

KANSAS FARMER

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TOPEKA, KANSAS, AUGUST 6, 1908

Established 1863. \$1 a Year

Kansas Veterinary College

Time was, not so very long ago either, when a man who was a natural "thinker" either became an itinerant clock mender or a "hoss doctor." Then any farmer who liked to "doctor" and who did not like to work became known as a country "hoss doctor" and after a few years he moved to town and "loafed" around a livery stable and then he called himself a veterinarian, although he seldom wrote the word, or if he did he was sure to spell it incorrectly.

Then as the animal industry became of more importance, when the

total value of the farm and city stock came to be reckoned in millions in a single State the business of treating sick animals came to be looked on with more respect. Then schools and colleges were established to give some instruction in "animal" anatomy at least. Later more and more courses were offered and real veterinary colleges were established, officered and directed by scholarly scientific men.

Kansas is a great live stock State, the total value of the live stock in Kansas as given by the State Board of Agriculture in 1907 being



The New Veterinary Building at the Kansas Agricultural College, Manhattan.

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Established in 1863.

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\$197,250,857.50. This has naturally created an interest in the general care of animals and has turned the attention of hundreds of young Kansas farmers to the study of veterinary science.

The proper place for the training of veterinarians for Kansas is at the Kansas college for farmers, the State Agricultural College. For many years the college maintained an elementary course but four years ago the regents at the evident demand of the live stock interests of the State established a regular four-year course in veterinary science, and the growth of the department has been so great that a new building was a necessity. This new veterinary building is without doubt the best building of the kind in the West, if not in the United States. It will be ready for use in September. The hospital and clinic arrangements are very complete, even elaborate; no frills but every square of space will be put to use.

Dr. F. S. Schoenleber, head of the department, is State Veterinarian, and hence can keep his classes in touch with the whole State situation. He will have next year five associates, not including hospital assistants, and not including a half dozen college teachers to whom the veterinary students recite in such studies as chemistry, physiology, live stock and stock judging, dairying, stock feeding, animal nutrition, English, and economics. If all instructors were counted it would make a faculty of at least twenty people.

Graduates of the veterinary department of the Kansas State Agricultural College have had flattering success. Their training not only gives them technical knowledge but the general course offers a training that makes their knowledge much broader than that of the average veterinary college.

Reports indicate that the corn belt is being rapidly extended westward. Some of the best corn in Kansas is this year well out in the wheat belt.

Appreciation of the value of alfalfa as a money crop is becoming contagious in portions of Stafford County which have heretofore been immune.

The disk harrow is a splendid implement to run through the stubble

soon as possible after harvest. The advantage of easier plowing will probably compensate for the labor.

Reports from the Kansas corn belt and the "corn belt extension," which latter includes a wide area west of the old corn belt, indicate that there will soon be plenty of feed for the profitable kinds of hogs. Corn and alfalfa are well sold in high-priced meat.

In some parts of Kansas the practice of "dry farming" methods will give good results. After heavy rains the soil sometimes dries and bakes with surprising rapidity. The sooner the crust is broken the better for growing crops or for those to be sown later.

The Crop Reporting Board of the Bureau of Statistics of the United States Department of Agriculture finds, from the reports of the correspondents and agents of the Bureau, that the average condition of cotton on July 25, 1908, was 83 per cent of a normal, as compared with 81.2 on June 25, 1908, 75 on July 25, 1907, 82.9 on July 25, 1906; 74.9 on July 25, 1905, and 81.4 the average of the condition on July 25 of the past ten years.

Persons whose ancestors were in this country in 1790 will be interested in knowing that the United States Census Office is about to issue pamphlets containing names of heads of families at the first census, in the States of Connecticut, Maine, Maryland, Massachusetts, New Hampshire, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Vermont, and Virginia. Each State will form a separate part, or volume, consisting of from 100 to 300 pages. Copies may be obtained of the Director of the Census, Washington, D. C. Price \$1.

PROPOSED ADVANCE IN RAILROAD RATES.

"The National Prosperity Association," St. Louis, has inaugurated and is carrying on a vigorous campaign to speedily end the financial depression. The interest of organizations throughout the country has been aroused to the extent of securing widespread coordinate action in bringing about resumption of employment and renewed activity in manufacturing, transportation, and trade.

Reports indicate gratifying success in many avocations. In reviewing the situation and the effects of the efforts put forth, E. C. Simmons, chairman of the executive committee, reports that the railroads are still suffering more than any other interest. He calls attention to the fact that they employ almost one-tenth of the adult male population of the United States.

The custom of the railroads is to do much of their business on borrowed money. When the loan market practically went out of business, on account of withdrawal of deposits, the railroads were greatly embarrassed. The storm came suddenly, following closely after readjustments of rates in 1907. It was charged that extensive reductions of rates did much to cause the panic, and it is still held by railroad financiers that at prevailing rates the earnings of the railroads are so small that lenders deem it unsafe to loan to railroads. The president of the Prosperity Association seems inclined to accept this view and to favor readjustment of rates, under Government supervision, allowing such advances as may be just to both the railroads and their patrons.

It is thought by some that such readjustment would have little if any effect on rates in Kansas, or that they might result in still lower rates in this State, for, while the adjustments of 1907 resulted in considerable reductions in Kansas, these reductions were in most cases conservatively made and consisted chiefly in the abrogation of discriminations against interior Kansas points.

The entire subject is one which may well be critically examined. The public is interested in having all indus-

tries prosper. If there is good reason for the much-mentioned proposed advance in rates; if they have been made unjustly low anywhere; if the pendulum has swung too far, readjustment will doubtless follow.

AGRICULTURAL COLLEGE REGENTS MEET.

The board of regents of the Agricultural College at their meeting at Hays last week elected Mrs. Mary P. Van Zile, of Chicago, Ill., as professor of domestic science and dean of women. Mrs. Dalinda Mason Cotéy, who was elected to this position in June, found it necessary to resign on account of ill health. Mrs. Van Zile attended college at Manhattan in 1889-91, taking work in chemistry and domestic science and art, later completing her work elsewhere. She has been engaged in teaching for the past ten or twelve years. Mrs. Van Zile comes very highly recommended and the regents feel that the work will be well handled.

The regents also created a council of deans, consisting of the president of the college, ex-officio, chairman; dean of agriculture, director of Experiment Station, ex-officio, dean of mechanic arts, Prof. E. B. McCormick; dean of women, Mrs. Mary F. Van Zile; dean of science and assistant to the president, Prof. C. M. Brink.

Unable to agree on a man for director of the Experiment Station that matter stands as it has for several weeks with Prof. J. T. Willard as vice-director. This position may be filled at the next meeting of the board.

REPORT ON A NEW ALFALFA MILL.

The great value of alfalfa as food for all kinds of live stock has given rise to much speculation with reference to methods of preparing and shipping. Experience in feeding alfalfa-meal has been reported as generally favorable. The meal sells at \$18 per ton at Topeka. These, with the fact that the sacked meal may be shipped, handled, and fed without waste have developed much interest in processes for reducing cured alfalfa to meal. Several machines for this purpose have been patented. Inventors are still busy and are bringing out new designs.

Reports have shown varying degrees of success in overcoming the difficulties. One difficulty which some had not anticipated is the heating of the material in the process of grinding or shredding. In some cases this has resulted in the destruction of the mills by fire. To overcome the tendency to develop heat, recent inventors employ an air blast, so that, as one operator puts in, the grinding is done in a small cyclone. This introduces another complication in taking care of the fine, dust-like meal to which the leaves are reduced. This dust, unrestrained, would fly away with the wind produced by the blower.

The various problems in the case had been studied for several months by F. H. Webster, of the Topeka Alfalfa Milling Company, who had installed one of the best alfalfa machines on the market. The result was the invention and installation of a new plant at the alfalfa mill at First and Quincy Street, Topeka. An invitation was extended to the Shawnee County Alfalfa Club to send a committee to observe the operation of this new plant. The writer accepted an invitation to be present. The committee's report includes a report by an eminent mechanical engineer on the construction and movement of the machinery and a report of the power used by the entire plant, including the sacking machinery. The writer may be pardoned for giving a few of his own observations.

In a thirty-minutes' run there was reduced to meal and placed in sacks 1,700 pounds. The power consumed for all purposes was approximately 40 horsepower! The apparatus for saving the "dust," for which there is a ready market at \$40 per ton, took care of this end of the work so well

that there was next to none wasted. This apparatus is a standard make of "dust collector," such as is used in flour mills. The sacking was done with a standard machine. The reduction from hay to meal was accomplished by Mr. Webster's new machine, which he has named "The Glutton." This receives the hay on an endless chain feeder which delivers it to a gang of circular saws. From the saws the material is presented to an intermediate apparatus and finally to a cylinder which is studded with heavy teeth. This cylinder runs 2,000 revolutions per minute and makes the final reduction. The entire machine is strongly built and runs without a jar. The writer, who has had a large experience with high-speed, heavy machinery, could see no reason why the mill might not have handled 2,000 pounds instead of 1,700 in the half-hour's run. The addition to the power consumed would not probably have been in as large proportion as the addition to the output, for the reason that this high speed machinery consumes much power to run it empty. The additional power required for additional work up to the reasonable capacity of the machine should be proportional to the amount of work accomplished. This is a detail that will doubtless receive attention of the inventor.

To secure the best possible machinery for this new milling industry is a matter of prime importance.

The following report of the Alfalfa Club's committee will be read with interest:

The Shawnee Alfalfa Club, Gentlemen: Your committee appointed to inspect and report on the new alfalfa grinder, recently installed at the mill of the Topeka Alfalfa Milling Company, have to report:

That on Friday afternoon, July 31, 1908, we went to this plant at 119-123 Quincy Street, and saw the machine. First, opened, exposing its parts; the machine appearing to us to be strongly and substantially constructed. In fact, the feature of strength and careful construction was very apparent.

Second, the machine was closed and set in operation, being fed old hay, evidently baled last fall, as the mats were tough and caked. The mats were somewhat shaken apart before being fed. In our judgment this was not choice hay nor in a favorable condition for grinding. Later the machine was fed this year's hay that had been baled, and which was harder to grind than the old hay, being tough and full of stems.

In both instances the machine ran from start to finish without any hitch or delay and in a way thoroughly characteristic of its name, which is "The Glutton." During the running of the machine a small glass filled with water was placed at various places on the machine and it showed no vibration.

Your committee secured a letter from Mr. F. W. Thomas, Santa Fe Engineer of Tests. In response to a letter to him from I. D. Graham, secretary of your club, giving his judgment as to the mechanical construction of the machine, which letter is herewith attached and made a part of this report. Also the motor furnishing the power was in charge of Mr. J. T. Huntington, superintendent of the Edison Electric Plant of this city, and his assistants, Messrs. J. E. Gossett and J. H. Taylor, who furnished us with a chart showing the variations of power and the average power and the pounds of meal made with said power. Also a letter translating the electric terms into their equivalent in horse power. We attach this chart and letter and make them a part of this report.

Respectfully submitted,
 O. E. WALKER, Chairman Com.
 H. H. WALLACE, Secretary.

Topeka, Kansas, July 29, 1908.
 Mr. I. D. Graham, Secretary Shawnee Alfalfa Club, 625 Jackson St., City.

Dear Sir: Your favor of the 28th, asking me to meet your committee at the Topeka Alfalfa Mill on July 31, was just received. I regret to state that I will be out of the city that afternoon on account of a prior engagement and will not be able to meet you.

But in compliance with your letter, I have made two trips to the Topeka Alfalfa Milling Company's plant and examined their new alfalfa grinder, both dormant and running. For identification, will say that this machine is called "The Glutton."

The general mechanical construction of the machine is good, both as to the power required to run it and the wear and tear it would necessarily receive in hard service. From the rough hay to the finished product, it does its work gradually, there being five points where the reduction is made from the time the hay is placed on the carrier until it leaves the mill a finished product. At each of these five distinct reductions it does its work systematically and delivers the material directly to the next cutters or grinders, there being no pockets, cavities, or stopping places for the hay in its progress through the machine.

The shafting and boxes are of sufficient size and proportion designed to insure cool running and above all to avoid any kinking in the shaft, due to any hard lump of hay passing through the mill. I find that they are using

phosphor-bronze bearing on the main shafting. This I would recommend to be supplanted with a lighter brass bearing lined with hard babbitt. The speed of this main cylinder is about 2,000 revolutions per minute, and it is my experience that for cylinders of such weight and high velocity it affords cooler and smoother bearing.

There is one cast gear and one small pinion that should be replaced by a cut gear and possibly raw hide pinion. This would make the machine practically noiseless while running.

The machine is remarkably steady while running, even at its high speed and heaviest capacity, which proves that all its parts are well balanced, and on account of these parts being perfectly balanced and there being practically no vibration of the machine whatever, the machine is insured for long life, for there is nothing that racks a machine so quickly as excessive vibration.

There is no indication whatever that the manufacturers slighted anything either in the material or workmanship, in their effort to turn out a first-class machine. In fact, if anything, they have gone to the extreme and made some parts heavier and stronger than was necessary. The wood framing of the machine is strongly and firmly mortised and fastened together.

In conclusion, I do not know of any agricultural machine or machine used in the production of any agricultural product that is so well designed or honestly built as this "Glutton Machine."

Yours truly,

F. W. THOMAS.

Topeka, Kansas, August 3, 1908.

Mr. I. D. Graham, Secretary Shawnee Alfalfa Club.

Dear Sir: On the afternoon of July 31 I conducted a test of the power consumed by the alfalfa disintegrator manufactured by the Topeka Alfalfa Milling Company, at the time when the committee of your club inspected the operating of this machine.

The alfalfa machine was operated for some time. I took readings every thirty seconds for a period of thirty minutes, during which time it produced 17 full bags of meal weighing 100 pounds each. The product for this period of the run was something greater than this, as some excess was taken from each sack in order to leave a contents of exactly 100 pounds. There was also some wastage around the machine and on the floor at the sacker and scales where sacks were weighed.

The electric power consumed during the run was 16 K. W. hours. This included the power required to bring the machine up to speed at the start and also the power consumed during the last minute of the run when no product was being fed into the machine. To arrive at the mechanical H. P. required to operate the machine during this run, without making allowance for current consumed at start and finish, we take the 16 K. W. hours of current consumed, which is 16,000 watt hours. A mechanical H. P. is the equivalent of 746 watt hours. This divided into 16,000 watt hours shows the actual consumption of H. P. hours during the thirty minutes to have been 21.45. Had the run continued for an hour this figure would have been doubled, so that the machine was consuming at the rate of 42.9 H. P. hours per hour.

I wish to state that all the above figures are more than liberal and that the machine would undoubtedly have consumed something less than at the rate of 40 H. P. hours per hour had a motor of the proper size been used in this test. The motor installed is about 50 per cent larger than it need be, as it has a rating of 65 H. P. Consequently it consumed more electrical power to overcome its own inertia than would be necessary with a smaller motor. Also, as the motor was only operating at two-thirds its capacity, its efficiency was probably in the neighborhood of 75 per cent instead of practically 100 per cent, which it should show.

I have used the term "machine," but this power record is of the plant, consisting of the disintegrator, a fan, a dust-collector, an elevator, and a sacker. The run of this last, the sacker, being intermittent, it is quite clearly shown by the chart of the thirty second readings that it required about 7 H. P. to run it.

To get the H. P. required to run the disintegrator proper you would have to deduct from the 42.9 H. P. the 7 H. P. of the sacker, and the power necessary to run the fan, dust-collector, and elevator, which are unknown to me.

Respectfully submitted,

JOHN T. HUNTINGTON,

Superintendent Edison Company.

NOTE.—Report received too late to admit of engraving chart for this issue.

Miscellany

Local Farmers' Institute to Come Early.

An announcement is being sent out by the Farmers' Institute department, Kansas State Agricultural College, relative to local institutes this fall in Eastern Kansas that may be of interest to many farmers. Every county has a county institute and those meetings will be held on the regular fall circuits, beginning October 12 or 19. But local institutes, meeting at small towns, away from the county seats or in groves, may be held in September or in the first week in October. Institute officers and others, farmers in other communities where an institute is wanted, should correspond

at once with the Farmers' Institute department asking for a date so September circuits can be arranged. Here is a chance for about twenty new local institutes in Eastern Kansas.

If there is a demand for local institutes in South-central Kansas a circuit can be arranged through the "Hessian Fly" district for the first two weeks in September. Address J. H. Miller, Manhattan, Kansas.

Corn Contest with Reference to Yield and Quality.

The following circular of instruction for preparing exhibits for entry in the acre-yield and quality contest in corn at the National Corn Exposition at Omaha, Neb., December 11, 1908, has been issued by Professor TenEyck. This contest is for Kansas farmers only:

1. Application for entry must be made to the chairman of the State committee by November 10, or before the corn is harvested.

2. The chairman of the State committee will appoint some one as assistant to help in measuring the acre and superintending the husking, weighing of the grain, sampling, etc., on such acre of land.

3. The party making the entry may recommend one or more persons whom he may be able to secure for assisting in the work mentioned above, but the appointment will be made by the chairman of the State committee.

4. The party making the entry and his assistant must make affidavit to the correctness of the work as regards measuring the land, weighing and sampling the corn, etc.

5. The corn must be husked when it is dry and in good condition, and this fact must be sworn to by the party making the entry and also by the assistant.

6. An average sample of the corn should be taken when it is husked, about a bushel basket of ears, and the same placed in a sack, weighed and shipped at once to the agronomy department of the Kansas State Agricultural College, which department will make a determination of the moisture in said sample. The total weight of the husked ear-corn per acre and the weight of the sample should be reported to the chairman of the State committee at the time the sample is shipped to the agronomy department.

7. It is possible by these weights and moisture determinations to reduce the yield reported from several contestants to the same standard as regards moisture content. The corrected yield of air-dry corn will be reported on the basis of 15 per cent of moisture in the ear corn.

8. This corrected yield of corn per acre in pounds, together with a thirty-ear sample of the crop, will constitute the exhibit at the National Exposition. The ears shown may be the best selection which it is possible to make from the total product of the acre.

9. A brief history of the growing of the corn, regarding location, soil, preparation of seed-bed, time of planting, etc., should be included with the sworn statements.

10. No charges will be made for application to enter this contest. All expenses connected with carrying out the above directions, express to the exposition, etc., must be borne by the party making entry. All fees will be paid when the entry is made at Omaha next December.

The committee wishes to make this acre yield and quality contest one of the most important exhibits. Ten premiums will be offered ranging from \$50 to \$5. This provision is made, however, that in order that the exhibit go on and the premiums be awarded, there must not be less than ten exhibitions. There are a thousand farmers in Kansas who may well enter this contest. Send in your application at once.

It is the conversion of its corn on the Kansas farm into beef, pork, poultry, dairy and similar products that brings the surplus to provide the comfortable homes and build the school-

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When we first notify you that your subscription has expired you should send your renewal at once. Should you receive a renewal blank after having sent your order for renewal, please disregard the notice. Owing to the fact that our circulation is growing so very rapidly we are obliged to make up our lists several days in advance of publication day, hence orders for change of address must reach us not later than Monday of any one week in order to become effective with that week's issue. New subscriptions which are received by us on or before Wednesday of any week will begin with that week's issue.

Address, THE KANSAS FARMER CO., Topeka, Kans.

houses, colleges and churches that are such common objects on the Kansas farmer's horizon and so largely a measure of his ambition.—F. D. Co-burn.

Shawnee Alfalfa Club.

When President Bradford Miller called the Shawnee Alfalfa Club to order in its regular session last Saturday he was confronted by a surprisingly large crowd of members and visitors. It proved to be one of the most enthusiastic meetings of the season in spite of the time of year and the pressure of farm work.

Before taking up the regular subject of discussion, Mr. O. E. Walker of Route 8 was asked to report on the results obtained in his experiment of making ensilage of alfalfa without chopping. It will be remembered that at the last meeting Mr. Walker reported that, because of the wet season, he made an attempt to save a part of his first crop of alfalfa by siloing it in an old ice-house. At the meeting on Saturday he showed a sample which he found to be still hot when taken from the silo and which was shown to the club in a very moist and browned condition. It was evidently not spoiled in any way but was thoroughly cured and had a spicy flavor. In order to see what reception would be given it by his live stock he fed a quantity to a cow that was accustomed to a daily ration of alfalfa and she ate it very greedily. The same results obtained when fed to work horses and mules. He is much pleased with the results of his experiment, although of course, whole alfalfa is difficult to handle in a silo. This little experiment may help to solve the problem of taking care of the first crop in a rainy season.

Colonel J. F. True reported that he had had a somewhat similar result from red clover in the stack, though in his case he thought it might be explained by stacking the clover when too green. It did not seem to interfere with its feeding value.

E. V. Mahaffey was the only one in the audience who could report having had experience with alfalfa in the silo. He stated that it was very satisfactory if cut in proper lengths so it could be well packed and consequently more thoroughly cured.

The subject for the afternoon was Seeding and Disking Alfalfa, and Colonel True was very emphatic in his belief that too much time and labor can not be expended in the careful preparation of the soil. Colonel True advised against disking and in favor of plowing and packing and not to waste money on too much seed. He thinks that the soil can be better prepared with the plow and sub-surface packer than with the disk and advises that more than twelve pounds of seed to the acre should never be used.

Mr. Walker is convinced that disking the land in preparing the seed-bed is a waste of time. He says he can prepare his soil better and cheaper by plowing and packing than by disking. Labor spent in preparing a seed-bed brings ample returns. He thinks from 8 to 10 pounds of seed per acre is enough. His own practice is to sow in the spring not later than March 1, after having plowed the land in the fall. He advises that the

first crop be cut often enough to prevent weeds from going to seed. Pay no attention to crab-grass and fox-tail and the second season the crop will be clean.

J. G. Stiles spent considerable time and expense in the preparation of his seed-bed and then found that he had a fine volunteer crop of oats. On cutting the oats he found large areas of the field whereon no alfalfa showed but later it came up as if just sprouting from the seed.

E. Kempton stated that three years ago he made the best seed-bed that he ever saw. He intended to sow ten pounds of seed but only sowed eight, and now has one of the finest pieces of alfalfa in the country. Another piece of alfalfa south of town was sowed in the fall and the crab-grass took it. He believes that it pays to sacrifice the spring crop and to summer fallow the ground before sowing in August. The results will more than pay for the loss of the spring crop. As possession is nine points of the law so thorough preparation is nine points of success in alfalfa growing. His own practice is to sow broadcast as he is equally expert with both hands and his skill enables him to give the seed better distribution. Too much seed is a waste as the plant will have to thin itself. Six pounds of seed per acre is enough if the seed-bed is well prepared.

Mr. A. L. Brooks of Jefferson County believes that poor ground requires more seed than does good ground. He sows his own seed and believes that a good stand may be secured through preparatory disking though better preparation is had by use of the plow and packer. Would use the sub-surface packer and continue it until the ground is hard. [See Topeka Foundry advertisement in this issue.] This is the last tool used on the ground in spring sowing. He has disked some fields with the wheel disk though the Emerson Alfalfa Renovator is by far the best tool that has ever been invented for the purpose.

D. L. Button of Elmont found that his seed had evidently been mixed and that after the first cutting the field showed about one-half red clover. His question as to what he should do in the case was answered by the suggestion that as alfalfa and red clover do not crop together he would soon be rid of the latter if it was not allowed to go to seed.

The Topeka Alfalfa Milling Company extended an invitation to the club to appoint some delegates and they to select some experts if desirable and visit the mill to see their newly patented Glutton Alfalfa Disintegrator. By vote this invitation was accepted for Friday afternoon, and O. E. Walker, C. W. Merriam, H. H. Wallace, A. L. Brook, J. E. True, L. R. Taylor, Geo. M. Kellam, and Dr. DeWolfe were appointed as such committee.

The secretary read an invitation from H. W. McAfee for the club to hold its next monthly meeting at Prospect Farm. While the members appreciated the invitation and were thankful for it, they thought it unwise to change their place of meeting for the present.

The election of a vice-president from each township in the county and

(Continued on page 854.)

Agriculture

Wheat Culture.

A. M. TENEYCK, PROFESSOR OF AGRONOMY,
K. S. A. C., MANHATTAN, KANS.

[ABSTRACT.]

The average yield of wheat in Kansas for the last ten years, 1896-1905, was only 13.1 bushels per acre. The average yield for all of the States during the same interval was 13.4 bushels per acre. Kansas, although having a soil and climate naturally adapted for growing wheat, produces less wheat per acre than the average of all other States, several of which are much less adapted for growing wheat than Kansas.

The large production of wheat in this State is due to the number of acres grown rather than to good farming and large yields. The possible wheat crop of Kansas is much greater than the actual crop.

This season, 1906, a measured acre of wheat grown by the Agronomy Department of the Kansas State Agricultural College produced an actual yield of 3,516 pounds of grain, or 58.6 bushels. Twelve acres in the same field yielded on an average over 50 bushels of wheat per acre.

In 1905 some of the best-producing plots of wheat on the Agricultural College farm yielded at the rate of nearly 50 bushels of grain per acre and some farmers in Central and South-western Kansas reported nearly as great yields from large fields, and yet the average yield of winter wheat in the State in 1905, as given by Secretary Coburn's report, was only 13 bushels per acre.

