE OR TRADE.

Coming 5 years old. Black, 16½ hands high, 1165 pounds. Sire Helioroom, 2:15½; dam by Grandeej Sound, fine conformation, stylish and speedy.

W.T. Calvin, 307 Polk St., Topeka, Ks

THE LOST MINE!

Have you read the wonderful story of the rediscovery of the famous Lost Bullion Spanish Mine? We will be pleased to send you a beautiful booklet, free, describing the wonders of the treasure vaults of the Ancient Spaniards.

C. L. BLACKMAN & CO.,

823 Temple Court. Denver, Colo.

My Plan

will sell any farm on earth. Send description and price. Customers waiting. If you want to buy a farm in the United States or Canada, tell me what and where and receive my "Locator" Magazine free. No commission to pay.

H. H. Harsha, Masonic Temple, Chicago

SERVICE TABLE

Every farmer and breeder of stock should have one. Tells just when animals are due at a glance. Save the young by knowing when to look for them. Absolutely correct. Only 10c. Send today.

E. W. SHOLTY, 508 W. Allen St., Springfield, Illinois

VETERINARY COURSE AT HOME.

\$1200 year and upwards can be made taking our Veterinary Course at home during sparetime; taught in simplest English; Diploma granted; positions obtained successful students; cost in reach of all; satisfaction guaranteed; particulars free. **ONTARIO VETERINARY CORRESPONDENCE SCHOOL, Dept. 17, London, Canada.**

FREE Our handsome Garden Annual and Seed Catalog. Send your address on a postal, with name of neighbor who is a seed buyer. For your trouble we'll mail you a packet of Flower Seeds. If you write before March 20th address Cole's Seed Store, Pella, Ia.

SEED

We Will Pay Men \$85 Per Month to travel, collect names, advertise and give away samples. Expenses advanced. Write today. H. O. Rider Company, Chicago.

The Blossom House

Kansas City, Mo.

Opposite Union Depot. Everything first class. Cuts in connection. Cars for the Stock Yards, the up town 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.

67475, one out of Nellie Mischief 89982, and four out of Mollie 82699. All of these animals will be safe in pig to Expansion Chief 42100 and Black Eagle 41073. If you want some good, prolific stuff, here is the place to get it.

Paul Grupe's Sale of Durocs.

On January 24, the day following Peek & Putman's sale at Tecumseh, Neb., Paul Grupe will sell 40 head of Duroc-Jersey hogs, consisting of six mature sows and a lot of fine spring gilts. The offering will be a good lot of useful stuff for breeders and farmers. Among the aged sows we found Lady L. 81282 by Glendale 12271, and Miss Long 128110 by Tecumseh Captain by Liberty Perfection. Everything will be safe in pig on sale day to Paul Banker, Restless Wonder, Low Set, and Paul's Choice. Mr. Grupe's place is two miles south of Tecumseh and six miles north of Steinaur on the Rock Island. Come to his sale and get some of his good stuff.

Gossip About Stock.

F. L. Dunable, Clay Center, who paid THE KANSAS FARMER for five lines, four times, reports as follows: "I sold 106 cockerels from your advertisement. I will have three pens of R. C. Brown Leghorns for sale."

Volume 26, American Berkshire Record, contains pedigrees from 90,001 to 95,000. It also contains a list of transfers of animals sold whose pedigrees are recorded in previous volumes; in-

Tenth Annual Meeting Central Short-horn Breeders' Association, Kansas City, Mo., February 5 and 6, 1907.

PROGRAM.

President's address.
"The Possibilities of a Foreign Market," Walter L. Miller.
"Showyard Etiquette," Col. W. A. Harris.
"Straight, Crooked, or Crosswise, but Always the Best," John R. Tomson.
"Two Classes of Bulls to Castrate for the Good of the Breed," Prof. W. J. Kennedy.
"Best Foods for Economic Production of Beef," Prof. R. J. Kinzer.
"How to Establish and Maintain a Good Local Trade," S. C. Hanna.

A Big Cooperative Creamery.

A movement of importance to the farmers of Nebraska and adjacent States, which has been quietly under way for several weeks, has culminated in the formation of an organization to be known as the Farmers' Cooperative Creamery and Supply Company, and the purchase by it of the plant and business of the Harding Cream Company, of Omaha, Neb.

This organization, which is composed of dairymen and farmers, is made with the avowed purpose of introducing the methods of up-to-date cooperation, not only in the manufacture and marketing of butter, but also in the purchase of farm supplies of all kinds.

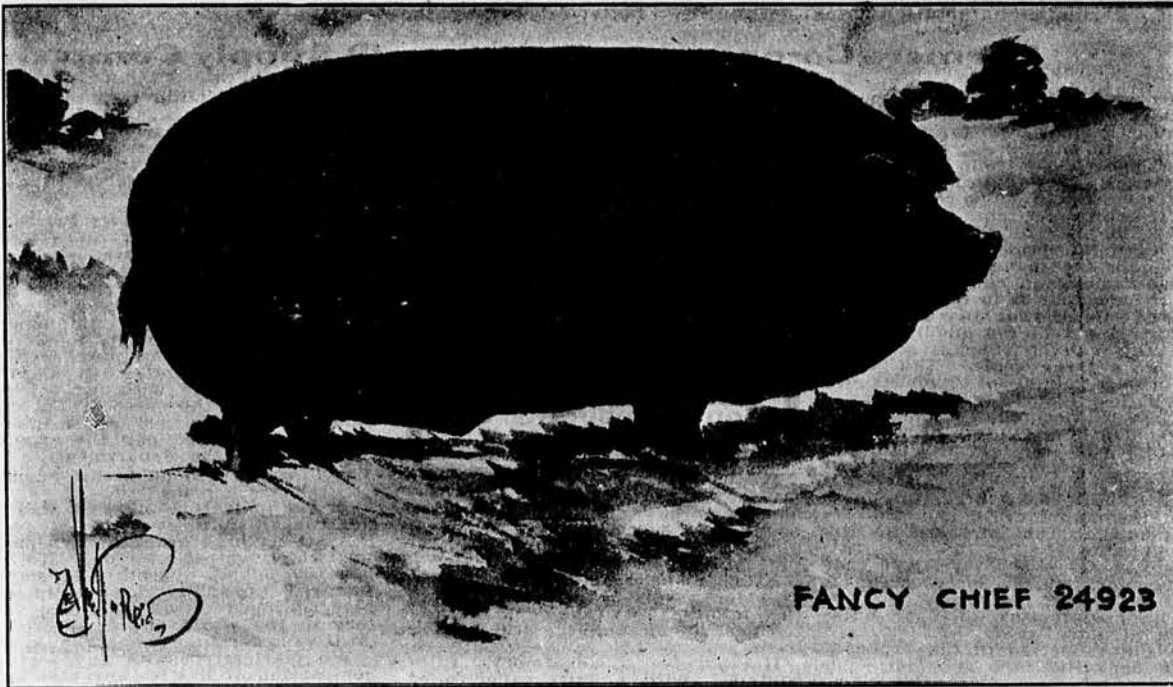
Unlike most cooperative societies, it starts out with an organized, going

business, and one of the best-equipped creamery plants in the world. The new organization very wisely retains Mr. Charles Harding as its president and general manager, an assurance that the organization will be conducted in a thoroughly businesslike manner. The 3,000 farmers who have been patrons of the Harding Cream Company will all be given an opportunity to become members of the new organization, and it is expected that as many more will join within the next few weeks. It is the first opportunity ever given cream-producers in this section to cooperate in the manufacture and sale of butter in the purchase of farm supplies at factory prices. It enables the cream-producer not only to have a voice in the manufacture and marketing of his product, but also to have his own product manufactured at actual cost, and to share in the profits which will accrue from manufacturing butter for non-members.

The Coffeyville Implement and Manufacturing Co.

Through the use of its celebrated "Banner" implements, the Coffeyville Implement and Manufacturing Company is rapidly coming into prominence. THE KANSAS FARMER representative visited its plant recently, at Coffeyville, Kans., and was very favorably impressed with what he saw. The factory is situated on a two-acre tract at the junction of the Missouri, Kansas, and Texas and Missouri Pacific Railroads, thus affording splendid shipping facilities.

This company has been in business only four years, but the wonderful demand for its implements has caused it to double its output every year, until it has entirely outgrown its present



FANCY CHIEF 24923

Fancy Chief 24923, whose cut appears above, is one of the great sires of the day. His get are very popular and are much sought for by many of the leading breeders of the country. Fancy Chief stands at the head of the great, good herd of Durocs known far and near as "The Famous Fancy Herd," located at Concordia, Kans. He is assisted by the two great show boars, Fancy Topnotcher 40339 and Shorty Orion 53341, the \$1,500 winner of five first prizes at the Illinois State Fair, 1906, the greatest show of Durocs the world has ever seen. Fancy Chief is by the \$6,000 first prize boar at the World's Fair (Ohio Chief). On the 19th day of February, 1907, John W. Jones & Son will hold their annual bred-sow sale. This will be one of the grandest and most useful lot of bred sows and gilts that will be sold this winter. They will be bred to this galaxy of royally bred, high-priced, prize-winning boars who boast of their superb forms and proud ancestry. Remember the date, February 19, 1907. Write for their fine sale catalogue.

dexes to breeders, owners, and animals, rules of entry, etc. The book is sent free to members, or to non-members for \$1.

M. W. Savage, proprietor of the International Stock Food Co., has purchased the Angora buck that captured the first premium at the Minnesota State Fair, and also the Angora buck taking the second premium at the Minnesota State Fair. Mr. Savage has 75 Angora does on his International Stock Food Farm, located a short distance from Minneapolis.

President C. F. Miller, of the Kansas Good Roads Association, is also secretary of the Bourbon County Farmers' Institute. He purchased the first prize and champion lot of yellow corn at the corn contest auction sale at the Kansas Agricultural College, and also the first-prize lot of white corn to take to his home at Fort Scott. For the 10 ears of yellow corn he paid \$16, or \$1.60 per ear, and for the 10 ears of white corn he paid \$14. It pays to raise corn in Kansas.

E. N. Woodbury, owner of the Banner Stud of imported and American-bred Percherons, Cawker City, Kans., has a 3-year-old black imported Percheron mare which weighs 1,950 pounds, and when developed will weigh fully 2,100 pounds, in the judgment of her owner. This mare was imported in 1906 by Watson, Woods Bros. & Kelly, of Lincoln, Neb. Her bone behind measures 13 inches, and Mr. Woodbury wants to know if anybody in Kansas can beat her.

Mr. John Wiswell, of Columbus, Kans., will sell on Wednesday, February 13, at public auction a large number of registered Percheron, Belgian, German Coach, Shire, Cleveland Bay, and trotting stallions, jacks, and jennets, fine driving horses, and broodmares. A large number of these animals have already been consigned, so that the sale is a sure go, but there is still room for a few more head. Any one who has a good animal that he wishes to sell should write at once to Mr. Wiswell and get a place in the catalogue. Animals of any age or either sex will be received, provided they are good. The catalogues will be ready February 1. Write at once and have your name on the list.

When writing advertisers please mention this paper.

business, and one of the best-equipped creamery plants in the world.

The new organization very wisely retains Mr. Charles Harding as its president and general manager, an assurance that the organization will be conducted in a thoroughly businesslike manner.

The 3,000 farmers who have been patrons of the Harding Cream Company will all be given an opportunity to become members of the new organization, and it is expected that as many more will join within the next few weeks. It is the first opportunity ever given cream-producers in this section to cooperate in the manufacture and sale of butter in the purchase of farm supplies at factory prices. It enables the cream-producer not only to have a voice in the manufacture and marketing of his product, but also to have his own product manufactured at actual cost, and to share in the profits which will accrue from manufacturing butter for non-members.

A similar society, organized in Des Moines, Iowa, last season, has been eminently successful, so successful in fact that prices for butter-fat for the past six months in Central Iowa have averaged 6 cents a pound higher than prices paid in territory where the cooperative society could not compete.

If the Omaha Association makes an equal showing, it means a good many more thousand dollars for our dairymen. Certainly it is a movement which deserves the encouragement and active cooperation of all persons who are interested in fair prices for farm products.

The new company starts out with a quotation for butter-fat of 31 cents to members and 30 cents to non-members, the latter being charged one cent per pound for manufacturing and market.

Send to the Farmers' Cooperative Creamery and Supply Co., 828 Harney Street, Omaha, Neb., for further particulars.

Our Future Orchards.

Ten years from now every farmer who sets out fruit-trees this spring will congratulate himself on his wisdom in selection if he listens to and seeks the advice of experienced fruit and nursery men.

A veteran among nursery men is Carl Sonderegger, at Beatrice, Neb. Any farmer who contemplates setting out a new orchard, or just a few trees; a new fruit-farm, or just a little patch; or is planning to reforest any part of his holdings, or wants just a few shade-

quarters, consequently in the spring buildings of brick will be erected sufficiently large to care for the business for several years to come.

Goods are now being shipped to every State in the Union, to Cuba, and Canada, from this factory. Mr. Winters, the secretary and general manager, says these fine results have been achieved entirely through judicious advertising, and the merits of the implements sold. No traveling salesmen are employed, the goods are sold direct to the trade and the consumer. The goods are all sold under a positive guarantee of "satisfaction or money refunded."

This company is manufacturing at the present time the Banner frameless high-lift sulky plow, which for simplicity, durability, moderate cost, and perfect working qualities, is equalled by few and surpassed by none.

The Banner riding attachment, which they also manufacture, is filling a long-felt want. It can be attached to any walking-plow, lister, or harrow in a few moments, thus converting them into a "sulky" at a trifling cost. The Banner garden disk cultivator is an exceedingly useful implement for use in the garden or any place where hand cultivation is required. With very little labor the surface of the ground can be put in the condition of a perfect mulch, thus conserving the moisture and destroying all weeds. All of these implements are carefully made, of the very best material and fully warranted. Mr. Winters enjoys the proud distinction of being the inventor of these useful tools, and he is also the secretary and manager of the company, which is making this great success. The Coffeyville Implement and Manufacturing Company starts its advertisement in this issue of THE KANSAS FARMER on page 75. Read it carefully, and if you need anything in its line, write it, mentioning THE KANSAS FARMER.

A Great Seed Book.

Ferry's great seed book is now ready for distribution. This is the book that every farmer wants and waits for. It makes no difference what other catalogues are received, farmers are not satisfied until they get Ferry's, because it contains better and fuller information.

Ferry's seed annual, in fact, is really more than a catalogue. It differs from the usual seed catalogue inasmuch as it really helps each farmer or gardener to choose intelligently the varieties best suited to his particular needs. The

The Biggest Profit for You



—To get the most money from your Live Stock,
—To make them yield the biggest profit,
—To maintain the best conditions at the least expense, use

Standard Stock Food

"It Makes Stock Thrive."

You know without our telling you that stock out of condition or "off feed" cannot make money for you.

You know that the modern farm animal needs help in the digestion and assimilation of its ration.

We can prove to you and we will guarantee you that Standard Stock Food will give your stock this help, with better results and at less cost than will any other means you can employ.

We ask you to try Standard Stock Food on that guaranty, and whether you buy it of the dealer or from us, we hereby promise to refund to you your money if Standard Stock Food does not do everything we claim it will do.

And remember this, it costs you less to use Standard Stock Food than any other stock food because so little of it is required.

Just compare Standard Stock Food with any other stock food made and you can see, smell and taste the superiority of the Standard. It is stronger, better and more concentrated. That is why you need use so little of it.

That's why a dollar's worth of it will last you longer, go farther and do more good than a dollar's worth of any other stock food.

GO TO YOUR DEALER. Insist upon having the Standard Stock Food. If he can't supply you do not take a substitute but send to us direct. Send us his name and address. Tell us how much stock you keep and we will send you our big Live Stock book "The Standard Feeder," 160 pages, 200 illustrations, 12 special chapters on the feeding, care and handling of Live Stock of all kinds.

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

No More Blind Horses For Specific Ophthalmia
or Sore Eyes. BARRY CO., Iowa City, have a cure

wise selection of varieties results in bigger, better-paying crops. The experience gained in fifty years of successful seed-growing is thus at your command.

For freshness, purity, and reliability Ferry's seeds are in a class by themselves. They are known all over the land, and farmers everywhere have confidence in the name of Ferry, and know for a certainty that their seeds can be relied upon. They know that every package has behind it the reputation of a house whose business standards are the highest in the trade.

Just drop a postal to D. M. Ferry & Co., Detroit, Mich., and they will send you a copy of their 1907 seed annual. It's absolutely free.

Highland Park College.

Highland Park College, Des Moines, Iowa, has grown to be one of the very largest institutions of learning in the West, purely through excellent business management. It is not under State or church control, but is purely a business enterprise. It was organized seventeen years ago by President O. H. Longwell and a company of wealthy citizens of Des Moines, and almost \$700,000 has been expended in building up this great institution of learning. President Longwell has demonstrated that a great educational institution can be built up on business principles without State or church aid.

The school has nine large buildings and is as thoroughly equipped as any of the State schools. Besides doing regular college work, the institution maintains a department of education for the training of teachers; a college of pharmacy, which is now the largest college of pharmacy in the United States; a college of engineering, which is rapidly becoming one of the largest and best-equipped engineering colleges in the country; a business college; a college of shorthand and typewriting; a college of telegraphy; a thoroughly equipped college of music with eleven teachers; a college of oratory; and a college of penmanship and drawing.

The present daily attendance at this institution, we are advised, is about 1,500 students, with an attendance annually of something over two thousand students. This is certainly a record of which to be proud. There are many students attending this school from Kansas, and they invariably speak in the highest terms of the educational work offered, also of the accommodations and advantages.

The spring quarter opens February 19, but students are admitted any day they wish to enter.

Young people interested in obtaining a practical education at a thoroughly reliable institution should address President O. H. Longwell, Des Moines, Iowa, for a catalogue, giving full and complete information relative to all departments of work offered in that most excellent institution of learning.

"The McMillan Fur & Wool Co., of Minneapolis, have mailed us their new circular, which we have on file for reference. This house has been established some twenty-eight years and on account of its extensive business, which minimizes the proportion of fixed expenses, is in a position to pay high prices. It makes a specialty of receiving goods through shipments, and ships them and returns very satisfactory."

Lunt's Hot-Blooded Poland-China Sale.

At Forest Park, Burden, Kans., on Tuesday, January 22, Harry E. Lunt will sell fifty head of his hot-blooded Poland-China brood-sows. This sale will afford an opportunity that is not often found. Many of these sows have been bred to Peerless Perfection 2d 38664, who won the grand championship at the American Royal of 1906, and is now at the head of Mr. Lunt's herd. You can not buy Peerless Perfection in this sale, but you can buy a lot of warm-blooded sows that are bred to him. Better than all that, you can buy a lot of sows that are bred to Grand Perfection 77899 to take home with your Peerless Perfection bred sows, and if that isn't good enough for any man, he is mighty hard to please. Grand Perfection is a half-brother to Keep On and just as good. Three of his pigs, belonging to the same litter, sold in the Ottawa sale of Dietrich & Spaulding for \$717.50. He is now owned jointly by Harry Lunt and Dietrich & Spaulding. Mr. Lunt offers some sisters and half-sisters of Grand Perfection that are bred to Peerless Perfection.

If, with all these good things, you are still not satisfied, you can buy some sows and gilts that are bred to Corrector Chief 38663, who was bred by Frank D. Winn. He is a son of Corrector 2d 27918 out of Moorish Chiefess (8427).

In Frank Winn's sale on December 20, twenty-two head made an average of \$613, and three of them were litter sisters to Corrector Chief, who is now one of Mr. Lunt's herd-boars. The other herd-boar is Shine On by the \$8,000 world's champion On and On, a nephew of the \$6,800 Impudence, grand champion of Iowa. His sire was champion of Illinois in 1904; his uncle in 1905; and his half-brother in 1906. Where can you get better-bred stuff in one sale in Southern Kansas than at Harry E. Lunt's sale at Burden, Kans., on January 22? Send for a catalogue and go.

Forest King Changes Owners.

Manwaring Bros., owners of Ridge View Herd of Berkshires, at Lawrence, and owners of Forest King 72668, have just sold a half-interest in this great boar to C. E. Sutton, of Lawrence. Forest King is a brother of Berryton Duke, at the head of Sunny Slope Herd of Berkshires, belonging to Hon. C. A. Stannard, of Emporia, and of Masterpiece, at the head of A. J. Lovejoy's herd in Illinois. Perhaps Masterpiece is the most famous Berkshire boar in America to-day, but the breeder of them all is credited with saying that both Forest King and Berryton Duke are better breeders and have sired more and better pigs than has Masterpiece. To Black Robin Hood and Duchess 221st belong the honor of being the sire and dam of Forest King, Berryton Duke, and Masterpiece, three such boars as were never sired in any other litter in the Berkshire breed. Mr. G. W. Leeper, best Berkshire sow in Kansas, and she is a daughter of Forest King. Ivanhoe, the grand champion Berkshire boar at the American Royal of 1906, is a nephew of Forest King. We are not at liberty to disclose the price paid by Mr. Sutton for his half-interest in this great boar, but can safely say that it was probably larger than was ever before paid for a Kansas Berkshire.

M. M. Johnson's Fine New Catalogue.

Johnson, the Old Trusty Incubator manufacturer, is out with another new catalogue. It is the finest one out to date and will continue to be the finest till his next catalogue is printed. Johnson is original in his ideals, original in the expression of those ideas, and original in the manner of exploiting the same. In short, Mr. Johnson is an all-around, original man. His catalogue is different from others. Instead of praising up his machine in high, flowing language, he tells us in his own homely, inimitable way of the merits of his incubator and backs this up with photographic cuts of the incubators and their wonderful hatches. He does not merely tell you that Mr. So and So hatched so many chicks in the Old Trusty Incubator, but gives you a photograph of the machine and of the chickens as hatched in it, and you may count them for yourselves. There is no chance for prevarication or misrepresentation here, for the actual results can be seen by the naked eye.