There is great opportunity to increase the average yield of wheat in this State. It may not be possible to produce average crops of 50, 40, or even 30 bushels per acre, but by growing better-producing varieties of well-bred wheat, maintaining the fertility of the soil and practicing reasonably good culture the average wheat yield of Kansas for the next ten years may be made to reach 20 bushels per acre, or 50 per cent greater production than during the preceding ten years.

The wheat crop may be injured by insect pests, by plant diseases, and by unfavorable weather conditions. The farmer has no control or only partial control over these agencies. The most important factors in wheat-production over which the farmer has control are good seed, a proper seed-bed and fertile soil.

THE SEED.

Good seed means more than seed that will sprout and grow; it means well-bred wheat adapted to the climatic and soil conditions of the locality in which it is grown. Crops must be grown and bred in the regions where they are intended to be grown. Drought-resistant crops can not be produced or bred in humid regions. Very little has been done in the way of breeding or adapting crops to western farming conditions.

That there is a great difference in varieties of wheat in productiveness and quality of grain produced is shown by the trials at the several experiment stations. Among eighteen varieties of winter wheat grown at the State Experiment Station at Manhattan in 1904, the yields varied from 19.5 to 35 bushels per acre. In 1905, 30 varieties were planted, the yields ranging from 30 to 47.5 bushels per acre. Even larger differences in yield between what were considered good varieties of wheat have been observed at the Fort Hays Branch Station and at the United States-Kansas Cooperative Station at McPherson.

A large number of varieties of wheat have been tested at these several stations during the past three years. The varieties which have given the largest average yields at Manhattan are: the Kharkof, Malakoff, Red Turkey, Bearded Fife, Defiance, Ghirka, Zimmerman, and Fultz; at the Ft. Hays Station: Turkey, Imported Turkey, Kharkof, Weisenberg, Theiss, Crimean, Banat, and Ulta; and at the McPherson Sta-

tion: Turkey, Kharkof, Crimean, Theiss, Weisenberg, Banat, and Ghirka.

The hard red winter wheat and the soft red winter wheat are the two types best adapted for growing in this State, and these types have their special adaptation to certain sections of the State, the soft red wheat being superior to the hard wheat only in the eastern and southeastern counties, while throughout the great central wheat belt of Kansas and in the north and west the hard red wheat has been found to be the most hardy and productive.

In order that the testing of varieties of wheat by experiment stations may become of permanent value to farmers, seed selection and propagation must go on with variety testing, and this work is being undertaken at the several Kansas Stations. Some 600 bushels of seed wheat of the best-producing varieties were sold and distributed among the farmers of the State by these stations in the fall of 1905, and two or three times this amount of winter wheat and other winter grains has been produced at the several stations this season and is now being distributed for fall seeding.

There is no question but that some varieties of wheat are superior to others in hardness, quality, and productiveness, and that certain varieties are better adapted than others for growing in certain sections of the State. The tests at the experiment stations prove this, and a farmer should be well repaid for securing and planting a little pure seed-wheat of one or more of the best-producing varieties, as shown by the tests at the experiment stations.

To produce seed-wheat the grain should be well graded and only the heaviest, plump seed sown, in a separate field, at the most favorable season, and given the best possible culture. Care should be taken to grow the seed-wheat on fields free from volunteer wheat. Much of the wheat of Kansas, because it is so mixed, grades No. 3 or 4, while if the wheat were pure in type it might grade No. 1 or 2.

Harvest the wheat which is to be saved for seed when it is just fully mature. Immature seed is apt to be shrunken and deficient in vitality. On the other hand, as soon as the wheat is over-ripe it begins to deteriorate in quality and may lose some of its vitality. Do not allow the seed-wheat to be damaged by rain, but thrash it at once or put it in the stack or barn for safe keeping. Take great care in thrashing the seed-wheat not to mix it with other grain or other varieties of wheat; keep it in a bin by itself. Clean the grain well and sow the best grade again to secure seed for another year's planting.

If such a method of growing and saving seed were practised by a majority of the wheat farmers of this State the average yield of wheat should be increased several bushels per acre and the quality of the grain would be much improved.

Many farmers have made it a practice to change seed of wheat and other crops occasionally, claiming that when they grow the same seed for a long time that it runs out and becomes less hardy and productive than it was when first introduced. If wheat is not adapted for growing in a certain region, doubtless there is an advantage in securing new seed occasionally from the sources where the crop grows to perfection, but if a variety of wheat is adapted to a certain climate and soil, or has become adapted by a long period of planting and selection, nothing would be gained and much might be lost by introducing new seed of the same variety from the original source. If a better variety or better strain of the same variety is obtained there might be some advantage in changing seed.

The hard red winter wheat is better adapted for growing in Western and Northern Kansas than in the eastern and southern portions of the State, and some advantage may be gained in the sections last named by introducing new seed-wheat occasionally from the west and north, since in these sections of the State a more perfect type and better quality of hard red

winter wheat may be grown; but it is not advisable to introduce seed-wheat from a foreign country or State which has a climate or soil very different from the climate or soil of the locality where the wheat will be grown.

THE SEED-BED.

With viable seed planted in the soil a few simple factors largely determine the strength of germination, the stand and yield of the crop, and the quality of the grain produced. These factors are moisture, heat, and air.

Every farmer knows that a dry seed will not germinate. No matter how favorable other conditions may be, before the processes are begun which start or renew life and produce growth the seed must absorb moisture.

Every seed requires a favorable degree of heat before it will germinate, and the presence of air is necessary in order to supply the "life-giving" oxygen. A seed placed in a vacuum with the proper degree of heat and moisture will not germinate, and the same results often occur when seeds are planted in a very wet or water-logged soil, because the air is largely excluded from a soil in such condition.

In order to secure the ideal conditions for seed germination and plant growth a seed-bed for wheat should not be too deep and mellow; rather the soil should be mellow but yet finely pulverized only about as deep as the seed is planted. Below the depth at which the seed is planted the soil should be firm, making a good connection with the subsoil, so that the soil water stored in the subsoil may be drawn up into the surface soil.

The firm soil below the seed, well connected with the subsoil, supplies the moisture to the seed, while the mellow soil above the seed allows sufficient circulation of air to supply oxygen and favors the warming of the soil, gathering the heat of the sunshine during the day and acting as a blanket to conserve the soil heat, maintaining a more uniform temperature of the soil during the night.

The mellow soil above the seed conserves the soil moisture, acting as a mulch to keep the water from reaching the surface, where it would be rapidly lost by evaporation, and the same condition favors the growth of the young shoot upward into the air and sunshine, where in the presence of oxygen, light and a favorable degree of heat the green leaves quickly begin the work of assimilation, and the soluble plant-food elements absorbed by the roots are rapidly transferred into protoplasm, starch, and the various tissues which build up plant structure, and the young plant grows and is soon established on its own roots.

With a deep, loose seed-bed the conditions are less favorable for seed germination than in the "ideal" seed-bed described. The mellow soil may be warm enough and well aerated, perhaps too well aerated, causing the soil to dry out, but with the deep, mellow seed-bed the moisture in the subsoil is not available for the use of the germinating seed, because the capillary rise of water is checked at the bottom of the mellow soil.

Such a seed-bed is almost wholly dependent upon rains for sufficient moisture to germinate the seed and start the young plants, and even if such favorable weather conditions prevail at seeding time, so that the seed may germinate and the crop start, yet at almost any time during the growing season if drought prevail the crop growing in the deep, loose seed-bed is more apt to be injured because of the rapid drying out of the surface soil. In such a seed-bed the crop is not only apt to "burn out" in summer but it is also more apt to "freeze out" in winter than a crop grown in the "ideal" seed-bed described above.

CONSERVING SOIL MOISTURE.

So far as cultivation is concerned there are three principal steps in the conservation of soil moisture:

1. The soil must be loosened to a considerable depth in order to prepare a reservoir to receive the rain and carry the water downward into the soil. This may be accomplished by

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deep plowing, by listing, or by disking unplowed lands.

2. The water which is carried down into the subsoil must be brought back again into the surface soil where the seed is germinating and the young roots are growing, and to accomplish this a good connection must be made between the furrow slice and the subsoil, and this is the purpose of the use of the subsurface packer immediately after plowing.

3. Finally, in order that the water which is drawn up again towards the surface may not reach the air and be wasted by evaporation, the upper two or three inches of the soil must be kept mellow in the form of a soil mulch, and this is accomplished in the growing of crops by frequent cultivation, which is not so practicable with wheat as with corn and similar crops. However, the harrow may often be successfully used in preserving the soil mulch in the wheat field.

PREPARING THE SEED-BED.

When wheat follows wheat or other small grain a good seed-bed may be prepared by plowing early and cultivating at intervals until seeding time. The natural settling of the soil with the surface cultivation produces in the average season nearly ideal seed-bed conditions.

It is necessary to plow deep in order to increase the capacity of the soil to catch and hold water, since storing water in the soil and sub-soil is really the most important factor in soil moisture conservation.

Prof. F. H. King determined by his experiments at the Wisconsin Experiment Station that with good culture and no waste of soil moisture twelve inches of water stored in the soil was sufficient to produce 40 bushels of wheat per acre.

Sufficient rain falls every year, even in the western counties of the State, to produce maximum yields of wheat provided this moisture could be caught and stored in the soil as a reserve supply for the crop if drouth should prevail during the period of growth. The rainfall, in time and amount, during the growing season, is an uncertain factor, hence the importance of storing water in the soil previous to planting the wheat and while the seed-bed is being prepared.

A new method of preparing the land for wheat is to list the ground soon after harvest, much the same as in planting corn. This leaves the land furrowed and with a covering of mellow soil, in excellent condition to catch the rain and carry the moisture down deep into the sub-soil, and by an occasional harrowing or disking after heavy rains the soil is gradually worked back into the furrows, leaving the ground level and mellow at the surface at seeding time, with the water stored below and the seed-bed in excellent condition to sprout the seed and start the young wheat plants.

When it is not possible to plow early, an excellent plan is to disk the ground immediately after harvest, continuing the use of the disk or common harrow at intervals, if the soil becomes firm or weedy, until the land is plowed or seeded again to wheat.

When the plowing precedes the sowing by a short interval it is well to follow the plow with the subsurface packer and harrow in order to pulverize and pack the soil at the bottom of the furrow slice and leave a mellow, even surface.

The disk harrow may be made to do the work of the subsurface packer. Set the disks straight and weight the harrow, causing the disks to sink deep in the mellow soil and pulverize and firm the bottom of the furrow slice, re-establishing a good capillary connection of the soil with the subsoil.

This packing and pulverizing of the furrow slice is especially necessary when the soil is plowed dry or when a large amount of stubble, trash, or manure is plowed under, because if the furrow slice is left loose and unpulverized the capillary connection of the soil with the subsoil is largely broken off, and the soil water will not rise into the surface soil to supply the germinating seed and feed the roots of the young plants, hence the seed fails to germinate well, the stand is often

poor, and in such a seed-bed the crop "freezes out" during the winter or "burns out" during drouth the succeeding summer.

If corn or other cultivated crops are removed from the land early, provided such land has been given good cultivation and is free from weeds, disking and harrowing will put such soil into good condition for sowing wheat.

No crop that grows late into the fall, leaving the ground dry at the surface, is a suitable crop to follow with wheat. Late corn, Kafir-corn, and sorghum often leave the soil too dry and hard or are removed too late in the season to sow wheat.

It is a common practise to sow wheat in corn with the one-horse drill, but the objections to this method are the same as already urged, for if the corn is late in maturing the ground is left dry and exhausted in available plant food, often resulting in a poor start and thin stand of wheat. Better follow corn with some spring grain crop which may be harvested early enough so as to prepare a seed-bed by plowing early and cultivating according to the methods outlined above.

SUMMER CULTURE.

In regions where the rainfall is not sufficient to produce a paying crop every year it may be advisable to summer fallow the land every third or fourth year, or every alternate year if this is necessary, in order to conserve a sufficient supply of moisture to insure a profitable crop when wheat is planted. "Summer culture" should be practised along with summer fallow, the purpose being to keep the land in a mellow condition and free from weeds in order that the soil may absorb and retain the rain water. The cultivation not only conserves the moisture in the soil, but also favors the development of the fertility of the soil, so that a larger amount of plant-food may become available to the crops following the summer fallow.

Summer fallowing may exhaust the fertility of the soil faster than continuous cropping, since there is apt to be a waste of soluble plant-food elements by wind and drainage. Also, on account of the bare and finely pulverized condition of the surface soil due to continued cultivation, the land is apt to blow and drift with the wind when dry, or wash away with excessively heavy rains. On the whole I do not recommend summer fallowing except in regions of very light rainfall, but recommend instead good culture every year and a rotation of crops.

MAINTAINING SOIL FERTILITY.

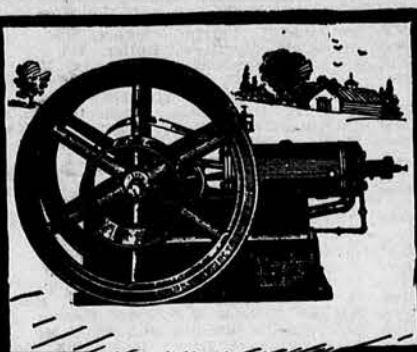
In a sense "tillage" is manure, because the favorable conditions brought about by cultivation of the land cause the plant-food in the soil to become available faster than would be the case without tillage; but thorough tillage alone will not keep the soil fertile, the fertility of the soil being more rapidly exhausted by the production of the larger crops, and there is also a greater tendency to waste soluble plant-food by drainage, etc.

It has been the history of wheat farming in this country that all wheat lands have finally ceased to produce profitable crops, and the wheat growing area has moved ever westward. Now, however, practically all land available for the growing of wheat has been taken, and if wheat growing in this country is to continue to be profitable there must be a change in the methods of farming.

Wheat can not be grown continuously on the same land without exhausting the fertility of the soil for the production of this crop. Much of the land of Kansas has already been cropped continuously with wheat too long. Such land is "wheat sick." It is only partially exhausted in fertility, but it needs a change of crops.

Land which is long cropped with wheat becomes deficient in humus and nitrogen, which must be restored by manuring or by the growing of grasses and legume crops. By a proper rotation of crops, in which the humus and nitrogen taken from the soil by the grain crops, is restored again in the growing of annual legumes, grasses, alfalfa, and clover, with a return to the land of the manure made by feeding

(Continued on page 844)



FARMERS are getting over doing things the hard, slow way. The very general use of farm powers is an example.

As a matter of fact, the farmer has as great need of a reliable power as the mechanic.

Take the average barn for illustration. Locate one of the simple, dependable I. H. C. gasoline engines, such as is shown here, outside the barn door, or within the barn, for that matter, and what a world of hard labor it will save! You will have a power house on your farm.

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They are built in:—

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Also sawing, spraying and pumping outfits.

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It will be to your interest to investigate these dependable, efficient engines. Call on the International local agent and get catalogues and particulars, or write the home office.

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Cuts and throws stalks in piles or windrows. Man and horse cuts and shocks equal with a corn binder. Sold in every state direct to farmers where corn and Kafir corn is grown. Beware of imitations of the Ziegler harvesters that are cheaply made by blacksmiths and other small manufacturing concerns and sold for \$10, and some as high as \$12, which are dear at any price. None genuine unless marked Ziegler Corn Harvester. Price of the Ziegler Corn Harvesters is \$15 with seat and dropping hook. Don't fail to send and get our free catalog and testimonials.

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Purchasers are all as well pleased as Mr. Fry and Mr. Rutherford. Why should you not buy a harvester. We have been selling this harvester since the fall of 1894.

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season 1907, and cut corn, Kafir corn and maize. One man cut and shocked 60 shocks, 288 hills, of heavy Kafir corn, in a day. The harvester does good clean work, shaves off the smallest stalks. All who saw the machine in operation were well pleased with its work. I have sold my harvester, so I will want another this fall.

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Runs easy, and cuts and gathers corn, cane, Kafir-corn, or anything which is planted in rows

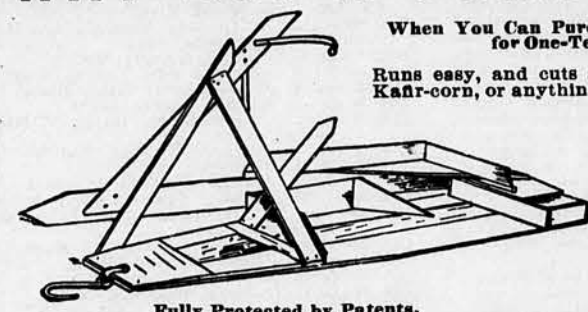
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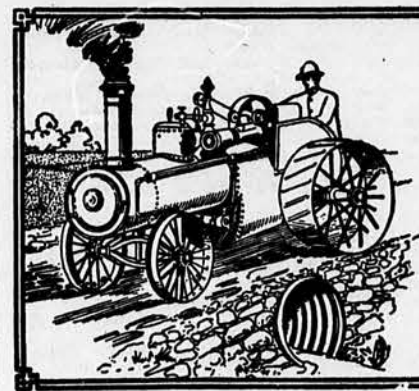
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L. K. Lewis.....Kansas and Oklahoma
A. L. Hutchinson.....Kansas and Nebraska
Geo. E. Cole.....Missouri and Iowa

PURE-BRED STOCK SALES.

Shorthorns.

Sept. 10—H. K. Frantz, University Place, Neb., at State Fair Grounds.
Sept. 23—B. Whistler & Son, Litchfield, Neb.
Sept. 23—S. W. Hogate, Bladen, Neb.
Oct. 6—A. O. Stanley, Sheridan, Mo.
Nov. 25—E. D. Ludwig, Sabetha, Kans.
Feb. 17—J. F. Stodder, Wichita, Kans.
Feb. 17—J. C. Robinson, Mgr., Wichita, Kans.

Herefords.

Sept. 15, 16—J. F. Gulick, Jasper, Mo.
Sept. 23—Jesse Engle, Sheridan, Mo.
Sept. 29—Mrs. S. W. Hudson, Sibley, Mo.
Oct. 21—Miner Bros., Craig, Neb.
Oct. 30—J. E. Wert Clark, Mo.

Red Polls.

Oct. 7—J. B. Davis, Fairview, Kans.

Aberdeen-Angus.

Nov. 5—Dispersion of Anderson & Findlay herd at Iowa, Kans., W. C. McDevitt, Mgr., Springfield, Ill.

Jerseys.

Oct. 12—J. B. Givens, Watonga, Okla., at Oklahoma City.
Oct. 20—Kinloch Farm, Kirksville, Mo.

Poland-Chinas.

Sept. 3—T. P. Crabb, Moberly, Mo.
Sept. 7—Koss Bros., Ottumville, Mo.
Sept. 9—H. E. Maupin, Pattonsburg, Mo.
Sept. 10—Leslie McCormick, Laddonia, Mo., and M. D. Porter, Vandalia, Mo., at Vandalia, Mo.

Sept. 11—J. F. Thomas, Maple City, Kans.
Sept. 11—G. W. McKay, Laredo, Mo.
Sept. 12—Ed McDaniel, Parsons, Kans.
Sept. 22—B. F. Ishmael, Laredo, Mo.
Sept. 23—Knorr Bros., Pleasant Hill, Mo.
Sept. 23—B. Whistler & Son, Litchfield, Neb.
Sept. 24—A. K. Sell, Fredonia, Kans.
Sept. 26—J. A. Jenkins, Conway Springs, Kan.
Sept. 26—P. L. Clay, Broken Arrow, Okla.
Sept. 28—W. L. Wright, Jr., Rosendale, Mo.
Sept. 29—J. H. Harvey & Son, Maryville, Mo.
Sept. 30—H. H. Colbert, Tishomingo, Okla.
Sept. 30—W. E. Hamer & Sons, Shelbyville, Ind.

Oct. 1—W. J. Wright, Jr., Rosendale, Mo.
Oct. 2—J. M. Devlin, Cameron, Mo.
Oct. 3—Lee Stanford, Lyons, Kans.
Oct. 3—Andrews Stock Farm, Kearney, Mo.
Oct. 3—D. C. Longman, Florence, Neb.
Oct. 5—L. D. Arnold, Enterprise, Kans.
Oct. 5—E. A. Vanscoy, Mont Ida, Kans.
Oct. 6—A. O. Stanley, Sheridan, Mo.
Oct. 7—J. M. Bader, Elmo, Kans.
Oct. 7—F. E. Muller, Hamilton, Mo.
Oct. 9—Barkley Bros., Louisburg, Kans.
Oct. 9—Ell Zimmerman, Fairview, Kans.
Oct. 10—Crofford & Drummond, Norton, Kans.
Oct. 10—H. H. Harshaw, Butler, Mo., at Harrisonville, Mo.

Oct. 10—N. R. Riggs, Lawson, Mo.
Oct. 10—C. D. Swain, Robinson, Kans.
Oct. 10—A. E. Schmidt, Alma, Kans.
Oct. 10—Smith Brooks, Gladale, Iowa.
Oct. 12—Fred Collet, Lincolnville, Kans.
Oct. 12—Fred Willie, Columbus, Neb.
Oct. 12—E. E. Axline, Oak Grove, Mo.
Oct. 12—D. A. Moats, Polo, Mo.
Oct. 12—Andrew Johns, Rosendale, Mo.
Oct. 13—H. H. Crawford, Rea, Mo.
Oct. 13—O. E. Wade, Rising City, Neb.
Oct. 14—W. V. Hope & Son, Stella, Neb.
Oct. 14—O. N. Remington, Tekama, Neb.
Oct. 14—G. W. Allen, Tonnawoxie, Kans.
Oct. 15—W. R. Webb, Bendena, Kans.
Oct. 15—W. O. Golde, Scribner, Neb.
Oct. 15—M. W. Adamson, Lincoln, Kans.
Oct. 15—Thos. Collins, Lincoln, Kans.
Oct. 15—G. E. Hayden & Son, Newkirk, Okla.
Oct. 15—Myers & Son, Clifton Hill, Mo.
Oct. 16—E. A. Herbert, Mulhall, Okla.
Oct. 16—G. M. Hull, Burchard, Neb.
Oct. 17—Scott & Singer, Hiawatha, Kans.
Oct. 17—C. E. Roveton, Canute, Okla.
Oct. 17—Stryker Bros., Fredonia, Kans.
Oct. 17—J. F. Burnham, Fayette, Mo.
Oct. 19—Frank Michael, Erie, Kans.
Oct. 19—W. H. Griffiths, Clay Center, Kans.
Oct. 19—Herman Groninger, Bendena, Kans.
Oct. 19—W. E. Adams, Elk Falls, Kans.
Oct. 20—L. P. Fuller, Morrowville, Kans.
Oct. 20—A. R. Enos, Lost Springs, Kans.
Oct. 20—Jno. McKerrlie, Dawn, Mo.
Oct. 20—J. L. Dars, Huron, Kans.
Oct. 20—Eolan & Aaron, Leavenworth, Kans.
Oct. 20—Davidson & Chrysler, DeWitt, Neb.
Oct. 21—John Blain, Pawnee City, Neb.
Oct. 21—Leon Calhoun, Potter, Kans.
Oct. 21—Jno. Blaine, Pawnee City, Neb.
Oct. 21—A. B. Hale, Cameron, Mo.
Oct. 22—O. A. Sunderman, Madison, Neb.
Oct. 22—W. H. Bullen & Son, Belleville, Kan.
Oct. 22—J. A. Harnes, Hamilton, Mo.
Oct. 22—T. E. Pletcher & Son, Topeka, Kans.
Oct. 23—A. P. Young, Lexington, Mo.
Oct. 23—Carl Jensen & Son, Guide Rock, Neb., at Belleville, Kans.

Oct. 23—S. W. Coleman, Sedalia, Mo.
Oct. 23—Everett Hayes, Hiawatha, Kans.
Oct. 24—T. F. Walker, Alexandria, Neb., at Fairbury, Neb.
Oct. 24—C. L. Hurless, Coleta, Ill.
Oct. 24—J. H. Hamilton & Son, Guide Rock, Neb.
Oct. 24—Reischick, Wittrock & Wyatt, Falls City, Neb.
Oct. 24—B. T. Wray & Sons, Hopkins, Mo., at Maryville, Mo.

Oct. 26—Geo. J. Hibbs, Pattonsburg, Mo.
Oct. 26—D. S. Weir, Clay Center, Kans.
Oct. 27—C. E. Tennant, New Hampton, Mo.
Oct. 27—Logan & Gregory, Beloit, Kans.
Oct. 27—W. H. Johnston, Frankfort, Kans.
Oct. 27—Homer L. McKelvie, Fairfield, Neb.
Oct. 27—W. B. Slen, Mgr., Surprise, Neb.
Oct. 28—Cavett Bros., Phillip, Neb.
Oct. 28—R. E. Maupin, Pattonsburg, Mo.
Oct. 28—C. Plicher, Glasco, Kans.
Oct. 29—Thos. Shattuck, Hastings, Neb.
Oct. 29—W. H. Lake, Hampton, Neb.
Oct. 29—F. D. Fulkerson, Brimson, Mo.
Oct. 29—Thos. F. Miller & E. J. Hays, York, Neb.

Oct. 29—Klaus Bros., Bendena, Kans.
Oct. 30—Geo. W. McKay, Laredo, Mo.
Oct. 31—F. D. Page, Orrick, Mo.
Oct. 31—J. B. Hamilton, Spickard, Mo.
Nov. 4—Henry Metzinger & B. F. Porter, Caldwell, Kans.

Nov. 5—John Book, Talmage, Kans.
Nov. 5—W. J. Hather, Ord, Neb.
Nov. 6—C. S. Nevius, Chiles, Kans.
Nov. 6—J. E. Bowser, Abilene, Kans.
Nov. 6—J. E. Summers, Clifton Hill, Mo.
Nov. 6—Kivett Bros., Burr Oak, Kans.
Nov. 7—W. B. Hayden, Campbell, Neb.
Nov. 7—Shipley Bros., Grant City, Mo.
Nov. 7—D. C. Stayton, Blue Springs, Mo.
Nov. 8—Herbert Griffith Clay Center, Kans.

Nov. 10—N. E. Copeland, Waterville, Kans.
Nov. 10—Aych L. Perrin, Buckner, Mo.
Nov. 10—H. H. Harshaw, Butler, Mo.
Nov. 11—J. W. Beauchamp, Bethany, Mo.
Nov. 11—J. W. & H. F. Pelphrey & Sons and Jewell Bros., at Humboldt, Kans.
Feb. 11—O. N. Remington, Tekama, Neb.
Nov. 12—Schneider & Moyer, Nortonville, Kan.
Nov. 12—H. O. Sheldon, Wichita, Kans.
Nov. 12—J. R. Sparks, Hunter, Okla.
Nov. 13—Frank Zimmerman, Centerville, Kan.
Feb. 13—Thos. F. Walker, Alexander, Neb., at Fairbury, Neb.

Nov. 14—J. E. Bundy & S. N. Hodgson, Parker, Kans.
Nov. 14—Geo. B. Rankin, Marion, Kans.
Nov. 16—Wm. Wingate, Trenton, Mo.
Nov. 17—C. G. Mills, Pleasant Hill, Mo.
Nov. 17—W. R. Crowther, Golden City, Mo.
Nov. 18—Geo. F. Bezeley, Girard, Kans.
Nov. 19—Leyth & Purcell, Marshall, Mo.
Nov. 20—Sensintaffer Bros., Brookfield, Mo.
Nov. 23—F. A. Dawley, Waldo, Kans.
Nov. 24—A. P. Wright, Valley Center, Kans.
Nov. 25—F. F. Oerly, Oregon, Mo.
Nov. 25—F. G. Nies & Son, Goddard, Kans.
Nov. 26—D. E. Crutcher, Drexel, Mo.
Nov. 27—J. H. Harvey & Son, Maryville, Mo.
Nov. 28—J. D. Willoughby, Zeandale, Kans., at Manhattan, Kans.

Nov. 28—C. T. Coates, Cleveland, Okla.
Dec. 5—G. W. Roberts, Larned, Kans.
Dec. 7—H. N. Holdeman, Meade, Kans.
Jan. 19—T. A. McCandless, Bigelow, Kans.
Jan. 21—H. H. Harshaw, Butler, Mo., at Sedalia, Mo.

Jan. 25—Frank Michael, Erie, Kans.
Jan. 27—Homer L. McKelvie, Fairfield, Neb.
Jan. 28—W. H. Johnston, Frankfort, Kans.
Feb. 3—F. Nies & Son, Goddard, Kans.
Feb. 4—W. W. Martin, Anthony, Kans.
Feb. 4—H. O. Sheldon, Wichita, Kans.
Feb. 9—Kivett Bros., Burr Oak, Kans.
Feb. 9—Henry Metzinger and B. F. Porter, Caldwell, Kans.

Feb. 10—Lemon Ford, Minneapolis, Kans.
Feb. 11—C. S. Nevius, Chiles, Kans.
Feb. 12—Geo. Wedd & Son & C. S. Nevius, at Spring Hill, Kans.
Feb. 12—D. A. Wolfersperger, Lindsey, Kans.
Feb. 13—Frank Georgia, Mankato, Kans.
Feb. 17—John Book, Talmage, Kans.
Feb. 18—J. C. Larrimer, Wichita, Kans.
Feb. 18—J. E. Bower, Talmage, Kans.
Feb. 21—J. W. Hoyle, Dwight, Kans.
Feb. 24—Logan & Gregory, Beloit, Kans.
Feb. 25—H. H. Harshaw, Butler, Mo.
Feb. 25—W. A. Prewett, Asherville, Kans.
Feb. 26—C. H. Pilcher, Glasco, Kans.

Duroc-Jerseys.

Aug. 20—H. L. Stites, Pilot Grove, Mo.
Sept. 2—F. L. Bowman, Kinston, Mo.
Sept. 8—A. F. Russell, Savannah, Mo.
Sept. 10—B. W. Hale, Laddonia, Mo.
Sept. 10—Maupin & Applegate, Shelbyville, Mo.
Sept. 11—C. A. Wright, Rosendale, Mo.
Sept. 11—W. R. Turner & Son, Shelbyville, Mo., at Shelbyville, Mo.

Sept. 24—J. W. Taylor, Edwardsville, Kans.
Sept. 29—Geo. A. Nordyke, Allen, Neb.
Sept. 29—W. H. Cummings & Son, Tecumseh, Neb.

Sept. 29—S. W. Hogate, Bladen, Neb.
Sept. 30—John Showalter, Cook, Neb.
Oct. 1—Dittmars Bros., Turney, Mo.
Oct. 1—C. W. Buck and W. F. Waldo, De Witt, Neb.

Oct. 3—Arch Brown & Sons, Waterloo, Neb.
Oct. 6—Ford Sken, Auburn, Neb.
Oct. 6—N. J. Fuller, Garnett, Kans.
Oct. 7—J. B. Davis, Fairview, Kans.
Oct. 7—W. H. Dittenderfer, Lost Springs, Kans.

Oct. 7—W. J. Tucker, Elk City, Kans.
Oct. 8—W. M. Putman & Son, Tecumseh, Neb.
Oct. 8—F. J. Miller, Wakefield, Kans.
Oct. 16—Lynch & Addy, at Independence, Mo.
Oct. 16—Forest Ray, Sheridan, Mo.
Oct. 17—W. J. Constant, Grant City, Mo.
Oct. 18—J. E. Ellsworth, Formosa, Kans.
Oct. 20—Sweeney Bros., Kilder, Mo.
Oct. 20—G. Van Patten, Sutton, Neb.
Oct. 20—E. F. Larne, Lyons, Neb.

Oct. 21—Geo. Briggs & Sons, Clay Center, Neb.
Oct. 21—E. D. Ludwig, Sabetha, Kans.
Oct. 21—T. S. Larrow, Miltonvale, Kans.
Oct. 21—Pearl H. Pagett, Beloit, Kans.
Oct. 22—Ola Nordstrom, Clay Center, Kans.
Oct. 22—W. T. Hutchinson, Cleveland, Mo.
Oct. 22—H. G. Warren, Inland, Neb.
Oct. 23—Hopkins Bros. & Sanstead, Holdrege, Neb.

Oct. 23—J. C. Monk, Ridgway, Mo.
Oct. 24—O. G. Smith & Son, Kearney, Neb., and Ross R. Steele, Wood River, Neb., at Wood River.

Oct. 26—Watts & Dunlap, Martin City, Mo., at Independence, Mo.
Oct. 27—E. S. Watson, Torney, Mo.
Oct. 27—R. B. Adams & Son, Thayer, Kans.
Oct. 27—O. N. Wilson, Silver Lake, Kans.
Oct. 28—S. A. Hands, Thayer, Kans.
Oct. 28—Grant Chapin, Green, Kans., at Manhattan, Kans.

Oct. 23—W. H. Wheeler & Sons, and W. H. Miller, Cameron, Mo.
Oct. 23—Chas. Leibhart, Marquette, Neb.
Oct. 23—G. W. Cowell, Sumnerfield, Kans.
Oct. 23—Geo. M. Hammond & K. S. A. C., Manhattan, Kans.

Oct. 30—Thompson Bros., Garrison, Kans.
Oct. 30—Burton Hahn, Norton, Kans.
Oct. 30—J. E. Rowe, Stockham, Neb.
Oct. 31—E. C. Gwinner, Holdrege, Neb.
Oct. 31—J. E. Joines, Clyde, Kans.

Nov. 3—E. M. Myers, Burr Oak, Kans.
Nov. 4—B. F. Porter, Mayfield, Kans., at Caldwell, Kans.
Nov. 4—H. Metzinger, Caldwell, Kans.

Nov. 5—J. F. Stodder and Marshall Bros., Burden, Kans.
Nov. 6—B. F. Roberts and Harter, Hebron, Neb.
Nov. 6—Coppins & Worley, Potwin, Kans.

Nov. 9—S. R. Murphy, Savannah, Mo.
Nov. 10—W. L. Addy & Son, Parnell, Mo.
Nov. 11—Chester Thomas, Waterville, Kans.
Nov. 11—J. W. Beauchamp, Bethany, Mo.
Nov. 13—T. F. Weidell, Fall River, Kans.
Nov. 17—L. D. Padgett & Segrist, Beloit, Kans.

Nov. 20—A. S. Aikin, Parsons, Kans.
Nov. 21—Lant Bros., Parsons, Kans.
Nov. 28—J. Harvey & Son, Marysville, Kans.
Jan. 19—Jas. L. Cook, Marysville, Kans.
Jan. 25—W. C. Whitney, Agra, Kans.
Jan. 26—Ward Bros., Republic, Kans.
Jan. 27—J. C. Logan, Onaga, Kans., at Havensville, Kans.

Jan. 28—Samuelson Bros., Manhattan, Kans.
Feb. 1—W. T. Fenn, Minneapolis, Kans.
Feb. 2—Pearl H. Pagett, Beloit, Kans.
Feb. 3—John W. Jones & Son, Concordia, Kans.

Feb. 4—J. E. Joines, Clyde, Kans.
Feb. 5—Grant Chapin, Green, Kans., at Manhattan, Kans.
Feb. 6—G. M. Hammond and K. S. A. C., Manhattan, Kans.

Feb. 9—B. F. Porter, Mayfield, Kans., at Caldwell, Kans.
Feb. 9—Thompson Bros., Garrison, Kans.
Feb. 9—H. Metzinger, Caldwell, Kans.
Feb. 10—T. E. Goethe, Leonardville, Kans.
Feb. 11—Ola Nordstrom, Clay Center, Kans.
Feb. 11—J. F. Stodder and Marshall Bros., Burden, Kans.

Feb. 12—L. E. Kretzmeier, Clay Center, Kans., at Emporia, Kans.
Feb. 13—Frank Georgia, Mankato, Kans.
Feb. 15—J. A. Rathbun, Downs, Kans.
Feb. 16—D. O. Bancroft, Downs, Kans.
Feb. 17—R. G. Sollenburger, Woodston, Kans.

Feb. 18—John W. Jones & Son, Concordia, Kans., at Emporia, Kans.
Feb. 18—E. M. Myers, Burr Oak, Kans.
Feb. 19—J. B. Miner and A. T. Cross, Guide Rock, Neb., at Superior, Neb.
Feb. 23—A. B. Skadden & Son, Frankfort, Kans.
Feb. 23—Wm. Sutter, Liberty, Neb.
Feb. 28—Jas. M. Williams, Home, Kans.

The Lincoln Top Sale Circuit.

Oct. 5—A. Wilson, Bethany, Neb.
Oct. 6—Ford Sken, Auburn, Neb.
Oct. 7—W. M. Putnam, Tecumseh, Neb.
Oct. 8—R. F. Miner, Tecumseh, Neb.
Oct. 9—Elmer Lamb, Tecumseh, Neb.
Oct. 10—F. C. Crocker, Filley, Neb.

Central Kansas Sale Circuit.

Oct. 6—N. J. Fuller, Garnett, Kans.
Oct. 7—J. B. Davis, Fairview, Kans.
Oct. 7—F. Staudt, Ottawa, Kans.
Oct. 8—H. R. Ginrich, Wellsville, Kans.
Nov. 3—C. R. Green, Spring Hills, Kans.

Southeastern Kansas Sale Circuit.

Nov. 11—Samuel Drybread, Elk City, Kans.
Nov. 12—Frank Drybread, Elk City, Kans.
Nov. 13—J. J. Baker, Elk City, at Thayer, Kans.
Nov. 14—O. W. Simmerly, Parsons, Kans.

Berkshires.

Aug. 20—Kinloch Farm, Kirksville, Mo.
Aug. 21—C. E. Sutton, Lawrence, Kans.
Aug. 22—Missouri Berkshire Association, at Jefferson City, Mo.
Sept. 18—T. P. Guthrie, Strong City, Kans.
Oct. 15—American Royal, Kansas City, Mo.
Oct. 17—A. C. Dugan, at Blackwell, Okla.
Oct. 27—C. A. Robinson, Kirksville, Mo.

O. I. C.

Sept. 24—Combination sale, St. Joseph, Mo., I. M. Fisher, Mgr., box K, Hastings, Neb.
Sept. 30—Combination sale, Cameron, Mo., I. M. Fisher, Mgr., box K, Hastings, Neb.

Oct. 1—Combination sale, Independence, Mo., I. M. Fisher, Mgr., box K, Hastings, Neb.
Oct. 8—Combination sale, Sedalia, Mo., I. M. Fisher, Mgr., box K, Hastings, Neb.

Oct. 10—D. C. Stayton, Blue Springs, Mo.
Oct. 13—E. Simpson, Sheridan, Mo.
Oct. 15—Combination sale, Independence, Mo., I. M. Fisher, Mgr., box K, Hastings, Neb.

Oct. 22—Combination sale, Hastings, Neb., I. M. Fisher, Mgr., box K, Hastings, Neb.
Oct. 27—Combination sale, Holdrege, Neb., I. M. Fisher, Mgr., box K, Hastings, Neb.

Oct. 30—Combination sale, Concordia, Kans., I. M. Fisher, Mgr., box K, Hastings, Neb.
Nov. 4—Combination sale, Sioux City, Iowa, I. M. Fisher, Mgr., box K, Hastings, Neb.

Nov. 4—D. C. Stayton, Blue Springs, Mo.
Nov. 18—A. T. Garth, Larned, Kans.
Dec. 10—S. W. Artz, Larned, Kans.
Feb. 19—Isaac Briggs, Minneapolis, Kans.

Chester Whites.

Oct. 12—A. E. Simpson, Sheridan, Mo.

Horses.

Feb. 16—J. C. Robinson, Mgr., Wichita, Kans.
Nov. 23, 24, 25—Draft breeds registered horses at Springfield, Ill., W. C. McGavock & Co., Mgrs.

Combination Sales.

Feb. 16, 17, 18—J. C. Robinson, Mgr., Towanda, Kans., at Wichita, Kans.
Oct. 15—American Aberdeen-Angus Association breeders' sale, at American Royal, Kansas City, Chas. Gray, Live Stock Record Bldg., Chicago, sales manager.

Dec. 1—American Aberdeen-Angus Breeders' Association combination sale at the International Exposition, Chas. Gray, Live Stock Record Building, Chicago, sales manager.

Guthrie Ranch Dispersal Sale of Berkshires, September 18.
One of the sensational hog sales of the season will be the dispersal of the well known herd of Guthrie Ranch Berkshires at Strong City, Kans., September 18. This famous herd has been successfully managed for a number of years by T. F. Guthrie, and it is through his efforts that the large number of valuable animals to be found here have been accumulated.

Mr. Guthrie has been a consistent and discriminating buyer and heretofore has refused to put a price on his foundation stuff.

Guthrie Ranch Berkshires are said to contain more Black Robin Hood blood than any other herd in the United States. This with other valuable strains of breeding should certainly make this dispersal offering a great attraction to breeders from all over the country.

Mr. Guthrie has produced many prize winners. Among the most notable of these was the grand champion, Ivanhoe; and many others of his breeding have made substantial winnings at many of the big shows. This sale will be a complete dispersal of the herd, with no reservations whatever for the herd is sold to settle the estate of the late W. W. Guthrie, consequently prospective buyers can be sure that they will have an opportunity to buy foundation stock that the Guthries have refused to price heretofore.

All of the herd boars will be sold, including Revelation, one of the largest sires of the breed and a producer of the kind that feed easy, fill the pork barrel, and win at the shows.

The females will include daughters of Black Robin Hood, Berryton Duke, Masterpiece, Forest King, Revelation, Ivanhoe, Lord Bacon, O. H. F. Sensation, Imperial Duke, Headlight, Sylvan, Dale, Riverside Lee, King Premier 2d, Searchlight 2d, Lord Premier's Rival, Longfellow, and Lord Premier's Rival. There will be gilts by Berryton Duke, Premier Longfellow, Baron Duke, Ivanhoe Jr., and Revelation; and spring litters by Berryton Duke, Revelation, General Premier, Berryton Duke Jr., Sir Ivanhoe, Richard Masterpiece, Sir Masterpiece, and Ivanhoe Jr.

Everything will be in the pink of condition and presented in the best breeding form. Mr. Guthrie says this will be the largest, and he intends that it shall be one of the best offerings that breeders will have an opportunity to bid on for some time to come. Everything will go under the hammer for the high dollar, to actual buyers.

Breeders should not miss this opportunity to buy foundation stock. Get your name on the list for a catalogue.

Horse Owners! Use GOMBALD'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 CAUSTIC OILS. 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.

ONSTAD'S "ONE APPLICATION CURES" LUMPY-JAW CAPSULES

GUARANTEED NOT WRITE FOR PARTICULARS
THE ONSTAD CHEMICAL CO.
104 Key Street Indianapolis, Ind.
JONES NATIONAL SCHOOL OF AUCTIONEERING!
THE ORIGINAL SCHOOL.
If you want to be a Zaan, a Snyder, or a McCulloch, attend this school. Summer terms open July 20 and August 23. Free catalogue.
Carey M. Jones, Pres., 1215 Washington Blvd., Chicago, Ill.

Res. Tel. 775. Office Tel. 192.
L. M. PENWELL,
Funeral Director and Licensed Embalmer.
511 Quincy St. Topeka, Kansas

GOMER DEATH
Kills Prairie Dogs and Gophers of all kinds. Endorsed by State Experimental Stations. 1,000 tablets prepaid for \$1.50. Warranted. Ratoid Tablets 25 cents. Ask druggist or send direct. Booklet free.
F. D. Chemical Co., Fort Dodge, Ia.

and watch for advertising in THE KANSAS FARMER. Arrange to attend this sale.

Foster & Son's Red Polls.

We call the attention of prospective buyers to the change of copy of Chas. Foster & Son, of Eldorado, Kans., in this issue of THE KANSAS FARMER. Foster & Son are among the oldest breeders of Red Polled cattle in the West and have one of the largest and best herds. They are regular advertisers in THE KANSAS FARMER and have built up an extensive business with many satisfied customers over a large territory.

They are advertising at the present time fifteen extra good young bulls, most of which are of serviceable age; a few good cows and heifers, and their herd bull, Dandy 39147.

Dandy has headed the herd for a number of years and has proven a strong breeding animal and an excellent sire. He is a fine individual of excellent quality and weighs 2,400 pounds in good breeding form. He is still in his breeding prime and their only reason for parting with him is that he is too closely related to the herd. The young males that are being offered are by Dandy and out of good dams. Among these is some good header material with plenty of substance, bone, and finish, and any one in want of a good male need not look further.

The females in the Foster herd are a good kind, with plenty of size, and splendid milking qualities. The absence of horns and the dual-purpose qualities of the Red Polled cattle commend them for the farm, dairy, or feedlot. Foster & Son have established a reputation for fair dealing as well as the quality of their cattle. Everything is sold under their guarantee and is priced worth the money. Prospective buyers should write them at once or go and see the cattle.

In writing please mention THE KANSAS FARMER.

Coppins & Worley's Durocs.

Messrs. Coppins & Worley, of Potwin, Kans., start their advertisement in this issue of THE KANSAS FARMER. These gentlemen have one of the largest and best herds of Durocs in that part of the State numbering at the present time nearly 300 head.

The chief herd boars in service are Coppins' Notch Higher, a grandson of Kant Be Beat, and Chief Justice, one of the best sons of Model Chief Again who so successfully headed Grant Chapin's Durocs. These boars are of two different types. Coppins' Notch Higher has very heavy bone with great length and scale, and strong, rugged, prepotent qualities. He also has plenty of finish, is a good feeder, and has proven an excellent sire. He won first in class and sweepstakes at the Butler County Fair, 1906.

Chief Justice is a show hog of the strong, medium type. He is of splendid conformation, with almost perfect head and ears, lots of style and finish, and is very mellow and an easy feeder. His work on the herd has been very satisfactory, some of the fanciest pigs that we were shown being by him. Chief Justice is one of the most promising boars of his age that we have seen. He is being fitted with a number of his get for the fairs this fall, and we predict that he will give a good account of himself.

In the sow division there are thirty-five females of breeding age, representing many of the standard families of the breed, such as Ohio Chief, Com Paul, Kant Be Beat, Orion, Improver, 2d, Top Notcher, May Boy, and other noted sires. These sows have given a good account of themselves, demonstrating their ability to farrow and rear large litters, and the result is a

large number of thrifty, vigorous pigs of nice color, fancy heads and ears, and plenty of bone and stretch. Coppins & Worley expect to hold a bred-sow sale early in September and another one November 5, both of which will be advertised in THE KANSAS FARMER. In the meantime remember that their herd is headquarters for Durocs and that they are prepared to furnish breeding stock of the best quality at rock bottom prices. Look up their advertisement on another page and write them, mentioning this paper.

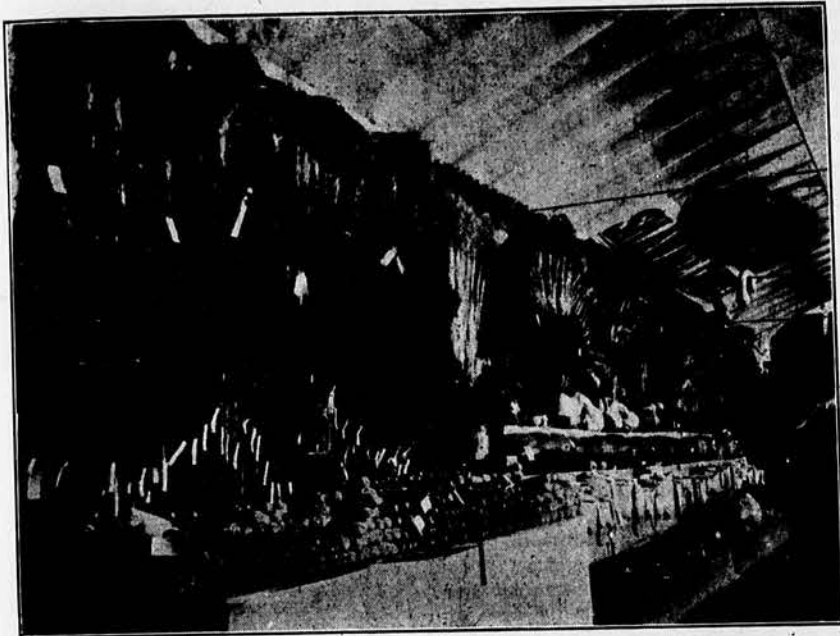
The State Fair and Exposition.

Everybody in the State wants to come to Topeka sometime during the year. The State Fair and Exposition will be held at Topeka September 7-12 and that is a good time to make the visit to the capital city. The railroads are going to help the farmers see this fair and have granted a one and one-half fare for the round trip. It will therefore cost just 3 cents for every mile you are distant from Topeka for the round trip. Stop overs will be allowed at Topeka on the home seekers excursion tickets. The fair at Topeka is going to be a big thing this year. The best horse races and popular attractions are all to be seen at Topeka. Among the more instructive features will be an exhibit by the Ideal Lighting Company of

the Kant Be Beat and Orion families. With the blood lines and individual merit of the herd boar and brood sows in this herd Mr. Peacock can and is producing a high class lot of pigs, pigs that are a credit to the breed and breeder. See Mr. Peacock's advertisement elsewhere in this paper and write for prices.

Tennant's High Class Poland-Chinas.

There is scarcely a breeder of Poland-China hogs in the entire corn belt of America who does not know Chas. E. Tennant, of New Hampton, Mo., and the kind of stuff he produces. It has been our opportunity to visit this herd each successive season for some time past and each time that a new crop comes on they seem better than those of former years. Mr. Tennant is not breeding hogs for honor or glory, neither as a "fad," but as a business just as distinct and stable as a financier would have his bank or merchantile establishment. One of the secrets of Mr. Tennant's success in the breeding of hogs is the strict scrutiny employed in the selection of herd sows, a mean gilt is relegated to the feed lot just as readily as an incompetent boar. Mr. Tennant now has on this farm the best lot of pigs that he has ever raised and they are sired by Flying



Shawnee County, Kansas, at the Topeka State Fair and Exposition.

Davenport, Iowa, of their machine to "make your own gas." These people have reserved a 20 by 20 foot booth and will have their machine on exhibition. The economy and convenience in using this home-made gas will be demonstrated.

The great firm of Gordon VanTyne, of Davenport, Iowa, which is so well known for bargains in lumber, sash, doors, and all sorts of building materials will also be exhibitors. The White Lilly Manufacturing Company, manufacturers of White Lilly washing machines and gasoline engines will show their machines operated by power, either electric, or gasoline. The Independent Harvester Company, of Plano, Ill., will show a line of corn pickers, corn huskers, corn binders, manure spreaders, and other implements. The Walker Manufacturing Company, of Council Bluffs, Iowa, will show their corn planter attachments and plow attachments. The McCullough Mfg. Company of Minneapolis, Minn., will show their practical oil pump for lubricating traction engines and will give demonstrations.