That Johnson has one of the best incubators on the market goes without saying. He sold more machines last year than most all other incubator manufacturers combined. They gave satisfaction to all who bought them. Mr. Johnson had to return thousands of dollars sent to him by customers for machines, whose orders could not be filled. He has anticipated a large trade this year and can supply all demands. Send to him for one of his catalogues. It is well worth perusing whether you want to buy an incubator or not, for there is lots of useful information in it for every poultryman. Address M. M. Johnson, Clay Center, Neb.

The International Harvester Company of America has the thanks of THE KANSAS FARMER office for a complete set of its handsome calendars and catalogues. These calendars are just what we needed and are handsome ornaments on any wall. They represent the Champion, Deering, McCormick, Milwaukee, and Plano harvesting-machine interests. These calendars and catalogues are not to be had from the head office, are not for free distribution by the local agents. If you want one of them, and we are sure you will when you see them, go to your dealer in harvesting-machinery and get the one you like, free of charge.

In La France Chevaline of December 23, which has just been received, we observe that the minister of agriculture has authorized the purchase of the French Coach stallion, Beaumaniot, from Monsieur T. H. Lallouet, of Semalle, Orne, France, for the sum of 70,000 francs (\$14,000), and he is to be placed in the Government stud for the use of French breeders. Beaumaniot won first prize at the great central show at Paris, in 1905, and has since

Break Loose from the Creamery Trust

Farmers organize to manufacture and market their own product

TO CREAM PRODUCERS:

Do you want more money for your butter fat?
Do you want to control the manufacture of your own product?
Do you want to be free from the danger of a combination to keep down prices?
Do you want to get for yourself all there is in cream production, and not let some corporation grow rich at your expense?
If you do—if you want to make the most money from your cows—you will join the great movement for

Co-operation

and manufacture and market your own butter fat through the

Farmers Co-operative Creamery & Supply Company

We need not say to the farmers of the great West that the creamery situation has been far from satisfactory to them.

You know that your cream has not yielded you anything like the profit you should have had.

You know, too, that you never will get the price for your product or your legitimate profit until you have a voice in the management of the manufacturing and marketing of it.

Your only hope is in the manufacture and sale of your own product—the cutting out of the middlemen.

But this can be done at a profit only on a large scale. You must have a big volume of business or you will lose money.

That is why co-operation on an extensive plan is absolutely necessary.

That is why the Farmers Co-operative Creamery and Supply Co. was organized.

It will unite 5,000 cream-producers in the manufacture and sale of butter and in the purchase of all farm supplies.

It means for every farmer in the vast territory which can reach Omaha by rail—

—The manufacture of your butter at actual cost.

—A big reduction in the expense of marketing.

—Just and fair prices the year around.

—And the purchase of your farm supplies at actual factory prices.

It means more money for you and the freedom and independence that comes from the control of your own product.

Will you join with us in this movement for the betterment of dairy conditions?

At least investigate—and out just what it means to you and your pocket book.

Already on a Solid Basis

We have already purchased and

have in operation one of the largest, best equipped and most successful centralized creameries in the world.

It is the plant equipment and business of the Harding Cream Co. of Omaha, with more than 3,000 patrons and an established reputation in eastern butter markets.

Our Present Price for
BUTTER FAT
Members - - 31c
Non-Members - 30c

We have retained as heads of the various departments, the practical men who have built the business and made a success of it, so that we already own and operate a big, going and growing business.

No experimenting is to be done—no pioneer work is necessary. From the minute we take control the business is on a successful paying basis.

It includes a creamery, fully equipped, with a daily capacity of 40,000 pounds of butter; a big ice cream business, capacity 5,000 gallons a day, with an established wholesale business throughout the State, a refrigerating plant (25 tons of ice a day) doing a good ice business—all on a solid foundation.

Members of the association share in the profits of the entire business, and have their butter-fat manufactured and marketed at actual cost.

As a mere investment, a membership in the Farmer's Creamery and Supply Co., offers an exceptional business opportunity, and as a

means of protecting the cream producer in his rights, and of securing for him his fair share of the profits in the butter business, it is the only solution yet offered the farmer.

Organize and Cooperate! It is the only way!

All Supplies at Factory Prices.

It is the purpose of the association to secure for its members all farm supplies, direct from the factory at factory prices, thus cutting out and saving to its members, all dealer's, jobber's, and middlemen's profits, enabling members to save 25 to 50 per cent on all purchases.

A general business will also be done in this line with persons not members of the association, the small profits charged non-members being sufficient to pay the expense of operating the department.

The Farmers' Friend Cream Separator

As an indication of what will be done in this line we cite—

A strictly high grade hand separator, which we offer for only \$55. It has 500 pounds capacity, is manufactured especially for us in the best equipped cream separator factory in the world and is sold on a positive guarantee.

We fearlessly invite any sort of comparison of it with any \$100 separator ever made.

We know what the farmer needs and demands in the way of a separator and we guarantee that you will not be disappointed in this machine. Why not save the extra \$30 or \$50, which you will have to pay for a separator no better, if purchased through an agent or dealer?

And this is only one of the many money-saving, money-making advantages you gain by

Organization and Co-operation

Join with your brother farmers in this movement.

SEND FOR FULL PARTICULARS

Our prospectus sets forth in detail full particulars of our organization. You owe it to yourself to investigate! Find out what we are doing and what can be done for the betterment of dairying conditions. Find out how the price of butter-fat was raised 6 cents a pound all summer long in central Iowa. Find out where your dairy profits have gone in the past and how to keep them in your own pocket. We want to hear from every man woman who milks cows in the territory tributary to Omaha. We can help each other by Co-operation. Write today.

Farmers Co-operative Creamery & Supply Company

626 Harney Street.

Omaha, Neb.

been kept by Monsieur Lallouet at the head of his own stud. Monsieur Lallouet never offered Beaumaniot at the regular presentation, because he did not care to accept the highest price that the Government ordinarily pays. This is an illustration of the fact that the French Government must have the best stallions at the head of the Government stud, regardless of cost. The French Coach horse is the pride of the French breeders and the French people, as is evidenced by this purchase of Beaumaniot.

List of Advertisers.

Mrs. Fred Cowley, turkeys.
International Harvester Co., gas engine.
H. E. Harsha, land seller.
Mrs. Cora B. Miller, medical.
J. W. Poulton, R. I. Reds.
Hurley & Jennings, Lyon County farm.
Happgood Plow, merchandise.
Continental Creamery, better butter.
W. R. Hildreth, corn.
T. Lee Adams, seeds.
M. T. Brown, for lease.
John Harnes, herd-boar.
M. M. Johnson, Old Trusty Incubator.
Hebron Incubator Co., incubators.
Dowling School of Carpentry, carpenters.
David Lakin, Texas lands.
Vermont Farm Machine Co., U. S. separators.
Smith Mfg. Co., manure-spreader.
J. K. Bremyer, McPherson County farms.
John W. Taylor, Duroc-Jerseys.
W. J. Snodgrass, Shorthorn dispersion.
Dr. W. O. Coffee, book.
Iowa Seed Co., seeds.
Goodell Co., implements.
Paul Grupe, Duroc-Jersey sale.

Jas. C. Smith, hides and fur.
W. L. DeClow, stallions.
DeLaval Separator Co., separators.
Pickett-Hammond Land Co., Gulf coast lands.

Frank Hoover, Shropshires and Short-horns.

W. M. Tipton, Black Langshans.
J. Q. Beeman, Buff Rocks and turkeys.
Louis A. Sommers, White Wyandottes.
Dr. Quinn, medical institute.

The Deming Ranch, seed-corn.
Clay Center Incubator Co., best hatch.

National Railway Training School, instruction.

Jno. Wiswell, stallions and jacks.
C. W. Merriam, herd-boar.

M. A. Draper, horse sale.
A. A. Berry Seed Co., free packets.

Col. Jas. W. Sparks, auctioneer.
Toxico Laboratory, asthma cure.

Farmers' Cooperative Cream and Supply Co.

C. E. Hildreth, seed-corn.
E. H. Wright, liquid smoke.

Jno. A. Salzer Seed Co., seeds.
Coffeyville Implement Co., riding attachments.

Coffeyville-Shimer Woven Wire Fence and Mfg. Co.

W. T. Calvin, pacing stallions.
Mrs. A. E. Hamers, Mammoth Bronze turkeys.

Moler Barber College, wanted.
R. H. Shumway, seeds.

Cole Seed Store, seeds.
Jno. Lewis Childs, flower seeds.

C. L. Blackman, the lost mine.
Wichita Nursery Co., trees.

Mrs. W. H. Imbler, wanted man, etc.
H. O. Rider Co., \$85 per month.

Wm. Galloway, manure-spreader.
Western Harness and Supply Co., supplies.

H. E. Lunt, Poland-China sale.

Segrist & Stout, Poland-China sale.
Jas. Mosher, Poland-China sale.
G. W. Wiltse, Poland-China sale.
M. M. Johnson, Old Trusty factory.
R. W. Rice, buy the best.

How to Save Feed.

Any stockman or feeder, who wishes to get the largest possible returns from the feed consumed, will do well to write the C. N. P. Bowsher Co., South Bend, Ind., for circular describing their well-known line of feed-mills.

The peculiar dress of the grinders in these mills, which "shears" the grain in distinction from "bruising" it, as many mills do, leaves the product in a condition which thousands of the best feeders in the stock-raising districts consider the most digestible ever produced. It eliminates all waste of grain, and also serves to keep the stock in that good, healthy condition which is indispensable to profitable feeding.

The grinders in this mill are cone-shaped, thus presenting a large area of grinding surface and still doing the work close to the center of the shaft. The conical shape also reduces the end pressure of the shaft by fully one-half. This is one of the features of the Bowsher mill which has won for it the reputation of being the lightest running on the market to-day.

These mills grind ear corn (with or without shucks) and all kinds of small grain, separately or mixed, and do it in a manner and with a quickness that can not fail to please the most exacting customer. They are made in seven sizes, ranging from 2 to 25 horsepower. This firm also makes a line of geared sweep mills, which grind corn in the shuck and do it successfully. Full descriptive circulars sent on request.

Agriculture

Professor TenEyck's Report.

The Kansas State Agricultural College makes a report every two years. In this report the heads of the several departments give brief accounts of their stewardship. The report of Professor TenEyck, the best-known and most popular man in the institution, will be examined with interest by the readers of THE KANSAS FARMER, who have learned to prize his answers to inquiries on practical problems of the farm, as these answers have appeared in THE KANSAS FARMER.

Professor TenEyck's report is for the biennial period ending June 30, 1906. It is the plain and direct style which characterizes the man and for which he is so well known to KANSAS FARMER readers.

To the Board of Regents: Gentlemen—At your regular meeting in June, 1906, you resolved to change the name of the agricultural or farm department to agronomy department. Agronomy is really the more suitable name for the department, the word meaning, primarily, the management of land and crops; while agriculture, in its broadest sense, means not only the cultivation of the land and the production of crops, but also includes stock-raising and dairying, which branches of agriculture are represented by the animal husbandry and dairy husbandry departments of this college.

The officers and regular employees of the agronomy department on June 30, 1906, were as follows:

A. M. TenEyck, B. Agr., M. S., professor of agronomy, and superintendent of farm; V. M. Shoesmith, B. S., assistant professor of agronomy; assistant in soil physics; M. D. Snodgrass, B. S., field assistant in crops; D. H. Zuck, farm foreman; Miss Edith E. Jones, stenographer; Miss Ellen Berkey, assistant stenographer. Student Assistants.—F. L. Williams, W. B. Gernert, E. G. Schafer, H. J. Bower, R. W. Hull, M. L. Walter.

Teamsters.—W. H. Cassell, J. L. Jolley, C. E. Forseman, Stanley Clark, Floyd Howard.

Other Employees.—R. R. Harrold, Charles Frank, V. E. Bates, Cecil Clark, A. B. Moore, Jay Mellotte.

Students and others who were employed by the agronomy department during the biennial period, not named above, are: W. W. Stanfield, B. S.; B. C. Copeland, student; A. B. Cron, student; C. Doryland, student; H. V. Harlan, B. S., graduate student.

C. H. Kyle, B. S., assistant in soil physics, resigned in May, 1906, to accept a similar position at an advanced salary in the Ohio Experiment Station. His place has not yet been filled.

H. V. Harlan, B. S., who was employed for a time as assistant in field crops, resigned in September, 1905, to accept a position in the United States Department of Agriculture, for work in the Philippines.

W. W. Stanfield, B. S., was employed during the summer of 1905 to make a special study of soil bacteria.

The following is an outline of the class work done by the members of the agronomy department, showing the study, instructor, and number in class during the past two years:

FALL TERM, 1904.

Elective, farm mechanics, fourth year; TenEyck; 7.
Agriculture, first year; TenEyck; 31.
Agriculture, first year; Kyle; 33.

WINTER TERM, 1905.

Elective, soil physics, fourth year; TenEyck; 9.
Farm mechanics, short course; TenEyck; 30.
Crop-production, short course; Shoesmith; 41.
Crop-production, short course; Shoesmith; 34.
Grain-judging, short course; Shoesmith; 30.

Agriculture, first year; Kyle; 17.
Agriculture, first year; Kyle; 27.
Agriculture, first year; Kyle; 26.

SPRING TERM, 1905.

Farm-management, fourth year; TenEyck; 25.
Farm-management, third year; TenEyck; 26.

Elective, crop-production, third year; Shoesmith; 12.
Agriculture, first year; Kyle; 25.
Total for year, 372.

FALL TERM, 1905.

Elective, soil physics, fourth year; TenEyck; 4.
Elective, grain-judging; Shoesmith; 10.

Agriculture, first year; Kyle; 47.

WINTER TERM, 1906.

Farm-management, short course; TenEyck; 34.
Crop-production, short course; Shoesmith; 47.
Crop-production, short course; Shoesmith; 42.

Crop-production, short course; Shoesmith; 36.
Grain-judging, short course; Shoesmith; 30.
Grain-judging, short course; Shoesmith; 32.
Agriculture, first year; Kyle; 46.
Agriculture, first year; Kyle; 48.
Agriculture, first year; Kyle; 40.
SPRING TERM, 1906.

Farm-management, fourth year; TenEyck; 34.
Elective, crop-production; Shoesmith; 5.
Agriculture, first year; Kyle; 26.
Total for year, 481.

The members of the agronomy department have spoken at forty-nine farmers' institutes, as follows: TenEyck, 1904-'05, thirteen institutes; 1905-'06, twenty-five institutes. Shoesmith, 1904-'05, five institutes; 1905-'06, five institutes. The demand has been made upon the department to attend county and State fairs, also, and to act as judges of corn and other farm products, and the department has also made exhibits of farm products at such fairs. In 1904 Shoesmith attended State fairs at Topeka and Hutchinson; TenEyck county fair at Iola; Kyle, the Riley County Fair. Exhibits were made at each of these fairs and the members of the department acted as judges of exhibits and gave talks on "Corn Judging." In 1905 Shoesmith attended State fairs at Hutchinson and Topeka; TenEyck, State fair at Topeka; and Zuck, county fairs at Hope, Ottawa, and Clay Center—the exhibits being at Hutchinson and Topeka only.

Beside the regular institute work, the Rock Island Railway Company ran a lecture train over its entire system in this State, November 6 to 19, 1905, stopping for thirty minutes at each station. Lectures were given on either corn or wheat, or both, at each of the 154 stations of the Rock Island system in this State, the speakers being Willard, TenEyck, and Shoesmith. Each speaker made about 100 lectures during the twelve days' tour.

The correspondence of the agronomy department has continued to increase. The letters received ask for information on various farm subjects, and many of these letters require considerable study and time in preparing answers to the various problems presented. During a considerable portion of the year more than one-half of my time was devoted to answering this correspondence, and the writing of these letters has kept one stenographer busy, and we found it necessary to employ an assistant stenographer to help out with the regular routine work. The more important of these letters, with their answers, have been published through the various agricultural papers of the State, such as THE KANSAS FARMER, Farmers' Advocate, Mail and Breeze, Western Breeders' Journal, Kansas and Missouri Farmer, and Farm and Ranch. This publication of letters and answers appears to be appreciated by the farmers of the State. The writer has also prepared and delivered addresses at the congress of agriculture at the St. Louis Exposition, 1904; Kansas Corn-Breeders' Association, 1904; Clay Center Chautauqua, 1904; Kansas State Dairy Association, 1905, and the Dry-Land Farming Convention, in 1906.

By referring to the biennial report of this department for 1903-'04, it will be seen that the work of the department has greatly increased. More subjects of agriculture are taught in the college, the work in farmers' institutes has increased, and the correspondence is greater; likewise, the work required in the Experiment Station has increased. The great need of the department is for more regular assistants. Student assistants give valuable aid, but necessarily they can work only at short, irregular intervals during the college year. Much of the work requires the continued attention of efficient men who may devote their whole time to the subjects which they have in charge. A number of new lines of experimental work are awaiting development. Other agricultural colleges, with a less number of students and no more experiment station work, employ a much larger force of regular assistants in their agronomy departments.

The divisions of crop-production and soil physics have been developed and are well provided for in room and equipment. No provision, however, has as yet been made for teaching farm mechanics. This is a very important subject. Iowa, Illinois, and other States have developed this line of agriculture and are employing special instructors to teach farm mechanics. Kansas is far behind in this respect. We require a building and equipment for this work and an assistant to take charge of it.

Crab-Grass Questions.

I have a field that was in wheat last season, but did not get it plowed while the vegetation, mostly crab-grass, was green. Would it be advisable to burn the grass before plowing or would it be more advisable to plow the dry grass under? We have always made it a practice not to burn anything off the fields, but to plow all vegetation under if possible while green. If we can not get it plowed under while green, we plow it while dry. I have always thought that burning the fields off was harmful to the soil, or at least deprived it of a certain amount of humus that it would contain if the vegetation was plowed under. Last winter I plowed under a heavy crop of crab-grass and this season the corn on the field where the dry grass was plowed under did not grow very well. Nearly all of my neighbors burn the grass off their fields. I thought that possibly I had over-estimated the value of the dry vegetation in the soil.

Our soil gets very cloddy at times. I suppose this shows a lack of humus. If this is of enough importance I would like to have it answered through THE KANSAS FARMER. C. B. THOMAS.

Wilson County.

It is possible that by burning off the crab-grass you might destroy considerable weed-seed, provided you burn it when the ground is rather dry. Except for the point of burning the weed-seed, I would prefer to leave the vegetation on the field and plow it under. It would have been well to have plowed this field in the fall, and I would prefer to plow it in the winter if there is open weather, rather than to plow it in the spring, provided the crab-grass is plowed under. Perhaps if you can not plow this field until toward time for seeding again, it would be advisable to burn off the crab-grass. The plowing down of a heavy growth of dry grass near seeding or planting time is apt to leave the soil too loose and mellow to prepare a good seed-bed for sowing grain or planting corn.

The cloddy condition of your soil indicates that it is lacking in humus, as you have suggested. However, it is necessary to pay attention to the condition of the seed-bed in order to insure the successful growing of any crop. Under separate cover I have mailed you a copy of a discussion on wheat culture in which the ideal seed-bed is carefully described. The facts and principles as stated in this discussion will apply largely also for the preparation of the ground for corn.

A. M. TENEYCK.

Bromus Inermis.

Will you please tell me the nature of Bromus inermis? What are its feeding qualities for horses and for other stock? About how much will it yield to the acre? Will it stand much grazing? When used for pasture in a dry season how much seed will it take to the acre? Where is the best place to get seed? Will it make a good hog pasture? F. W. SPRUGMEYER.

Rice County.
I have mailed you a copy of press bulletin No. 129 giving information regarding Bromus inermis. Have also mailed you a copy of a circular letter on seeding Bromus inermis. Briefly answering your questions, Bromus inermis is similar in feeding value to timothy hay and a little richer in protein than prairie hay. The hay is relished by all kinds of stock, especially by horses. If cut before it is too ripe and put up in good condition, Bromus inermis hay is not dusty and its abundance of leaves makes it a more palatable hay than timothy or English blue-grass.

At this station the yields of hay from our ordinary upland soil has averaged from one to one and three-quarters tons per acre. The grass produces only one good crop of hay in a season, but makes a very rank thick growth of aftermath which yields abundance of excellent pasture.

Bromus inermis will stand as close grazing when used only for pasture as any other grass unless it be Kentucky blue-grass. However, the grass grows better and produces more pasturage if it is not pastured too closely. Bromus inermis is one of the first grasses to start in the spring, furnishing good early pasture and the grass grows well during the hot, dry period of mid-summer. No other domestic grass remains green longer in the fall. I consider Bromus inermis one of the best grasses for pasture adapted for growing in this State. I always recommend, however, to sow a little red clover or alfalfa with it when the purpose is to use it for pasture.

If the Bromus inermis is seeded

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alone, sow 16 to 20 pounds of grass-seed per acre. Sown with clover or alfalfa, 12 to 14 pounds of grass-seed with 3 or 4 pounds of clover or 5 pounds of alfalfa per acre is about the right combination. The grass will make good hog pasture, but I would recommend to sow more alfalfa with the Bromus if the purpose is to use it largely for hog pasture, about 8 pounds of each per acre.

Much of the seed sold is imported from Europe, and imported seed is not always of the best quality. Excellent Bromus inermis seed is grown in the Northwestern States, the Dakotas, Minnesota, and Nebraska. You can often secure good seed from Northern seedsmen. Most of our Kansas seedsmen handle Bromus inermis seed. Geo. T. Fielding & Sons, of Manhattan, expect to secure a large quantity of prime seed to supply the trade next spring. F. Barteldes & Co., Lawrence, Kans., are making a special advertisement of Bromus inermis seed. This company gave \$50 worth of choice Bromus inermis seed as prizes in the corn exhibition held at Manhattan (December 27 to January 5). Unless you purchase guaranteed seed it is always advisable to test the germination of a small sample of Bromus inermis seed before purchasing a large quantity. A good deal of impure seed has been sold in the State. If there is a question about the purity of seed which is being offered for sale, secure a small sample and send it to the Agricultural College for testing. A. M. TENNEYCK.

English Blue-Grass with Alfalfa.

I sowed a field of alfalfa last spring on upland, red clay land, and got about two-thirds of a stand. Could I sow English blue-grass on it? I want it for hogs and calves. Would the grass kill the alfalfa? J. W. WERNER, Fort Cobb, Okla.

It is rather difficult to start grass in alfalfa, even though the alfalfa may be rather thin in stand. I think the preferable time to seed grass and alfalfa is early in the fall, immediately after the third or fourth cutting. Possibly if the alfalfa makes considerable growth after its seeding pasturing it would be beneficial in order to keep it down so as not to shade the young grass-plants. The tramping would also firm the soil about the grass-seed and help to start the young grass-plants. It would not be advisable to pasture during wet weather.

I have never tried seeding grass on alfalfa ground early in the spring, but perhaps it can be done. If the season should prove to be dry, I am quite certain that the grass would be entirely destroyed, even though it might make a good start early in the spring.

Alfalfa and English blue-grass grow well together and the grass will not run out the alfalfa, at least not for many years. Bromus inermis is a stronger grower than English blue-grass. We have a field of Bromus inermis and alfalfa which has stood now for four years. The alfalfa is still thrifty and productive, while the grass seems to grow fully as well or even better with the alfalfa than in the plots where it is grown alone. A combination of Bromus inermis and alfalfa makes an excellent pasture for all

kinds of stock, and there is much less danger of cattle being injured from pasturing on the combination pasture than by pasturing on the alfalfa alone. If your purpose is to produce a meadow, I would advise to plow up the poor stand of alfalfa, seeding other land or reseed the same land again the next season after plowing, growing some cultivated crop the intervening year in order that the soil may become firmed and be put in good seed-bed condition. A. M. TENNEYCK.

The Conservation of Soil Moisture.

J. G. MOSIER, PROFESSOR OF PHYSICS, ILLINOIS COLLEGE OF AGRICULTURE, URBANA, BEFORE THE STATE BOARD OF AGRICULTURE, TOPEKA.

There are six essentials in crop-production: (1) seed, (2) soil, as the home of the plant, (3) food or the fertility of the soil, (4) moisture, (5) heat, and (6) light.

Good seed is necessary for a good crop, but large yields do not always follow the planting of good seed. Any one of the factors named may be the limiting one. Heat and light are probably less frequently the limiting factors than soil, food, or moisture. If any one of the factors is of more importance than the others, it is the soil, the home of the plant, for all other factors are influenced by this, especially those of moisture, food, and heat.

All soils are not naturally good homes for plants, especially for our domestic ones. Suppose we should attempt to grow a crop of corn or wheat without preparing the seed-bed. Failure would certainly result. Nature has given us our soils, but man must get them in the best condition for the crops he intends to grow. For some plants, such as wheat, oats, barley, rye, clover, and alfalfa, it is only necessary to thoroughly prepare the ground before the seed is planted. The good condition produced is not destroyed by the time the plant matures or perhaps before it becomes large enough to withstand somewhat adverse conditions. Other plants, however, such as cotton, corn, etc., require that the best possible home be maintained during almost the entire growth of the plant.

The improvement of the home of the plant increases its food and moisture supply. In this comparatively new state, the plant-food is probably not yet one of the limiting factors in crop-production, but the question of moisture is one that pushes to the front every year, and in some years and in some localities becomes quite a serious problem. It is the treatment of the soil with special reference to the moisture supply that interests every farmer.

AMOUNT OF WATER REQUIRED BY PLANTS.
Plants require immense amounts of water for their growth. It has been found that in humid climates they require from 300 to 500 pounds of water for every pound of dry matter produced. King, of Wisconsin, found that a 40-bushel crop of wheat required 11.9 inches of water to grow it or 34 tons of water to produce one bushel. At the Utah Experiment Station it has been determined that 20 inches of water would be required to grow a 40-bushel crop, or 56 tons to produce one bushel of wheat under arid conditions.

The average rainfall of the eastern part of Kansas for the past fifteen years has not been far from 30 inches, while the average for the western half of the State for the same time has been about 20 inches. Judging from the rainfall statistics, with the exception of 1892-93 and possibly 1894, there has been plenty of rainfall for good crops if the water could have been retained in the soil for the use of the crop. The rainfall is irregular. At Dodge City, for instance, taking less than 2 inches of rainfall per month as representing a dry month, there have been 9 dry Aprils in the last fifteen years, 8 dry Mays, 3 dry Junes, 4 dry Julys, and 8 dry Augusts. This represents the recurrence of these dry spells all over the country, perhaps not as frequent in some localities as for the one given, but everywhere it is of the utmost importance to have a supply of moisture in the soil to tide the crop over these periods of droughts.

All soils are not naturally well adapted to absorb water or to retain it after it is absorbed. Clay and silt soils are too close-grained or too compact to absorb rain rapidly, while some sand soils are too loose to hold the water against gravity.

WAYS IN WHICH WATER MOVES THROUGH THE SOIL.

Water moves through soils in two ways: (1) by percolation downward by the force of gravity; and (2) by capillarity in all directions, the rise of oil in a lamp wick being a good illus-

tration. In the former, the looser the soil the more rapid the movement, while in the latter the movement is more rapid in a compact soil. Both movements are of the greatest importance in soils, and it is well to remember that what hastens one retards the other. It is the control that he has over these two forms of movement of water that makes it possible for the farmer to lock the moisture up in his soil for the use of the crop when it needs it most, or store the moisture of one season for the use of the crop next season.

Percolation always takes place downward, while capillary movement takes place in the direction of the driest soil. Since the surface soil is usually drier than the subsoil, water moves toward the surface, and, unless stopped before reaching the surface, will be evaporated. The best barrier to the movement of the water to the surface is a layer of loose, granular soil.

EFFECTS OF PERCOLATION.

Percolation of water through a loose soil rearranges the soil particles, bringing them in close contact. This effect is well shown when a trench is being filled. Water is frequently run in with the dirt to settle it. The same thing takes place to a greater or less extent during every shower. The beating of the raindrops tends to break up the granules, partially puddling the surface soil, which, when dry, forms a crust. The water that passes into the soil rearranges the particles, bringing them close together, forming chains by which the water travels to the surface where it is evaporated.

The burrowing of insects, worms, and other animals, as well as the growth of roots, tends to loosen the soil to a certain extent, but their action is incomplete at the best. The plow is the best implement for loosening a compacted soil, especially a plow with a sharply curved mold-board. The shearing produced in turning the furrow-slice pulverizes the soil, if in proper condition for plowing, leaving a loose layer well fitted for absorbing water, but frequently a little too loose to retain it well.

Although the practise of plowing the ground about once a year is an almost universal one, yet the time and method of plowing varies a great deal in different localities. But when the conservation of moisture is one of the principal objects of plowing, it is best to plow deep whether in summer, fall, or spring.

WHY SUMMER OR EARLY FALL PLOWING IS DESIRABLE.

Summer or early fall plowing in arid regions and late fall plowing in humid regions have many things to recommend their practise. From the standpoint of moisture alone, summer or fall plowing is very desirable, in fact almost absolutely necessary in semi-arid climates, because it not only stops capillary movement of water to the surface, but it prepares the soil for absorbing the fall and winter rains and melting snow. This gives fall an advantage over spring plowing, especially if the season is dry. To illustrate, in 1904 at the Illinois Experiment Station the surface soil of a fall-plowed plot showed, for the season, an average of 18.08 per cent of moisture, while the spring plowed showed an average of 15.07 per cent, or a difference of 3.11 per cent in favor of fall plowing, and that in spite of the fact that the yield of corn was 82 bushels on the fall plowing as against 49 bushels for the spring plowing. In the season of 1905 there was practically no difference either in yield of corn or moisture content of the two kinds of plowing.

In arid or semi-arid regions, the soil should be kept as loose as much of the time as the crops and weather will permit. Plow the ground as soon as the crop is removed, whether it be summer or fall. Follow the binder or header with the disk and then the ground can be plowed later, but plow as soon as possible so that the soil will be in the best condition for retaining the moisture present and absorbing the rainfall. A freshly plowed soil may be too loose, and is apt to be so if coarse organic matter, such as corn-stalks or straw, is plowed under, or if cloddy when plowed. This hastens evaporation. Use some implement for compacting it so that circulation of air can not go on very rapidly in the plowed soil. The harrow will answer very well, although some may prefer the subsurface packer followed by the harrow. The surface should be loosened to the depth of two or three inches after every rain, no difference what implement is used, provided it does the work. To show the effect of fall plowing in arid regions, at the Utah Experiment Station sam-

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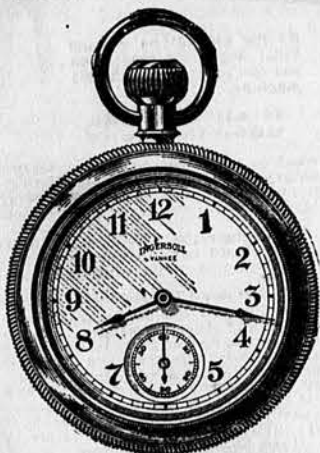
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Topeka, Kans.

ples taken July 19 from fields, one of which had been plowed the fall before and the other in the spring, showed 7.47 inches more moisture in the fall plowing to a depth of five feet, than in the spring plowing to the same depth. At various places in the arid West the value of summer fallow and fall plowing is receiving practical demonstration by the good crops that may be grown on land that was formerly thought to be worthless.

The farmer is now able to keep the moisture in the soil and grow with two seasons' rainfall, where one would not be sufficient, or in some cases grow two crops with three seasons' rain. The practical application of the principles of conservation of moisture is opening up possibilities in the great West that were not dreamed of twenty years ago. Although plowing and the immediate preparation of the soil is of vast importance in the arid regions, it is necessary to produce a new mulch after every shower until the crop is planted. Weeds must not be allowed to grow. In the spring the soil must be worked as soon as the weather will permit to restore the mulch that has been destroyed by the winter's rains.

However desirable fall plowing may be, there will always be a great deal of plowing done in the spring. This should be done early. A practise that pays well in moisture, either in semi-arid or humid regions, is to thoroughly disk the ground before plowing. The soil will remain moist and will not break up cloddy, even if a dry spell does come before the plowing is done. It also cuts up any organic matter of the previous year's growth and gets it in good condition to turn under. Disking also gives a loose layer to turn under, which forms close capillary connection with the undisturbed soil beneath. It is well to follow the plow with the harrow.

Whatever the crop that is to be planted, there should be a well-prepared seed-bed to receive the seed, and there will be an abundance of moisture for germination and growth.

EFFECTS OF TILLAGE ON MOISTURE CONSERVATION.

The methods of tillage of a soil play the largest part in conserving moisture, yet the physical composition has considerable to do with its water capacity and water-retaining power. A sand soil permits the percolation of water through it very rapidly, retaining a comparatively small amount, but losing it by evaporation very slowly on account of its looseness, so that a sand soil will nearly always appear moist an inch or two beneath the surface. Corn will "fire" sooner growing on sand soils than upon fine-grained ones, but not from want of moisture. Silt and clay soils retain more moisture against the force of gravity, but lose it more rapidly through evaporation from the surface.

The organic matter content of soils influences to a large extent the amount of moisture which they will hold. It not only increases the water capacity of all soils, but when mixed with close-grained ones, it makes them looser so they will absorb rainfall more rapidly. In sand soils it retards absorption and percolation slightly, thus increasing the water capacity. It checks capillary movement in all soils and produces better physical condition, making it easier to work and bring about tillage conditions that tend to conserve moisture.

The power of organic matter to increase the water capacity of soils was shown by a simple experiment of put-

lowing moisture content of two soils that had been cropped for different length of time:

	Per cent of humus and moisture in surface foot of new soil cultivated for 2 years	Per cent of humus and moisture in surface foot of old soil cultivated for 22 years
Humus.	3.75	2.50
Moisture.	16.48	12.14

This gives a difference of 85 tons of water per acre-foot in favor of the soil having the greater amount of organic matter or three-fourths of an inch of water.

WATER CAPACITY OF DIFFERENT SOILS.

In the vicinity of the University of Illinois two types of soil are found that differ in their amounts of organic matter. The two are separated by a very sharp line and in 1905, while a field containing both types was in corn, the moisture content of the two soils was determined each week from May 5, when the corn was planted, till September 15, when it was mature.

The results are as follows:

	Per ct. of organic matter	Per ct. of water in soil, over for gray silt season	Excess of water in tons per acre
Brown silt loam:			
Surface, 0-7 in.	3.89	21.23	43
Subsurface, 7-19 in.	2.09	20.47	39
Subsoil, 19-40 in.	1.21	23.17	147
Gray silt loam:			
Surface, 0-7 in.	1.85	17.36	..
Subsurface, 7-19 in.98	18.57	..
Subsoil, 19-40 in.87	19.24	..

This gives an average difference between the two types of soil for the season of 229 tons per acre or slightly more than two inches of water in the first forty inches of soil, enough to produce eleven bushels of corn. The actual difference in yield was twenty bushels per acre.

Organic matter is the only physical constituent in a soil that varies. The amount of sand, silt, or clay will always be the same, but the organic content may be increased or diminished according to the method of farming practised. For its effect on moisture alone, the organic matter content should be maintained by all means, but when we take into account the fact that it is the source of the nitrogen for most plants and probably much of the phosphorus for all plants, it becomes of double importance.

Professor Snyder, of Minnesota, says, "A soil which by long cultivation has lost one-half of its organic matter shows a loss of 10 to 25 per cent of its water-holding power."

Professor Whitcome, of the Oregon Experiment Station, in speaking of the semi-arid region in Eastern Oregon, says, "While from 8 to 12 inches of precipitation may be sufficient to produce a good crop of wheat now, later when the organic matter becomes reduced, a great deal more moisture will be required, as the soil will be less capable of retaining moisture."

There is one other factor in the conservation of moisture and that is weeds. Remember when you see a weed growing on your farm, that every pound of dry matter in that weed probably has required from 400 to 750 pounds of water to produce it. It will not take a very large weed to remove a tenth of a ton of water. At the Illinois Experiment Station two plots of ground lying side by side were prepared for corn in the usual manner and planted. On one plot the weeds were allowed to grow, but on the other they were kept down by scraping with a sharp hoe without producing a mulch.

The moisture content was determined during July and August, the average for the time being as follows:

	Per cent in surface soil 0-7 inches	Per cent in subsurface 7-19 inches	Per cent in first subsurface 19-30 inches	Per cent in second subsurface 30-40 inches
Weeds removed by scraping with a sharp hoe.	18.6	19.6	21.6	20.9
Weeds allowed to grow.	15.1	16.7	18.9	19.7

ting 100 ounces of dry, medium sand in a tube with a perforated bottom and pouring water through it and allowing it to drain. It was found that the 100 ounces of sand retained 13.3 ounces of water. A mixture of 5 per cent of organic matter and 95 per cent of sand was then made. One hundred ounces of the mixture retained 18.6 ounces of water. A mixture of 10 per cent of organic matter and 90 per cent of sand retained 24.7 ounces. In experimenting with soils in the laboratory, it was found that an increase of 1 per cent in the organic matter content of soils, deficient in it, gave an increase of from .2 to 1.5 per cent in the moisture capacity of the soil. 4 to 5 per cent of organic matter gave the largest increase in the moisture capacity of the soil per unit of organic matter.

In Bulletin 41 of the Minnesota Station, Professor Snyder gives the fol-

This gives an average difference during July and August of 171 tons, or 1½ inches per acre to a depth of 40 inches. But this is only one of the effects that weeds have on the soil; another is that they require plant-food for their growth, and if there is no more food and moisture than the crop needs, that taken by the weeds is sure to diminish the yield of the crop by that much.

The successful farmer must be a man of resources and good judgment. He must be able to change his methods, to adapt them to the varying conditions of the different seasons, and to the crops. He must be a man who has some scientific knowledge because there is a science of agriculture as well as an art, and the man who supplies the necessary scientific principles as well as practises the art will be the successful farmer.

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and he and you together can ask every other neighbor living along that two or three miles to sign it. In less than one-half day your association is well started, and the chances are you have enough money in the treasury to buy material to build a home-made drag.

Start this drag out immediately after the first rain, and the first application will show such decided improvement that none will drop out, nor will they feel that they have not had their money's worth.

I have said but little so far in regard to the drag system, for all have read more or less about it in the public prints. It consists of smoothing or dragging, or puddling, the surface of the road while it is still wet, or even sloppy. Strangely enough, the capillary attraction and evaporation causes this part of the road to dry more rapidly than the other surface and, drying, becomes at the same time harder and to a certain extent, impervious to the next rainfall. The road being slightly convexed, the majority of the water runs to the gutter. The loaded wagons, which now pass, pack or roll the earth equal to a twenty-ton roller, being hardened still more with each passing vehicle:

The machine or drag may be the celebrated split log drag or a couple of 2-inch planks set edgewise, or perhaps a discarded railroad rail. If nothing better is at hand, try an ordinary clod smasher, which, when weighted down with stones and drawn up one side and down the other, will answer the purpose until something else can be procured. As I said in the beginning, this is a plan, but by no means the only one, by which you and your neighbors may enjoy the luxury of a good road right now at a small cost.

How Our Roads May Be Improved.

HON. ROBERT STONE, MEMBER OF THE LEGISLATURE FROM SHAWNEE COUNTY, BEFORE THE STATE GOOD ROADS ASSOCIATION AT MANHATTAN.

The distance from the shipping point to the great centers of consumption and distribution has been shortened many fold in the last fifteen years, but the distance from the farm to the shipping point has remained practically the same. This mud tax must be paid by some one, and is an absolute loss to the people. Wherever a good road is built and maintained, the net receipts to that community are very appreciably increased.

Kansas is so wide, her roads, ordinarily, have been so good, and her people, at times, have been so poor, that the permanent improvement of our highways has been neglected. We have been engaged in the business of settling up our State. We have now reached, however, the time when we should begin to settle it down. In settling up a country, the people put up with all sorts of inconveniences, living in sod houses and cabins, going without fences and modern improvements of all sorts; but, after the country has been fairly well populated and the people begin to increase their savings, they can begin to enjoy some of the luxuries, as well as the necessities, of life. They can then build comfortable homes and barns, use all sorts of improved devices, and along with this should go, and I believe will go in our State, the improvement of all public highways. They can then begin to settle the country down.

In thinking about the loss that we suffer from having to haul so much of our products through the mud, we are apt to feel discouraged, and then begin to theorize on things that should, or might, be done. We are apt to overlook, at such times, the things that are done and fail to take advantage of conditions that are about us. At such times there is always a good deal of agitation about "legislation that is needed and ought to be passed," and some of us are apt to forget to look at the statutes to see just what laws we already have.

On that account, I wish to call your attention to some of our present laws. In every municipal township in the State, the township board—consisting of the trustee, clerk, and treasurer—constitute the highway commissioners of that township. All roads of their respective townships, except those included in incorporated cities of more than six hundred, or that have been taken out of their hands by action of the county commissioners, are under the immediate supervision and control of this board, and they are authorized to appoint road-overseers to take charge of these roads and highways; to levy a tax of not more than five mills on the

dollar upon all property in their township, this tax to be collected in cash, and expended under the supervision of the board. The commissioners are also authorized to purchase tools, implements, road machinery, and any material that may be necessary for the improvement of the highway; and to let, by contract, to the lowest responsible bidder, any roadwork in their township, where they deem it advisable to do so.

This law authorizes them to make permanent improvements on the road, as well as to do the dirt work that is necessary, and in my judgment, this law also permits them to cooperate, if desirable, in the permanent improvement of any highway with the county commissioners, dividing the expense in such proportion as may be agreed upon between them and the county commissioners.

These provisions are contained in Chapter 362, session laws of 1905, but even before that time the township board was authorized to levy a tax, payable in cash, with which they could purchase machinery and make either permanent or temporary improvements on the highways.

The next step in our road laws is the authority given to the county commissioners. They are authorized to levy a road tax of not more than three mills on all the taxable property in the county, except real estate in incorporated cities of over two thousand. This may be paid in labor; but under another provision, found in Chapter 363 of the laws of 1901, by submitting the proposition to the county for endorsement, a cash levy for good-roads tax of not to exceed two mills on the dollar may be made and the proceeds used for the permanent improvement of any highway which the county commissioners may see fit to make. This money may also be used for the purchase of machinery, for surveys, maps, estimates; and the roads which are thus improved shall thereafter be under the full and exclusive control of the county commissioners.

There are many special acts on our statute books, with reference to particular counties, authorizing commissioners or township officers to buy machinery and improve roads, but the above-mentioned general laws seem to me adequate to provide for the improvement of any of our highways, and also to care for the earth roads, by King road drag, either in contract, or under the supervision of the highway commissioners, through the road-overseers.

The only missing link in the development of our highways, so far as legislation is concerned, is in some way to connect the State with the improvements of the roads. Theoretically speaking, and I believe practically speaking also, the State should bear a portion, if not all, of the expense of the improvement of the country highways. But a law which will saddle any of this expense upon the State at large could not be passed unless there is a very remarkable change in the sentiment of the people.

In the western part of our State, where the population is less dense, the roads are much better than in the eastern part of the State. The people there are at present satisfied with their roads, and very seriously object to being taxed for the improvement or maintenance of roads in the eastern half of the State, and it seems to me that each county must work out its own salvation in this matter. It is necessary, however, and important that sentiment in favor of the improvement of our highways should be developed, and that those who desire to do something in this line should have all necessary information and assistance.

The people who believe in the improvement of our highways, and who are promoting the sentiment, are doing it out of patriotic desires, and it is not right that they should be called upon to spend their own money in disseminating literature or giving instruction.