Secretary R. T. Kreipe announces that the demand for stalls and pens for the various classes of live-stock exhibit has never been so great in the history of this association. The circuit is so arranged that the Topeka dates immediately follow those of the Nebraska State Fair and precede those of the Hutchinson Fair and this fact together with the premiums offered at Topeka make it both convenient and desirable for the live-stock exhibitors to show here.

The indications now are that the display in the agricultural and horticultural departments will be the best ever made here, although the picture shown herewith proves that it has been very fine in the past.

Secretary Kreipe is putting forth every effort to have the presidential candidate on the Republican and Democrat parties both give addresses on the fair grounds. He now feels reasonably sure that he will secure Mr. Bryan for one speech during the week and hopes that Mr. Taft may also be here.

O. A. Peacock's Durocs.

One of the progressive young breeders of Duroc-Jersey hogs in Pawnee County, Nebraska, is O. A. Peacock, of Burchard, Neb. He started his herd a few years ago by buying some of the best sows from the well known herd owned by T. L. Livingston of the same place.

At the head of this herd is a boar of good quality and size with Duroc type and conformation from the best show and breeding families to be found in the breed. This boar is Combination, sired by Bell's Chief, the hog that won first at Nebraska State Fair and third at St. Louis Exposition in 1904. The dam of Belle's Chief was Nebraska Bell, that great show and breeding sow so well known to Duroc breeders. Bell's Chief's sire was Red Chief I Am, half brother to Ohio Chief. Combination's dam was Bishop's Choice, was also dam of Cole's Duroc and Larchwood that won first and second at Nebraska State Fair in 1905 as yearlings. The brood sows in this herd are from

Fox one of the very best boars of the breed. Those who attended the Missouri State Fair and the American Royal last year will remember this hog, for his excellence was common comment on every hand.

Perhaps the star litter of this crop are three sows and three boars by Flying Fox and out of Stylish Queen by Stylish Perfection. These are all top liners and will look good in any company.

Glen Fall Rose, by Perfection E. L. has a litter by this hog that are simply fine. Fanny Keep, by Keep On, Blooming Flower, by On and On, On's 2d, by On and On, Keep Sake's Rose, by Keep Sake, all have promising litters by Flying Fox and some of them must be reckoned with at the shows this fall.

There is a hog on this farm that deserves a creditable mention. His name is Herpicide by On the Dot. This is a grand individual, one of the smoothest hogs that we have had the pleasure of seeing, and we predict for him a brilliant future. We saw this pig when Mr. Tennant bought him and we thought him good then, but to-day he is much better than he was at that time, and just bear this in mind the hog that beats him must be every inch a hog.

We will have more to say for this herd from time to time in the future and just keep your eye on the date for sale this fall.

Meisner's Poland-Chinas.

Among the good breeders of Poland-China hogs in Northern Kansas is T. J. Meisner, of Sabetha. Mr. Meisner is raising the large, smooth, strong bone hog, the kind the farmer and feeder wants.

The boar at the head of his herd is Meisner's Hadley, a son of that great hog Big Hadley and grandson of the famous show hog Logan's Chief. His dam was Mariah Logan 80239. This is a very promising young hog and we believe he will grow into one of the good ones of the breed.

In selecting his brood sows Mr. Meisner used good judgment getting together sows that had size, smoothness, strong bone with Poland-China type and conformation from well bred families.

When we saw these pigs, a short time ago, they were a well grown, smooth lot showing lots of quality and finish for spring pigs. Parties wishing Poland-China pigs would do well to write Mr. Meisner where they will get good stock and just treatment.

Notice his advertisement elsewhere in THE KANSAS FARMER.

Crows' Durocs.

Crow Brothers, of Hutchinson, are starting a yearly card in this issue, in which they invite your attention to the fact that they have 140 large, early spring pigs ready to sell, also that they have 21 sows and gilts bred for August farrow, and a few extra good fall boars, that are in first-class condition to go out and do good service. Crow Brothers have established a reputation for quality in their herd, in which many ex-

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DON'T overlook what promises to be the best Fair ever held in Kansas. Plenty to see and hear. Kansas Music Festival. Twentieth Kansas Reunion. Free Sensational Exhibitions. Fat Stock. Farm Machinery. Farm Products. Races Galore.

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HOG CHOLERA VACCINE

Successfully used upon 700,000 head of swine.

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CHICAGO

the best families of the breed are represented. They announce that they are fitting a show herd of 24 head which they will exhibit at the leading fairs this fall. There is no doubt that they will make it interesting for other exhibitors.

Their herd is located in town at 200 E. Osborn St., Hutchinson, and the electric cars run within two blocks of their yards. Prospective buyers will find Crow Brothers headquarters for everything in Durocs. Visit the herd or write them your wants, mentioning THE KANSAS FARMER.

Alvey Bros. O. I. C's.

Some of the best O. I. C's in the country can be found at the Alvey Farm at Meriden, Kans. Alvey Bros. moved to Meriden last year, bringing with them five sows from which they have raised forty-one pigs. These all have plenty of length, strong backs, medium large, smooth bone, and are straight on the feet. From the forty-one pigs they have culled twenty choice breeders. They are a combination of size and finish. They are strictly pure O. I. C's, the kind that are white, stay white, and breed white. Mr. Alvey can furnish you with pairs not akin. See his advertisement.

Baler's Poland-Chinas.

J. M. Baler, of Elmo, Kans., proprietor of the well-known Welcome Herd of Poland-Chinas is starting an annual card in this issue of THE KANSAS FARMER. Mr. Baler has one of the good herds in the State containing many choice individuals of the richest breeding.

His herd is headed by the celebrated \$1,000 Tom Lipton, one of the best breeding sons of the great Grand Chief. Tom Lipton is a strong individual and an excellent sire, and his work on the herd has been very satisfactory. Many of the champion and prize-winning sires of the breed are represented among the herd matrons who have farrowed an extra fine crop of spring pigs. Most of these came early and are a nice, thrifty, vigorous lot of youngsters. Mr. Baler has for immediate sale spring pigs, either sex, and several very fancy boars. Among these is the yearling boar, Cyclone, by Meddler 2d, out of a Chief Perfection dam. This fellow is outstanding in quality and at in ev-

ery way to head a good herd. There are two choice fall boars, sired by Tom Lipton; the dam of one of these is Spring Tide, by Meddler 2d and a daughter of Louise of Oakwood. The other is out of a Chief Perfection 2d dam.

Mr. Baler now feels that he can spare a half interest in Top Lipton and is offering it for sale to the right party. Tom Lipton is not only a great sire but he is a show hog with many substantial winnings to his credit, and has a reputation that would be of great value to any high-class herd.

Write Mr. Baler for particulars and mention THE KANSAS FARMER.

Fairview Herd of Durocs.

No herd of Duroc-Jerseys in Kansas is better known than the Fairview herd owned by J. B. Davis & Sons of Fairview. Mr. Davis has been a Duroc breeder for a number of years. In selecting his breeding stock his aim has always been to get individuals that were strong in Duroc type and conformation with size, smoothness, and bone from the best blood lines in the breed. This with Mr. Davis's judgment of what a good Duroc should be has enabled him to get together and maintain one of the best breeding herds of Durocs in Kansas.

The herd boars in this herd are Monarch 16185-A, 28395-N, sired by Morton's Model 7539-A, he by Orion 4901-A, dam Belle Pribble 37124-A by Perfection 4697-A; Fairview Chief Chief 32685-N, sired by Kant Be Beat 10239-A, dam Miami F's 8224 by Top Notcher 8803-A, and the yearling boar J. B's King of Coils. 22339-A, sired by King of Coils. 16075, dam Carolina Ann 33162 by Ohio Chief 8827.

In no herd can you find three better bred boars containing as they do the blood of the most noted boars of the breed, such as King of Coils. 16075, a boar that Mr. Morton values at \$8,000, Ohio Chief, Kant Be Beat, Orion, and Top Notcher.

Mr. Davis has in his herd animals of individual merit and strong Duroc type as well as the best of breeding. The two older ones have proved themselves to be the best of breeders in the quality and merit of their get.

In brood sows Mr. Davis is very strong, having in his herd a number of the best sows to be found in the breed. Among the good ones are Lady S. 98184, sired by Chicago Lad 8870, (Continued on page 846.)

Wheat Culture.

(Continued from page 841.)

to the stock on the farm the coarse fodder and a part of the grain produced, it is possible to maintain the fertility of our soil and continue to produce large crops of wheat.

So far as the general principles of applying manure are concerned, they are the same for the West as for the East, with perhaps this exception, that the danger of injury to the crop in plowing the manure under is greater in the West than in the East, or in regions of greater rainfall, thus surface dressing is to be especially recommended for the Western regions.

Manure should not be applied in two heavy applications. A light dressing of manure over forty acres will give a greater relative increase in the crop and a larger total yield than a heavy dressing on twenty acres, leaving the remaining twenty unmanured. Again, it is not advisable to apply trashy or coarse manure in our Western regions; rather the manure should be well rotted, since the process of decay is slower in a dry climate; also the coarse, strawy manure is very apt to give unfavorable results when plowed under, by breaking the capillary connection of the soil with the subsoil and thus causing the crop to "burn out" in a dry season.

INJURIOUS INSECTS.

It is impossible in this discussion to more than touch on this part of the subject. The insects and diseases which attack wheat often seriously injure or destroy the crop, and in some cases there is little or no means of preventing the damage. Of the insect enemies the chinch-bug and the Hessian fly are perhaps the most destructive. The remedies to stop their ravages are only preventive, as burning over the stubble land, which allows the chinch-bugs no cover for winter hibernating, and destroys the Hessian fly, since the flax-seed or pupæ stage of the insect remains in the stubble after harvest. For both insects "trap" crops are sometimes sown, such as the early planting of patches of millet to attract the chinch-bugs and the early planting of patches of wheat to act as decoys to attract the flies. When the bugs have congregated or the flies have laid their eggs, these crops may be deeply plowed under, thus destroying the insects. Migrating chinch-bugs may be kept out of the fields to some extent by plowing protecting furrows about the fields and making coal-tar barriers, etc. Under certain favorable climatic conditions the bugs may be largely destroyed by fungus diseases which prey upon these insects. Late sowing of wheat is a means of escaping the attacks of the Hessian fly, which appears early in the fall.

At the Kansas State Experiment Station, the average of many trials shows results favoring seeding during the last week in September or the first week in October; ever later seeding is less effected with the fly, but with unfavorable growing conditions the very late-sown wheat is apt not to make a strong growth in the fall and is more liable to be winter-killed than earlier sown wheat. Perhaps one of the best means for checking these pests and the plant diseases which attack wheat is to practise a regular system of crop rotation. The Hessian fly can be starved out almost completely by the abandonment for one year of the crops in which it breeds, namely wheat, rye, and barley, while if a system of rotation can be adopted which will entirely dissociate small grains from corn very little damage from chinch-bugs would be experienced. Following out this idea would mean the planting of a part of the farm to corn one year and to wheat and small grains the next, while the balance of the farm may be kept in grass and legume crops grown in rotation with corn and wheat.

RUST AND SMUT.

With reference to plant diseases, rust and smut are perhaps the most destructive. There is no remedy for rust other than the breeding of rust-resistant varieties of wheat, and so far no fully rust-resistant varieties have been produced, although certain varie-

ties growing side by side in a field often show a different susceptibility to the attacks of rust. This may be due, however, to different periods of maturing of the crops and to weather conditions as much as to variety.

It is estimated that the damage by smut in many seasons may be as great as 10 per cent of the total wheat crop of the State, while certain fields may show a much larger percentage of smut. This disease may be almost wholly prevented. In the thrashing of smutty wheat the smut balls break and the small, dust-like spores adhere to the wheat kernels. When such wheat is planted the smut spores sprout and produce the fungus plant which infects the young wheat plant and grows within it, fruiting and forming its spores in the head of the wheat, taking the place of the grain. Any treatment which will kill these spores without injuring the grain of wheat will prevent smut. Several treatments have been more or less successfully used, as hot water, copper sulfate, or blue-stone, corrosive sublimate, and formaldehyde.

The best remedy for smut in wheat is to treat the seed with a solution of formaldehyde. Use 1 pound of 40 per cent strength formaldehyde to 45 or 50 gallons of water. Either spray the wheat or dip it in a barrel or tank, taking care that the grain is thoroughly wet on the outside. The wet grain may be left in piles and covered with blankets for a few hours in order to retain the formaldehyde gas and insure the destruction of all the smut spores. Then spread the grain quite thinly on a tight floor or canvas and allow it to dry from twelve to twenty-four hours, shoveling it over once or twice. Care should be taken not to allow the wet grain to heat in the pile. The usual method is to treat one day the seed that is to be sown the next day. The wheat will swell some, and in order to sow the required amount per acre the drill should be set to sow about one-fifth to one-fourth more than the usual amount of wheat. If the smut spores adhering to the wheat grains are destroyed, there is little opportunity for the smut spores which may remain in the soil to come in contact with the young wheat plants, hence the seed-wheat treated with a solution of formaldehyde produces a crop which is practically free from smut.

[The complete pamphlet on "Wheat Culture" may be had by writing the Farmers Institute Department, Manhattan, Kans.]

Chemical Weed-Killers.

Will you kindly give me the names of two or more chemicals, which when dissolved in a liquid and applied to vegetation, such as plantain, dandelion, etc., will kill it?

R. W. NORWOOD.

Can you or any of your readers tell me the name of a powder that will kill dandelion and not injure grass?

J. H. BILSING.

Various chemicals have been used for the purpose of destroying weeds. In the selection of such a chemical two things must be taken into consideration. First, it must be of such a nature that the weeds will be destroyed; and second, it must be cheap enough to make its application practical. If weeds growing in some valuable crop are to be destroyed, the chemical, furthermore, must be such that it will be injurious to the weeds, while at the same time it is harmless to the crop. The chemicals most frequently used are, common salt, iron sulfate, and sodium arsenite. The last named is exceedingly poisonous and very effective, but the high price prevents its general use except on small areas. The other two are cheap enough to be used in field conditions. To be most effective they must be used in the form of a solution, and the spraying should be done when the weeds are young, succulent and rapidly growing. Salt solution should be from 20 to 25 per cent, and the iron sulfate 25 to 30 per cent. The solution may be sprayed on with either hand or power sprayer, according to the area to be treated. The nozzle should be such that a very fine spray is thrown and the weeds should be

thoroughly wetted. Chemical sprays have very little effect after the weeds have become old and woody and the flowering season is past, or even well advanced. Spraying should be done in bright weather, for if showers come the chemical may be washed off the plants before it has had time to take effect.

Plants which are susceptible to these sprays usually die in from twenty-four to forty-eight hours. Annual plants are completely killed, but perennial plants are only killed to the ground. They will therefore sprout up, making it necessary to spray again at intervals of seven to fifteen days. Plants of the grass family, such as the lawn grasses, wheat, oats, rye, etc., are not injured by the solutions above mentioned, whereas most weeds, except weedy grasses, are killed. Cultivated plants, however, which have the veining of the leaf forming a net work, that is the so-called net-vein leaved plants, are all more or less seriously injured by these sprays. They can not therefore be used on clovers, alfalfa, or garden vegetables.

The principal advantage of chemical weed-killers is to be found in the destruction of such pests as dandelion, pepper grass and shepherd's purse on lawns, and wild mustard, thistles, and ragweed in fields of wheat or other grains. This station is carrying on extensive experiments in the western part of the State, which have in view the destruction of bindweed by chemical means. The presence of this weed in wheat fields reduces the yield to one-half or one-third of the normal. It is especially abundant in Ellis and the adjoining counties, where it is doing thousands of dollars of damage every year. This is a perennial plant, and while, as above mentioned, they are killed to the ground, they sprout again from the roots, and must therefore be sprayed repeatedly in order to keep them down. The number of sprayings which will be necessary to exterminate this perennial bindweed has not been determined. The results of these experiments therefore can not be foretold. We hope, however, in the future to be able to publish some favorable results from this work.

GEO. F. FREEMAN.

Assistant Botanist, Kansas State Agricultural College.

Plantain and Dock.

Kindly furnish us, or advise us where we may obtain any information as to how to dispose of or destroy plantain or dock.

Is there any way to destroy this weed and if so how?

PERRY N. ALLIN.

When plantain or dock are once established in a field, there is practically no way of destroying them except to dig them out with a hoe, or else put the land in clean cultivation. If the previous preparation of the land is well done, and the cultivation is thorough, either dock or plantain should be destroyed in one year. The land can then be put back to grass or alfalfa. When this is done, however, care should be taken that pure seeds are used. A large proportion of the alfalfa and grass seed usually sold on the market contains also the seeds of the two weeds mentioned above. If, therefore, you do not yourself recognize the seeds of these weeds at sight, I would suggest that you submit samples to this office before purchasing, and we will take pleasure in giving you a mechanical analysis and germination test of the seeds and advise as to whether they contain admixtures of the seeds of any noxious weeds. Moreover if you will mention the price at which different samples are offered we would be able to tell you which it would be most economical to use. The station performs this duty free of charge to all farmers and seedmen within the limits of the State.

GEO. F. FREEMAN.

Assistant Botanist, Kansas State Agricultural College.

In writing The Kansas Farmer please give your full name and post-office address.



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Service—that is, appearance and wear—is the test of paint as it is of clothing, but we want to know that the paint is of the long-wearing kind before we use it.

Good paint can be known before-hand as certainly as we can know all-wool cloth, and almost as easily. It is true that White Lead, the essential base of good paint, is very commonly adulterated with worthless materials which cannot be detected by the eye, but intense heat will reveal them every time. How heat does this is explained in our free booklet. Send for it.

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To get the required degree of heat, a blow-pipe is needed. We will furnish one free to any one intending to paint, with directions for using it. Don't trust to luck, to the dealer, to the painter, to us, or to any one else. Write for test outfit.

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Orders booked now for the 1908 crop fancy quality American grown Alfalfa seed. We can also supply Turkestan Alfalfa, the plant of wonderful vitality and drought resisting quality. Sow during August and September.

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Re-cleaned and guaranteed free from dodder and all weeds. Strictly pure seed. Price 35 cents per pound, delivered free west of the Mississippi River. Address,

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On our wonderful new Daisy SELF-THREADING, self-feeding, one-horse hay press. It is the only one on the market on which one man can do all the work. This first successful self-threading device—greatest time saver ever. Condenser and open bars on bale hopper. Increase capacity and prevent fork catching. Five days free trial. Write today for prices and circulars.

THE ROYAL HOTEL, Lincoln, Neb. Modern, fire proof, only American Plan Hotel in the city. Centrally located, 15th and O Sts.

Merits of Clover.

EDITOR KANSAS FARMER:—In your issue of May 6, there is a suggestion by D. P. Norton, of our State, that sweet clover is useful as an ameliorator and fertilizer of gumbo soils. We are surprised that Mr. Norton does not mention the great value of this plant for hay and grazing. Under the same caption "Sweet Clover Made Useful," Mr. B. T. Sims, of Alabama, we think, merely does the plant justice in sounding its praise both as a fertilizer, and as a hay and grazing plant. The following is Mr. Sims' statement:

"Here in the lime belt of Alabama we consider it one of the most valuable plants that we have. Stock, when first placed in a pasture containing it, will not eat it, but they do not come anywhere near starving before they begin to eat. In many pastures there is nothing but melilotus, and these are nearly always the pastures that contain the fattest cattle in the neighborhood. Several of our best farmers depend upon it very largely for hay, cutting it when about 12 to 18 inches high. They say it is nearly as good as alfalfa hay, if cut young enough, and their stock is just as fat as the stock that gets alfalfa for roughage. We find it no trouble to kill. One year in corn nearly always clears the land of it. As a soil renovator we think it has no equal on thin lime land. I have seen land that would not make five bushels of corn per acre planted in melilotus for five years, and then produce about twenty-five bushels per acre (nearly double the average Alabama yield). This land was pastured a part of the time, and the melilotus was cut for hay the other part."

It is a mystery to me why so few Kansas farmers appreciate this plant. Probably it is because it grows in our State, as it were, by leaps and bounds, and so quickly passes the palatable stage as a pasture plant, or for hay of the highest quality.

Housewives may as well discard that delectable dish, asparagus, because it is not good when gone to seed, and our little early radish, because it so soon gets pithy. The motto, "Everything in its season," should be strictly applied to sweet clover and its uses. The season for sweet clover for grazing is when it is from three to six inches high, for hay when the first bloom begins to open. We claim no credit for knowing these things; accident or adverse circumstances gave us the knowledge.

Thirty-six years ago we ordered ten pounds of alfalfa seed, from a seedhouse, then and now very prominent as such (we will not mention names), and we paid fifty cents a pound for the seed. We prepared a nice plot of ground and sowed the seed. The stand was all we could ask, the growth was enormous. As we wanted to be good to it, we let it grow full size before cutting for hay. It was five to six feet tall and fully seeded when we cut it (we did not know any better then). Needless to say, that after we had become disgusted, and had tried for five years to eradicate it, we learned it was sweet clover.

About the time this plot was seeded to sweet clover, the adjoining land was sown to timothy and clover. The sweet clover contested with the other grasses for possession of the land, and though the timothy and clover with sweet clover mixture was harvested for hay the last of June, at least one month later than the first cutting of sweet clover should be done, yet we noticed our stock never neglected this indifferent looking sweet clover hay.

A valuable test came later. The sweet clover seed drifted down a ravine running through our farm, and lodged and grew with wild slough grass on a farm below. The tenant on this farm below mine, often poorly supplied with hay in the spring, made hay of this slough grass in the latter part of May, just the time when sweet clover was in prime condition for hay. This tenant was not slow to learn that patches of slough grass with the greatest amount of sweet clo-

ver mixed in, was the most valuable hay.

We were slow to learn how to graze this clover profitably. Not till very dry seasons came, and short pastures inevitably came with them, did we begin to appreciate the sweet clover that was liberally mixed in the pastures adjacent to the plot first sown. The shortness of all the grasses in these pastures kept the sweet clover at a height that was most palatable and it therefore proved a very profitable part of our pastures during those most trying seasons. Being a biennial we have grazed it so closely during dry seasons that it failed to reseed the land in many places, and, to our regret, is disappearing.

At this time, July 18, we are carrying sixty-four head of cattle in a thirty-five acre pasture of mixed grasses. The sweet clover is abundant in this pasture and the clover plants are in prime condition for grazing, notwithstanding the excessive rainfall. This condition is due to the large number of cattle in the pasture, being nearly two head to the acre. We had placed twenty head in this pasture April 10, expecting it to carry them through to November, comfortably. On June 8 the flood in the Kaw bottom sent us the other forty-four head. If these last had not come the sweet clover in this pasture by this time would have been a wilderness and worthless.

With our experience we know it is a most valuable hay and grazing plant, if mowed often enough, and grazed close enough. Even when grazed closely it is well to clip it closely once a month if the land will admit of it, lest some of the plants get away from the cattle.

And yet there are many characteristics of this plant concerning which we are ignorant. Being a biennial, and the plant having been propagated on our farm for thirty-six years by haphazard reseeding, we do not know what proportion of the plants were of first or second year growth that gave best results as grazing plants or for hay. We beg to suggest that it would be a profitable line of experiments by our stations to establish facts as to first and second year growth of the plant. Will the first year's growth stand extremely close grazing and survive? Would second year's growth stand three or four cuttings for hay and make repeated, vigorous growth? J. F. TRUE.

Jefferson County.

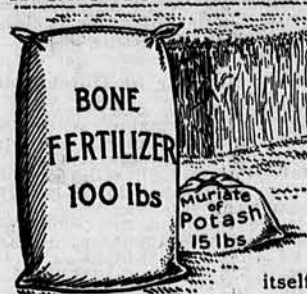
The Tall Thistle.

The enclosed stem and leaves were found growing on land in that part of my field of alfalfa which had a poor stand. The plants, about forty or fifty in number, stood about three feet high, with from three to five branches from the main stalk, starting about six inches from the ground. The roots are not numerous and do not penetrate more than six inches in the earth and there seems to be no tap root. The roots have a peculiar sickening odor. From this brief description can you say what the plant is? It is a stranger hereabouts. The plants were all carefully dug up and burned. An answer through THE KANSAS FARMER may also enlighten others. Sedgwick County. D.

The plant which you enclosed is the tall or roadside thistle (*Carduus altissimus*). It is usually a biennial plant but sometimes an individual may live for several years. In bottom and second bottom lands, which are moderately moist, it may often so spread as to become a troublesome weed, but little need be feared from it on the drier uplands. Where it has become scattered over a meadow so thickly as to seriously affect the yield of hay or forage, the land should be put to some cultivated crop, as for instance, corn. Then in midsummer the few plants which have escaped the plow should be cut out with a hoe before they produce seed. If this be carefully done, one or at most two years of clean cultivation ought to completely eradicate the tall thistle.

I can not too strongly commend your action in digging out and burning the small patch of thistles which you found, even before you know

Takes both to make Good Wheat



POTASH

Good clover follows good wheat, but it takes Potash to set the clover.

Starved clover won't feed the crop that follows it. It needs a vigorous root and a sturdy growth for itself before it can gather nitrogen for you.

Give it a good start by enough Potash with your phosphates in this Fall's seeding of wheat or rye.

The clover will do the rest—you'll see when you cut the clover. Clover, timothy, rye and oats, for turning under, or a crop in rotation—all need more Potash than most commercial mixtures afford.

We can prove by hundreds of practical field demonstrations, what a 6 per cent. Potash application will do—15 pounds per hundred of fertilizer. Potash is profit. Buy the Potash first.

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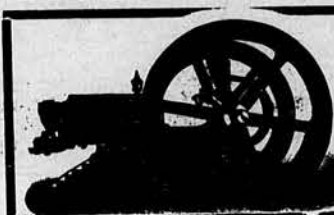
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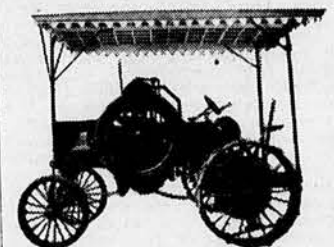
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129 Mill St., Kansas City, Mo.

what it was, for in that act you may have saved many dollars of expense later. If, in fact, farmers in general would adopt the principle of immediately and completely destroying any small patch of strange and apparently noxious weeds which may appear from time to time on their farms, they would not only very often save, at small cost, their own farms but also those of their neighbors from an invasion of some noxious weed like Russian thistle, Canada thistle, bindweed, or dodder, any one of which when once scattered are almost impossible to completely eradicate. These weeds are also capable of causing the loss of thousands of dollars in the value of crops and the price of the land which they infest.

GEO. F. FREEMAN.

Satisfactory Yields.

EDITOR KANSAS FARMER:—I notice in a late issue that a man in your county states that he took nine big loads of alfalfa from 5½ acres, as the second crop this season; one of my fields beat it—52 big loads from 14 acres! This is nice, rich, bottom land, that produced nearly \$75 worth of potatoes per acre a few years ago, and was then seeded to alfalfa, and

this is the third years' alfalfa; we expect to cut it five times this season. I have 140 acres in alfalfa now, and will seed 60 more next year.

This land lays just north of the land which produced the big yield of potatoes this season for Jacob Scheid, near Jaggard, Kans. On seven acres of the Wolf Creek bottom, between Jaggard and Bonner Springs Mr. Scheid grew and harvested and sold \$796.30 worth of potatoes. Who has ever produced a larger value in potatoes from 7 acres, this or any other year? GEO. S. LINSBOTT.

Jackson County.

Her spectacular crops have focused the attention of the world upon Kansas as the premier wheat-grower. Wheat is supposed by many to be the State's chief agricultural asset. It might, however, appropriately be termed but a curtain-raiser to the main performance, as corn is the big crop in Kansas, and by far the greatest contributor to the State wealth.—F. D. Coburn.

Besides their Indian corn Kansas farmers raise upwards of \$6,000,000 worth of Kaffir-corn annually.—F. D. Coburn.

Fairview Herd of Durocs.

(Continued from page 843.)

he by Chief Surprise 22293, dam Lady C III 72248, sired by St. Paul 10745. This sow was the dam of one of the best fall litters we have seen anywhere this season and was suckling a nice litter when we saw her. Another good one is Variety A 157048, sired by The Chief, he by Ohio Chief, dam Variety 43d 35356, sired by Morton's King.

The son, Kant's Lady sired by Kant Be Beat, dam Queen Ruby is one of the best in the herd, also is Useful Mair sired by Monarch, dam F. Maid. This sow is the dam of a choice litter sired by J. B.'s King of Cois.

Perhaps one of the best sows in the herd and one of the best in the breed is the yearling sired by King of Cois, and out of S. E. Model 10th 46116 sired by King of Kings by Morton's King. With the individual merit and breeding in this herd Mr. Davis can and is producing some of the best Durocs to be found anywhere.

Mr. Davis is also breeding Red Poll cattle. The breeding animals in this herd was selected with the same judgment and care as was used in selecting the Duroc-Jerseys, buying from the best herds and selecting animals as near the standard of the breed as he could by. At the head of this herd is Buster Brown 16157, sired by Teddy 11069 and out of Mayflower's Bud 20080. This is a long, smooth bull showing lots of Red Poll character and conformation. In the cow Miss Davy sired by Iowa Daryson 10th 31490, dam Duchess of Ashland 7827. Mr. Davis has one of the very best Red Poll cows we have seen in the State. She is a very large, deep cow with strong constitution and large capacity with good udder development and very typical of the breed. The heifer Belle 25441 sired by Barney 11229 is a very good animal, she was good enough to win third at Lincoln last year and looks as though she could get higher up this year. Another good one is the heifer Lilly 27603, sired by Horton 6th 14056. This heifer we believe will grow into a grand cow of the dairy type.

This herd showed in a great measure the milking qualities of the Red Polls as well as the blocky, smooth form of the beef animal.

Notice Mr. Davis's advertisement elsewhere in this paper and write him for prices.

Mr. Hunt's Holstein Sale at Kankakee, Ill., August 20.

A sale of greatest interest to Kansas milk and butter producers, as well as breeders of pure-bred dairy stock, is C. F. Hunt's sale at Kankakee, Ill. Mr. Hunt's stock farm is at Oran, N. Y.

For eight years now he has held sales in Syracuse and it is very gratifying to know that he has given entire satisfaction both as to methods in conducting them and as to the cattle offered.

He says: "While I have never been such a staunch advocate in breeding as some I like good and well bred animals. I have always clung to the individual. It's the choice individuals that establish breeding. I have in this sale some very nice young stuff and what I think exceptionally good individuals. There will be some thirty-five head of cows and the most of them are to freshen this fall and early winter. They are served by first class A. R. O. bulls and the offspring will be valuable. There will be some very choice young heifers and several service bulls. I shall offer at this sale a couple of aged bulls that are fit to head any herd in this country. Caesar Ulkije, an imported bull 4 years old, is one of the very best stock getters I ever saw, without any exception. I just had him drop of heifers started sired by him when a party near here saw them and gave me \$125 each for the lot. They ran in ages from calves a few months old up to 14 to 16 months. Any bull that will sire heifers that will bring that price at the ages mentioned is worth almost any amount to head a herd. I have three other service bulls, hence I am offering this one at this time. He is gentle, and sure, nicely marked and a good individual. His dam has an A. R. O. butter record of over 25 pounds in seven days, 97 pounds milk in one day, 661 pounds in 7 days, averaged over 90 pounds per day for thirty days and gave almost 15,000 pounds in nine months. There will be some youngsters sired by this fellow and out of dams with records so that you can see just what his offspring are like and the way he marks them. Another very valuable aged bull will be offered, Leucke Paul 33289. This bull is sired by Paul DeKol Jr., a son of Sadie Vale Concordia, who has a record of 30.6 pounds butter in seven days and is out of Almeda Leucke 2d. The average A. R. O. records for this fellow's dam and sire's dam is almost 25 pounds butter in seven days. He is already the sire of several A. R. O. daughters. There will be several youngsters sired by this bull and out of A. R. O. dams. I purchased the whole herd headed by this bull and having no use for him will sell him in this sale. He is a fine individual, sure, and gentle to handle. There will be several cows in calf to him."

Taking it as a whole this will be a grand offering and people wanting Holsteins will not go amiss. Mr. Hunt's sales are held on the square and he will render every assistance possible. His Eastern sales are being looked forward to as a coming event. From his last sale at Syracuse he shipped cattle to Wisconsin, Iowa, Illinois, Nebraska, and Canada, beside supplying his many customers in the East.

A public sale is a sale held for the benefit of everybody. If a person conducting such sale is reliable it is a great benefit in many ways. It gives those in want of cattle a chance to select at one certain point without running at great expense all over the country. They have the several animals before them and can compare one with another. Mr. Hunt's motto has always been "To serve you always, better in all ways." He would like to

meet you at his sale at Kankakee and a whole lot of your Kansas friends that are wanting cattle. He will convince you that he is the sale man and that people wanting his breed of cattle can not do better. His prices are right. See his advertisement in this paper.

The Kansas State Fair at Hutchinson.

THE KANSAS FARMER has received a letter from A. L. Sponsler, secretary, Hutchinson, Kans., in which he tells some interesting things about the big Kansas State Fair which will be held at Hutchinson, September 14 to 19. He writes, in part, as follows:

"There is no question but what we will have a greater entry in every department of the fair this year than ever before. We are changing our premium list on Chester White hogs and giving them the same classification and premiums as the Poland-Chinas and Berkshires. It appears that we have not been friendly to the Chester White; but the way this came about was that two or three years ago there was no competition in the classes at all and one breeder came in and made double entries in all the classes and

of the very best anywhere. While we made several thousand dollars last year we want the people to understand that it has all been expended in improvements and for the purpose of making the fair bigger and better."

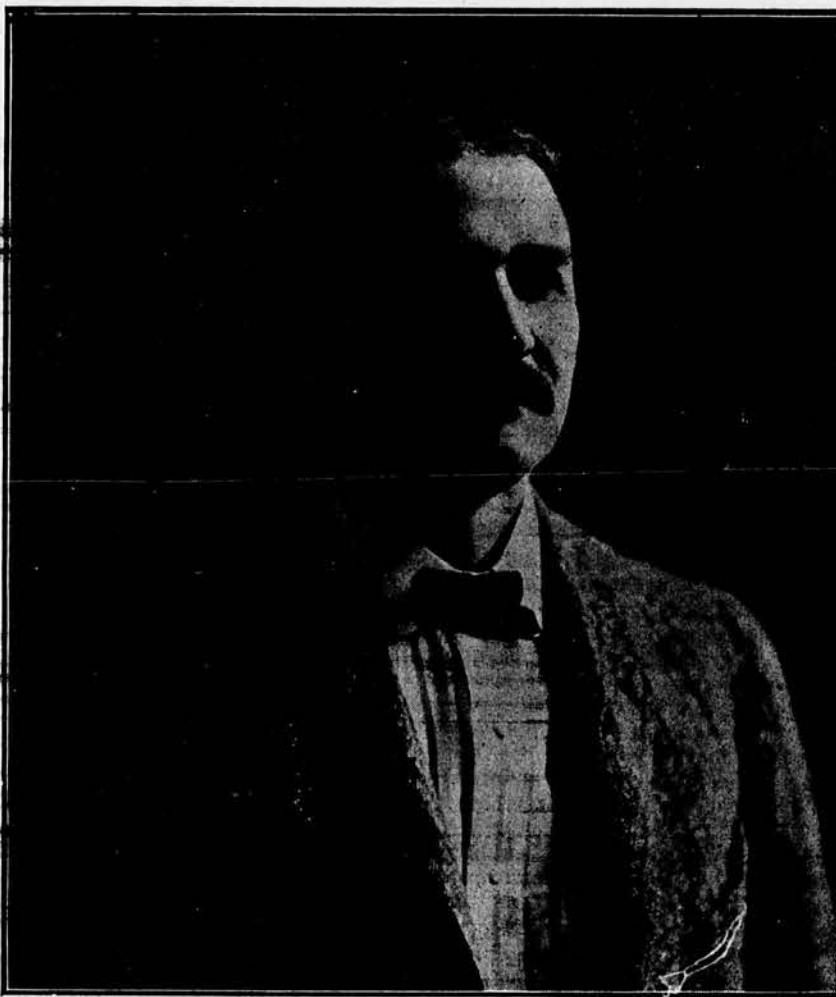
Maupin's Great Herd of Poland-Chinas.

One of the very best herds of Poland-Chinas in the Mississippi Valley is the one owned by Robt. E. Maupin, of Pottsville, Mo.

In this herd are included one of the strongest arrays of brood sows that are to be found anywhere. Many of the most popular and strongest sires of the breed have daughters doing excellent service on this farm and are now rearing litters of exceptional merit.

Mr. Maupin has demonstrated his ability as a breeder of really high-class Poland-Chinas and a number of the most critical breeders of the corn belt make annual purchases from his herd.

There are now about one hundred spring pigs on this farm sired by Spell-binder, Meddler 2d, Top Notcher, Missouri Meddler, Storm Center, and a number of other hogs of prominence in Poland-China circles. Mr. Maupin is



A. L. Sponsler, Secretary.

took all the premiums himself. Observing this, the association thought, until the Chester White people got out and did more exhibiting, they would make the premiums offered somewhat dependent on the competition, but now and hereafter, we will probably give this breed the same recognition as the other popular breeds. The classification of the Red Polled will be used for Polled Durham this year and the same premium money will be given.

"Most State fairs demand that entries be made at least two weeks prior to the opening of the fair, in order that they can print a list of the entries for the benefit of visitors. Not having adopted that system of giving out a printed program containing the entries, we can and do take entries up to 6 o'clock Monday evening of the week of the fair, but there is one thing necessary for all live stock men to recognize and that is, we must know the number of stalls and pens required, in order that when they do come they will find accommodations for their stock."

This fair has grown continuously and we aim to provide facilities so as to accommodate all comers. A new building is being erected as headquarters for the swine department and the same will be used for press bureau. The grounds are now being cleaned up and the buildings painted and repaired.

Our carriage horse division should have more competition this year than ever before, and we believe Kansas is particularly adapted to the growth of this breed of horses and the horsemen should encourage the Government officers in their promotion. The premium catalogue contains a full account of the conditions and liberal premiums offered. Owners of fine stallions should take advantage of this extra offer. Last year we were one of the three or four fairs in the United States that adopted the Government classification and we have a very fair show this year. There are probably as many as fifteen State fairs that have adopted the classification and join with the Government in promoting this useful breed of carriage horses. We would especially like to correspond with parties who have horses to show in this class, and will send all inquiring ones a premium catalogue.

"Our races this year will be more interesting than ever before, because while we have very large entry lists the horses are more classy and represent some of the very best breeders' establishments in the West."

"We have gone to great expense in resodding and regrounding and widening our track until we know we have one

making arrangements for one of the greatest sales this fall that he has ever had, and judging from the stuff that he has from which to select an offering we predict for him one of the greatest events in his breeding career. We want to say to our readers who are interested in this character of live stock that every hog that goes out from this farm bears the endorsement of Mr. Maupin, and they must make good."

Probably the greatest sow of this herd is Classical by Prince Alert and out of a Perfect I Know dam and one of the great sows of the breed. Some of her produce are now being fitted for the fall shows, and when they are driven into the ring attention will at once be called to this grand, old matron.

Just keep your eye on Classical and her youngsters. We will have more to say of this herd as the season advances.

J. T. Bayer's Shorthorns and Berkshires.

J. T. Bayers, at Yates Center, Kans., is producing some fine show Shorthorns and Berkshires. He has written to THE KANSAS FARMER about some of his excellent animals. This is what he says:

"My Shorthorns are doing fine. Red Marler, Best Barbera, and Star Bright have show calves by their side as they are in the habit of raising that kind. Baron Rupert has proven to be a valuable breeder and has been a credit to our herd. As for Berkshires we have 108 May, June, and July pigs which have been highly complimented by all competent hog judges who have seen them. Some of these may be seen at the Kansas Royal show at Kansas City in October, 1908. Sixty of these pigs are credited to Field Marshal who gets the size, shape, and finish on them. Lady Star, Star Edna, and Lady Durham all have show litters."

Read the special offer of the Home Canner Company in the special want column this week.

Chas. M. Johnston, secretary of the Improved Stock Breeders' Association of the Wheat Belt at Caldwell, Kans., has sold his splendid 440-acre farm, just west of that city, for \$28,500. This land lies in a section which, only a few short years ago, was considered a part of the Great American Desert and even in the last fifteen years was thought to be of doubtful value. Proper methods

COMMON SENSE

Leads most intelligent people to use only medicines of known composition. Therefore it is that Dr. Pierce's medicines, the makers of which print every ingredient entering into them upon the bottle wrappers and attest its correctness under oath, are daily growing in favor. The composition of Dr. Pierce's medicines is open to everybody. Dr. Pierce being desirous of having the search light of investigation turned fully upon his formulae, being confident that the better the composition of these medicines is known the more will their great curative merits be recognized. Being wholly made of the active medicinal principles extracted from native forest roots, by exact processes original with Dr. Pierce, and without the use of a drop of alcohol, triple-refined and chemically pure glycerine being used instead in extracting and preserving the curative virtues residing in the roots employed, these medicines are entirely free from the objection of doing harm by creating an appetite for either alcoholic beverages or habit-forming drugs. Examine the formula on their bottle wrappers—the same as sworn to by Dr. Pierce, and you will find that his "Golden Medical Discovery," the great blood-purifier, stomach tonic and bowel regulator—the medicine which, while not recommended to cure consumption in its advanced stages (no medicine will do that) yet does cure all those catarrhal conditions of head and throat, weak stomach, torpid liver and bronchial troubles, weak lungs and hang-on-coughs, which, if neglected or badly treated lead up to and finally terminate in consumption.

Take the "Golden Medical Discovery" in time and it is not likely to disappoint you if only you give it a thorough and fair trial. Don't expect miracles. It won't do supernatural things. You must exercise your patience and persevere in its use for a reasonable length of time to get its full benefits. The ingredients of which Dr. Pierce's medicines are composed have the unqualified endorsement of scores of medical leaders—better than any amount of lay, or non-professional, testimonials. They are not given away to be experimented with but are sold by all dealers in medicines at reasonable prices.

of farming have made the country what it is—the richest State in agricultural America.

Disinfection at Fall Fairs.

As the fair season approaches and breeders are getting their herds ready for the circuit, it is perhaps well to say something about the arrangements that are made for maintaining sanitary conditions in the barns and show rings of the various State fairs and expositions. This matter is one that is very important, although there are doubtless many exhibitors who have not stopped to consider it seriously and take into consideration the benefit they derive from proper attention to these details. Where large numbers of animals from almost every part of the country are assembled, those from the East quartered alongside of those from the West, there is more or less chance of the introduction and spread of some contagious diseases. There have been instances of just such unfortunate occurrences, and to guard against a repetition of the trouble, most fair associations now arrange to have buildings and grounds thoroughly disinfected during the fair season.

We presume most of our readers have noticed the work done by Parke, Davis & Company, at many of the leading fairs in past years. Kreso Disinfectant, at manufactured by this company, is now recognized as the standard product of its kind, and the fact that it is used at fairs must always give the exhibitors of valuable stock a feeling of security. During the present season, Kreso will be represented at the following fairs: Columbus, Ohio; Detroit, Mich.; Milwaukee, Wis.; Indianapolis, Ind.; Grand Rapids, Mich.; Syracuse, N. Y.; Huron, S. D.; Atlanta, Ga.; Danbury, Conn.; Des Moines, Iowa; Hamline, Minn.; Sioux City, Iowa; and Springfield, Ill. At some of these, Kreso will be employed as the official disinfectant, and others will doubtless be added to the list later in the season. Moreover, Kreso has been used at some seventy-five leading fairs and expositions (including the International Live-Stock Exposition) during the past few years, and we have never known of an outbreak of contagious disease upon grounds thus protected.

To those who are visitors but not exhibitors, the fact that Parke, Davis & Company will be upon these grounds with sanitary apparatus and a display of their animal industry products, offers an opportunity for the visitor to acquaint himself with them, that should not be missed. The display will include, in addition to Kreso Disinfectant, Kreso Dip for general dipping operations, Blacklegoids for the protection of cattle against Blackleg, Anthraxoids for the protection of domestic animals against Anthrax, Azoo (Rat Virus) for the extermination of rats and mice with a material that is not injurious to domestic animals, Thermofuge, Tuberculin, etc. Almost every one has, at one time or another, been very much in need of materials of this kind or information regarding them. We would therefore make it a point to call at the tent or booth occupied by Parke, Davis & Company, and post up on these products. You will find there a representative of the company whose business it is to give information along these lines. From what we know of Parke, Davis & Company we can assure our readers that they will be given a very cordial welcome and will be able

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Home Departments

CONDUCTED BY RUTH COWGILL.

How the Baby Grows.

Nobody sees the baby grow,
Baby dear, with the laughing eyes,
Who came to our house a year ago,
Looking ever so wrinkled and wise,
But every day of the happy year
He has taken upon him some beauty new.
And as for growing, why, this is clear,
He's never had anything else to do!

Grandmama says, "When he's asleep,
Then it is that the baby grows;"
Close to the crib we often creep
To watch; but we don't think Grand-
ma knows.
Never a fringe of the golden hair,
Clustering softly around his brow,
Lengthens the least while we are
there;
And yet it is growing—the wonder,
how?

Teacher talks of chemical things
Which into a secret life combine,
And mother, listening, softly sings,
"O, God be good to this boy of mine!"
And into the sunny, summer days,
Or into the winter's evenings cold,
She weaves the notes of her joyful
praise.
While closely about him her arms
enfold.

Nobody sees the baby grow,
But over his rosy little face
The prettiest ripples of laughter flow,
The dancing dimples merrily chase;
The tiny feet are learning to walk,
The rounding limbs are growing
strong,
The lisping tongue is learning to talk,
As cheerily pass the days along.
—Margaret Sangster.

The Wrong of Overwork.

"Unless each night recovers the ground lost in the exertion of the day before, you are committing suicide by inches; and you have no right to commit suicide at all." The above is a quotation from Edward Everett Hale, in an article on "Sleep and Recreation." There are no set rules that can be applied to every one alike in regard to sleep, food, or exercise, but one should rise every morning refreshed—perfectly rested, with strength and vigor restored. This is a test and may be a guide to every one. If you have a sum of money on interest, you may use the interest and still have the same amount left to continue to make more money for you, but encroach ever so little on the principal each day and in time you will find that you have nothing left. Just so is it true in the matter of our vitality and strength, but how few seem to realize it!

Farming ought to be one of the most healthful occupations it seems to me, but when I hear about some farmers working from half past three in the morning until eight or nine at night I am not surprised when I see men old and broken down in the prime of life. How can they recuperate their powers in so short a resting time? And the wife, she probably does not rise so early, yet her rest is broken by the stir of the menfolk; and the drain upon her strength induced by her arduous duties as mother in addition to the housework necessitates a greater amount of sleep for her recuperation. It may be these early risers feel rested and vigorous when they start out on their day's work. Perhaps the restoring qualities of the air in the country is greater than in the city, so that the body recuperates more quickly, but bear in mind these words of Edward Everett Hale, who is an old man, yet vigorous in mind and body and whose sense and wisdom are accepted and respected by all. If you are still tired in the morning when you awake, be sure that nature has not had time enough yet to restore the waste material of the body used up by the labor of the past; and give it a little more time.

There is a tired feeling that some people have that is ever present. This may come from a lack of exercise or from insufficient or wrong assimilation of the food, or from some disease, but he who works all day need not think it is laziness if he still feels tired in the morning. My sympathy is great for growing children who have to rise early in the morning and who have to work at hard work all day. I think sometimes parents are inconsiderate

and think children ought not to get tired so easily and call it laziness, when really they are overworked. We must bear in mind that a growing child is building the house in which he lives and must have material, and if he uses the material up in labor the building will not be well done but must suffer. Children should have time and opportunity for plenty of play and recreation. The farmer knows better than to work his colts, but it is more serious to overwork children for the body is the temple of the soul.

Overwork is demoralizing. It robs the person of his will power that he uses to overcome temptations; it takes away his manly poise and makes him a coward; it makes him say and do things that he regrets when he becomes rested and restored. There is danger of his committing suicide, not only by inches but outright because of his overstrained nerves and fagged and used up physical forces. Do not understand me to be discouraging work—it is overwork—using and appropriating the strength that we have not accumulated. Temperance and moderation should be used in all things. Let us ever remember that our bodies are the temple of the divine and immortal part of us.

Kansas and the Flour-Sack.

A Canadian exchange in writing about the uses of flour-sacks, brings to mind the economies practised in early times with these interesting facts:

A recent number of McClure's Magazine contained an interesting story of an Italian priest, and what he did for a Pennsylvania village of Italian slate-workers. The writer of the story, speaking of the poverty of the villagers says, "Some idea of the economies they still practise is suggested by the fact that they buy their flour in cotton sacks—they won't take it in paper—and when the sacks are empty they wash them and save them till they have six; then they sew them into a sheet."

To those who were among the early settlers in Kansas there will be nothing startling in this. The saving of flour-sacks, to be made into garments was practised by every careful housewife of Kansas and other Western States in the early days, and by many in more recent years. All the children's summer underwear was made of flour-sacks. For dish-towels they were invaluable. Men's trousers, in the days when these garments were fashioned at home, were lined with them, as were the women's basques and polonaises. The only handkerchiefs one Kansas woman ever carried to school, till she was ten years old or so, were made from flour-sacks. By careful calculation, one flour-sack would make two large handkerchiefs—the boys got these—and three small ones, and a woman who brought up a family of half a dozen boys and girls largely on flour-sacks says she was very glad to get them.

When the backs of the men's vests wore out they were replaced from flour-sacks, and one Lyon County bachelor, whose "weskit" was repaired by a kind-hearted neighbor, went about one whole summer with "Ladies' Friend"—the brand of flour used in that family—in big red and green letters across his back.

Six flour-sacks sewed together made a good table-cloth, which had the merit of laundering easily and wearing well.

The sacks were colored with sumac berries, sewed together, and used for quilt tops and linings. Sumac coloring was not gaudy—a dull slate, as many old-timers will remember—but it did not fade and did not soil easily. Quilts pieced from scraps of the women's and children's calico dresses and the men's shirts were lined with



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six flour-sacks sewed together. There are quilts with flour-sack linings today in scores of well-to-do Kansas homes.

Particular women ripped the flour-sacks, sewed them up the "other way" of the cloth, hemmed them, and neat, durable pillow-slips were the result. Others, characterized as "shifless" by the particular ones, slapped them on the pillows just as they came, the selva at the open end serving as a hem—and they wore as long that way as the other.