Under the Iowa plan the State Agricultural College acts as a highway commission, and it seems to me that this is all that is needed in this State to give us a good system of laws. I have, therefore, prepared a bill, following the Iowa statute, which I am willing to support, and if desired, will introduce in the next session.

Little Flossie—Say, papa, you got things mixed at Miss Oldham's funeral, didn't you?

Parson—In what way, my dear?

Little Flossie—Well, you said she had gone to her eternal rest, then you spoke of her having joined the heavenly choir.

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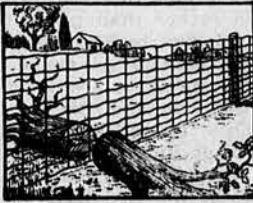
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Lee.

A passion of conflict—Country or State!
Allegiance or loyalty!—which clearer
the call?
Man of the nation, a name blazoned
high
On escutcheons of glory—
Should he part with the past in which
they—his people—
Had writ deep and fast,
Lee!

Harsh, bitter, and cruel the struggle.
Then—white and undimmed
The altar of Duty shone out of the
dusk,
And Love burned away all dreaming or
gross.
And he knew not, when yielding one
sword for another,
He had carved on the heart of his
country forever,
Lee!

—Kate Langley Bosher, in The Outlook.

Robert E. Lee.

The Nation celebrates to-day, this 17th day of January, the one hundredth anniversary of Gen. Robert E. Lee, commanding officer, of the Confederate army in the Civil War. It has been a little more than forty years since hatred was rife between the North and the South, since a chasm, broad and deep, separated them, which, it seemed, time could never fill. That the Nation, North and South, unite to honor this hero of the war, is a good omen and should make glad the heart of every American citizen. He was one whose memory all may delight to honor—a valiant soldier, a great leader, and a Christian gentleman, loyal to his State and fighting for the right as he saw it. He was that kind of a character that stands the test of time. Since the clouds of misunderstanding and wrong conceptions have cleared away, this hero of the South stands forth before the Nation in his true character, and viewed in the light of love we behold a hero worthy to occupy a place beside our beloved Lincoln and Washington. Lee's devotion to his State was equal, if not greater than that of the latter. This is proven by his own words, "If I owned four million slaves in the South I would sacrifice them all to the Union, but how can I draw my sword on Virginia, my native State." He loved the Union, but he loved the State better. The conflict within was greater than that without, and when the crisis came it almost tore his heart asunder to raise his sword against the Union and in defense of his State.

The attitude of General Lee after the war showed of what he was made—proved his greatness of heart and magnanimity of spirit. He was invited to join a company and leave all for England, where he might spend his life in ease and quiet. But he refused with these words, "The thought of abandoning the country and all that must be left in it is abhorrent to my feelings, and I prefer to struggle for its restoration rather than give up all as lost." The spirit he displayed toward the North may be summed up in these words of his in speaking of the event of the war and the Northern people: "I have never cherished toward them bitter or vindictive feelings, and pray for them." He spent the remaining years of his life after the war in trying to raise the standard of lives of young men. He was president of Washington College, a small institution in the South, devoting his time and energy in training young men to do their duty in life. He refused to accept the presidency of a Southern life insurance company at a salary of ten thousand dollars a year, saying he considered it his duty to remain at Washington College as it was his conviction that the best way of promoting the prosperity of the South was in the thorough education of all classes. If his convictions had been shared by all and put into execution, some of the unpleasant existing conditions of the South would not be present and much of the suffering would have been averted.

In conclusion let me quote the closing words of Dr. Lyman Abbott, in an editorial in the Outlook:

"The time is not distant when in every place where the statues of heroes are placed for remembrance and for inspiration the figure of Robert E. Lee will stand among his peers; when the cities of the North will set his effigy in public places, and tell his story to children in the schools. The time is not distant when the image of Lincoln will touch the heart of every man of South-

ern birth with a sense of his human greatness, his human tenderness, his human wisdom, and monuments to his noble memory will rise on Southern soil; for he was the truest friend the South had in its darkest days. In such interchange of sacrifice, nobility, and greatness, the tragedies of conflicting convictions are finally reconciled and the world is moved forward into the light of a happier day."

Nature Study in the Common Schools.
MISS EVA SCHLEY, TEACHER OF NATURAL HISTORY, TOPEKA HIGH SCHOOL.

Broadly speaking, nature study is the study of the universe from its most complex constellation to the humblest

forms to keep it ever glowing unconsciously founded the firmest institution of modern society—the home.

The establishment of the home introduced or rather developed two other phases of nature study—plants and animals in their relation to man. Somewhere along the line of progress man learned to love his dumb neighbors; perhaps having killed the mother, he carried the young of some animal home and tamed it; perhaps some wounded, which was not needed at once for food, was allowed to live until he had learned to love it. From here it was an easy step to flocks and herds, and in the keeping of them the necessity of food supply brought man his first lessons in economic plant life.

THE TEACHER'S PROBLEM.

The problem which confronts the teacher of nature study to-day is the same problem which has confronted the race since the beginning, that is, discovery of the different forces of nature and experiments to learn the laws governing them; the learning of



Friend Andrew Hinshaw and wife of near Emporia, who recently celebrated their golden wedding. They have taken THE KANSAS FARMER almost from its first issue.

atom of its composition. Brought down to earth it embraces study of that planet, physically in its relation to the solar system, in the causes of day and night, change of season, its own revolution and rotation, with the resultant influence on the ocean currents, prevailing winds and tides; chemically, in the composition of the earth's crust, of rocks and minerals, metals and soils; biologically, in the plant and animal kingdoms found upon it. Nature study is limitless in its scope and may be wide in its application to our needs.

THE BEGINNING OF NATURE STUDY.

The study of nature began when God placed Adam and Eve in the garden of Eden "and blessed them, and gave them dominion over the fish of the sea, the fowl of the air, and over every living thing that moveth upon the earth." The stimulus to this first lesson was curiosity, that desire for discovery and exploration which has always been exhibited through the countless generations, and though the experiment in this case was not entirely a success, the world at large has never entirely forgotten that apples are good to eat and that snakes are not always to be trusted.

We have no other record of primitive man's first experiences with nature on the food question, but though the Bible says, "Take no heed what ye shall eat," I doubt not that the trail of the culinary science is strewn with the bleaching bones of the victims of this branch of nature study, and deep into the human mind has sunk the lesson which we hear repeated on every side in the advice given the young child, "Don't eat it—poison—it will kill the baby."

The discovery of fire marks an epoch in nature study and must have been marvelously wonderful to our remote ancestors, for they immediately set about to make it and thereby learned another of nature's lessons—the conservation of energy, heat, then light, and though modern man has completed the cycle, I doubt if he feels the exultation of his forefathers. No wonder they worshiped fire, and made it a part of religious ceremonies, and in their ef-

forts to keep it ever glowing unconsciously founded the firmest institution of modern society—the home.

Interesting facts concerning the animal and plant world, their inter-relations and interest to us from an economic standpoint, and above all the appreciation of the wonderful beauties in nature.

NATURE STUDY AS TAUGHT IN THE SCHOOLS.

I can best tell you something of the teaching of nature study by describing some of the work my classes have done in school—we have two entering classes a year, one in the fall, the other in the winter, and the work is different in the two classes because of the difference in material available for study at the two seasons. But in either case one of our first lessons is in keeping what we call a weather record; these records are kept for the day from midnight till class time and consist of the date, whether clear, cloudy or foggy, precipitation, whether rain, snow, sleet, or hail; the temperature at class time; the barometric reading; time of sunrise and sunset; when the moon rises and sets; and the morning and evening stars. This record is kept every day throughout the term. It has not been kept many days, however, until some boy or girl wants to know why the barometer is higher one day than the next. This is just the opportunity I have been waiting for, to tell them all I know about the origin of storms among the islands south of Asia, where the water is very shallow and is consequently heated to a higher temperature than the surrounding ocean. Each day the warm humid air rises from these seas until it is taken hold of by the outer atmosphere and carried across the Pacific ocean, striking our coast at about Washington and Oregon, crossing our continent in a southeasterly and then in a northeasterly direction and

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bringing with it under proper conditions rain or snow, depending on the temperature.

Then follows the reading of the weather maps gotten out by the Weather Bureau and the learning to predict the weather for tomorrow. Here we have gained quite a local reputation among the football boys and are called upon to predict the weather for days ahead in the event of a game. At this time also we learn the cause of the changes of season. With a discarded bicycle wheel, two rubber balls, and a fixed object in the room, we improvise a solar system with all the necessary fixed and rotating bodies to show that summer and winter are caused by the tilting of the earth on its axis and not by the sun moving north and south—a common childish belief. Another thing studied in connection with the weather record is the skyometer, an instrument to measure the amount of surface covered by a beam of light. A block of wood 6 inches square and a foot long is placed in the sunlight, and the shadow it casts is measured from time to time. Of course if the experiment is performed in the fall of the year, the shadow increases in length as winter approaches and reaches its maximum length at the winter solstice in December. The children are told then that a ray of light is brightest and hottest when it is shining straight down, and decreases in brilliancy and heat as it strikes a surface more obliquely. With this information it is easy for the pupil to reason out that the tropics are hot because the sun always shines straight down, that our climate is milder on account of the oblique rays, and that winter and summer are caused by variations in the slant with which the sun's rays strike us—all of which the pupil may have recited glibly enough parrot fashion in his geography recitations, and have given less than no thought to because he did not understand it.

Questions in connection with the weather are almost numberless and are always intensely interesting to children. We pay considerable attention to it, because the United States Weather Bureau is doing some fine work along this line, and people should be able to understand and take advantage of the predictions and forecasts which the bureau publishes.

INSECT LIFE.

One branch of nature study which we take up in the fall is that of insect life. I have found that pupils, even of high school age, are almost totally ignorant of insects, and the horror which the majority of them exhibit at the sight of a bug is second only to their unqualified ignorance of the life and habits of the little animal. Therefore, we begin at the beginning by catching enough insects (usually grasshoppers because they are so common and the timid girls are less afraid of them) for the class and make a careful study of their personal appearances—how many legs and wings, the parts of the body, the three simple eyes and the two compound ones, (always a surprise to the class) and the crowning feature of all, its mouth parts. After we have exhausted the external features of the insect we study the life histories. The life history of the moths and butterflies are particularly easy to study at this time of year because the caterpillars are spinning their cocoons or forming their chrysalids preparatory to the coming winter. This change of form is a complete surprise to the pupils, and they eagerly collect various kinds of caterpillars to find what sort of cocoon they will make.

The habits of insects are studied from the standpoint of their economic relations to man, and upon this basis are separated into those beneficial to us and those harmful in one way or another. In the former class belong the bees, wasps, bumblebees, and hornets. Into the latter class fall the chinch-bug, Hessian fly, army-worm, and very many others. We discovered two new (to me) harmful insects this fall, the elm-twig girdler and the cottonwood-twig borer. Both cause the twigs to drop in the fall and practically destroy the season's growth. We cut open the twigs and found in case of the elm-twig girdler the eggs at each bud on the twig, and in the cottonwood twig, the borer was at the base of the year's growth. When confronted with the question, "What should be done to destroy the insect, should it become a pest?" the pupils were unanimous in their decision that if the twigs were gathered and burned it would destroy more individual insects than at any other period in its

life history. This was precisely the advice given in the Manhattan Agricultural bulletin, as we afterwards learned. By this you will see, that, given the conditions, the pupil is able to think out a good solution to the problem. We study life histories of the insect—that is egg, caterpillar, chrysalis, and the adult stages particularly, because so many of our injurious insects do most of their damage in the caterpillar stage, when they are hard to cope with, and are lost sight of in their earlier and later stages when they may be more easily handled. To show you that this kind of information is valuable and also that it is needed, I have only to tell you of an incident which came under my personal observation. An acquaintance of our family, a farmer from Southern Kansas, was visiting us. We got into a discussion of farm life in general, during which he told me of the destruction which the army-worms had caused that summer in attacking his corn which they completely devastated. "And," he concluded, "in a few days every one of those worms went down into the ground. The ground was full of little holes where they went down." He thought that each little caterpillar had lived its allotted time upon this earth and was ready to seek its happy hunting-grounds, and had accommodately buried itself before doing so. When I told him that each little worm would hatch out a full-grown moth next spring, and that each female would lay from fifty to a hundred eggs, he began to be interested in earnest and was anxious to know the remedy.

The study of insect life leads naturally to the insect enemies—our friends—the birds, snakes, frogs and toads, spiders, and even the thousand-legged bugs—all of which depend more or less upon insects for their daily living. If that farmer, I told you of, had plowed his field that fall just below the depth that the army-worm went down and had watched the flock of blackbirds and crows in the wake of his plow, eating those very same army-worm chrysalids, he would have come to some realization of the value of birds.

TREE STUDY.

In the spring when the leaves begin to come out, we make a study of trees, both forest- and fruit-trees. Last year the pupils learned to recognize from their leaves, fifty kinds of trees that grow in or near the city. This was exclusive of a half-dozen or so of the commonest trees which they all knew. From here we branch into forestry—one of the great economic considerations of the day from the lumber standpoint. Here, of course, we can do no real work. I read or tell them about the work of the United States Department of Agriculture along the line of forestry, because of the increasing demand for lumber and the constantly decreasing supply. This year I am trying to interest my classes on the subject of nut-producing trees. Little or no attention is given the cultivation of our most valuable nut-bearing trees. The reason for this neglect is hard to find, since the demand for them is good and increasing and the prices high. Pecans, almonds, English walnuts, and filberts sell for 20 or 25 cents per pound in all markets and even reach as high as 40 cents per pound in the larger cities. Trees might be planted in the city to advantage, for many of the nut-producing trees are also valuable for shade.

A STUDY OF SOILS.

Another lesson which is given in both terms is that of soils. A given amount of gravel, sandy, humus, and clay soils is sifted to determine the amount of gravel coarse and fine sand, which they contain. The residue is burned to determine the amount of carbon in each. After having determined the composition of the soils in this way we pour a given amount of water on equal amounts of the different soils to find their relative retention of moisture. Then follows a discussion of the values of soils according to their stratification of surface soil and sub-soils. Then we study the effect of decaying vegetation upon the soil. We find the proportion of gases, carbon and mineral matter in definite amounts of leaves and of wood separately by heating and then burning them and weighing after each process. It is ever a surprise to the children to learn that the amount of mineral matter in the leaves far outweighs that in the wood of the same tree—in some kinds weighing as much as sixty-eight times that in wood. Here, too, they discover why it is that in the woods the soil is so much richer in carbon than meadow soil, and are able to tell why a crop of weeds



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plowed under will give more carbon to the soil than it took from it.

These are a few of the things we do in nature study. There are many others, such as our semi-annual visit to the electric-light plant, a source of delight to the boys, who will discuss learnedly for days after the different kinds of steam chests, cylinders, throttle valves, etc., till it fairly makes the wheels go round in the girls' heads, when we are obliged to quit the interesting subject for something more general.

An objection to the teaching of nature study is the inability of the average teacher to handle the subject intelligently and practically. This objection may be readily obviated by gradually raising the educational qualifications of the teaching force, so as to make them embrace the elementary sciences of botany, zoology, chemistry, and physics. Such a change would necessarily be gradual, but in the interim no hardship would be worked on the individual teacher and the inestimable benefits to be derived deserves the championship of all educators and of all progressive citizens.

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. Best 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.

"Marse Robert is Asleep."

[The following verses are based upon an incident of the Civil War. General B. D. Fry, of the Confederate army, related the story to the author. General Lee, sorely fatigued by a hard day's march, lay down on a log beside the road and quickly fell asleep. Soon a column of soldiers came down the road, laughing and talking as they marched along. A burly trooper, who had been standing guard by the General's improvised couch, rushed out into the road and whispered, "Hush! Marse Robert's asleep! The word was passed down the line, and the ranks, instantly subdued, tiptoed past their sleeping leader.]

Had you heard the distant tramping
On that glowing summer day!
Had you seen our comrades running
To meet us on the way!
Oh, the wondrous, sudden silence,
Th' unmilitary creep,
As down the line that caution ran,
"Marse Robert is asleep!"

Give me your hand, old Blue Coat,
Let's talk of this awhile,
For the prettiest march of all the war
Was this of rank and file!
Was the passing of that army,
When 'twas hard, I ween, to keep
Those men from crying out, "Hurrah!
"Marse Robert is asleep!"

There lay that knightly figure,
One hand upon his sword,
The other pressed above his heart,
A vow without a word!
Two laurel leaves had fluttered down,
For flowers their vigils keep,
And crown'd him, though I think they
knew
"Marse Robert was asleep!"

In glorious old Westminster
No monument of war,
No marble story, half so grand
As this our army saw!
Our leafy old Westminster—
Virginia's woods—now keep
Immortal that low whisper,
"Marse Robert is asleep!"

As we clasp hands, old Blue Coat,
List, Brother of the North;
Had foreign foe assail'd your homes,
You then had known his worth!
Unbroken vigil o'er those homes
It had been his to keep;
Step lightly o'er the border, then—
"Marse Robert is asleep!"

He's yours and mine, is Robert Lee,
He's yours and mine, hurrah!
These tears you've shed have sealed the
past.

And closed the wounds of war!
Thus clasping hands, old Blue Coat,
We'll swear by the tears you weep
The sounds of war shall be muffled—
"Marse Robert is asleep!"

—Miss S. B. Valentine, in The Outlook.

Book-Farming.

C. W. BURKETT, DIRECTOR KANSAS EXPERIMENT STATION.

Once upon a time a farmer's boy wanted to go to an agricultural college, but his father objected, because he said that all the professors knew was book-farming. But the boy was very wise, as most boys are, and something as follows in conversation occurred:

"Father, what you know about farming is worth something, isn't it?"

"Why, of course, it is."

"You have learned a good many

things, have you not, father, that would be worth while for me to know?"

"Certainly, my boy, I can tell you a good many things about farming."

"And Uncle Bill is a good farmer—what he knows is worth something?"

"Yes, yes. Uncle Bill is a good, practical, and successful farmer."

"Well, father, if what you know and what Uncle Bill knows could be printed in a book, it would be book-farming, but I do not see why that would take any value out of it. And then if what you and Uncle Bill know about farming were explained by men who were farmers themselves, and who love farming, and believe in farming, it would be practical knowledge that ought to help me in my farming. Is this not true, father?"

"Yes, my boy; I guess you are too much for the old man."

And so it is. There is nothing about books and agricultural papers, and so-called "book-farming" that is objectionable, providing the same is practicable, commonsense, and true. A farm fact in a book or in the paper does not take any of its real worth away from it. There are a great many very successful farmers, and if their methods and the knowledge which they have learned by hard experience could be impressed upon the minds of young men who are just engaging in farming, it would save a lot of wasted effort and a lot of costly experience to the young man.

There is nothing objectionable about book-farming. The old prejudice against agricultural papers and agricultural books is just about dead today. We are realizing that if young farmers and old farmers are to succeed in their chosen work they must get facts and information from every source they can and use the same in their business, just like men use experience and knowledge in other professions, taking it where it can be obtained.

Let's take our hats off to the farmer boy who loves farmwork, and who has an ambition to make a success of farmwork! Here is to the eager, earnest farmer boy!

A Snail's Ways.

One day I found a snail in the woods. He was crawling on a mossy log. His shell was glossy and of a light brown color. The snail, too, was pale brown. He looked soft, as if he had been made out of jelly. He had a pair of horns thrust out from the front of his head, to warn him of danger.

When I picked up the shell, Mr. Snail quickly tucked himself out of sight inside. I took the shell home in my pocket, and at night laid it out on my table. In the morning it was gone. Looking about the room, I found the snail climbing up the wall, half way to the ceiling.

I stood on a chair, touched him gently on the head, and, in a fright, he drew into his shell, and it fell from the wall into my hand.

Then I took a large china dish, and put in it a nice stone from the brook. The stone had little lichens and bits of water weeds on it. I put water in the dish. Then I set the snail on the stone.

Snails like cool, moist things. My snail at once came out to see his new home. He began to travel around it at a great rate. He crept to the water on every side. I saw that he ate the lichens. So I brought a nice young lettuce leaf, wet it, and laid it on the stone. When the snail in his journey reached it, he touched it with his horns. Then he crept upon the edge of the leaf, turned sideways, and began to eat fast.

He seemed very hungry. He moved along the edge of the leaf, gnawing as he went. After he had eaten about a quarter of the way along the leaf he turned and went back, still eating. So he kept on until he had cut a deep scallop. Then he went to another place and ate out another scallop. The children said he liked scalloped lettuce.

I kept the leaf wet. At first I thought the greedy little creature did nothing but eat. I found that he liked to play and was fond of travel. He would go to the edge of the water, and, holding fast to the stone, would dip his head in for a drink, or to get it wet.

When he did this, he drew in his horns until they could not be seen. Then he tried to cross the water and to reach the side of the dish.

He would cling fast by the hind part of his body, raise his head, and stretch himself as far as he could, and try to take hold of the dish. He often fell short and tumbled into the water. But out he would come and try again. When he succeeded, he would walk all around the rim of the dish.

One night he came out, dropped to the floor, crept over the carpet, up the leg of the table, along the top, and then traveled all over Nan's new bonnet. He tried to eat the artificial leaves on the bonnet. There I caught him in the morning.

Wherever he went he left a thin trail like glue. I could follow his steps as you can those of a careless boy who forgets to wipe his feet.—Julia McNair Wright, in Holiday Magazine.

The Test of a True Gentleman.

The forbearing use of power does not only form a touchstone, but the manner in which an individual enjoys certain advantages over others is the best test of a true gentleman.

The power which the strong have over the weak, the magistrate over the citizen, the employer over the employed, the educated over the unlettered, the experienced over the confiding, even the clever over the silly—the forbearing or inoffensive use of all this power or authority, or a total absence from it when the case admits it, will show the gentleman in plain light. The gentleman does not needlessly or unnecessarily remind an offender of a wrong he may have com-

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mitted against him. He can not only forgive, he can forget; and he strives for that nobleness of self and mildness of character which impart sufficient strength to let the past be the past.