The useful flour-sack stands in the history of pioneer days alongside the despised but "couldn't-have-got-along-without-it" sorghum, the hominy, the bacon, the dried wild plums and grapes, the wild, sour gooseberries—sweetened with the afore-mentioned sorghum—the dried pumpkin, and the cornbread which made the coming of the flour-sack not half often enough for the Kansas house-mother.

An Appeal for Help.

The following letter is from Pratt County and bespeaks the feelings and wishes of very many whose conditions are similar. If any of the readers have suggestions or know of any way to help our sister to lighten her labor kindly write and send it to THE KANSAS FARMER. This department welcomes upon any subject that will be interesting or helpful to the readers. In this particular case, the lady is fortunate to have the windmill so convenient, but the practicability of its use to do the churning and washing is doubtful, as the windmill is dependant upon the wind for its motive power; but if she had a gasoline engine it could be attached to the pump for pumping when the wind did not blow, and could be used to run the washing machine, to churn, or as a motive power for any needed thing. Having the windmill so near the house makes it easy to have water convenient in the house which lightens the work very much. Another time I will go more into detail as to how work may be made easier in the home. The following is the letter:

"I am one of the many women out in the rural districts, amid the immense wheat fields, where much work is to be done. We are too far from town to patronize a laundry or creamery, and find it impossible to get hired help.

"My health is poor and with small children I have found it more than I can do, and I am seeking ways to lighten my household duties. I find the Home Department a great help and comfort and I have wondered if it could offer suggestions of how we could lighten our work.

"We have a windmill at the kitchen door and we wondered if it could be used to churn and turn the washing machine."

Deep Breathing.

There are three distinct breathings of the body—the chest, or upper breath; the middle, which fills the lower lungs, and the lower, or abdominal breath; none of these should be used alone. The majority of women breathe in the chest or upper part of the lungs only, while it is absolutely necessary for health to cleanse the lungs of impure air by filling them with a deep intake breath of pure air as regularly as possible. The majority of women do not use their spine, or the muscles of the back properly, but throw all the work upon the muscles of the chest, the abdomen and the fore part of the arms. If they would



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to the yard every day and liked it so well I spent most of my time there.

One day I was having a delightful nap, curled up in the long grass, when a woman came out of the house and walked right towards me with a big basket in her arms. I ran, but she called out "Kitty, Kitty!" Then she talked to me while she took things from her basket and hung them on the line.

At first I did not have much to do with her, for I was afraid of every one, but she looked so very kind that one day I decided to go and rub against her basket and see what she would do. She seemed pleased and talked to me, so I knew she must be a nice woman. We grew quite friendly and nearly every day she gave me something to eat.

One day another woman came out of the house and talked to me. She seemed to own the house, so I thought perhaps this was my opportunity to obtain a home.

I decided I would make myself as attractive as possible. I went up to her and rubbed against her skirts, watching all the time out of the corners of my eyes to see what kind of an impression I was making. I could see she liked cats. She stooped down and petted me. Then I grew bolder and purred harder. She sat down and took me in her lap. I tried to be quite demonstrative, but she said I was too dirty to be petted. I wanted to tell her if she had lived in ash barrels for a year, she would probably look dirty also.

She did not stay long, but I made up my mind I would watch my opportunity and see her as often as I could. If I could only make her like me, I felt sure she would give me a home.

To make a long story short, I will say that I succeeded. I began to be asked into the house to take my meals. Then I was taken upstairs, and one never-to-be-forgotten night, I was taken down cellar and given a nice soft bed in a box close by the furnace.

I felt then that I had a home and how happy I was! I tried to be very clean, washing myself often, and smoothing my fur, for my mistress is particular how I look. One day I felt rewarded for all my trouble when I heard her say I was a very neat cat.

I have a master, too, and sometimes I think he likes me better than my mistress, for he lets me do just as I like. My mistress does not approve of having me fed at the table, but my master often gives me a bit of meat on the sly. Then there are two chairs in the parlor of which I am extremely fond. They are very large and soft, covered with some smooth material which makes a good bed, and I love to curl up on them and take a nap. My mistress whips me when she finds me there, but my master only says, "O, never mind!"

I suppose you wonder where I got my name. Well you see it is this way, my mistress is very much interested in missions—I suppose all ministers' wives have to be. Everything in her "den"—that is where I spend the greater part of my time when I am not in my master's Morris chair—seems to be on missions and I get very tired of the subject. Why she even said she did a piece of missionary work when she gave me a home. Think of that, and I American born!

Well, to go back to my name. It seems that Africaner was a man in Africa who was very black and very dirty and very bad, but who became very good. My mistress said I was so black—I have not even one white hair on me—she would name me for him, so that is how I got my name.

I must confess I had not a very high opinion of ministers after my first experience in a minister's family, but I have come to the conclusion that they are not all alike and that, everything considered, I am very happy in my new home.—Transcribed by Jessie Kemp Hawkins, in the Congregationalist and Christian World.

The value of her corn grown in the past twenty years is \$100,000,000 more than that of all the wheat crops grown in Kansas since her beginning.—F. D. Coburn.

The Little Ones

A Doll Problem.

Said a grave little maid to her father one day:

"I don't know what to do;
The girls all say I'm too big for dolls,
So I thought I'd just ask you.
It worries me so when I think of them,
Neglected, without a mother,
And I couldn't bear to give away
My children to another."

"I don't want ever to give them up,
It seems as if grown folks might play;
And if I was big I could make doll
clothes."

Lots better, anyway.
It's so much fun to play with dolls,
I don't see what I'll do,
Or how I'll know when the time is
come
That I am really through."

Then her father gave, as a father will,
Advice for a childish woe:
"When the time shall come to leave
dolls behind,

Don't worry, my child, you'll know;
But I really think, right now, my dear,
Your family needs your care;
I'd crowd them, rag-dolls and all, in
the cart,
And give them a taste of fresh air."

—Bessie Rae Hoover.

The Cloud-Mother.

A fair white cloud-mother floated over the fields one hot summer day, her arms outstretched over her earth-children. How beautiful she was in her snowy white dress, with her silvery hair and her long, thin veil trailing out behind her.

"The earth is very fair" she thought as she passed over the green meadow where the blue forget-me-nots were nodding across the stream.

She came again, and as she looked she thought it seemed less fair. The grass was not so green, nor the flowers so blue. Day after day she came to look upon her earth-children, and day by day she saw the grass grow browner, the leaves dryer, and the flowers begin to hang their heads. Each day the brook ran more slowly and sang less merrily, till at last the pond dried up, the cows could no longer cool their hot feet nor the children play in its water.

The cloud-mother looked sadly at the earth's faded dress and then at her own fresh, beautiful

one. Slowly she took off her dainty dress and laid it aside, took up her thick black cloak and heavy veil, and, wrapping herself closely about, she burst into tears of pity for the poor earth. The sobs which shook her were heard below and the children said, "It thunders;" and as her tears fell they danced with joy and cried, "It rains." Still she cried on and on, and when she had no more tears to cry she looked down upon the earth. But what a change! The meadow was again covered with a carpet of green, the flowers were nodding their pretty heads, the brook was dancing merrily along, the cows were standing in the cool water, and all the world looked bright. Then she knew that her tears had watered the earth and saved her children, and filled with happiness she floated away.
—Mrs. Winfield S. Hall, in Little Folks.

A Steady Growth.

During the past decade the Central Kansas Business College at Abilene, Kansas, has made a steady and ever increasing growth. It has broadened out into many departments of the highest order, until to-day it is recognized as the leading commercial college in the Central Western States. No school has had a more rapid growth, and few have reached the same standard of quality that is now maintained in each and every department of the college.

The school is modern in every sense, and supplied with the best class of equipment that money can buy, thus offering in addition to thorough instruction, the kind and quantity of facilities that are needed for the best work. The aim from the beginning of the school has always been to give the best service at the least expense, and to maintain in every respect the same

class and quality of work, instruction, and equipment in every department.

The management have never sought to make claims for the school that they are not amply able to verify by actual work and investigation, in addition to the products sent out from the institution. No school can reasonably make claims that do not exist within the institution, and still pose as being an honest and reliable institution.

as the golden thread by which success was gained.

A young man's best capital is something that is permanent and always available—something that thieves can not steal nor misfortune sweep away. A bright young fellow once said that he had a five hundred acre farm that was exempt from taxation, was not subject to execution, and was equal in value to three times the area. "Where



This school started in its infancy in a very meager way, but on a high plane of business integrity, and because of this, in addition to its true sense of justice and right, has grown to its present proportions so that its influence is now effecting the young manhood and womanhood of hundreds of homes annually, being also at the present time recognized over the entire United States as one of America's greatest business colleges and educational institutions. Hundreds of young men and women have come and gone out into the business world where greater experience and practical application of the education received could be put into use so that the influence of this magnificent Christian institution, is to-day felt in active life throughout the entire United States.

Young men and young women, interested in securing a practical and sensible business education, should by all means take advantage of investigating this school; because its quality is known and its reliability is beyond question. Education received within its walls on thorough and sound basis will leave a happy and practical graduate in the coming business life of the future, and such education will be always regarded by the happy possessor.

is it" he was asked. "Under my hat," he replied. Every industrious, ambitious lad has just such a farm which he can cultivate and develop or allow to run to waste.

A Good Position for Every Graduate.

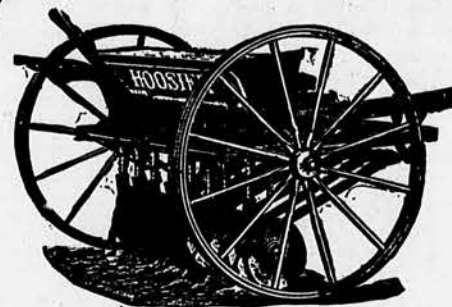
Last week a representative of THE KANSAS FARMER dropped into the Platt Commercial College of St. Joseph, Mo. Platt's is one of the foremost commercial colleges in the country, but it seemed this time that it must be meeting with even greater success than ever before, a veritable hive of industry, located in one of the most commodious college quarters that we have ever visited, an elegant building, modern in every particular, and the finest equipment that can be purchased.

This college was organized thirteen years ago and has been under the same management ever since.

Mr. E. M. Platt, the president and owner is a son of Prof. J. E. Platt, who for twenty years was professor of mathematics in the State Agricultural College at Manhattan, Kans.

This school has had a steady growth from its inception beginning with an enrollment of four pupils in a small room, to a yearly enrollment of 850. The careful, conscientious, and pres-

HOOSIER GRAIN DRILLS



When you buy a Hoosier Drill, you get full value for your money in quality; the machine you buy must do all that we claim for it. It is sold to you under a guarantee that is in plain English, and this warranty means much to you.

Hoosier Grain Drills have broad-tired, staggered spoke steel wheels, the kind that stand the racket and hold up under severe trials. The Axle Boxes have removable sleeves, renewable at little cost. The frame is of toughest steel, strongly braced—a foundation as solid as the Rock of Gibraltar. The purchaser has the option of two styles of force-feeds, the Plated or Double Run Internal, and they are accurate as to the handling of all known grains. The Hoppers are large and roomy, with divided lids. The Open or Closed Delivery Disks are set at the right angle to line of draft, to make the most desirable seed trench, and they have removable boxings. The spacing between the discs is adjustable, so that if you want to sow your wheat eight inches apart, you can change the width and sow your alfalfa six inches apart. Think well of this exclusively Hoosier feature. There are many other Hoosier features that will appeal to you, but we can't describe them here. So send today for our free Hoosier Catalog.

Go to your dealer and insist on seeing the Hoosier before you buy a Drill. If he will not supply you, we will.

THE AMERICAN SEEDING-MACHINE CO.
INCORPORATED
RICHMOND, INDIANA.

tical instruction given by Mr. Platt and his corps of experienced teachers enables him to graduate a class of the most successful stenographers and bookkeepers to be found anywhere. This school being located in St. Joseph, a city of 125,000 inhabitants, with large wholesale, manufacturing, and railroad interests affords the best opportunities for good high salaried positions.

There is a tremendous demand for business college graduates.

In this extremely busy age the young man or lady who is expert in any of the lines taught in a commercial college will have not very much difficulty in getting or holding a good position. Over done? If there were 10,000 first class office help turned out to-morrow in the West there would be a good job for every one of them.

Platt's Commercial College being located in the heart of one of the greatest of all Western industrial cities, they have at their fingers end, so to speak, a first class position for every first class graduate.

Send for one of their beautifully illustrated catalogues which will be mailed to you on application and will give you whatever information you may desire with reference to this school.

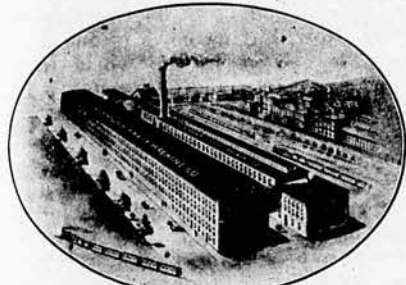
A SUCCESSFUL MANUFACTURING CAREER.

What One Company Has Done and Is Doing for Dairy Interests the World Over.

There have been many companies spring up and vanish in the past two score years, manufacturing dairy implements of different styles and descriptions, but one in particular (by maintaining the principles on which they started of giving every one "a square deal" and maintaining the superior quality of their goods), has grown from a small concern doing business in a single room to the foremost factory of its kind in the country.

The Vermont Farm Machine Company, Bellows Falls, Vt., incorporated in 1873, has been prominently identified with dairy interests from the start, and has done much to raise the standard, the country over, all along these lines.

They have manufactured for years, several different styles of the most popular factory and dairy churns, as well as several sizes of powers for ani-

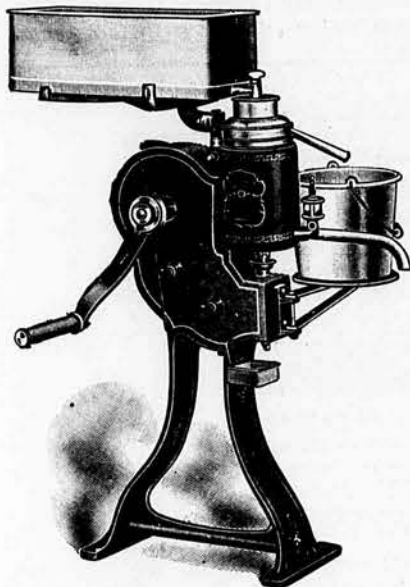


Partial view of U. S. Cream Separator Factory, Bellows Falls, Vermont.

mals of varying weights, from a dog to a bull. The praises of their several styles of butter-workers and butter-printers is voiced by dairymen the country over, as is also their "Agos" Babcock Tester.

The celebrated Cooley Creamer, so popular in the days before the centrifugal separating methods were instituted, established in the minds of dairymen the reliability of their goods. For the past sixteen years the popularity of the United States Cream Separator has been echoed around the world by the thousands of satisfied users.

It will be readily seen by an examination of one of their separators why this particular make of machine is so thoroughly built and stands up for years under the most severe tests. Ev-



Perfect in construction, symmetrical in design, and ever ready for immediate use.

ery part that goes to make up the United States Separator, large and small, is subjected to the most severe tests before leaving their factory, thereby insuring every machine to be of perfect construction.

It would be a very interesting and convincing experience if every reader of this article could only see the whole process of making the United States Cream Separator, starting where the castings first come from the foundries and watching its process through the different departments until it leaves

the paint shop, spick and span, without a blemish.

Then if you could only see their immense, modern machine shop with the many rows of automatic, labor-saving machines, making many of the more intricate parts to less than one thousandth part of an inch. This great accuracy of the running parts makes the separator just what it has always been, the easiest running machine on the market. And this is a very essential part to be considered when one has to separate twice a day, and perhaps it takes twenty to thirty minutes each time, which, if it required the strength necessary for the turning of most separators, would be a very laborious task.

As popular as the peerless United States Cream Separator has always been, the improved 1908 machine is truly the acme of perfection in separator construction. It has to be seen to be fully appreciated. That almost perfect bowl which in 50 consecutive runs, so unmercifully beat everything else under the name of cream separators, at the Pan-American Exposition, has even been further improved by its weight being materially reduced, making it to run much lighter, wash easier and has, in fact, simplified it to a minimum.

The milk supply can support which previously was held in place by being bolted to the side of the frame, is now supported by a stud which fits in a hole in the immediate center of top of frame, adding greatly to the graceful, symmetrical frame which has always characterized the United States. Then the thumb screw which held the milk supply can to bracket, has been replaced by a very clever contrivance in the shape of a lever and can, which releases and holds securely the can to bracket by simply throwing over the small lever.

The familiar crooked cream outlet spout used on all other separators is replaced on the United States by a perfectly straight spout, being much easier to clean and keep clean.

Another great convenience is the addition of a cream pail shelf which can be moved around to any position.

With the best equipped factory in the country for the manufacture of cream separators, employing all experienced and competent mechanics and backed by forty years of honorable and satisfactory dealings with dairymen the country over, the Vermont Farm Machine Co., manufacturers of the celebrated United States cream separators, stand to-day in a class by themselves.

It would well repay every reader of this article, if they keep three or more cows and have no cream separator or if they have one not giving perfect satisfaction, to write this company for catalogue No. 91, which is cheerfully sent on receipt of a postal.

The Poultry Yard

CONDUCTED BY THOMAS OWEN.

Poultry Notes.

The next State Poultry show will be held at Newton, Kans., January 4 to 9, 1909. The board of managers met at Topeka, July 29 and decided the dates and place as above mentioned. This takes the show to near the center of the State and to a region swarming with pure-bred poultry. While Newton is not as large a town as Topeka and the attendance at the show may not be as great as at the State Capital, still it is believed that there will be more of the buying class of visitors than at Topeka, for it will draw such persons from the new State of Oklahoma as well as from all the surrounding counties. The State Show is now on such a well-established basis that it is bound to be a success no matter in what town it is held.

We all know the value of eggs for eating purposes, but comparatively few of us know how good they are from a medicinal point. For burns and scalds there is nothing more soothing than the white of an egg, which may be poured on the wound. It is softer as a varnish for a burn than collodion and being always on hand can be applied immediately. It is also more cooling than the sweet oil and cotton which was formerly supposed to be the surest application to allay the smarting pain. It is the contact with the air which gives the extreme discomfort experienced from ordinary accidents of this kind; and anything which excludes air and prevents inflammation is the thing to be at once applied. The egg is also considered one of the very best remedies for dysentery. Beaten up lightly, with or without sugar, and swallowed at a gulp, it tends by its emollient qualities, to lessen the inflammation of the stomach and intestines, and by forming a transient coating on those organs to enable nature to assume her healthful sway over the diseased. Two, or at the most three eggs per

day would be all that would be required in ordinary cases; and since the egg is not merely a medicine, but food as well, the lighter the diet otherwise and the more quiet the patient is kept, the more certain and rapid is the recovery. One would not suppose that there is much strength in the white of an egg but in the case of a sick neighbor from inflammation of the bowels, nothing in the way of nourishment was given to the patient for over two weeks but the white of an egg and the patient sustained her strength and eventually got well.

If you have more young stock on hand than you intend to keep over winter you had better sell at once rather than keep expecting a higher price. Chicken feed is very high this summer and a reasonable price now is better than a little higher one later. For by selling now you avoid the risk of death and disease caused by overcrowding growing chicks. The fairs will soon be commencing and if your stock is not sold by that time, here will be a good place to dispose of them.

It is a good plan to feed a little oil-meal in the morning or at noon with the soft food, about once a week is sufficient. It will act gently on the bowels, gloss the plumage, and is really a useful food to give the flock occasionally. Russian sunflower seeds are also good for putting a gloss on the plumage of fowls and if you have grown some or can buy them reasonably I would feed some to the hens two or three times a week. But linseed-meal can always be bought at the feed stores and is almost as good as the sunflower seeds.

Don't forget that the State Fair at Topeka will commence in a little over a month, September 7 to 12, and that there will be a great display of chickens there. The premiums offered are the most liberal of any fair and no entry fees are required. Make up your mind to send some birds to the State Fair. If you have not yet received a premium list, write to R. T. Kreipe, Topeka, Kans., and he will send you one immediately.

The dust-bath to the fowl is what the wash-bowl is to the individual. With the dust-bath the hen cleans her body. She comes as regularly to dust herself as she does to feed, instinct teaching her that it is the best method for ridding herself of lice. If she has free range where there is plowed ground or soft earth she will find a place to dust herself, but if confined to pens she must be provided with a place and material wherewith to dust herself. Some provide ashes of either hard or soft coal, some use dry road dust. These are all good, though some object to the road dust because it may be filthy, but this is not necessarily so. We have noticed that the hen has a preference for a moist earth rather than for a perfectly dry ingredient. There is nothing as good as a deodorizer as mother earth. Therefore see that the yards are spaded up quite frequently so that the hens may wallow in this dirt, or go to a plowed field and haul a load of fresh earth to the poultry yard. If you will see that the hen has proper material wherewith to clean herself, she will avail herself of the means, and thus solve, in great part at least, the lice problem.

Jewell County, Kansas, raised in 1896 nearly 11,000,000 bushels of corn. This was more than the combined yields that year of Maine, Rhode Island, North Dakota, Montana, Wyoming, New Mexico, Utah, Arizona, Nevada, Idaho, Washington, Oregon, New Hampshire, Vermont, Massachusetts, and Connecticut, or considerably more than the aggregated output of California, Colorado and Florida in the same twelve months.—F. D. Coburn.

We are pleased to number among our advertisements in this issue that of Bromo-Seltzer, the world-renowned remedy for headaches, a delightfully refreshing effervescent salt, which

"THE OLD RELIABLE"

DIETZ LANTERNS

THERE ARE NONE "JUST AS GOOD"

WHEN YOU BUY A LANTERN INSIST ON A "DIETZ"

MADE BY R. E. DIETZ COMPANY NEW YORK

Largest Makers of Lantarns in the World

ESTABLISHED 1840

PIONEERS AND LEADERS

PLYMOUTH ROCKS.

Duff's Barred Rock Winners

at half price during summer. Fine spring chicks and 1-year-old breeders. Send for circular and prices. A. H. Duff, Larned, Kans.

REMEMBER—That I have a choice lot of young stock coming on. All Smith's laying strain Rocks. Choice breeders. Prices right. Chas. E. Smith, Mayetta, Kans.

White Plymouth Rocks EXCLUSIVELY.

For 16 years I have bred W. P. Rocks exclusively, and have them as good as can be found anywhere. I sell eggs from first-class, high-scoring stock at live and let-live prices. \$2 per 15, \$5 per 45, and I pay the expressage to any express office in the United States.

Thomas Owen, Sta. B, Topeka, Kans.

BRAHMAS.

Light Brahma Chickens

Choice pure-bred cockerels for sale.

Write or call on

Chas. Foster & Son, Eldorado, Ks. Route 4

WYANDOTTES.

BROWN'S WHITE WYANDOTTES—Ahead of everything; stock for sale; eggs in season. I have the English Fox Terrier dogs. Write me for prices and particulars. J. H. Brown, Boyero, Colo.

LEGHORN.

S. C. BROWN LEGHORN EGGS from our standard bred flock, sterling quality, rest of season \$1 per 30, \$1.50 per 50 or \$3 per 100. Our motto: Fine birds, moderate prices. L. H. Hastings, Quincy, Kans.

BUFF ORPINGTONS.

FOR SALE—S. C. Buff Orpington, Rhode Island Reds (both combs), White Langshan cockerels and pullets, \$1 each, six for \$5, if taken soon. Mrs. Lizzie Griffith, Emporia, Kans.

BUFF ORPINGTONS—1500 utility, January, February, March hatched cockerels and pullets to sell. Buy now and get the pick. Price will advance next month. Catalog free. W. H. Maxwell, 1906 McVicar Ave., Topeka, Kans.

CHOICE Buff Orpington and B. P. Rock cockerels. Collie pups and bred bitches. Send for circular. W. B. Williams, Stella, Neb.

RHODE ISLAND REDS.

NEOSHO POULTRY YARDS—Rose Comb R. I. Reds; stock for sale. Prices reasonable. J. W. Swartz, Amercus, Kans.

SCOTCH COLLIES.

SCOTCH COLLIES of the very best breeding, have the intelligence of a human. For particulars address, DEER LAKE PARK, SEVERY, KANS.

SCOTCH COLLIES—Pups and young dogs from the best blood in Scotland and America now for sale. All of my brood bitches and stud dogs are registered, well trained and natural workers. Emporia Kennels, Emporia, Kans. W. H. Richards.

Scotch Collies.

Fifty-seven Collie puppies just old enough to ship. Place your orders early, so you can get one of the choice ones.

Walnut Grove Farm, Emporia, Kans.

Incubators and Brooders

If you want a good incubator in a hurry write to the undersigned. He keeps the Old Trusty Incubator (hot water) and the Com-pound (hot air), two of the best incubators made. Also the Zero brooder, no better made. It pays to buy a good brooder. No use hatching chicks without a good brooder to raise them. The Zero will raise every chick you put in it.

THOMAS OWEN, Sta. B, Topeka, Kans.

braces the nervous system, invigorates the mind, cures headaches, relieves mental exhaustion, insomnia, nervousness, and nervous dyspepsia. The Emerson Drug Company, Baltimore, Md., manufacturers of Bromo-Seltzer, claim to have sold during the past ten years, 12,500,000 bottles of the various sizes, aggregating 580,000,000 doses. This record should be sufficient guarantee of the merits of the preparation.

"It is estimated that the acreage of alfalfa will be increased by this fall's seeding at least 100,000 acres. New crop seed will hardly be available in sufficient quantities in time, and as stocks of high grade seed carried over from last spring are not large, buyers should engage their supply immediately. As is well known, Kansas is the center of the alfalfa growing industry. The Mangelsdorf Bros. Co., seedsmen, Atchison, Kans., advertise tested seed in this issue."

EXCLUSIVE Tubular ADVANTAGES No. 6

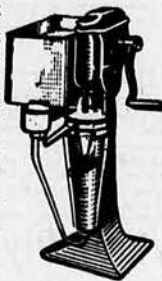
NO EXPOSED GEARS

Exclusive Advantage No. 6 is another point in favor of the Tubular. No Exposed Gears—every moving part is enclosed except the handle. No danger to fingers—no chance of clothing to catch—no accidents to mischievous children. Absolute safety and freedom from dust and dirt is another evidence of what our 28 years building experience means to you.

The Tubular is a particular favorite with the women, simply because it has so many features that save work, and make it easier to run and to clean.

Write a postal and let us send you, prepaid, our Catalog No. 165; it will interest you in many ways.

THE SHARPLES SEPARATOR CO.,
West Chester, Penna.
Toronto, Can., San Francisco, Calif., Chicago, Ill.



Dairy Interests

Breeding and Feeding for the Dairy Type.

EXCERPTS FROM AN ADDRESS BY W. F. MCSPARRAN, FURNESS, PA., BEFORE THE VERMONT DAIRYMAN'S ASSOCIATION.

Naturally, right here, a special purpose dairy cow man might be expected to pay his compliments to that dairy delusion, known as the dual-purpose cow—the one that will make profitable milk all through her life and good, salable beef when her milking usefulness is over. I grant that such a cow would be of inestimable value to the average dairyman, but I can not encourage the hope any one may entertain of her ever being evolved into a breed fact. Evidently the people who think they can find that breed of cows or make it, want that kind and we can dismiss them with our best wishes. All cows in a given environment were very much alike in their characteristics and tendencies as long as they were in their wild or native state. Improvement only began when men brought them under dominion. No real progress was ever made toward breed improvement until man became a factor in the evolution towards some ideal. The birds in the trees, the rabbits, the squirrels, are of the same size and of the same habits as in the days of our grandparents. The robin has the same size, the same plumage, the same too-early four o'clock note for my little boy as it had for my father when he was a boy.

Perhaps of all our wild animals the bear has developed most in stature and importance—especially those that got away.

The same may be said of the fishes, for while the old saw has it that, "There are as good fish in the sea as ever were caught," those of us who must listen to tales of piscatorial sport know there is a great tribe of fishes always smart enough to jump the hook; but we observe that the silly ones that get caught, run about the same sizes our fathers brought home when we were boys. So, the better cow waited for man. In her native state she and her consort were both survivors of the physically fittest. They were fleet of foot, and alert to guard against and ward off danger. The cow became a mother and from such scant and uncertain living as she could gather, made the milk till her offspring could shift for himself in his individual struggle for his own survival.

IMPROVEMENT OF BREED.

Of course we do not know, but we can easily imagine that improvement of breed was begun by man taking the cow and learning (some men have not learned it yet) that she gave more milk when she had more feed. Then no doubt her daughter, under the influence of a quieter life and fuller feeding, was a milking improvement upon the mother; and some daughters more of improvement than others. The majestic "head of the herd" of course, severed domesticity and spurned it, and maintained his wild dominion on the hills, till some successor grew robust enough to depose him.

No doubt now and then, in a hazy sort of way, these early breeders wondered that the superior cow did not always give in her female offspring a superior cow also. They did not take into account the prepotent, masterful worthlessness of the sire that came down from the hills. And it was no shame for these early breeders that they knew no better, for they had no Hoard nor professors to teach them; but what shall we say of the breeders of the present day, who have Moses and the prophets and have not learned that improvement is impossible with the scrub sire, come he from the hill or the valley?

THE PRACTISE OF INBREEDING.

We do not know to what extent these pioneer breeders practised inbreeding, but we can imagine they followed it, under their methods, too closely until they saw its evil effects and then they flew off in a tangent from it, for we notice in their lineal descendants the breeders of our present day scrubs, a horror of the practise of inbreeding. Now, inbreeding in itself is not to be condemned as beyond excuse for being done, for inbreed improvement is one of the most important agencies at our command, when used wisely and in connection with favorable environment and rational, continuous good feeding.

We can not discuss the good cow from a single outlook. We can not make her by breeding alone. If we try to do that, then certainly close inbreeding becomes the forerunner of disappointment and disaster. We can not ignore breeding and depend upon environment in our development of the dairy cow. We can not say there is nothing at all to be considered but feed, and bring forth our ideal cow from our skill and knowledge in compounding and feeding a balanced ration. We can not dissect the cow and put a value upon this, that, or the other influence contributing to her production.

TYPE OF DAIRY COW.

First, we must have in mind what to us means dairy type. After we have fixed that well in mind and have a proper realization of the fact that to secure this type means probably a

large part of a man's years, and to have a stock of patience, industry, and hope we may consider ourselves in good shape and breed our dairy cow.

When we fully realize the length of the work we undertake, when we know we will make many mistakes and that "the best laid plans of mice and men gang aft agley," only then will we have a proper conception of the absolute and utter folly of trying to work improvement by crossing breeds, as, for instance, cross the Holstein on the Guernsey, with the hope of getting in the issue a cow that will yield the Holstein quantity and the Guernsey quality.

THE FIRST BREED IMPROVEMENT.

The first breed improvement must have been accomplished by fixing as a prepotent characteristic certain traits in a strain or a family. The reason the first breeders made no progress in producing great milk cows was because of lack of merit in the sire, and lack, also, of prepotent ability on his part of impressing such merit as he may have possessed on his offspring; and I can think of no way in which this prepotency can have been secured, but by the practise of inbreeding—breeding a type selected male back to his dam, and then breeding the type selected female offspring back to her sire, and from that mating or a series of such matings, choosing, when nearing maturity, a type of male progeny to use in service with sisters and half-sisters, tentatively, and freely with near and remote cousins. It is impossible here and with such time as I think you will allow me to take up this aspect of the breeding question and follow it into some of its important ramifications, but I may add that a great deal of the primary work here briefly outlined may be saved the beginner in breeding, if he shall intelligently take up the work at the point to which some of our most careful and conscientious breeders have brought it. Thus he will save himself both time and trouble. All over the country are well established herds of different dairy breeds and from these he can safely make his selection.

THE CALF OF A GOOD DAIRY COW.

The calf that is to be a good dairy cow, certainly has a right to be well-born—to be bred with an unquestionably strong dairy record as an inheritance. If the breeder is fortunate enough to own or to be able to acquire meritorious cows of pure blood, carrying strains of high-producing capacity, and will use a male of rich inheritance from great sires and dams—not great in the show ring, but in the work of the dairy—to such a man, if he have even ordinary gumption, breeding dairy type animals is a work easy of accomplishment.

"THE WORLD'S STANDARD"
DE LAVAL
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SEPARATORS
THE DE LAVAL SEPARATOR CO.
165-167 BROADWAY, NEW YORK. 42 E. MADISON ST. CHICAGO.

But to the other man, the one who has not things so ready made to his hand, building up the dairy herd is not so easy as it may often look. It is this man, this representative of the great American class of farmers, who is eating his bread in the sweat of his face, who can ill afford to make mistakes; this average, struggling, brave-hearted burden-bearer that ever should have concern that any message that is sent may reach.

His cows may be a bunch—a job lot—carrying their unwritten pedigrees back to the watering-places—breeding operations of the patient Jacob—and, giving credit where it is due, I may say in passing, that Jacob was probably the first extensive breeder to make a practical application of one of the elements that in breeding operations we now name, environment.

POOR COWS AND GOOD COWS.

To the man with this assortment of unknowable cows, I have heard the advice sometimes given to sell the whole lot and invest the proceeds in as many good cows as the sum will buy. Now, buying cows is one of the very last ways in the world to get good ones. My advice to such a man would be to get into shape to feed those cows a good full ration for a whole year.

I do not know how it is with the brethren, but for myself, I'll admit I am not smart enough to tell the worth of a cow by looking at her. They say the only way to know a woman is to live with her, and it is pretty much the same with the cow. She may be better than she looks. Then again she may be worse than she looks. As soon as you see some cows you know they should have been steers. It is a waste of time and labor to fool with them. Get rid of them as quickly as possible—they will take the bread out of your mouth; but the more promising ones may surprise you after you have fed them well for about a year and lived with them.

Put them to the test of the scale and the Babcock. Shelter them from storms; be kind to them; in addition to feeding them abundantly do it regularly; don't forget the round year full ration—don't try to fool them on

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Bull Dog
SUSPENDERS
MODEL A
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RUBBER THE LIFE OF A SUSPENDER
is a vegetable that decays and evaporates, giving suspenders short life if the strands are not thick enough to withstand penetration by the elements. A comparison of the thin rubber used in ordinary 50c suspenders with the thicker strands to be found in BULL DOG WEBS explains why BULL DOG SUSPENDERS withstand heat, perspiration of the body, climatic action, etc., better, and why **THEY OUTWEAR THREE ORDINARY KINDS**

BULL DOG SUSPENDERS have unbreakable, non-rusting, gold gilt metal parts; tough, pliable Bull Dog ends that won't pull out at the button holes, are made in light, heavy and extra heavy weights (extra long if desired), comfortable, neat, durable.

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a short, dry pasture by piping them the tune, "Consider, old cow, consider." Better use the up-to-date version—"Corn fodder, old cow, corn fodder."

USE THE BEST BULL YOU CAN BUY.

If a scrub bull is used to head the herd, make him walk the chalk to the butcher, and in his place put the best bull you can buy from the breed of your choice of dairy breeds. Feed and care for him right and it is likely he will not disappoint you. If at maturity he proves his worth, keep him in use for as many years as possible and until his successor has given proof of his right to the succession. If a matured, tried bull can be bought at the start, and "his papers fit" him, as my friend Collinwood loves to say, so much the better.

Then you have begun to breed for dairy type. The functions of the dairy cow are three: From the food she eats she must maintain her physical well-being; nourish and develop her unborn; and generally furnish milk for her master. What a wonderful creature is the good cow.

There is a limit to the cow's ability to eat, digest, and assimilate food, and unless the quantity be full, some function, or perhaps all her functions, will lag; if the quality be lacking from the full quantity she goes undernourished. It is pretty well settled in our conception of cow nutrition that the medium cow must have at least two pounds of digestible protein a day. Nature is never lavish with protein in corn stover, timothy hay, and oat straw, huckleberry bushes and ragweeds, and there is no cow living that can eat enough of such provender to extract therefrom her complement of digestible protein; and I can assure you the man who is breeding for dairy type and thus underfeeding the-to-be mother of the future cow, is feeding for his own disappointment and nullifying the inheritance that should be the birthright of the future cow from her prepotent sire.

THE "BRED-RIGHT" CALF.

But assuming that the calf has been bred right and has been strongly born, it then passes into the hands of the breeder to carry on the work. "All flesh is grass," it has been written. After being well-born all the calf-heifer-cow needs is care and feed. At this stage comes in the necessity of wisdom and patience. All good looking calves do not make good cows. Dairy progress is not bewilderingly rapid and often the way of the progressor is hard.

It is supposed this calf carries the dairy type inheritance from its sire. In the sire, the type was established and encouraged, largely by environment and feed, and these two forces must be operative in encouraging a proper development of the dairy tendency in the offspring. Consequently, the calf and the heifer must be fed with the dairy type in view. One popular conception of the dairy type is a thin skin drawn over the skeleton of a cow, but I say unto you, no man has ever yet starved dairy qualities into a calf or a cow, and it is not worth the beginner's while to make the experiment. But many a good cow has been starved into mediocrity by the stinginess or ignorance of her feeder. In the matter of a little more or less fat on the heifer or cow I may quote—"Better the excess than the deficiency."

It is well to remember that the same character of feed that will encourage the cow into well doing as a milker is the kind that will develop the heifer into a cow.

As I have said, if she is big enough to become a mother, at 2 years or less of age, have her bred back to her own strong sire. Then in feeding the pregnant dairy heifer remember she must make growth, also, and withhold not the abundant and well-formed ration. At this time remember, further, that this young thing is performing one of the most wonderful and beautiful marvels of the universe—working out the design of maternity—taking on the obligations of motherhood, and she is in your hands where I will wish you both well and leave her.

BEST HAMMERLESS DOUBLE BARREL SHOTGUN \$13.85 MADE IN THE WORLD \$13.85

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Our A. J. Aubrey Hammerless Double Barrel Shotgun, made in our own gun factory at Meriden, Conn., under the direct supervision of Mr. Aubrey, offered at factory cost, with our one small profit added. You cannot buy its equal for double our price. If you have any use for a high grade American made hammerless double barrel breech loading shotgun, then don't overlook this, the greatest offer ever made.

ACT RIGHT NOW. Take advantage today of this truly marvelous gun offer and you can get the best hammerless gun made in the world at a mere fraction of what you could ever buy a gun elsewhere that would not in any way compare with the great gun we offer.

DESCRIPTION.

No picture or description can possibly do justice to this high grade A. J. Aubrey Hammerless Shotgun; it must be seen, handled and used for you to appreciate it. It has the very finest armory steel barrels, reinforced at breech, taper choke bored for smokeless or black powder, top extension rib, triple automatic locking device, full plate locks, top snap break, positive automatic safety, interchangeable parts; the stock is made of especially selected black walnut, beautifully finished, full pistol grip, grip and fore end nicely checkered by hand. The frame is made from the highest grade drop forged steel, the top snap break and safety mechanism are the great Aubrey design, the most positive, reliable, best working safety constructions ever put on a hammerless gun. In style, alignment, in the way this gun comes to the shoulder, for rapid shooting, in the handling, in the mechanism, in the lock construction, the barrel work; in fact, in all its details as well as in strength, safety, in shooting qualities, as a fine gun for trap or field shooters, in every way it outclasses all other guns on the market. This Aubrey Gun comes in 12-gauge only, in 30 or 32-inch barrels and weighs 7½ to 8 pounds. With every gun we send out our written binding 20-year guarantee, by the terms and conditions of which, if any piece or part gives out by reason of defect in material

or workmanship, we will repair or replace the gun free of charge to you. In our free Gun Catalogue we show large illustrations of this gun and all its parts, as well as our entire line of guns and sporting goods of all descriptions, and while we will gladly send our Gun Catalogue to anyone on request, in order to get this wonderful gun value introduced in every section we especially urge you to send us your order at once, direct from this advertisement, enclosing our price, \$13.85, and fill out the blank lines above.

GLOBE SIGHT FREE. This Globe Sight, given free with every order sent us from this paper, is our own patent, controlled exclusively by us. It can be instantly attached or detached, is of wonderful value to every shooter, a perfect marvel for wing shooting. Fill out the blank lines in the coupon printed above, cut this ad out and send it to us with \$13.85, and we will send you this latest model A. J. Aubrey Hammerless Double Barrel Gun, and we will include this Globe Sight Free.

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Fine Stock at Bargain Counter Prices.

Some weeks ago we called attention in an editorial to the splendid opportunities that had taken place and that were to take place in the East for dairymen to buy pure-bred cattle at auctions at moderate prices. Since then reports of several of these auction sales that have occurred have been received and if anyone heeded our advice by following them up they have nothing to regret. At most of these sales extremely low prices ruled, and in many instances some very choicely-bred animals sold at little more than ordinary cows are worth. The "tightness" of the money situation, which is compelling men of wealth to pull the purse strings, is generally given as the cause of the low prices, and with these fellows out of the bidding the dairymen had their opportunity.

One of this class of sales took place near Baltimore when a herd of Jerseys representing "all that money could buy" was disposed of by a receiver at less than ordinary dairy cows sell for. The original owner met with financial reverses and as a trust company, acting as a receiver with dairy cows on its hands is out of its element, the herd had to go regardless of what it realized.

At the sale of the famous Hood Farm of Jerseys in Massachusetts early this month a choice lot of Jerseys were also practically sacrificed. The average price realized on eighty-one head, which included fifty-two mature cows and young stock of which twenty-six were imported animals, selected on account of their superiority, was only \$143.76. Mr. Hood has bred only in the best strains and a cow that gives for him less than 300 pounds of butter-fat a year has no place on his farm. He has been breeding the cow that gets up above the five hundred pound figure and when a dairymen can get such stock at \$143.76 he is fortunate. Many sales of fine stock, forced for one reason or another, prove to be bargain counters and our dairymen want to keep their eyes on them.—Pacific Dairy Review.

Nervous Break-Down

Nerve energy is the force that controls the organs of respiration, circulation, digestion and elimination. When you feel weak, nervous, irritable, sick, it is often because you lack nerve energy, and the process of rebuilding and sustaining life is interfered with. Dr. Miles' Nervine has cured thousands of such cases, and will we believe benefit if not entirely cure you. Try it.

"My nervous system gave away completely, and left me on the verge of the grave. I tried skilled physicians but got no permanent relief. I got so bad I had to give up my business. I began taking Dr. Miles' Restorative Nervine. In a few days I was much better, and I continued to improve until entirely cured. I am in business again, and never miss an opportunity to recommend this remedy." MRS. W. L. BURKE, Myrtle Creek, Oregon.

Your druggist sells Dr. Miles' Nervine, and we authorize him to return price of first bottle (only) if it fails to benefit you.

Miles Medical Co., Elkhart, Ind

VARICOCELE

A Safe, Painless, Permanent Cure GUARANTEED. 30 years' experience. No money accepted until patient is well. CONSULTATION and valuable BOOK FREE, by mail or at office. DR. C. M. COE, 915 Walnut St., Kansas City, Mo.

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FREE MEDICINES

To Sufferers from Catarrh, Deafness, Sore Weak Eyes, or Failing Sight TO TRY



Here is the most liberal free offer ever made: We will send absolutely free fully prepaid 1 month's medicines to any person who has Catarrh in any form or who is Deaf or afflicted with sore weak inflamed eyes or any disease of Eye, Ear, Nose or Throat. We do this so you can try the Absorption Remedies in your own home and learn how easy it is to be cured.

Don't Send Us Any Money

Just tell us what is the matter with you. We will make a special diagnosis of your case and send you the proper medicines that have been used by over 100,000 people afflicted just as you are or worse. These medicines helped others and made many wonderful cures. They will do as much for you. We say positively

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If the tissues still remain, the Absorption Remedies can and will restore healthy conditions. Isn't it worth your while to write and prove to your own satisfaction that we can do for you what we claim and what we are daily doing for hundreds?

Don't hesitate when we make it so easy for you by sending you a whole month's medicines delivered right in your home to try. We couldn't afford to do this if we did not have perfect faith in the curative power of the Absorption Medicines.

Whatever you do, don't put off writing to us but do it now because every day you wait means needless torment, pain, anxiety, and the longer you delay treatment the deeper rooted is your trouble. So write at once and say, "Send your free medicines."

Perfect Sight and Hearing FREE

This revised book on the Eye, Ear, Nose and Throat containing the lifelong experience of a specialist and full of valuable matter sent free to every one who gets the free medicines. It tells what to do to help cure yourself while waiting till the medicines come. Write for the book and the medicines NOW.

The National Eye & Ear Infirmary Dept. 872, Des Moines, Ia. ☐

Shawnee Alfalfa Club.

(Continued from page 839.)

from the city of Topeka became the next regular order of business and nominations were made as follows: Mission township, H. W. McAfee; Rossville, D. M. Howard; Silver Lake, A. L. Entsminger; Menoken, Grant Kelsey; Soldier, D. L. Button; Topeka, A. T. Daniels; Tecumseh, Samuel Parr; Monmouth, Peter Everhardt; Williamsport, George Nell; Auburn, Frank M. Stahl; Dover, Wm. Lytle; city of Topeka, Dr. F. L. DeWolfe.

On motion of H. H. Wallace the vice-presidents were unanimously elected as named.

The subject selected for discussion at the August meeting, which will be held on Saturday the 29th, is "Saving Alfalfa Seed," and reports on the Emerson Alfalfa Renovator.

Following matters of business President Bradford Miller took occasion to emphasize the necessity for a thorough preparation of the soil. There is money to be made in the preparation of the seed-bed and Mr. Miller is very earnest in his belief in regard to it.

At the close of the meeting Secretary Graham distributed a handsome little booklet entitled "The Story of Alfalfa," which had been published by the Barteldes Seed Company of Lawrence, Kansas.

H. A. Heath's Retirement.

Those who have been associated with the agricultural press as patrons, "esteemed contemporaries," or in any other capacity, will feel a peculiar void in the field for some time to come.

There is probably no publisher of this class who is more thoroughly identified with the work than Mr. Heath, and his retirement will come as a shock to many of his friends who have regarded THE KANSAS FARMER and its publisher as fixtures of most desirable quality.

Mr. Heath is one of the charter members of the U. P. A. and has always commanded our respect and deepest friendship. While his proprietary interest in THE KANSAS FARMER still continues, he intends to devote such time as he proposes to give up to business to other enterprises in which he has already invested.

We are certain that we voice the sentiment of the entire publishing fraternity when expressing the hope for Mr. Heath's continued prosperity, health, and long life, and those he holds dear, and success in all his future ventures.

THE KANSAS FARMER will, according to all indications hold its proud position in the field for many years to come. To-day it stands with few equals in the country.—Publishers' Bulletin.

Kansas in the Middle.

Recent statistics show that Kansas is not only the geographical center of the United States but is the center, also, of lead and zinc productions and of farm production, the value of the latter amounting to 7,500 million dollars in 1907.

The center of the wheat and oats production lies just a little north of Kansas, the horse and mule center is in Missouri, the cattle, hog, and sheep centers are each just northeast of the Kansas line, and the cotton center is just southeast of the Kansas line, while the center of population is on the line between Indiana and Illinois. The center for sheep and wool and for silver production are both in Wyoming, though the former is in the southeast corner nearest to Kansas.

The St. Joseph Veterinary College.

One of the best veterinary schools of the country is the one of St. Joseph, Mo.

This school was established about four years ago and in that time has made a record that places it in the front ranks with other great schools of alike character.

The gentlemen behind this institution are veterinarians who understand their business thoroughly, not only as general practitioners but in the art of training young men for the highest possible success in this popular and profitable profession.

A new building has recently been constructed, equipped with modern and up-to-date apparatus, including laboratory, lecture room, and having in connection a hospital which insures the students of the most thorough clinical training, and qualifying them for general practice.

Most of the graduates from this school have successfully taken the State board examination. The faculty consists of representative veterinarians of the city and State, and the M. D.'s

of the teaching force are now teaching the same subjects in the local medical schools.

The institution has issued a handsomely illustrated catalogue which will be mailed you on application and it contains much valuable information which you should know.

When writing please address Dr. C. E. Steele, St. Joseph, Mo., and kindly mention THE KANSAS FARMER.

Alfalfa Seed Specialists.

The Missouri Seed Company of Kansas City maintains a force of men in the alfalfa counties who make it a point to secure the choicest of the season's seed products at the earliest thrashing time, and in consequence this company claims to be able to supply the farmers with the best alfalfa seed on the market in advance of seedmen who do not have their facilities for securing the first crops.

Good seed is of the utmost importance in securing a good stand of alfalfa and the grower can not afford to take chances. If you need alfalfa seed for the fall sowing write direct to the Missouri Seed Co., Box E, Kansas City, Mo.

THE MARKETS.

Kansas City Grain and Produce.

Kansas City, Mo., August 3, 1908. Wheat was higher in all markets on account of unfavorable crop reports from the Northwest. The speculative markets were especially affected.

By sample on track here at Kansas City: No. 2 hard, choice turkey, 1 car old 97c, 3 cars 96½c, 8 cars 96c, 1 car 95c; fair to good turkey, 2 cars 95½c, 3 cars 95c, 1 car 94½c, 2 cars 94c, 15 cars 93c; dark, 8 cars 92½c, 12 cars 92c, 26 cars 91c; yellow and ordinary, 8 cars 90½c, 4 cars 90c, 3 cars 89c, 1 car 88½c, 5 cars 88c. No. 3 hard, choice turkey, 1 car 93c, 3 cars 92½c; fair to good turkey, 7 cars 92c, 10 cars 91c, 2 cars 90½c, 6 cars 90c, 1 car smutty, 90c; dark, 4 cars 92c, 14 cars 90c, 1 car 89½c, 32 cars 89c; yellow and ordinary, 1 car 88½c, 3 cars 88c, 26 cars 88c, 3 cars 87½c. No. 4 hard, turkey and dark, 1 car 90½c, 1 car 90c, 3 cars 89c, 1 car 88½c, 3 cars 88c, 1 car 87c; fair to good, 1 car 88c, 4 cars 87½c, 7 cars 87c, 26 cars 86½c; ordinary, 3 cars 87c, 2 cars 86½c, 16 cars 86c, 10 cars 85c, 8 cars 85½c. Rejected hard, 8 cars 85c, 5 cars 84½c. No grade hard, 1 car 86c, 5 cars 84½c. No grade hard, 1 car 86c, 8 cars 85c. No. 2 red, choice, 1 car 94c, 1 car 93½c, 5 cars 93c. No. 3 red, choice, 2 cars 90½c, 3 cars 90c; fair to good, 1 car smutty 90c, 3 cars 89c, 3 cars 88½c. No. 4 red, choice, 1 car 88½c; fair to good, 3 cars 88c, 1 car smutty, 87½c, 3 cars 86c. Mixed wheat, No. 3, 1 car 89c, 1 car 88c. No. 4 mixed, 1 car 85c. Durum wheat, No. 2, 1 car 85c.