A true gentleman of honor feels humbled himself when he can not help humbling others.—General R. E. Lee.

The Little Ones

Shov'lin' Snow.

I'm glad it's gittin' winter,
Because I like to sling
A head o' good, hard snowballs,
An' skate, an' everything.
But, gee, I ain't so happy
At six o'clock or so,
When pa he comes an' calls me
And starts me shov'lin' snow.

I hate to git up early
An' scrape off every walk,
But pa he just says "Hustle,"
He won't take no back talk.
So when the storm gets started
It makes me sore; I know
I won't get any breakfast
Till I'm through shov'lin' snow.

I've got to clean the front walk
An' clean the back walk, too,
An' dig around the porches
Till both my hands is blue.
Sometimes I feel like swearin'
An' wish that I could go
To Afriky—them niggers
Git out o' shov'lin' snow.

Well, anyhow, I'd rather
Be me than Jimmy Black;
He fell off their big woodshed
Last year, an' hurt his back.
He sets up in his window
An' waves at me—I know
He'd like to come right over
An' help me shov'lin' snow.

—Milwaukee Sentinel.

"Fluff," An Autobiography.

I have heard the story of my life related so often to wondering and admiring visitors that I feel capable of telling it myself.

My mistress is a dear little girl, whose soft, dark eyes first saw the light on "Sunny Georgia's sandy plains," and, outside of her school hours, I am her playmate, her joy, and delight.

A year ago Amanda and her mamma went into the country, and when they returned home the little girl was the proud possessor of a big white goose egg, given her by a good woman who kept geese. And the day Amanda's mamma found me, a very animated ball of yellow down, cheeping in the coal-house by the biddy, under whose warm feathers Amanda had slipped me with a hopeful and expectant heart, there was no happier little girl in Dixie than my owner.

The hen was put back in the chicken-yard and I was taken into the house, where, for three weeks, I slept in a basket by Amanda's cot, knowing no mother but her—my gentle little mistress.

I am a grown gander now and sleep in my own little house, though Amanda still puts me to bed. I am told I am not of a fine breed of goose, but my feathers are nice and white and look rather well, I think. My name is "Fluff," but my mistress calls me "Baby."

When Amanda and her mamma go out driving, I go with them and enjoy the drive as much as they. My mistress puts me in a basket in the carriage while she and her mamma are dressing, and there I sit without moving or murmuring until they are ready, which I am told is very much better than human beings of my age behave.

Amanda's mamma often stops by a stream on which geese and ducks play to permit me to enjoy a river bath, and people wonder that on these occasions I do not join the fowls in a friendly swim, for I do no more than step in the water, then return to the sands, where I squat quickly beside my mistress, ready to go. But Amanda and her mamma do not swim, so why should I? And their society suits me better than that of the fowl kind.

I like to play "horse" with my mistress, and frequently draw a tiny cart for her. The harness is a cotton band that, placed around my neck as a horse's collar, rests on my breast and has straps attached to the ends of the shafts. I can not permit a bit to be placed in my mouth as the horses do, but my mistress has reins fastened to the shafts and I obey her word of command. When she brings out my wagon I am always ready to go and stand quietly as I can while she adjusts my harness. I feel no embarrassment in the presence of the crowds of children who collect to watch us when we go out on the pavement, but my little mistress frequently turns homeward when too many strangers gather to see a little girl driving a goose to a cart.

Amanda's grandmother lives in the Blue-Grass State, and after Amanda and her mamma had gone on their usual summer visit to her, the little maid became troubled about me. She felt that she could not do without me six long weeks, so papa, at home and lonely, sent me to her.

I took my long train ride very comfortably in a crate. The train men were kind to me, but I thought I should go wild with happiness when I saw my little lady again and felt her soft love pats.

While in Kentucky, I went with Amanda to the photographer, where we both had our pictures taken. The artist was so much pleased with our behaviour under the trying ordeal that he requested permission of Amanda's mamma to put a large picture of us in his show window.—Sarah Belle Hackley, in *Pets and Animals*.

Club Department

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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 (1888).
Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
Challotte Club, Highland Park, Shawnee County (1902).
Calvus 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 (1899).
The Lady Farmer's Institute, Marysville, Marshall County (1902).
Women's Country Club, Anthony, Harper County.
Richardson Embroidery Club, Madison, Greenwood County (1902).
Frentis 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 (1902).
West Side Study Club, Delphos (1902).
Domestic Science Club, Berrington, Shawnee County (1902).
Mutual Improvement Club, Vermillion, Marshall County (1902).
Centralia Reading Circle, Nemaha County.
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

Program.

- Roll-call—Items of interest.
- I. The gospel of relaxation.
- II. Benefit of the club.
- III. The Hall of Fame.

I. One of the hard things the conscientious careful mother has to learn is how to rest, and she needs to be reminded frequently and urgently that it is a duty to her friends and family and not a selfish thing to do. A discussion as to how best accomplish this without neglecting the home would be useful.

II. This subject follows the one above well, and it may be shown that one of the benefits derived from the club is that of giving the woman a chance for relaxing as well as of broadening her life and enlarging her opportunities for doing good.

III. Information about this institution, which is but a few years old, will prove interesting.

Encouraging Words From The Mutual Helpers.

My Dear Miss Cowgill:—The Mutual Helpers wish you a "Happy New Year," and at our last meeting we extended to you a vote of thanks, for the kindness you have shown us during the past year. We truly appreciate the Club Department in THE KANSAS FARMER. Your effort to interest the women in rural districts in club work is worthy of the highest commendation. I know what I am talking about, because I know what our club means to us.

Our year-book is in the hands of the publisher. When they arrive we will mail you one.

You will pardon me if I say we are proud of our first effort, but the inspiration to go on, to be something, has in no small measure come from the columns of your Club Department. Of course we realize that we are on the bottom rounds of the ladder, but better be at the bottom than never to have started.

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

Mrs. Ben W. Whitsitt, Madison, Kans., to Mrs. Hugh Hemphill, Madison, Kans. Mrs. Hemphill has been elected honored helper and I want her to enjoy the paper the coming year. I thank you for it the past year.

I have endeavored to bring the club news before the club as much as possible.

One of the things we did at our first meeting this year was to order one of the traveling libraries from Topeka.

Pardon me for taking up so much of your time, and again thanking you I remain, Truly yours

MARY STORY WHITSITT.

Madison, Kans.

Last Meeting for the Year of The Domestic Science Club.

The Domestic Science Club recently elected the following officers for 1907; President, Mrs. Laura Reed Henderson; vice president, Mrs. Ida M. Ferris; secretary, Mrs. Lillie Green; treasurer, Mrs. Rachel Guilfoill; county board member, Mrs. Maude Morrison.

Board of directors, Miss Nettie Smith, Mrs. Ida Soxman, Mrs. Mable Hunsicker, Mrs. Sue Brewer, Mrs. Sarah Strain.

The club closed its work for the year in an enjoyable banquet at the home of the retiring president, Mrs. Ferris, December 28. An unusually interesting program was given, nearly all the seventy-five present responding to roll-call. After the new president had been installed, Mrs. Dixon, who is moving to Oklahoma, was presented with a silver bread tray. A delicious four-course menu was served.

Miss Guilfoill, one of the club's most estimable young ladies, was married during the holiday season, the club remembering her with a silver cake-basket.

IDA M. FERRIS,
Osage City.

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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 36 to 76 pages each month. It tells all about fruit of all kinds—and nothing but fruit—how to market, how to pack, cultivate, spray, prune, 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.

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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 Prizes for new subscribers—write for particulars. Write your name and address in blanks below and mail to Fruit-Grower Co., Box 4, St. Joseph, Mo.

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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.,
183 C. Monroe St. Chicago.
Agents wanted.

Dairy Interests

The Necessity for State Supervision of the Dairy Industry.

HON. R. M. WASHBURN, STATE DAIRY COMMISSIONER OF MISSOURI, BEFORE THE KANSAS STATE DAIRY ASSOCIATION, AT MANHATTAN, KANS.

Any government, whether it be local, State, or National, should hold as one of its fundamental functions the betterment of the material condition of its people, with just as much zeal as it would defend them in time of war. Just as a father counsels his sons to prepare themselves in a profitable and lasting industry, so should a Government encourage its people in those pursuits which, from a close study of world conditions, prove themselves to be fundamentals in the country's prosperity. A government which neglects to give its people such support and guidance deserves not the patriotism of those people nor their taxes. Note the attitude of England toward India and the awful result. The future wealth of this country and this State now lies dormant in the soil. Any industry, no matter how profitable temporarily, if it is destined to reduce the fertility of our lands to a point of poverty, should not be generally encouraged. The raising of wheat and corn and flax and other grains should be pursued carefully, for they rob the soil of that which makes human existence possible. Of all the many productive vocations of man, the dairy industry is the most productive of present and future prosperity. One acre of grass, pastured by a good dairy-cow, will produce from three to six times the amount of food for the human family as that same acre would had it been pastured by a good beef animal. The economical production of human food, though ultimately the point to be considered, is not now the only feature to be taken into account. Under the present market conditions, which conditions so far as our present knowledge goes are permanent, there is from two to six times the amount of profit to be derived from the dairy-cow. The dairy-cow is a wonderfully constituted creature, capable of working day and night, capable of consuming large quantities of rough and cheap foods, and working them over into the most delicious and useful of human foods. Not only is she capable of yielding more than her own weight yearly in milk solids, all of which are marketable, but while doing this she, at the same time, works over the coarse vegetation of the farm into a very useful form for the land. The amount of milk, butter, or cheese sold more than pays the cost of the raw material. Yet of the 16 cents worth of soil fertility contained in a bushel of corn, she returns to the soil about 14 cents worth. Of the 26 cents worth of soil fertility contained in a bushel of wheat, she returns about 23 cents worth. Nature here has been beautifully economical. This cycle of uses always reminds me of a steam-heating plant. The water in the boiler is heated and circulates through the radiators in the form of steam. The heat is given off and the water itself return to the boiler to be reheated and again performs its work as a warmer. So the original ingredients in the soil grow into a plant, are consumed by the cow and returned to the soil where again the same identical matter which helped to build one corn-plant may aid another and yet another an indefinite number of times.

THINGS A DAIRY-FARMER SHOULD KNOW.

The requirements for successfully carrying out this plan of nature are greater than those required to successfully raise corn or beef. The successful dairy-farmer must know accurately a greater variety of subjects than any other class of men. The compositions and requirements of the soil, the habits of growth and composition of the several crops and their several effects on the land, the compounding of these crops into an economical ration, the feeding according to the needs of the animal, the handling of the herd according to the needs of the several individuals, the handling of the by-product back to the fields in a way that the minimum shall be lost, the handling of the delicate food, milk, in such a way that it shall lose none of its original properties, and the marketing of it where he shall secure the highest available market price, all these dairy-farmers must know. Any one of these branches might easily be broadened to furnish a life work for a man. Little

wonder then that so few of our people have met success in a high degree.

BAD PRACTICES AND THEIR REMEDIES.

The Government, especially here in this country where the people are trying to be the Government, should set aside money and create a department for carrying these many truths in their varied forms to its people. Right here, allow me to mention fragments of my own experience in this very work. Two years ago near the western border of Missouri, there was a cheese factory. It had been running several years, yet was doing poorly. Located far from the railroad, these farmers found it necessary to maintain a factory that they might have a market. This market, however, was paying the farmers only about 45 cents a hundred pounds for their milk. This was less than the market price of the food consumed by the cows to make that milk. The cheese they produced was so poor at certain seasons of the year that many pounds of it were burned, it being more valuable as fuel than as food. A letter was received at the Agricultural College asking for help. I was sent to investigate. Being a practical cow-man and cheese-maker, I soon learned the difficulty. A meeting of the farmers was held and the situation was thoroughly explained. To-day that cheese factory is having trouble, but of another kind. Their cheese is selling above market price, yet they are unable to supply the demand. Their milk is now netting them a over \$1 a hundred. Last summer I was inspecting a little cheese factory in Northwest Missouri and found that the method employed by the maker was such that he was losing 10 per cent of his gross receipts and did not know it. It required less than twenty minutes to show and explain to this man how to save the remaining 10 per cent. In another factory I found the manager discouraged and nearly ready to close down. His yield was poor and the quality not high. Investigations showed that his patrons were skimming and watering their milk to such an extent that they were all but killing the enterprise. Here is where the police power of the instructor comes well in play. A pointed personal letter, typewritten on paper bearing the letterhead of the State Dairy Commission, was all that was required to make most of these people get good. In one cooperative factory I found the same thing going on, and even found the president of that cooperative company guilty of skimming. It is not sufficient that the traveling instructor be able to guide the cheese-maker or the butter-maker, he must also have authority to compel arrest and fine, otherwise these evil-doers will only laugh and continue. In the eastern side of Missouri a butter factory was having many troubles. It seemed impossible to produce butter of the highest grade. Many of the patrons had become careless in the matter of washing their milk-cans. So many of the neighborhood had drifted into such fearfully dirty habits that the quality of the entire product was lowered very materially. The operator could remonstrate and would have done so, had he been willing to make enemies in the neighborhood. An outsider was necessary, and not only an outsider, but one clothed with the authority of the law. I told the farmer that he must direct those who washed his cans to be more careful; to use a brush on the inside. He turned to me and said, "Oh! you bin a brush agent, hugh!" I laughed and showed him my star. He promised to get and use a brush. In a little factory in the Ozarks I found little to complain of in the factory, and nothing in regard to the farmers, yet an opportunity to do good presented itself. A farmer who was just struggling into the business informed me that he intended buying a certain Jersey bull, and not being an expert himself he asked me to go with him into the country to see the animal. The creature had been highly spoken of by its owner, yet upon investigation I found the thing to be at least one-half not Jersey and a very inferior animal for any breed. Had this man purchased this animal, as he intended doing, he would have lost six or eight years of hard work. Where the trouble is found to be caused by ignorance the instructor is necessary, but where the trouble is caused from indolence or something worse, there the inspector with police power is absolutely essential to improvement. These few cases indicate the nature of the work to be done. Continue it the year round, in private conversation, in public meetings, in correspondence, in public writing, and

1 1/2 more butter 2 lbs.

If you can increase your butter production without any increased cost or any more work won't it pay you to do it? And if you can get more butter from you milk with less work, that will be still better, won't it? That's exactly what you can do if you will do as Mr. LEITING did—buy a Sharples Tubular Separator. Here's what he says about the Tubular:



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gets all the cream there is in the milk, does it so easy that it's not work to run it at all, and is so simple, with only one little part in the bowl to wash and keep clean that comparison is out of the question.

The extra cream it gets makes the Tubular a regular savings bank for its owner.

All the other good money-making points are told in book F-165, which you ought to read. Write for it today—we'll send it free to you.

THE SHARPLES SEPARATOR CO.,
Toronto, Can. WEST CHEST. R. PA. Chicago, Ill.



The Sharples Tubular Separator

Randolph, Nebraska, Feb. 15th, 1906.
Gentlemen:—On the 23rd day of January, 1906, I took a No. 4 Sharples Tubular Separator on trial. On learning that I was in the market for a cream separator, the agent for the disc style "bucket bowl" separator brought one to my farm and requested me to give it a trial before making a purchase. After giving both machines a fair trial, I concluded to keep the Tubular as I consider it far superior to the other machine. It skims closer, runs easier, and is very much easier to wash, there being so many less parts. From three skimmings of milk from 7 cows, we were able to make 1 1/2 lbs. more butter with the Tubular than we could with the "bucket bowl" machine. B. LEITING.

the money value to the State can not be measured.

Having spent twenty-two years on a dairy stock-farm, having made hundreds of tons of butter, and cheese by the carload, and having had five years of experience in public work, I am in a position, I think, to see what is needed.

Over in Missouri I find that about 25 per cent of the entire number of cows are kept at a loss; that more actual money would be made if the poorest fourth of the cattle were disposed of. I have no doubt that the same is true out here. A work which I am going to start just as soon as I can get the means is to go over the State in a great many communities and test the yield of the cows for a year. The results will be published locally so all may become convinced of the value of closer selection.

An increase of only one per cent in net profits will be worth \$200,000 a year to the farmers of Missouri. It will be worth nearly as much in Kansas. To increase the net earning 10 per cent, which is easily possible, would be worth two million dollars a year in Missouri. Our entire dairy force of instruction now costs the State only about \$8,000 a year.

Considering the great value of this industry to this great State and considering the many intricate problems which must be solved by or for the dairy-farmer, I sincerely hope that your State will soon establish a dairy commission, that a practical and honest man may be placed in charge of it, and that sufficient funds may be turned over to his use to truly advance the knowledge of our farmers in this fundamental industry.

President's Annual Address.

DR. GEO. C. MOSHER, KANSAS CITY, MO., BEFORE THE MISSOURI STATE DAIRY ASSOCIATION, COLUMBIA, MO., JANUARY 10, 1907.

Gentlemen of the Missouri State Dairy Association: The seventeenth annual meeting of our organization finds us in the most gratifying environment, as compared with the past. We are beginning a new era, this being the first meeting under the auspices which ally us with the other great agricultural and breeders' associations of the State, and thus draws more attention to the dairy industry in the position it must occupy in our State, as land gradually becomes higher-priced and farms cut up into smaller tracts. The experience of Missouri in the raising of cattle has been a

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

ways along beef lines. As one gentleman recently expressed it, every effort was made to get fat on the animal. Any cow that could have a calf was considered good enough to give milk. A good illustration of this is given in Professor Fraser's "Object Lesson," where he shows nineteen good dairy-cows worth nineteen hundred of the kind which give only milk enough to pay for their feed; or as has been

shown in Hoard's Dairyman cow census, many of these cows were fed at an actual loss to the owner, not counting the value of his time in care of his herd, nor the investment in the cows—a most lamentable picture.

GREAT WORK OF THE EXPERIMENT STATION.

I believe one of the greatest boons to the farmer is the experiment station and the institute work under its direction. We have the men in Missouri who are doing this great work of building up our agricultural wealth, until she is an empire beyond question. Take the matter of corn-breeding and selection. If followed out intelligently, it is not such a burdensome task; yet if each farmer will adopt this system, it will add millions to our annual corn-crop. The same statement applies to the work Professor Ellis and Dean Waters are doing along lines of stock breeding, and our own Professor Eckles in the dairy division is undoubtedly adding to the worth of our herds of dairy-cows by advice in breeding and feeding, which is hard to appreciate unless one follows the history of the work which has been done.

The intelligent and painstaking care which Dr. Luckey, our State Veterinarian, has exercised, will minimize and finally practically eliminate tuberculosis from Missouri herds.

The good-roads propaganda is a child of the Experiment Station and bids fair to have a vigorous and valuable development. It is a pardonable pride that points to these great movements in Missouri.

We have been working for years as a separate entity. Now, we come in close touch with the other great lines of modern farming industry, and the result will be an increased impetus to all branches of agriculture.

It is not out of place at this juncture to express our appreciation of the great good fortune we have in the eminent gentlemen who have given their time and who will devote their valuable thought to our advancement in the program to be enjoyed at this meeting.

The Dairy Division of the National Department of Agriculture has been most generous, and year after year sends of its best to our meetings. This year, Professor White, one of the practical scientists of the dairy world, is with us.

Not the least entitled to our thanks is the great dairy and agricultural press, which sends the lectures and teachings of all the best minds to every corner of the State. No dairyman can hope to succeed unless he takes and reads these most valuable newspapers. They are the encyclopedia of knowledge of dairying.

SOME THOUGHTS FOR MISSOURI DAIRYMEN.

The dairy industry in Missouri is fast assuming the importance to which it is entitled. This statement has reference to the various points where improvement has been wanting; a larger investment in dairy equipment; better dairy-cattle; higher type of finished product; and to the farmer, a better price for his goods.

Why should Missouri be paying out \$2,000,000 surplus to other States for her milk, butter, and cheese? There is no better pasture in the world than our blue-grass, and being in the center of the corn-belt, we have ensilage produced at the minimum cost per ton.

The making of ensilage in Missouri is a new method of feed supply. Naturally, it is looked on with some degree of question until its value is more thoroughly established. Who would need an argument, if he were to realize that the chopped corn-stalk has more feeding value than any roughage except alfalfa? And it is to be had at a cost of \$1.25 to \$2 per ton in the silo. This year in particular, when hay is selling at \$10 to \$16 per ton, it takes very little arithmetic to settle in the mind of the average man what is the profitable feed.

The price of mill feeds is less by one-third than the dairymen in New England pay. We have the market within our own borders. "Every prospect pleases." There remains to be accomplished only the education of our people to realize how valuable an heritage is being wasted in the overlooking of these great opportunities. On the high-priced land in Holland, the dairy-farmer has made fortunes which are proverbial. No doubt, the same condition prevails in the channel islands. We have thousands of acres of rich pasture-land, which could be brought to return big yields of profit if put to use in raising dairy-stock.

The advent of the great creamery concerns, with their agents ready to take cream at the door and return a monthly check to the farmer, reduces his otherwise precarious financial busi-

ness outlook to a system which gives him ready cash to meet his obligations, and a margin to add to that received from the sale of surplus farm products at the end of the year.

In the vicinity of the great cities of the State, the opportunity to participate in the higher-priced market for commercial milk and sweet cream should make every small farmer essentially a dairy-farmer, and only incidentally a general farmer. In other words, his success will lie in his being able to feed his crops and turn them into milk and butter, the by-product, the skim-milk, being converted into pork and veal rather than to strip the farm each fall of its earned reward. The economic saving of the fertilizer, contained in the manure of a herd of dairy-cows, will in many cases decide the chances between failure and success in farm operations.

These statements, it is realized, are not new. They are none the less valuable because of this. The truth is always mighty and never loses interest in being kept before us.

We have many reforms to work out aside from the problems of balanced ration and season for breeding cows, the advantages of clean barns, clean cows, and pure water supply.

We would look to the State Legislature for help in many lines. We want changes in the dairy laws; in the laws with reference to the sale of artificial substitutes for dairy products; for the prevention of adulteration of our output after it leaves the farm in a pure state.

We want a fair and reasonable standard for fat and solids in milk. The pure-food laws will harm no honest producer. It has raised the retail price of commercial milk in Kansas City to 8 cents. The farmer should have his equitable share of this increased price for his wares.

The subject of sanitary milk has received, through the press of Missouri, more attention than it ever before could boast. Keep up the agitation not only until every customer is educated to demand better milk, but until he realizes that, for a high-class article, he must pay an increased price commensurate with the increased expense of production.

In closing, I wish to express my profound thanks to the association for conferring on me the undeserved honor of being its president during the year just closing. I look forward to the new administration taking up the work with an industry and enthusiasm which will show 1907 the grandest year in our history. I am sure the present meeting will be one of much value, and an inspiration to every member to do his share to make Missouri the greatest dairy State.

A Word To Our Readers.

Those of our readers who expect to purchase a vehicle of any kind in the near future should pay particular attention to the advertising of the Ohio Carriage Manufacturing Company which appears in this issue.

The Ohio Carriage Manufacturing Company are old and well-known advertisers, and have built up an immense business on their full line of Split Hickory Vehicles. They manufacture every style of Vehicle, and can supply the needs of the most discriminating buyer. They also make a full line of Harness, and can furnish the best there is in that line.

This Company has earned a wide reputation for fair and liberal treatment of all its customers and has succeeded in making SPLIT HICKORY VEHICLES the best-known and best-liked Vehicles on the market.

Mr. H. C. Phelps, the President of the Ohio Carriage Manufacturing Company, is a splendid type of the American business man, and makes a point of keeping in close personal touch with each individual buyer of Split Hickory Vehicles. He is making a particularly attractive offer at the present time—one that cannot fail to interest the most particular purchaser. He is also offering to send FREE to anyone who asks for it his Big Catalogue of Split Hickory Vehicles—and we strongly recommend anyone who is thinking of buying a vehicle of any kind in the near future to write for this book. It contains a lot of information valuable to the prospective purchaser.

Some idea of the size and completeness of this catalogue can be gained by the fact that it brings right into the home of the buyer—where he may carefully select at his leisure—descriptions and illustrations of a line of Vehicles equal to the stock carried by ten ordinary retail buggy dealers. If you are interested in Vehicles of any kind, this Big Book will be of immense value to you.

A Postal Card addressed to H. C. Phelps, President Ohio Carriage Manufacturing Company, Station 251, Cincinnati, Ohio, will bring it to you, free. You should not fail to write for it.



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Providing for a record of exact information about every item of transaction or event on the farm for five years. It is divided into two divisions, Diary in one and Accounts in the other. In the Diary there is space for five years. Here it shows you the occupation of the day; here are any special incidents that you wish to remember the date of.

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Hired help. This is for your labor account; shows the name of the one hired, time worked, wages paid, how paid, etc.

Expense; shows all the outlay for such items as Groceries, Labor, Clothing, etc. You can tell when you paid your Insurance, Taxes, how much they were; in fact, this department will show to a penny what it costs you to run the farm and also what you get for every cent of it.

Live-stock account has a double ruling, sales and purchases for each kind of stock being side by side, and as this is to be for five years it makes an interesting comparison. Then over here you have a history of each deal that you make.

Grain and fruit are ruled and printed in the same way, also space for sales on butter and milk or cream, eggs or poultry, in fact there is space for everything raised on a farm and all you have to do is to make the figures. It certainly is an easy matter to have your affairs in shape if you have a system like this.

The inventory sheets are short but businesslike, you fill in under the proper headings the value of the different kinds of stock, grain, tools, buggies, wagons, etc., and the total is of course, the amount of your resources; then under, this other heading you fill in anything you happen to owe on these things, and the difference is your actual worth. This is left in the book and the next year you do the same thing and the difference is your profit for the year.

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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.

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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 96%, and as good as can be found anywhere. Eggs only \$2 per 15; \$3 per 45, and I prepare expressage to any express office in the United States. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B, Topeka, Kans.

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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.

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Foes to Egg-Production.

During the months of December and January there is often complaint made by poultry-raisers that they are getting no eggs. Sometimes they tell us that they are feeding just as they have been taught by those who are successful in getting winter eggs; and they have stock hatched from high-priced eggs, or that they have paid a good price for early-hatched pullets which they have housed and fed well, and yet, they receive no eggs, right at the time when eggs bring the best price. May be they have carefully and rightfully fed and watered this stock, and with all the care given, have been most careless about some other matters that it is well at this time to call attention to.

We well remember an instance a few years ago in which a pen of fine early-hatched White Wyandotte pullets began to lay vigorously about the middle of December. We were very proud of them and you may be sure they had the best of care. A few days before Christmas the sun shone brightly every day and a mild wind from the south soon dried up all the mud. The door to the scratching shed was left open so that the pullets might get out into the yard as we feared they might not get enough exercise if kept shut up, nor was this at all desirable while the weather remained good, so the door was left open and the birds came and went as they pleased. But a day or two before Christmas there came a heavy snow-fall and we neglected to close the door to keep the pullets in out of the snow. We noticed that they ate quite a lot of it and waded around in it, and again we noticed them huddled together out in the yard in the snow, and drove them in, but still neglected to close them in. This went on for a few days and shortly we began to get no eggs from that pen and soon they stopped altogether and we got no more eggs from them until the latter part of February. After that experience, one would suppose it would not be necessary to be again reminded in a forceful way, but it was. The next time it was with Leghorn hens, which had begun to lay nicely in January, but were carelessly allowed to get out into the snow, with the result that they also stopped laying until some time in March. So much for the effect of snow.

Some birds are very indifferent about taking a dust bath in the winter, and if their heads are pale and they have a listless way about them, you may be sure you will get no eggs. The egg-machine doesn't work that way. You may also be sure there is a cause for those pale combs and blanched-out faces, and that cause is generally body lice. Sometimes, too, when you go about the bird's roosting quarters, you may notice, if you have on dark clothing, little fine specks of dust that seem to have been sprinkled all over your clothes, especially if you have jarred the roosts or brushed against the sides of the house. May be, if you will look very closely at those little particles of dust, you will see them move. Ugh! It makes me want to scratch to think about it. Mites, the little wretches—may be millions of them. Think you will get any eggs with those little pests crawling about over your hens? Never. If you don't know how to get rid of them and stay rid of them, you want to learn how right now. It's easy. Mix a strong solution of salt and water—thick brine—and with a spray pump—you can get an Aspinwall big enough for 75 cents—spray everything in sight—sides and ceiling, under and above the roosts. Spray everything good and wet. You may kill several millions of them, but in a day or two, there will be another crop of them. Spray everything wet again. If the weather is cold, it is better to put the brine scalding hot on the roosts with a whitewash brush. Keep this up for a few days and you won't be bothered long with mites. They simply can't abide anything salty and all that are not killed outright will go elsewhere for forage. The lice are not so easy to get rid of. We used to make a liquid lice-killer as follows:

One quart of tar-oil, ½ gallon coal-oil, 1 pound of pulverized Naphthaline flakes. Heat the mixture in any old iron kettle, and stir while heating, and as the coal-oil dries out, add more. When the Naphthaline is well dissolved and the tar-oil very thin, apply to the roosts with a whitewash brush. You won't be troubled with red lice for a

while on the roosts. Now to get the pests out of the cracks in the wood-work. Make a little pile of dry straw in the middle of the building. Sprinkle over the straw a teacupful of powdered sulfur to which two or three tablespoonfuls of red pepper has been added. Set the straw on fire and when it blazes up good, throw a damp gunny sack over it to smother the flame. Get out of there quick and close the door. The smoke will do the rest. This will rid your house of lice. Painting the roosts once or twice a year with the above solution will be sufficient, but once every two weeks at least, the roosts should be whitewashed with coal-oil, to each quart of which an ounce of oil of sassafras had been added. This is splendid and not very expensive, especially for spraying. To get the lice off the fowls it may be necessary to take them individually and thoroughly dust them with lice powder. Hold the bird by the legs, turn it on its back, and rub the dust well into the breast feathers and fluff and the under side of the wings and hackle; then turn it over and rub the dust well into the wing-bows, saddle, hackle, and side-hangers. The following is a very good and cheap mixture: 2 pounds sifted coal or wood ashes, 1½ pounds air-slacked lime, 1 pound Persian insect powder, ½ pound pulverized Naphthaline flakes, making five pounds at a cost of about 60 to 70 cents.—C. S. Gorline, in The Deseret Farmer.

Handling The Layers.

How to obtain a heavy egg-production in the fall and winter months when prices are higher is a much studied question by all interested in poultry. To be highly successful in any line you must start right. You must have the best stock that can be obtained. You should hatch your pullets in April or early May from eggs of parent stock that are strong and vigorous. If your breeding-pen consists of 2-year-old hens, mate them to vigorous cockerels of the same breed. If you must use eggs from pullets, they should be of good size and not less than one year old and mated to a good cock-bird. The first mating of hens with cockerels is greatly to be preferred.

If one breeds Leghorns or any of the Mediterranean class, they must not make the mistake of hatching their pullets too early. A friend of mine hatched hers in March, and they are now moulting when they should be shelling out the eggs at a good rate. The heavier breeds are not so apt to do this.

As to their daily feed, many writers differ, but our plan is to feed them at day-break a prepared scratching feed or wheat in their litter. Or, still better, after the fowls have gone on their roosts for the night, shake up the litter well and scatter the grain in it. In this way the birds are not disturbed and you are soon welcomed in the morning with a song of contentment. At noon we feed the mash of shop feed and the best wheat bran in equal proportions, with a small quantity of con-

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

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dimental egg food added. Their evening meal consists of whole corn, and we try to have their crops full on going to roost. Always have a good supply of grit before them.

The nest-boxes should be arranged so that the birds can enter from the rear, where it is darkened, as they greatly prefer a dark nest. A trap-door can be made so that it can be easily opened in front to remove the eggs.

My layers are confined in a house which is built with double walls and tar paper with an air space. When the weather is zero outside it shows 45 degrees within. I will admit that this is warmer than most houses, but in any tight house, where perfect cleanliness exists and the proper food is used, any good flock should show a profit during the entire winter.—Dr. D. A. Babcock, in Northwestern Pacific Farmer.

The Great American Hen.

A significant statement in Secretary Wilson's report shows that investigations are now being made by the Department of Agriculture, in conjunction with the Maine Experiment Station, with a view to developing a strain of chickens with increased egg-laying capacity. Several hens have been found to lay more than 200 eggs in one year, and the results seem to indicate that by selecting the best layers for breeding purposes, and by proper feeding, the average egg yield of a flock can be increased.

Poultry, says the secretary, is one of the steady and helpful sources of farm income. Movements are already on foot, which may be expected to increase the egg-production per hen by at least a dozen a year within a generation; and there are poultrymen, who are not enthusiasts, who foretell double that increase. If the hens of this year had each laid a dozen eggs more than they did, the prediction is made by Secretary Wilson, that the increased value of this product would have been possibly \$50,000,000.

Rightfully does the fowl deserve the name, "The Great American Hen," for according to statistics the American hen yields more money annually than any other one farm-product, eliminating the grains and cotton. With eggs as low as a cent apiece—a very cheap and nutritious food—a well-bred hen, laying two hundred eggs a year as developed at the Maine Station, will have a value of \$5. An estimate is made that \$1 a year will keep her in comfortable, if not luxurious quarters. The trouble is that millions of barnyard scrubs do not yield a hundred eggs a year.

The farmer's hen is becoming a worthy companion to his cow. The annual production of eggs is now a score of billions, and, after supplying the needs of factories, tanneries, bakeries, and other trades, they are becoming a substitute for high-priced meats, besides entering more generally into the everyday food of the people.

Some one has estimated that the industrious little gallus domesticus produces enough eggs to require a train of refrigerator cars 900 miles long filled with 43,000,000 crates, each of which holds 360 eggs.

If one wants to obtain eggs from his hens, it is necessary to have healthy, vigorous stock, properly fed. To do their best hens should be fed grain, animal and green food. They should be fed enough to keep them in good condition but not overfat, and should be induced to take plenty of exercise.

A good system to follow for winter feeding is mash once a day and grain scattered in the litter twice a day. The mash may be fed dry or slightly moistened. When the former, it is usually put into a trough or hopper hung against the wall, and the fowls allowed to have access to it at all times.

A mash fed at the Maine Experiment Station is as follows, in the proportion indicated: 200 pounds wheat bran, 100 pounds cornmeal, 100 pounds wheat middlings, 100 pounds linseed-meal, 100 pounds gluten-meal, 100 pounds beef scrap.

Another mash may be mixed as follows, in the proportions indicated: 100 pounds cornmeal, 100 pounds ground oats, 100 pounds wheat bran.—Indiana Farmer.

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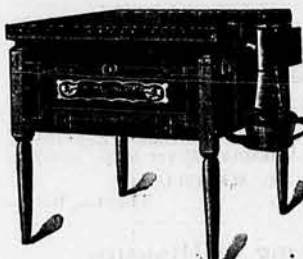
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FOR SALE—Fruit lands, farms and timber. Stock do well in this section. German truck farmers can make big money. I can loan your money on good security. Campbell, P. O. Box 663, Van Buren, Ark.

LAND FOR SALE in western part of the great wheat State. H. V. Gilbert, Wallace, Kans.

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FOR SALE—240 acres 2 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 160 if desired. Price 240 acres, \$8,500. Reasonable terms. S. H. Hobart, Glen Elder, Kans.

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Iler & Mansfield, Garnett, Kans.

A TEN DAY SNAP.

160 acres 8 miles from Wichita, 3 1/2 miles from good railroad town, Sedgwick county. 110 acres in cultivation, 50 acres in grass. Fine alfalfa and corn land. 5-room residence, barn, corn cribs, chicken house and lots of other out buildings, all in good repair. Fenced and cross fenced, mostly hedge. Good wells and fair orchard. Price for TEN DAYS ONLY \$36.25 per acre. Terms. The Nelson Real Estate & Immigration Co., 137 N. Main, Wichita, 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 smooth grass land, cheap as dirt. We have 80 acres improved land for \$2800. 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 town, 5-room house, fair repair, stable, lies fine, 250 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, Kans.

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.

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

A FINE PROPOSITION

320 acres one-half mile from Rozel, in the Pawnee Valley, all alfalfa, 200 acres now in wheat, new 4-room house, barn for 20 head of horses, good granary, all fenced and cross fenced. A great bargain at \$33 per acre. Must be sold quick.

Frizell & Ely, LARNED, KANSAS

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. 320 acres, fair buildings, large orchard, some timber, 55 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 Alfalfa Land

in Trego County, Kansas for \$10 an acre. This is a snap and will not last. Be quick! STEVENS & RUBY, Stockton, Kans.

TEXAS, RICE AND GARDEN LANDS.

in the Gulf Coast country—Artesian belt. Finest and most productive lands in the country. Excursions semi-monthly. \$20 round trip. See me or write for particulars.

DAVID L. LAKIN, Agt. Fidelity Immigration Co., 113 W. 6th, Topeka, 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.

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 Healey, 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. King, McPherson, 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, \$25,000 cash.

E. D. NUTTING, Emporia, 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.

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.

Watch Tacoma Grow!

Population, 1906, 37,714
Population, 1906, 85,000

Leading industrial center of Pacific Northwest. Five additional transcontinental railroads building to Tacoma. Chief distributing point for leading products of Washington: wheat, lumber, coal. Send stamps for descriptive literature to Secretary Chamber of Commerce and Board of Trade, Tacoma, Washington.

Neuralgia And Other Pain.

All pain in any disease is nerve pain, the result of a turbulent condition of the nerves.

The stabbing, lacerating, darting, burning, agonizing pain that comes from the prominent nerve branches, or sensory nerves, is neuralgia, and is the "big brother" of all the other pains.

Dr. Miles' Anti-Pain Pills rarely ever fail to relieve these pains by soothing these larger nerves, and restoring their tranquility.

Dr. Miles' Anti-Pain Pills leave no bad after-effects, and are a reliable remedy for every kind of pain, such as headache, backache, stomachache, sciatica, rheumatism and neuralgia. They also relieve Dizziness, Sleeplessness, Nervousness, Car-Sickness, and Distress after eating.

"For many years I have been a constant sufferer from neuralgia and headache and have never been able to obtain any relief from various headache powders and capsules, until I tried Dr. Miles' Anti-Pain Pills. They always cure my headache in five minutes time." FRED R. SWINGLEY, Cashier 1st Nat. Bank, Atkinson, Neb.

Dr. Miles' Anti-Pain Pills are sold by your druggist, who will guarantee that the first package will benefit. If it fails he will return your money. 25 doses, 25 cents. Never sold in bulk. Miles Medical Co., Elkhart, Ind.

Miscellany

Federal Inspection of Grain.

EDITOR KANSAS FARMER:—Too much can not be said and done in favor of a National inspection law. We have no uniform inspection of grain and cotton, the principle farm products which are so largely dealt in, and which are of such great importance to both the producer and consumer. A shipper of grain can not send a car of wheat from one point to another with any security at the present time, take all the precaution he may. A shipper at some point in Kansas may have a car of grain inspected at some point in the State, as No. 2. He sends it to Missouri where it is inspected by the Missouri Grain Inspection Department as No. 3. The same car of grain may be forwarded to Illinois and there inspected No. 4, and from Illinois it may be sent to New Orleans and there inspected "No Grade." It is discounted from place to place anywhere from one to fifteen cents per bushel, until it falls into the hands of the trust exporter, when it is again inspected as No. 2, sold for No. 2 at No. 2 price, the difference falling into the hands of the trust instead of the farmer and producer. Under present conditions the different interests and influences are so diversified and the degree of uncertainty so great in making a shipment of grain, as to what it will inspect at the different points of destination, that it makes the transaction next to, if not altogether, a gambling one. For instance, the inspection of grain in Kansas is done by the State; in Missouri it is done by the State, in Illinois by the State; at Galveston by the board of trade; and at New Orleans by the board of trade; at Baltimore by the board of trade; at New York, Buffalo, and Boston by the boards of trade, all controlled and influenced by local conditions, the inspectors at the different points owing their position to same local political organization, or board of trade. For example, we will take Galveston. The board of trade there is dominated by a few exporters who appoint the inspectors. These inspectors inspect grain, which is bought from the Central West by these dominating characters, on Galveston weights and grades, and it is a fact that during the past crop year 85 per cent of the grain going into Galveston has graded below No. 2, all the way from No. 3 down to No Grade, and has been discounted from one to fifteen cents per bushel. Then, when it became the property of the same dominant characters of this board of trade, who appointed these same inspectors, this same grain was inspected by these same inspectors as No. 2. The records of this department will show this state of affairs. Therefore, by the very nature of existing conditions, the farmers and producers of this country can not hope to get just and fair treatment in the inspection of their grain, notwithstanding the fact that all inspection charges are at last paid by them. It is a notorious fact that the standard of grain, traded in to-day on the boards of trade, is so low that there is not a miller in this country who would think of putting it into his mill, or use it for the manufacture of flour. The same rule applies to other commodities, especially cotton, of which there is at this time in the city of New York, 70,000 bales covered by certificates issued by the New York cotton exchange, that are deliverable on contracts made on that exchange. These contracts, however, are worthless for commercial purposes, evidenced by the fact that there is not a spinner in this country that will think of using this cotton. On account of these practices, there has been a meeting of dealers in London and one in Berlin, representatives attending these meetings from all over Europe, to protest against the low grade of grain coming from America, and these conventions are now sending a delegation to this country to protest against these practices and to insist on establishing a trade on rye terms, which means European weights and grades. I believe that Federal inspection of grain would be of incalculable benefit to the producers of this country, and be the means of reestablishing the good name of America in all the world for her farm products, and thereby reap a reward in obtaining better prices.

Federal inspectors should be under civil service rules. They should know that the only requirements must be efficiency and duty; they should not owe their position or the continuance of same to any local political organization



Johnson, Incubator Man.

WELL, well! Time flies, sure enough, doesn't it? Here it is pretty near a year since I had a good big talk with you folks. Tell you the truth, I've been too busy making and shipping incubators and brooders to do much talking. But I've made some big improvements in the factory and office end of the Old Trusty business, and I'm going to tell you about it, if it takes the whole blamed page.



THE Old Trusty factory you see here is all mine and all paid for, too. I built it out of my hard earned profits of \$1.00 on each Incubator and Brooder, and I want to tell you, Friends, that Johnson's brow shed quite a bit of sweat.

Yes, I do feel pretty good about this new factory and the way my business has jumped up this year.

My wife and my customers have helped a whole lot. They're the only partners I recognize, and I cheerfully take my hat off to them.

As the Old Trusty factory now stands the wheels are turned with a 100 horse power steam plant.

The factory is equipped with electric light, water works and steam heat, also the very latest wood and metal working machinery, operated by over 200 skilled mechanics who have grown up with me in the business.

Last season we were not able to accept and promptly fill all orders, but for this season let me say we have our guns loaded. We have doubled our manufacturing capacity and have our store rooms loaded to the muzzle; we are ready for the big meeting.

I have store rooms located in different parts of the country and quick shipments will be one of our specialties; but let us talk about the 1907 Old Trusty incubator.

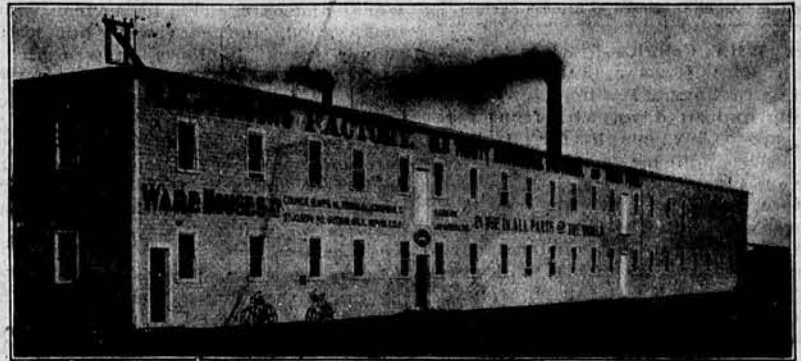
It is now fitted with interior chick drawers, and the nursery is 4 1/4 inches deep.

The front doors are divided; that is, you can remove the egg trays and look after the incubation with-



"Old Trusty."

"I want to tell you Chicken Raisers about my Old Trusty Factory. I believe that it is the Biggest and Best Equipped Exclusive Incubator and Brooder Plant in the World. Others that should know tell me so and I believe it myself."



The Old Trusty Factory Has Floor Space of 39,400 Feet.
(This picture is a real photograph)

out opening the whole front, otherwise the machine remains the same.

We have improved in every point improvable, but have not molested the principle that has made Old Trusty famous.

The big 1907 Catalog tells all about it, and a mighty interesting story it is, too.

I sold more incubators and brooders of the one brand last season than any concern on earth.

Did it right here at Clay Center, Neb., the best town in the west for manufacturing. Have plenty of propositions to move into larger towns and greater troubles, but I do not care to sell out and "hike."

Would have no excuse for doing so; my business is going up instead of down and our mechanics stay with us. Yes, Sir, we are hooked up all right.

When you come to Nebraska, come to Clay Center.

Over the Old Trusty factory entrance you will find a big sign that says "Come In." Don't stop to knock at the office, come right in and let us talk the chicken question over from A to Z.

I've studied poultry and their ways in sickness and health, summer and winter, under all sorts of conditions, for a good many years now.

While I don't know it all, yet I've managed by hard digging to prove a good many things of practical value to every poultry raiser.

If you can't come, send for the catalog; it does my side of the visiting pretty thoroughly.

Write to me right now, please. I want to hear from you.

Send for the Old Trusty Catalog.

I want to tell you about the 1907 Old Trusty catalog. It is a "square from the shoulder" proposition on the poultry question. I wrote it to help poultry raisers out of trouble instead of into trouble. It tells how to get money out of poultry raising as well as how best to put some money into the business. It contains over 200 illustrations, most of which are photographs. If you want the book send me your name and address. It's easily worth \$1.00, but is free to any one who loves chickens and wants to know more about them.

Write to me personally. Address your letter this way:

M. M. JOHNSON, CLAY CENTER, NEBRASKA.



Johnson Pays the Freight

A. G. SODERBERG, Importer and Breeder of... CLYDESDALE, - AND - ENGLISH - SHIRE - HORSES Osco, - - Illinois.

should and must be taken from it before the farmer will get justice.
A HOPEFUL.

LISTEN TO THIS SPECIAL SUBSCRIPTION OFFER.

Fact No. 1.—Many KANSAS FARMER subscriptions expire in January.

Fact No. 2.—The United States postal authorities urge that subscriptions be paid in advance. Strong intimations of trouble for the publisher who disregards this admonition prompt The Kansas Farmer Company to make the following liberal offer:

Proposition.—To every subscriber who pays his subscription to January, 1908, during the month of January, we will send free of charge any one of the following books and newspapers. Order your choice by number. (Old subscribers can have the advantage of our "blocks of two" proposition in connection with this offer.)

NEWSPAPERS.

1. American Swineherd.
2. Agricultural Review.

3. Apple Specialist.
4. Farm and Stock.
5. Green's Fruit Grower.
6. Farm and Fireside, etc.
7. Helpful Hen.
8. Kimball's Dairy Farmer.
9. Poultry Gazette.
10. Prairie Farmer.
11. Vick's Family Magazine.
12. Western Swine Breeder.
13. Weekly Capital.
14. Woman's Magazine.
15. Weekly Inter Ocean.

BOOKS.

16. Bonnie Brince, a juvenile book of great excellence.
 17. Guide to Success, a 250-page book of reference and information for everyday life.
 18. The Corn Book, by Prof. Holden, the latest and best publication on corn-breeding published, and a year's subscription to Farm News.
- Address all orders to The Kansas Farmer Company, Topeka, Kans.

When writing advertisers please mention this paper.

or board of trade, as is the case to-day. The inspection of grain and cotton should be uniform, at all points. A Federal inspection certificate should be as current as money anywhere, not only in the United States, but in all the world. It is a notorious fact that the different State inspection departments will not inspect a car of grain at one point in the State at No. 2 and guarantee it to inspect No. 2 at another point in the same State, seventy-five miles distant; indeed, it is impossible to have a car of grain inspected in Kansas City, Kans., with any assurance or guarantee that it will grade the same at a point 500 feet away across the State line. Few people know this, perhaps, but it is a fact nevertheless. I take it, that under Federal inspection of grain and cotton, merchandising in those commodities would not be as it is to-day, the most hazardous of all lines of trade; but, on the other hand, could be handled with safety.

Our Representatives in Congress can not be urged too strongly of the importance of Government control of the inspection of many commodities, especially grain and cotton, the same as the government inspection of wheat. We must have it; the present system of inspecting grain is the greatest weapon in the hands of the grain trust, and it

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 Veterinary Department of The Kansas Farmer, Topeka, Kansas, or to Dr. C. L. Barnes, Veterinary 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."

Hogs With Cough.—I wish to ask through THE KANSAS FARMER about coughing in hogs. My hogs go about coughing and sit down with front feet raised up. They cough for a long while. Also tell me what to do for mange on pigs.

J. P.

Answer.—You had better secure some of the Government hog-cholera cure for your hogs and I think it will prevent their coughing. It can be secured from almost any druggist. Use a lime and sulfur dip for the mange on your hogs.

Kidney Trouble.—Mare has kidney trouble after driving her. Urine has brown, bloody cast. She urinates frequently, but it is not bloody when not driving her.

A. N. N.

Oakhill, Kans.

Answer.—Feed the mare a handful of buchu leaves three times daily in ground feed until she is improved. Also give a tablespoonful of oil-meal, beginning by letting her have a tablespoonful once a day, increasing it gradually to twice a day in ground feed.

Pigs' Jaws Swell.—I have lost my entire lot of spring pigs. The first symptoms I notice are that their lower jaw begins to swell and then a sore comes on the nose, and grows until it kills them. A few of them get these sores all over the body. They finally crack open. Is there anything that can be done for them? I tried putting turpentine on them, but it did no good.

Wellsville, Kans.

T. L.

Answer.—If you have any further trouble with your pigs, I would advise opening the lumps and washing out with a disinfectant. If they get sores over their bodies use a lime and sulfur dip according to the formula which we are sending you.

Heifer Has Fits.—I would like some advice from you in regard to a yearling heifer that will drop down and then have fits. She will lay and kick as if dying and froth at the mouth and within five minutes will get up and stagger about and go to eating again. What can I do to benefit her?

Windom, Kans.

H. C. R.

Answer.—Your animal may be effected with a cerebritis, caused by eating some fungus on corn or other food. If you will write me more of the particulars of your animal, I may be able to give you definite treatment.

Worms in Pigs.—I would like to ask you for a remedy for my pigs that are bothered with worms, commonly called spool worms. They are from 4 to 8 inches long and some longer and as thick as 16-gauge wire. The pigs are 6 weeks old and they looked fine until three weeks ago when they began getting smaller. They will eat at all times, but I feed them milk and ground corn and sometimes oats only three times daily.

H. C. B.

Monee, Ill.

Answer.—We are sending you a press bulletin on "Some Trouble of Swine." Kindly have the prescription filled. I am also sending you a bulletin on worms, containing a prescription that the Government prescribes as a tonic, which I would also have filled.

What Best To Feed Stallion?—I have a black stallion, 18 months old, that weighs nearly 1,500 pounds. Would like to know what to feed him to make the best of him as a stallion. I feed him alfalfa, timothy hay, corn, oats, and corn-and-cob meal. Should I also feed him bran or oil-meal?

E. A. P.

Pomona, Kans.

Answer.—In regard to feeding your stallion, would advise you to feed oats, very little corn, and a little oil-meal. Would not feed alfalfa hay, as it is hard on the kidneys, but would feed timothy hay. Give the animal plenty of exercise. Exercise him daily regardless of weather and I think you will find that he will be in the best of condition.

Horse Has Sore Feet.—I have a lame horse, 7 years old, that is black in color and weighs about 1,000 pounds. He has been lame about three months, the

trouble first appearing in the shoulder. I used liniment, and then the lameness shifted to the other shoulder. After a time the hind parts were affected also and were stiff all around but more so in front. He starts off stiff in front, a great deal like a foundered horse, but his chest is not shrunken in. He appears to be very sore-footed and more so in right front foot which is slightly feverish, for he raises it off the ground a great deal. I have always been very careful with both feed and water, and I always put my horses in the barn for a while when I come off the road. Feed consists of whole oats and prairie hay, except a little while when away from home I fed a mixture of speltz wheat and oats. This horse feels good, looks good, and eats well, but would sooner travel in loose snow than on packed road. He is shod with never-slips.

H. C. P.

Williston, N. D.

Answer.—I would advise you to secure some commercial foot-packing and pack your animal's feet that are sore, then write me again if they do not improve after using this treatment for a week or two.

Lump on Leg.—What can I do for my horse that has a lump on its hind leg on the knee? I think perhaps it is bog spavin.

W. E. S.

Glenville, Mo.

Answer.—I would advise you to have the following liniment prepared at your drug store for your horse: 4 ounces each of tincture of iodine, tincture of capsicum, and tincture of cantharides; compound soap liniment sufficient to make 1½ pints.

Warts on Mare.—I have a 2-year-old mare that has a lump on the right side underneath, something like a blood wart, and she also has a seed wart on top of her head. I used castor-oil on them but it did not help any. I would be very much pleased if you would advise me what to do for them.

Dane, Kans.

J. W. A.

Answer.—I would advise you to remove surgically and then burn the warts that are in places where they can be easily removed. For the others use a 30 per cent Thuja Oil ointment on them.

Lame Mare.—My 7-year-old saddle mare is lame in right foot. She was turned in stalk-field November 28, and when found next morning could not step on front foot at all.

F. A. L.

Garnett, Kans.

Answer.—Continue poulticing your mare's foot, using linseed-meal, keeping poultice hot. The probabilities are the mare has bruised her foot and that you will find a discharge coming from the foot at the hair line just above the heels. If you do, syringe out the foot with hydrogen peroxide twice daily.

Mare Paralyzed.—I have a mare that is paralyzed so that she can hardly get up. Medicines don't seem to help her much.

Miss B. G.

Stillwater, Okla.

Answer.—I would advise you to bathe your horse's leg frequently with as hot water as she can stand, and then apply a stimulating liniment similar to some that I have mentioned in THE KANSAS FARMER, such as 50 per cent alcohol, or pint; 8 ounces of spirits of camphor; 4 ounces of poke root; 4 ounces of tincture of belladonna; 4 ounces of spirits of turpentine. Mix well.

Enlargement on Cow's Throat.—I had a cow that had a swelling between her jaws or on her throat. It was about the size of a fair-sized apple. I put oil and iodine on it and it broke and disappeared. I now have another cow in the same condition, only swelling is about the size of an egg. What treatment would you advise, and is the milk of this cow fit for family use?

E. S.

Wakefield, Kans.

Answer.—I would advise you to use a good stimulating liniment over the enlargement on your cow's throat. Use it daily until the parts become sore, then withhold for a few days and begin again. Would not use the milk for family use.

Bog Spavin.—I have lately traded for a 3-year-old black colt that has bog spavin in both hock joints. He has had it for at least a year and a half and in the early stage became so bad that he could hardly walk on leg. When he is pulled hard he seems to get worse. What is the cause of the disease, can it be permanently cured, and what would you advise? He is a fine, large fellow and would bring \$150 on market if he were sound.

A. E. V.

Goteba, Okla.

Answer.—Will say that from the fact that blistering has not permanently cured your animal that has a bog spavin, would recommend that you address Haussman & Dunn, Chicago, and see if you can get a clamp that is manufactured by them for bog spavin and use

WALNUT VALLEY STOCK FARM

DISPERSION SALE

New Sale Pavilion, Wichita, Kans.,

Saturday, February 2, 1907

Representing some of the greatest families of Shorthorns.

26 Cows—21 Bulls—8 Heifers

On account of failing health, I will sell my entire herd of pure-breds. This herd was selected and bred for milk, butter and feeding qualities, and consists of some of as good individuals as there are in the country. They are all pure Scotch or Scotch-topped. Most of the older cows were sired by my great herd bull, Scott Jr., and he is the grandsire of the young ones. The calves were sired by my other herd bull, Maples' Golden Rule, and many of the cows are safe in calf to him.

This is a strictly closing out sale and nothing will be reserved. Remember the date and place and arrange to attend. Catalogues ready to mail on application to

W. J. Snodgrass,

DOUGLASS, - - - KANSAS

MOSHER'S

POLAND-CHINA SALE

Rydal, Kans., Jan. 30, 1907.

40 head of bred gilts and aged sows, comprising the tops of my herd. Some of the sows in this sale are Cora Stewart 94710, Cintrilla 94705, Pretty Nell 84154, Nellie 94709, Lulu 91361, Anna Wilkes 65348, Little Pride 84932, Lady U. S. 91144, Guy's Queen 79930, Perfection 91146, and Keim's Model 94701. The offering also contains many gilts bred in the purple. Most of this stuff will be bred to Axle 38856 by Corrector's Son by old Corrector, and all will be safe in pig to high-class boars. Catalogues are now ready for distribution. Arrange to attend sale or send bids to C. E. Shaffer of THE KANSAS FARMER.

James Mosher, Rydal, Kas.

Col. John Brennan, Auctioneer.

it on your colt. I have been very successful in using these clamps at the veterinary clinic at Manhattan.

Affected Shoulder Blade.—I write you for information concerning a horse that seems to be affected in fore shoulders. The horse when hitched to any load with weight on neck will invariably keep backing up and seems to be in pain in shoulders, standing with one forefoot extended on ground. The trouble does not affect him so badly only when some weight is on neck. If he is put on plow or any steady pull will, in two or three days, swell behind withers and also stumble a great deal. Any information or remedy you can give will be greatly appreciated.

H. H. C.

Milo, Kans.

Answer.—I fear that you have a serious infection with your horse and the trouble is probably located beneath the shoulder blade and will be hard to

treat. A stimulating liniment applied over the affected region will doubtless prove beneficial.

Dog Has Mange.—I have a large pet dog that has the mange. Will you please send me the exact quantities of lime and sulfur, salt and water so that I can make the sulfur dip. There are parties here who use salt, lime, and sulfur as a dip for cattle.

S. W. H.

Carlsbad, N. Mex.

Answer.—We are mailing you a press bulletin on lime and sulfur dip, which will give you the method of the preparation and application of the mixture.

Mare With Scours.—My 4-year-old brown mare had had scours for the last three months. Have had her in stalk-field most of the time.

B. H.

Farmington, Kans.

Answer.—Feed the mare a tablespoonful of pulverized chalk in ground feed three times daily until the diarrhea

is checked. Then tone up the intestinal tract by the use of the following tonic, which can also be given in the feed: one ounce of pulverized nux vomica; two ounces of pulverized iron sulfate; one ounce of pulverized gentian; 4 ounces of pulverized glycyrrhiza root. Mix and put in 4 pounds of finely ground oil-meal. Put a heaping teaspoonful of this in the feed three times daily.

Stuffed Horse.—I have a 7-year-old horse that has been lame in stifle joint since last July. There is a hard enlargement in front of stifle joint. He does not show much lameness in walking, but when trotting or galloping he limps considerably. He usually stands resting his foot on toe. I have blistered the joint several times and have thought that it gave relief, but only temporarily. A. T. Plato, Mo.

Answer.—Continue using the fly blister over the stifle joint. Put on a severe fly blister that will be sufficient to cause a considerable swelling. Repeat the blister in three weeks. You had better leave the animal to himself and do not work him. Give him about three applications of the blister three weeks apart. Be sure and tie him short enough so that he can not reach the stifle after you have put on the blister. Allow the blister to act 24 hours, then wash and grease. C. L. BARNES.

Corn-Stalk Disease in Cattle.

Corn-stalk disease is the name given to a peculiar affection of cattle which they contract while feeding in corn-stalk fields in the late fall and early winter. The disease is peculiar in that many animals may have died before the owner ever suspected its presence. As Moore states, cattle that act perfectly well at night are dead on the following morning. The definite cause of this disease has not been determined.

Symptoms.—The rapid course of the disease usually results in the death of the animal before one is able to detect its presence. However in some cases the sick have been observed very carefully. Moore states that one owner found a steer down and unable to rise. Its head was extended, resting on the ground and moving continually from side to side; this was kept up for several hours when he died. In some instances the animal will get down on the knees, lay his head on the ground, froth at the mouth, groan and die within two or three hours. Other animals will simply appear dull, show great weakness, walk with a peculiar jerky movement of the hind legs, and in a short time fall and seem to be in great distress.

Disease Changes.—Large numbers of veterinarians report that the organs of cattle dying of corn-stalk disease are normal in appearance (Moore). However hemorrhages of the heart have been observed beneath the pleura and under the capsule of the liver. As to medicinal treatment very little can be done as the animals are usually so short lived after contracting the affection that they die before any medicine could be of benefit.

About the Smoking of Meat for Summer Use.

At this season of the year, it becomes a matter of anxiety, how best to prepare our meat for summer use. We have all experienced the trials incident to butchering, curing, and smoking meat, and it is with apprehension that we always approach the last part of this work, the process of smoking.

During the last eight years a firm in Kansas City, Mo., has been exploiting a new way of smoking meat and where their method has been adopted all the work and worry attending the old way of smoking meat has been done away with.

They manufacture what is known as Wright's Condensed Smoke which is a liquid, made by burning selected hickory wood, condensing the smoke into a liquid, which is then put up in quart bottles, one of which is sufficient to smoke a barrel of meat.

By referring to the advertisement of The E. H. Wright Company, Limited, on page 69 of this issue you will learn how to produce a small sample of their preparation free of charge.

In writing them, please mention this paper.

Making Waste Land Pay.

Many a piece of land not fit for grazing or tilling can be made a source of much profit in growing hardy trees. As one rides through farming districts reports come rushing to the mind that so many waste places are barren of trees, which might be steadily, quietly, yet persistently growing a savings-bank account for the owner.

Here is a good opportunity for every farmer. The Galbraith Nurseries, Fair-

bury, Neb., to get in touch with a few thousand more customers, are giving away twenty-five black locust seedlings ready to set out in the spring. They are fitted for rapid growth on waste land and make excellent fence-posts. The mailing expense is 5c, which one may send if he wishes when he writes for the Galbraith catalogue. This book is well worth having. Has colored illustrations and gives prices and descriptions of hundreds of varieties of nursery stock, small fruit, and forest-trees.

Asthma Conquered—Great Claims Made for New Discovery of Vienna Physician.

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 asthma, bronchitis, and catarrh, will be hailed with delight by the many thousands of sufferers.

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

Grain in Kansas City.

Receipts of wheat in Kansas City yesterday were 133 cars; Saturday's inspections were 76 cars. Prices were unchanged to 1/4c higher and the demand was good. The sales were: Hard wheat—No. 2 hard, 1 car 73c, 2 cars 72c, 3 cars 70c, 1 car 69 1/4c, 8 cars 69c, 2 cars 68 1/4c; No. 3 hard, 1 car 71c, 1 car 70 1/4c, 4 cars 69c, 1 car 68 1/4c, 2 cars 68 1/4c, 4 cars 68c, 2 cars 67 1/4c, 6 cars 67 1/4c, 1 car 67 1/4c, 9 cars 67c, 4 cars 66c, nominally 66 1/4c; No. 4 hard, 1 car 67c, 1 car 66 1/4c, 1 car 65 1/4c, 5 cars 65c, 2 cars 64 1/4c, 5 cars 64c, 2 cars 63 1/4c, 13 cars 63c, 3 cars 62c, 6 cars 61c, 4 cars 60c, nominally 60 1/4c; rejected hard, 1 car 60c, 7 cars 59c, 3 cars 58c, nominally 58 1/4c.

Soft wheat—No. 2 red, 1 car 72 1/4c, nominally 71 1/4c; No. 3 red, nominally 66 1/4c; No. 4 red, nominally 61 1/4c; No. 5 red, 1 car live weevil 63c. Spring wheat—No. 2, 1 car white, 68c; No. 3, 1 car white, 67 1/4c, 1 car 66 1/4c. Mixed wheat—No. 2, 2 cars 69c; No. 4, 1 car 60c.

Receipts of corn were 48 cars; Saturday's inspections were 42 cars. Prices were unchanged to 1/4c higher. The sales were: No. 2 white, 1 car 38 1/4c, 1 car 38 1/4c; No. 3 white, 7 cars 38 1/4c, 1 car bulkhead 38c; No. 2 mixed, 3 cars 37 1/4c; No. 3 mixed, 2 cars 37 1/4c, 1 car 37 1/4c, 9 cars 37 1/4c; No. 4 mixed, 1 car 37 1/4c, 1 car 37 1/4c, 1 car 36 1/4c; No. 3 yellow, 4 cars 37 1/4c.

Receipts of oats were 34 cars; Saturday's inspections were 12 cars. Prices were unchanged to 1/4c higher. The sales were: No. 2 white, 1 car 36c, 2 cars 35 1/4c, 2 cars 35 1/4c, nominally 35 1/4c; No. 3 white, 3 cars 35 1/4c, 6 cars 35c, 6 cars color, 35c; No. 4 white, 1 car color 34 1/4c; No. 2 mixed, 1 car 35 1/4c, 1 car red 38c, nominally 35 1/4c; No. 3 mixed, 1 car 35 1/4c, nominally 34 1/4c; No. 4 mixed, 1 car bulkhead red 36c.

Barley was quoted 43@45c; rye, 60@62c; flaxseed, \$1.10@1.12; kafir-corn, 72@75c per cwt.; bran, 85@87c per cwt.; shorts, 85@90c per cwt.; corn chop, 75@78c per cwt.; millet-seed, 95c@1.10 per cwt.; clover-seed, \$8@12.

South St. Joseph Live-Stock Market.

South St. Joseph, Mo., Jan. 14, 1907. The week opened with big supplies of cattle in sight especially in the East. Locally the Monday run was not above normal, but the effect of an over-supply in Chicago was plainly felt at the river points. Steers were steady to 10c lower, but while buyers made a strong play for cheaper prices, they had a place for all the cattle on offer and trade had a fairly active tone. No prime steers were offered. The best here were some medium weights that sold at \$5.50 and they were just a fairly good lot of short-fed beefs. The bulk of steers were of the grade that sold between \$4.60@5.25. The cow and heifer trade felt the effect of the big supply, and while a few sales were made at steady prices the bulk of the day's business was around a dime under Saturday prices. There was a good demand for stockers and feeders and supply was fairly liberal. Trade was largely to the local speculator interest but about a thousand cattle were worked out to the trade at prices steady to easy. There is a good big supply of stock cattle now in the hands of local dealers and it looks as though prices might go a little lower.

The volume of hogs moving towards market continued very large, there being close to 76,000 in sight to-day at five markets. Notwithstanding the big supplies, the demand continues quite good and although prices were weak to 5c lower on the opening there was a little firming up and the bulk of the day's crop sold steady to a shade easier. The average decline was about 2 1/2c. Hogs sold largely at \$6.37 1/2@6.42 1/2, with tops making \$6.45. The outlook for the week appears to be fairly good.

There is only a fair volume of live mutton moving towards the market and prices are holding up quite well. Today's offerings at this point sold fully steady with just a fair class of lambs making \$7.35@7.45; good yearlings made \$6.25; choice Western-fed wethers \$5.75, and a big string of Colorado ewes at \$5.25, which is an extra price for the latter. WARRICK.

Kansas City Live-Stock Market.

Kansas City, Mo., January 14, 1907. The cattle market is steady here today, though not very active on the moderate supply of 13,000 head. The disadvantage and loss to shippers when the cattle supply is not equitably distributed among the markets is illustrated to-day by the centering of 40,000 cattle at Chicago, where prices are 10@20c lower. The market closed last week steady on all kinds except cows and heifers, which were about 10c lower for the week, and the supply to-day

Special Want Column

"Wanted," "For Sale," "For Exchange," and small 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.

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 Cruickshank 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 Collie puppies. Dr. J. W. Perkins, 422 Altman Bldg., Kansas City, Mo.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgwick County, Kansas.

FOR SALE.—Young registered Holstein bulls from big milkers and rich milkers. Burton & Burton, Topeka, 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.

SEED CORN.—C. E. HILDRETH, Altamont, Kans. Originator, breeder and grower of Hildreth Yellow Dent corn. First prize at fairs and corn shows. First prize acre yield, 103 bushels, 1906. First prize, acre yield, home county, 83.50 bushels, 1906.

SWEETSTAKES CORN at both the Kansas State Fair and the Kansas State Corn Show was grown and exhibited by W. R. Hildreth, Altamont, Kans., who has the same kind for sale for seed.

25 YEARS OF SUCCESS selling high grade seeds. Would you have equal success growing get my catalogue. It's free. A postal will bring it. Write for it now and order seeds early. T. Lee Adams, 417 Walnut St., Kansas City, Mo.

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.

HORSES AND MULES.

I HAVE a good 2-year-old jack for sale. Good color, good build and well broken and priced right. Thos. Gribben, Hope, 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.—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, Wauweta, Kans.

POULTRY.

FOR SALE.—40 White Plymouth Rock cockerels, also one M. B. gobbler. J. C. Bostwick, Hoyt, Kans.

WHITE WYANDOTTES.—Mrs. E. F. Ney, Bonner Springs, Kans., is sold out. Eggs in season.

Hammer's White Wyandottes

35 cockerels for sale at \$1.50. These are high scoring birds. My strain is noted for eggs.

Lewis A. Hammer, Clearwater, Kans.

BLACK LANGSHANS

My birds are prize-winners. Choice cockerels and pullets for sale; eggs \$1.50 and \$2. Satisfaction guaranteed.

W. M. Tipton, Route 5, Wellington, Kans.

BUFF ROCKS

Winners at State Poultry Show 1907; also slate turkeys. Stock for sale. Eggs in season.

J. O. Beeman, Sherman, Kans.

is being handled without respect to outside influences, as the offerings are no larger than the local demand requires. The best steers here last week sold at \$6.25, on different days, but there are no extra good cattle here to-day, only a few fairly good steers at \$5.50@5.50, bulk of steers \$4.75@5.50. Heifers sell at \$3.25@4.85, cows considered high in comparison with other killing stuff, at \$2.75@4.50, bulls highest of the season at \$3@4.35, veals up to \$7.50, heavy calves \$3.50@4.50. Country demand has been better supplied for the last week than formerly, but prices have remained about steady, including to-day, at \$3.25@4.60 for stockers, feeders at \$3.65@4.75. A feature last week was the sale of several trains of high-grade New Mexico feeders, around 850 pounds, at \$4.25@4.50, stockers in same shipments at \$3.85@4.25.

Hog receipts were 62,400 last week, largest supply for two months in any one week, and even exceeded the corresponding week a year ago. The market held up very good, closing Saturday with a top of \$6.50, only a shade lower than best time during the week. The run to-day is 7,000 head, market generally 5c lower, but closing nearly steady, top \$6.47 1/2, bulk of sales \$6.35@6.42 1/2. Smaller runs are anticipated this week and firm markets, as packers evidently need the hogs and are not prepared to make any fight to break prices just now.

Sheep and lambs sold about steady last week, regaining the loss of last Monday on Tuesday. The run to-day is 10,000 head, market steady on lambs, top \$7.50, other sales of fed Western lambs at \$6.85@7.35, weighing from 65 to 77 pounds. Fed Western ewes sold to-day at \$5@5.25, wethers \$5@5.75, yearlings \$6.15@6.40. Top yearlings last week sold at \$6.60.

J. A. RICKART.

SWINE.

FOR SALE.—Poland-China herd boar, O. K. Perfection 34234 by Black O. K. and out Ideal Perfection 4th 70821. He is a great sire, in fine condition. Price \$40. Address C. W. Merriam, Alvsdale Farm, Topeka, Kans.

FOR SALE.—Duroc-Jersey boars sired by Parker Boy, a son of the great Parker Mac, winner of first prize at Kansas State Fair 1906. White & Tomson, Route 8, Topeka, Kans.

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. Williams, Inman, 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.

SHEEP.

FOR SALE.—Bunch of 16 registered Shropshire sheep, herd register and share in American Shropshire Association for \$200. Also 10 head of Shorthorn headed by son of Victorious, \$400 cash. Frank Hoover, Columbus, Kans.

MISCELLANEOUS.

ARE YOU MOVING to California or Washington State? Special freight rates for January in through cars. Address Merchants Transfer Company, Topeka, Kans.

WANTED.—Men to learn barber trade. We prepare you for positions \$12 to \$20 weekly. Few weeks complete. Scholarship includes tuition, tools, board, diplomas and position. Great demand for barbers. Send for our 1907 catalogue mailed free. Moler Barber College, Kansas City, Mo.

WANTED.—Man and wife of experience to work on stock and grain farm. No drinking or smoking. Give references and state wages. Mrs. W. H. Imbler, 1408 N. Lawrence St., Wichita, Kans.

HONEY.—For Kansas, Missouri and Oklahoma. Two 5-gallon cans, 120 pounds net—Amber \$3.40; whitest \$3. Also small cans. Comb honey in one pound sections 12c. 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.

FOR SALE OR TRADE.—Choice alfalfa farms, Clydesdale Horses, Shorthorn and Jersey Cattle, Poland-China, Duroc-Jersey and O. 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 envelope. Best Mfg. Co., Champlain Bldg., Chicago, Ill.

HONEY.—5 cents per pound. Write A. S. Parson, 514 S. Main St., Rocky Ford, Colo.

WANTED.—Non-union moulders. Call or write Topeka Foundry, 315 Jackson St., Topeka, Kans.

WANTED.—A good second-hand grain separator. Dr. Barker, Chanute, Kans.

Stray List

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.

Week Ending January 10.

Montgomery County.—Samuel McMurry, Clerk. Mule.—Taken up by Noah Vaughn, of Louisburg tp., Dec. 11, 1906, one 2-year-old horse mule, mouse colored, valued at \$35.

Week Ending January 17.

Ness County.—J. H. Elting, Clerk. STEER.—Taken up by C. D. Foster in Center tp., December 24, 1906, one yearling roan steer, crop on left ear, brand on left hip indistinct, valued at \$15.

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 parts of the world.

(First published in THE KANSAS FARMER, Jan. 17, 1907.)

Publication Notice.

In the District Court of Shawnee County, Kansas.

George S. Jewell, Plaintiff, vs. Maude A. Jewell, Defendant. No. 24228.

State of Kansas, Shawnee County, ss. To Maude A. Jewell, Greeting: You are hereby notified that George S. Jewell has filed in the District Court of Shawnee County, Kansas, his petition in an action wherein George S. Jewell is plaintiff, and Maude A. Jewell is defendant, praying for a decree of divorce against you; and unless you answer the said petition on or before the 1st day of March, 1907, the allegations and averments in said petition will be taken as true, and judgment will be rendered against you accordingly.

George S. Jewell, Plaintiff.
By Troutman & Stone,
(Seal) His Attorneys.

I, S. Curtis, Clerk of the District Court of Shawnee County, Kansas.

INVENTING "HOW and WHAT TO INVENT" and "HOW TO OBTAIN PATENTS" explained FREE. CHESTER W. BROWN, Patent Atty., 974 F. St. Washington, D. C.



DUROC-JERSEYS

Woodlawn

We have just 10 head of spring boars left for sale and we are going to make very LOW prices for the next 30 days to close them out. They are sired by Fancy Chief 2452, the great show hog FANCY TOPNOTCHER 4939, first in class at Kansas State Fair and by PRINCE WONDER 42455. They have the size and are sure to suit you.

JNO. W. JONES & SON,

DUROC-JERSEYS

Home of The Famous Fancy Herd Registered DUROC-JERSEY SWINE

Concordia, Kansas

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

COUNTY SEAT HERD DUROC-JERSEY SWINE
Geo. Briggs & Son, Clay Center, Neb.
Young stock for sale.

DUROC-JERSEYS—Large-boned and long-bodied kind. Spring pigs either sex. Prices reasonable.
E. S. COWEE, Route 2, Scranton, Kans.

SUNFLOWER HERD OF DUROC-JERSEYS—Fall and spring pigs for sale, of both sexes, sired by Klondyke Prince, an 800 pound hog. Samuel Boston, Prop., Smith Center, Kans.

Pigs Shipped on Approval.
200 head of Durocs, all ages, representing the blood of Combination, Valley Chief, and a son of Kant-Be Best.
T. L. LIVINGSTON, Burchard, Neb.

Ireland's Durocs
Herd headed by Young Model 3311, a son of Higgins 2251.
Pigs for sale from such sows as Antelope 9766, a granddaughter of Ohio Chief. Fancy Xenia 47490 and Lela H. 97038. Z. Ireland, Chester, Neb.

Registered Duroc-Jersey Swine
Up-to-date breeding, choice individuals. Farrowed from February 27 up to October 1. Either sex, pairs or trios, not a kin, at \$12.50, \$15, \$20 and \$25 per head, for 30 days only. G. E. NEWTON, Whiting, Kans., (Successor to Newton Bros.)

Orchard Hill Herd of Duroc-Jerseys
Fall and spring males, and the gilts bred and to be bred, for sale. Blood lines: Top Notcher, Ohio Chief, Improver 24 and the Wonder family.
E. F. NORTON & SON, Clay Center, Kans.

Duroc-Jerseys
Big, blocky, handsome boars of March and April farrow. Write
Buchanan Stock Farm, Sedalia, Mo.

STAADT'S DUROC SALE.
Will sell at Sale Pavilion, Ottawa, Kans., January 19, 1907, 40 choice sows and gilts safe in pig by my great champion boar, Long Wonder 2187, and Nelsa's Model 22055. Write for catalogue J. F. Staudt, Ottawa, Kans. Please mention Kansas Farmer.

Egypt Valley Durocs.
Herd headed by Egypt Lad 34023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts, bred to Lora's Lad, to farrow in April; will also sell some tried sows. Write for prices and particulars. H. W. STEINMEYER, Volland, Kans.

Peerless Stock Farm
DUROC-JERSEY HOGS
Correspondence solicited. Inspection invited.
R. G. Sellenbarger, Prop., Woodston, Kans.

Fairview Herds Durocs and Red Polled
My herd bull, Expansion, for sale. No swine for sale now. Spring sale, February 13, 1907.
J. B. Davis, Fairview, Brown County, Kans.

PIONEER HERD
OF DUROC-JERSEY SWINE
Herd headed by Red Chief, 1st prize winner at Hutchinson, assisted by Chief Grand by Ohio Chief. Sows of equal merit. 15 large growthy males and 25 sows, some bred. To these males I breed big boned, quick feeding females. Describe what you want and write for prices.
N. B. SAWYER, Cherryvale, Kans.

Eureka Manor Herd Duroc-Jerseys
Choice breeding stock for all. Boars, and sows and gilts, bred or open. Prices the lowest, quality and breeding the best. Herd headed by EUREKA TIP-TOE 43641, sired by the great World's Fair grand champion, Tip-Top Notcher 20729; and PEROLESE 27247, by Josephus 19125, the Kansas State Fair grand champion. Write your wants or call and inspect my herd. Address
J. F. ENSOR, Olathe, Kans.

Otatop Herd Duroc-Jerseys
Herd composed of best blood in the west. Headed by Otatop Notcher, out of Tip Top Notcher, who weighed 1120 pounds at 18 months, and sold for \$5,000. Bred gilts and fall pigs for sale at reasonable prices.
JOHN W. TAYLOR, Edwardsville, Kansas

Oak Grove Herd of Durocs
Herd headed by Choice Goods H. 36471 by Hunt's Model, and Corrector's Model 34351. Forty fine spring pigs for sale from such sows as Labaugh's Choice 4682, Oak Grove Queen 12004 and Miss May 112008, a granddaughter of Improver II. If you want good ones write me.
SHERMAN REEDY, Hanover, Kans.

WILSONS' DUROCS
I have for sale a few gilts and boars sired by Ohio Chief. I also have a number of fine boars carrying the leading blood of the Duroc breed. Can please you in something good.
R. L. Wilson, Chester, Nebraska

WE HAVE a lot of fine gilts sired by Crimson Wonder and Kerr's Champion, bred to Oom Paul M'souri Wonder, King's Crimson Challenger. These sires are all sired by prize winners. Mr. and Mrs. Henry Sharrer, Wameka, Kans.
Please mention Kansas Farmer when writing.

COUNTY LINE HERD OF DUROCS.

A lot of fine gilts for sale, carrying the blood of Jumbo Jr. 28016, Orion 5283, 2d Climax 23361, and Joe 29271. These gilts are all safe in pig to Kansas Oom Paul 53317. Prices right.

O. N. Wilson, Silver Lake, Kans.

Lone Star Durocs

We will have over 50 fine boars for sale this fall, representing the best blood lines in the country. Orders booked after July 1, and shipments will be made to responsible parties on approval.

J. L. WILLIAMS, Bellaire, Kansas

Ward Brothers Republic, Kans.

Spring Durocs for sale sired by Model H 37967, the best son of the great Higgins Model; also Shakespear 8d, and other noted sires; also some fall boars that will be a credit to any herd. Write for prices.

Vick's DUROCS are bred for usefulness. Choice young stock for sale by such great boars as Vick's Improver 47385, Red Top 32241, Fancy Chief 24023 and other noted sires. Correspondence invited. Visitors coming to Junction City and phoning me will be called for.

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Duroc's
from the Highland Herd carry the blood of the leading strains of the country. 31 head of fine spring males sired by Ohio Major 32327, Red Raven 47897.
This stuff is the cream of my herd and I am pricing it right. Grant Chapin, Greene, Kans.

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Of pure-bred POLAND-CHINA HOGS. We will have some bargains this season to offer the public.
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Mention Kansas Farmer when you write.

Dawley's POLAND-CHINA SALE
SALINA, KANS., FEBRUARY 15, 1907.
File your application now for catalogue.
Frank Dawley
Waldo, Kansas

Belleville Herd of Heavy-Boned Poland-Chinas

Headed by Grand Chief 34410, one of the good sons of Chief Tecumseh 2d. I have 100 spring pigs from this old fellow, the mothers are from Expansion-Mogul and other boars of such renown. Correspondence and inspection invited. Annual boar sale November 15.
W. H. Bullen, Belleville, Kansas

Poland-Chinas For Sale—Herd Boar

Joe Mascott 41764 by Mascot 31481, out of Lady One Price (70041) by Priceless, sire of Mascott Mo's Black Perfection 26517. Mascott sold for \$1,480 and Joe's Mascot is as good as his sire. A prominent breeder told me yesterday, December 13, that he is better than half the herd-boars owned by prominent breeders; also that if he had been exhibited at any of the leading State fairs he would have been inside the money in the aged class. He was farrowed February 28, 1904. There is not a wrinkle on him; he has a heavy coat of straight black hair. I have raised and seen near 200 of his pigs and never saw one with a wavy coat, a poor back, or a bad ear; neither have I seen any spotted ones. If you want to raise large hogs with quality buy this boar. He can easily be made to weigh 800 pounds. Reason for selling I have only two sows on the farm that are not his get. You can't go wrong on him. He is kind. The price is right. For further particulars address
John Harness, RFD, 5, Leavenworth, Kans.
P. S. I have a young boar by Nemo L's Dude and out of an L's Perfection dam, and some choice open gilts by Joe's Mascot, that I will sell at a bargain.

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The great preventive and cure for HOG CHOLERA. Indorsed by more good breeders than any other remedy. We also put out a Dip at \$1 per gallon, in 5 and 10 gallon cans. Freight prepaid. Guaranteed as good as any Dip on the market or money refunded. Address
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I have pigs for sale from the leading strains of the country. Prices reasonable. Write for full particulars.
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The Useful Type of Poland-Chinas

Herd headed by Model King 34580, by Mischief Maker. Growthy spring pigs for sale.
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Herd boars: Calder's Chief by Garver's Choice, and Calder's Grand Chip by Grand Perfection 37480 out of Mo. Chip dam. Address
Wm. D. Calder, Prop., Bancroft, Kans.

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are from the leading strains of the heavy type. Good boars and gilts for sale. Write for information.
J. T. ELERBECK, Beatrice, Neb.

A. J. Hinckley, Milo, Kan.

Breeder of fashionable Poland-Chinas. Will have some fine boars for sale this fall. Write for breeding and prices. Mention Kansas Farmer when you write.

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My herd is headed by the Great MAJOR M. 31527, by Buaine Tecumseh 23338. We breed the big fellows with plenty of finish. Our sows are all heavy boned animals and producers of large litters. If you want to breed the large type, write us for prices on boars and gilts.

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Spring pigs for sale sired by the great boar Perfect Tecumseh 27899 B, and out of sows of equal breeding. Also a few choice ones by a son of Medier. Write me for full particulars.

J. B. Myers, Canton, Kansas

JOHN BOLLIN, Route 5, Leavenworth, Kans.

Breeds and Sells Popular Poland-Chinas

The State and World's Fair winning boars Nemo L's Dude and The Picket in service. Bred sows and serviceable boars for sale.

P. L. WARE & SON, Paola, Kansas

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Several choice boars for sale. One spring boar by On and On 61733, dam by Chief Perfection 2d 42568. One fall yearling grandson of Mo's Black Perfection. Dam 50 per cent Chief Perfection 2d, and others extra good. Also a few young Galloway bulls and several young Holstein bulls.

H. N. HOLDEMAN, MEADE, KANS.

HOT BLOODED POLAND-CHINAS

Two April boars by Grand Perfection 77899 out of Keep On Fashion, by Keep On. One by Perfect Mischief out of a litter sister to Grand Chief, the \$3000 boar. One March boar by Perfection I Know, sire of Iowa State Fair and World's Fair champion; dam is a Corrector sow as good as the best. These are strictly fit to head herds. A few choice sows safe in pig to Grand Perfection or Chief On and On. Write now.
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The home of the western champion. Peerless Perfection 2d 38664, sired January 22, 1907, will sell 50 fancy bred sows, bred to Peerless Perfection 2d 38664, Grand Perfection 77899 and Corrector Chief 38663, at my farm.
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Size, breed, character and fashionable breeding. Stock all ages for sale.
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Fall boars all sold; am now booking orders for March and April pigs; sixty head to select from also a choice lot of bred sows at farm's prices. A square deal guaranteed. Write me your wants.
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The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. One herd boar and a few choice May boars for sale. Brood sow sale Feb. 28, 1907. Correspondence solicited and visitors always welcome.
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My sows are sired by Elmer Prime 64778, and Berryton Duke 72946. Boar head of herd, Jourist Topper 76277.
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Breeder of O. I. C. hogs. Young stock for sale. See or write me.
A. W. TOEVES, Prop., Inman, Kans.

O. I. C. SWINE

Choice young stock of both sex for sale at very low prices.
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Of Ohio Improved Chester Whites; 40 April and May boars and gilts for sale, sired by Pomona Chief 368 and Teddy Boy 14888. Have added to my herd Jackson Chief 2d 12285, 1st and champion at American Royal 1906, son of Jackson Chief, champion at the World's Fair 1904. Write for description and prices. Farm 2 1/2 mi. n. Neosho Rapids, 8 mi. s. of Reading. W. H. Lynch, P. O. Reading, Kans.

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Extra fine March and April pigs ready to ship. Single pairs or trios sired by five prize winning boars. Express paid on any part of the United States. Write for prices and description.
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