Corn.—The need of rain throughout the corn belt and a higher market for futures helped the cash market and buyers took hold with less coaxing and bid prices up ½¢ to 1¢ both mixed and white, and by the close most of the offerings had been disposed of. By sample on track here at Kansas City: No. 2 mixed, 3 cars 72½c, 3 cars 72c, 7 cars 71½c; No. 3 mixed, 1 car 71½c; No. 2 yellow, 1 car 73½c, 6 cars 72½c, 1 car bulkhead, 72c; No. 3 yellow, 1 car 72½c, 2 cars 72c; No. 2 white, 1 car 74½c, 4 cars 74c, 9 cars 73½c, 1 car bulkhead 73½c; No. 3 white, nominally 73½c to 74c.

Oats.—By sample on track here at Kansas City: No. 2 mixed, choice, nominally 50¢ to 51¢; fair to good, 1 car 49c; red, 3 cars 50½c; No. 3 mixed, fair to good, 3 cars 49c, 12 cars 48c; red, 1 car 50½c; No. 2 white, choice, 3 cars old 57c; fair to good, 1 car 57c, 1 car 56c, 1 car like sample 56c; color, 1 car 54½c; No. 3 white, choice, 1 car 54c; fair to good, 1 car 52c; color, 1 car 53½c.

Flaxseed.—Steady at \$1.11 upon the basis of pure.

Cottonseed Meal.—All points in Kansas and Missouri, taking Kansas City rates, \$29.50 per ton in car lots.

Seeds.—Timothy, \$3.50@4 per cwt.; red clover, \$10@12.50 per cwt.; Kafir-corn, \$1.55@1.60 per cwt.; cane, \$2@2.10 per cwt.; millet, \$1@1.25; alfalfa, \$12@15 per cwt.

Broomcorn.—Quotations: Choice green self-working, \$7@7.75; good self-working, \$6@7; slightly tipped self-working, \$5@6; red tipped self-working, \$4@5; common self-working, \$3@4.

Hay.—Timothy, choice, \$9.50@10; No. 1, \$8.50@9; No. 2, \$6.50@8; No. 3, \$4.50@5.50. Clover, mixed, choice, \$5.50@6; No. 1, \$7@8; No. 2, \$5.50@6.50; No. 3, \$4.50@5.50. Clover, choice, \$8@8.50; No. 1, \$6.50@7.50; No. 2, \$5.50@6.50. Old prairie, choice, \$9; No. 1, \$8.25@8.75; No. 2, \$7@8; No. 3, \$5.50@6.50. New prairie, choice, \$7.25@7.50; No. 1, \$6.75@7; No. 2, \$5.50@6.50; No. 3, \$4@5. Alfalfa, choice, \$12@13; No. 1, \$10@11.50; No. 2, \$8@9; No. 3, \$6@7.50. Straw, wheat straw, \$4.50@5; oats straw, \$4.50@5; packing hay, \$3@3.50.

South St. Joseph Live Stock.

South St. Joseph, Mo., August 3, 1908.

The marketward movement of cattle is continuing very moderate, and the proportion of natives is gradually becoming smaller. At the opening of this week fully two-thirds of the cattle on the St. Joseph market came from the ranges of the West and Southwest. The market is not in very satisfactory condition, the long run of extremely hot weather which has extended over the most of the consuming centers, has been a big factor in curtailing the demand for fresh beef. However, the extremely moderate supplies have been a sustaining factor and there is not much difference in prices as compared with a week ago. Choice to prime corn fed cattle would still sell at \$7.40, but the best here on date of this writing were medium weights that went at \$6.65. Bulk of steers that have had some corn are selling at \$5.75@6.25, while native grass steers are selling from \$5.50 down with the big bunch going at \$4.10 on the date of this writing. The market for cows and heifers has not shown much change and the bulk both Western and natives, are selling within a range of \$2.85@3.50, although choice cows and heifers that have been fed corn are selling considerably higher. Calves have broken 50c per hundredweight and the tops are now selling at \$6, with the bulk, including a big bunch of Westerns, going around \$5.50@5.75. There is not much trade in stockers and feeders, although some indication of picking up in the demand. Good feeders can be quoted around \$4.25@4.40, and yearlings and calves at \$3.50@4.10.

Supplies of hogs have continued rather lighter than expectations and late last week prices too a very sharp upturn of 35¢ to 45c. On the opening day of this week, with only 66,000 hogs in sight at the five leading markets, all points recorded a break of 15¢ to 20c. The range of prices was wider than at any time heretofore this season due to the presence of a large proportion of unfinished light weights. The best hogs at present are selling at \$6.75 with the bulk to-day at \$6.50@6.60. Although quite a few light weights sold down to \$6.30, some increase is noted in the arrivals of

C. F. Hunt's Second Sale

KANKAKEE, ILL., AUGUST 20, 1908.

60--Pure Bred Registered Holstein-Friesian Cattle--60

35 choice young cows, some fresh, the most due this fall and early winter. 15 extra nice and well bred young heifers. 10 A. R. O. young service bulls. Catalogues ready.

C. F. HUNT, - - - Oran, N. Y.

LAND BARGAINS IN TEXAS AND ELSEWHERE

25,000 acres in Pan Handle country at \$8.00 to \$20.00 per acre. 22,000 acres in South Texas consisting of rice, cotton, sugar-cane, and all kinds of fruit lands at \$15.00 to \$25.00 per acre. Also choice fertile lands in the Artesian Belt of Texas. We also have a splendid list of Kansas ranches and farms for sale, and 10,000 acres in Colorado. For detailed information,

Address, H. P. RICHARDS, 205-67, Bank of Topeka Bldg., Topeka

Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisement 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.

WANTED—4 to 12 HIGH GRADE MILK COWS I would like to buy 4 to 12 fancy milk cows on such terms that seller is to receive at least half of the income from cream or butter sold, until cows are paid for in full. I am an experienced creamery butter-maker with family and only last year acquired 160 acres of land in Western Kansas. Have this summer improved the place with residence, some sheds and a well, a dave 30 acres in millet, kafir-corn, cane, and corn and planted for next winter's feed, but have no capital to buy these cows for cash at present. References furnished. Address, "8 milk cows for sale", care Kansas Farmer.

ALYSDALE SHORTHORNS—Offer 2 bulls, 10 females. The bulls are "Lothair," by Prince Consort, dropped August 21, 1907, and "Byvester," by Prince Consort, dropped September 2, 1907. Both out of Lord Mayor dams. Cows are nicely bred and in calf to Prince Consort or Master of Alysdale. Will be priced right to any buyer. C. W. Merriam, Columbian building, Topeka, Kans.

SWINE.

ALVEY FARM O. I. C.'s—Where the progressive kind are bred. We are offering 20 pigs just weaned; quality considered, we shall price them very reasonable. Will be pleased to hear from any one in regard to our O. I. C.'s. Alvey Bros., Meriden, Kans.

FOR SALE—A few very choice Poland-China fall hogs; in good breeding condition. F. A. Tripp, Meriden, Kans.

SEEDS AND PLANTS.

PURE BRED SEED WHEAT—Karkoff and Malakoff. Varieties giving the heaviest yields. Seed bought from Manhattan Experiment Station, 1906. Recleaned and sacked, \$1.50 per bushel, F. O. B. J. A. Fleming, Garfield, Kans.

TENNESSEE WINTER BARLEY—Averaged 47 bushels per acre for 3 years. \$1 per bushel. 85¢ per bushel in lots of 10 bushels or more. Best of pasture. Walter Jenkinson, Pond Creek, Okla.

THE BEST ALFALFA SEED GROWS "OUT THERE IN KANSAS". We sell it. Ask us for samples and prices. The Barteldes Seed Co., Lawrence, Kans.

PURE "BEARDED PIPE" seed wheat, grown on sod. Inquire of Wallace Gibbs, Kinsey, Kans.

WANTED TO BUY—New crop Meadow Fescue or English Blue Grass seed. If you have any to offer, please correspond with us. The Barteldes Seed Co., Lawrence, Kans.

MISCELLANEOUS.

WANTED—Good strong man and wife, without children, experienced and efficient at farm work; the woman to cook for one hired man besides her husband. Furnished house and provisions supplied. Work and live on best improved and equipped farm in southeastern Kansas. Give references as to experience, character and reliability in your first letter. Thos. D. Hubbard, Kimball, Kans.

SHEPHERD DOGS FOR SALE—Have a choice lot of well bred puppies. Prices right Mrs. A. E. Harness, Speed, Cooper Co., Mo.

NEW HONEY—Fancy, \$10 per case of two 60-pound cans. A. S. Parson, Rocky Ford, Colo.

HOME CANNING—The Home Canner enables you to preserve corn and other vegetables, meats and fruits. Canning is more pleasant and the appearance and quality of fruit is improved over the old method. surplus crops may be converted into market staples and sold any time. You may often save enough in one day's work to pay for the Canner. We are so certain "The Home Canner" will please you, that we will ship it to any reliable person subject to inspection, to be returned at our expense if in any way unsatisfactory. For booklet giving further particulars which is sent free upon request, address The Home Canner Co., Lawrence, Kans.

JOB PRINTING—Write us for prices on anything in the job printing line. Address B. A. Wagner, Mgr., 625 Jackson Street, Topeka, Kans.

TYPEWRITER—LATEST MODEL. OLIVER. Used less than a month. Good reason for selling. A bargain at \$65. Address, J. L. Allen, Topeka, Kans.

sheep and lambs, the Western range movement being now considered fairly on. The market is in fairly good tone, although prices were marked down 10¢ to 15¢ to-day. Good fat yearlings and wethers can be quoted at \$4.10 @ 4.25. Ewes, \$3.75@4.10, and lambs \$5.75@6.50. A few feeders are beginning to come, but not sufficient as yet to establish quotations. A big bunch of Utah wethers were taken out to a feed lot at \$3.65. WARRICK.

SHEEP.

FOR SALE—400 breeding ewes with 400 lambs, in bunches to suit on farm of W. R. Lott, Highland Park. Address, Route 1, Topeka, Kans. Ind. Phone 2674.

REAL ESTATE.

THE RICHEST FARMS FOR SALE—Where everything grows large; in Southeastern Kansas; 113 miles south of Kansas City and 80 miles west of Missouri; prices away below their value; maps and printed information; no trades. Thos. D. Hubbard, Erie, Kans.

FOR SALE OR TRADE—For western land, new store building and small stock of groceries and meats furnishing goods on main line of C. R. I. & P. R. R. in East Central Kans. H. W. Hudson, Lehigh, Kans.

LAND FOR SALE—Three upland farms in Jefferson County. One highly improved. Also wheat land in Gove County. J. F. True, Perry, Kans.

MR. FARMER AND BUSINESS MAN—List with us your farms, ranches, merchandise, hardware, drug stock, rental and city property, mills and elevators, lumber yard, heavy barn, horses, cattle, mules. Anything you may have to sell or trade, list with us. We advertise your stuff and get you a quick deal. Send full description with first letter. The Western Exchange Co., El Dorado, Kans.

SAY—If you want to buy a model farm home that will feed your family regardless of dry or wet weather, or floods, write, F. L. Williams, Agricol, Kans.

FINE alfalfa, wheat and stock farms for sale. Circular free. Warren Davis, Logan, Kans.

FARMS for sale in Catholic community; \$25 per acre and up. Ed George St. Paul, Kans.

TWO HOMES CHEAP—160 good improvements, bottom, timber, orchard, alfalfa, route, phone; price \$6500. 200 acres improved, smooth, 180 cultivated, land and location good. Garrison & Stuebaker, McPherson, Kans.

"Do You Want to Own Your Own Home?" If so write for catalogue to Hurley & Jennings, Emporia, Kans.

QUARTER SECTION of fine land in Sherman County, close to Goodland, to trade for part horses, cattle or mules. T. J. Kennedy, Osawkee, Kans.

WRITE J. D. S. HANSON, HART, MICH., for best list of fruit, grain and stock farms.

"LAKEVIEW."

A rich 40-acre poultry and fish farm, 1½ miles from a good railroad town having two railroads, five churches, graded schools, good business houses and excellent shipping facilities. Lake fed by springs never known to go dry; full of fish; splendid opening; no trades. Thos. D. Hubbard, Erie, Kans.

A GOOD FARM WELL LOCATED. 160 acres all good land of a dark, sandy loam, located 2 miles from the city of Wichita, 5-room cottage, 2 granaries, barn, haymow and other outbuildings, good young orchard, all fenced and cross-fenced, 10 acres hog light, some alfalfa, 20 acres pasture, 20 acres meadow, balance in a high state of cultivation. Price for a short time, \$8500. The Nelson Real Estate and Immigration Co., 137 N. Main St., Wichita, Kans.

YOU WANT MONEY! SO DO WE.

Will you invest \$100 now for \$500 next year? Write for details. NAPA IMPROVEMENT CO., San Francisco, Cal.

SELL YOUR REAL ESTATE

quickly for cash; the only system of its kind in the world. You get results, not promises; no retaining fees; booklets free. Address, Real Estate Salesman Co., 488 Brace Block, Lincoln, Neb.

MISSOURI FARMS FOR SALE

Everman has a farm for every man. Write for description and price list.

John W. Everman, . . . Gallatin, Mo.

Stray List

For Week Ending July 30. Greeley County—Curtis Major, Clerk. MARES AND COLT—Taken up May 12, 1908, by A. Dyberg, in Colony, two small brown mares and a colt; no marks or brands visible; valued at \$35. STALLION—Taken up by the above on same date, one small bay stallion, white spot in forehead; valued at \$25.

The Blossom House

Kansas City, Mo.

Opposite Union Depot. Everything first-class. Cafe in connection. Cars for the Stock Yards, the up-town business and residence parts of the city and for Kansas City, Kansas, pass the deer. Solid comfort at moderate prices. A trial will please you.

The Kansas City Live Stock.

Kansas City, Mo., August 3, 1908.
Extreme hot weather affords buyers an excuse to demand lower prices, although receipts of cattle at all the markets continues to run below the corresponding time last year. Prices made a net loss of 10¢ to 25¢ last week, after an uneven market all week. Top steers sold at \$7.20 on different days, and while these steers fancy prices have been eliminated as though the present. The supply to-day is heavier than on any recent Monday, at 17,000 head, including 2,000 calves, market steady to 10¢ lower. A liberal supply at all markets to-day, and the prospects of a long, hot spell are against any urgent demand on the part of killers. Nothing topsey is here to-day, best fed steers quotable at \$6.25 to \$7.25, grass steers of good weights \$4.50 to \$5.25, medium to common grassers \$3.75 to \$4.40, grass cows \$2.50 to \$3.50, bulls \$2.40 to \$3.25, veals a quarter higher than a week ago, tops \$6.25. Stockers and feeders declined 10¢ to 15¢ during the last week, although a good demand late in the week enabled traders to make a good clearance. Shipments were of about the same volume last week as the week before, 300 carloads. Market is steady to 10¢ lower to day on country kinds, stockers mainly at \$3.25 to \$4.25, feeders \$3.75 to \$4.50, a few above these figures.

The hog market made a gain of 37¢ per cwt. last week, under the influence of light marketing, although packers continue to resent the advancing prices, account of unsatisfactory provisions market. Run is 7,000 here to-day, market 10¢ to 20¢ lower, and almost a quarter below last Friday, high time last week. Top to-day is \$6.75, bulk of sales \$6.45 to \$7.00. The high price of corn has induced many owners to substitute some cheaper feed in fattening hogs, but the inferior killing qualities of these makes them unpopular, and buyers quickly detect them, and cut the price accordingly. Country buyers should allow wide margins for such.

Supply of sheep and lambs continues liberal, and slightly heavier than at this period last year. A large percentage of the supply is natives, and markets have been strong each day since a week ago. Run is 6,000 here to-day, market steady to weak account of lower reports from Chicago, spring lambs to-day at \$8.25, yearlings worth \$6, wethers \$4.50, ewes \$4.25. Utah grassers brought \$4.35 last Thursday and Texas muttons \$4.40 on Friday.

J. A. RICKART.

DUROC-JERSEYS

DEEP CREEK DUROCS {Spring pigs, either sex, noted families of the breed. Up-to-date Durocs shipped to move them. C. O. Anderson, Manhattan, Kas.

STROH'S HERD OF DUROC-JERSEYS

70 spring pigs for sale, mostly sired by Hogate's Model, the sweepstakes boar at Nebraska State Fair, 1906 and out of popular breeding dams. Correspondence solicited.

J. STROH, R. 4, DeWitt, Neb.

DUROC SPRING PIGS FOR SALE

Of both sexes from the Orion, Kant Be Beat and Ohio Chief families. Correspondence solicited. Write for prices.

O. A. Peacock, - - Burchard, Neb.

CROW'S

DUROCS—140 large early spring pigs, 21 sows and 119 gilts bred for August farrow and a few fall litters. Are fitting a show herd of 24 head, call on or write, CROW BROS., 200 E. Osborn St., Hutchinson, Kas.

200 SPRING PIGS

HEADQUARTERS FOR DUROCS: any age, either sex, females sold open or bred, largest herd in the S. W. Send in your order, we can fill it.

COPPINS & WORLEY, Potwin, Kas.

GEO. KERR'S DUROCS.

Pigs for sale sired by such boars as Lincoln Chief, Leader, Lincoln Top, Out of dams from the Improver 2d, Proud Advance, Top Notcher, Wonder and Ohio Chief families.

R. R. 3, Box 90, Sabetha, Kas.

Humphrey's

DUROCS. Choice spring pigs, both kinds, of early farrow; Ohio Chief and Improver 2d blood lines. Also Scotch Collies of the best breeding and quality. Prices reasonable. Call or write.

J. S. Humphrey, R. 1, Pratt, Kas.

MADURA DUROCS.

BROOD SOWS—Some fine brood sows bred to Major Roosevelt and Miller's Nebraska Wonder, he by Nebraska Wonder.

FRED J. MILLER, Wakefield, Kas.

Vick's

DUROCS are bred for usefulness. Choice young stock for sale by such great boars as Vick's Improver 4785, Red Top 3241, Fancy Chief 2422 and other noted sires. Correspondence invited. Visitors coming to Junction City and telephoning me will be called for. W. L. VICK, Junction City, Kas.

SPRING CREEK HERD DUROC-JERSEYS

75 choice spring pigs of both sexes for sale, by 7 noted sires and out of popular breeding dams. Tried sows and gilts bred to farrow in August and September. Boars in service, Raven's Pride 63145 and Nordstrom's Choice 78741. Ola Nordstrom, Clay Center, Kas.

GAYER'S

DUROCS: 26 choice fall gilts and 14 topsey fall boars by Golden Chieftain, a good son of Ohio Chief. These will be sold cheap to make room for my spring crop. Also 1 good yearling boar, \$25.

J. H. GAYER, R. R. 1, Cottonwood Falls, Kas.

PEERLESS STOCK FARM

DUROC-JERSEY HOGS FOR SALE.

R. G. SOLLENBERGER, Woodston, Kas.

Fairview Herds—Durocs, Red Polls

20 high grade Red Polled cows and heifers, 40 Duroc-Jersey swine, mostly males, will be sold at my fall sale on October 7, 1908. Nothing for sale now. Stock doing fine.

J. B. DAVIS, Fairview, Brown Co., Kas.

WOOD'S DUROCS

Good hogs are good property now. Don't you want some? A few boars and gilts of 1907 crop. Nice lot of spring pigs just right age and weight to ship.

W. A. WOOD, - - Elmdale, Kas.

DUROC-JERSEYS**Howe's**

DUROCS. 100 early spring pigs, the best I ever raised. Improver, Top Notcher, Sensation and Gold Finch blood lines. Call or write.

J. U. HOWE, - - Wichita, Kas.

Route 8.

DEER CREEK DUROCS

100 pigs of March and April farrow by sons of Ohio Chief, Tip Notcher and Kant Be Beat. Ready for shipment after July 1.

BERT FINCH, Prairie View, Kas.

JACKSON'S DUROCS.

Special Bargains in fancy, well grown spring pigs, both sexes, and choice fall males richly bred; 2 of these are double cross Ohio Chief. Also 1 good herd boar, a grandson of Desoto 15155. 2 extra good registered Shorthorn bulls for sale.

O. L. JACKSON, New Albany, Kas.

SPECIAL!

I have a car of long yearling bulls, a car of bull calves, a car of yearling heifers and a car of heifer calves for sale. These cattle are all in good growing condition and are mostly reds. They were sired mostly by Baron Ury 2d 124970, Bold Knight 179064 and Headlight 2d 243305.

C. W. Taylor, R. 2, Enterprise, Kas.

CHESTER-WHITES**CLOVER RIDGE CHESTER WHITES**

Choice pigs from the Garnett and Captain families. The large smooth strong boned, easy feeding kind. Correspondence solicited.

E. S. CANADY, R. R. 2, Peru, Neb.

OHIO IMPROVED CHESTERS

Ninety pigs of February and March farrow, and sixteen fall boars and gilts. The large deep smooth bodied strong boned easy feeding kind. I pay express, and ship on approval.

N. W. ROGERS, Peru, Neb.

Closing Out Herd O. I. C.

Including two champion herd boars. Tried brood sows and choice bunch of spring pigs ready to ship. Write for prices. Correspondence solicited. John Cramer, Beatrice, Neb.

**O. I. C. SWINE**

Fall boars and gilts, also spring pigs. They are bred right and will be priced right. Let me know your wants.

S. W. ARTZ, Larned, Kas.

O. I. C. BARGAINS

Bred sows and gilts all sold. Have a fine bunch of spring pigs for which I am booking orders. Write your wants and get prices.

W. S. GODLOVE, Omaha, Kas.

Prop. Andrew Carnegie herd—O. I. C. swine.

Garth's O. I. C.'s

125 choice spring pigs, also some extra good fall boars, out of good dams and by the prize winners, Kerr Dick, Kerr Nat and Big Jim, at right prices. Call on or write

A. T. GARTH, - - Larned, Kas.

BERKSHIRES**MAPLE HEIGHTS HERD BERKSHIRES**

Kansas Longfellow, champion Nebraska State Fair, 1907, and Berryton Boy in service. Have some choice sows and gilts bred for fall litters, for sale. Nice lot of spring pigs to choose from. Write me.

J. M. Nelson, Marysville, Kas.

Ridgeview Berkshires

—FOR SALE—

One aged and one yearling boar, and spring pigs of both sexes

MANWARING BROS., - - Lawrence, Kansas

Route 1.

Guthrie Ranch Berkshires

The Guthrie Ranch Berkshire herd, headed by Berryton Duke, assisted by Revelation, General Premier and Sir Ivanhoe (all three winners). Berkshires with size, bone and quality. Individuals of style and finish. You will find our satisfied customers in nearly every state in the Union.

T. F. GUTHRIE, Strong City, Kas.

King's Berkshires

Have weight, quality and constitution developed by rustling for the best pork producing food on earth, alfalfa and blue-grass, supplemented with a light ration of grain and milfeed. They are bred right, and best of all they are priced right. Write for anything in Berkshires to,

E. D. KING, Burlington, Kas.

Knollwood Berkshires

Headed by Pacific Duke 56691, dam Marjorie 37491 by Baron Duke 324 50000, a son of Baron Lee 4th, the sire of Lord Premier and Dutchess 12th 28976, grand dam of Premier Longfellow. Stock of all ages for sale. All stock guaranteed as represented.

E. W. MELVILLE, Eudora, Kas.

HORSES AND MULES**HORSES AND MULES****ROBISON'S PERCHERONS**

FOR SALE—Two extra good 2-year-old stallions; and some good young mares bred to Casino.

J. C. ROBISON, Towanda, Kas.**POLAND-CHINAS****Miesner's Poland-Chinas.**

Choice pigs for sale sired by Miesner's Hadley, a son of Big Hadley and grandson of Logan's Chief; out of large well bred sows. Write for prices.

T. J. MIESNER, Sabetha, Kas.

WELCOME HERD POLANDS

Choice richly bred spring pigs either sex. Several extra fall boars, fit to head good herds, also a half interest in the \$1000 Tom Lipton. Fall sale Oct. 6.

J. M. BAIER, ELMO, KANS.

CENTER GROVE POLANDS

Choice well grown fall yearling gilts, sold bred or open. Also early springs, both sexes. Stock guaranteed and richly bred. Prices reasonable.

J. W. Pelphrey & Son, Humboldt, Kas.

KEEP ON PRINCE

by Keep On; dam, Sweet May by Chief Perfection 2d; now owned jointly by R. A. Stockton and J. M. Devinia. An 800-pound boar in show flesh. The get of this boar will be the feature of our fall sale at Cameron Mo., October 2. R. A. Stockton, Lathrop, Mo.; J. M. Devinia, Cameron, Mo.

SUNFLOWER HERD.

POLAND-CHINAS—Herd boars, Meddler's Defender (119147) by Meddler (99999), dam Excitement (289698) by Corrector (63379); Allen's Corrector (128613) by Corrector (63379), dam Sweet Brier (261790) by Chief Perfection 2d (42559); Kansas Chief (126963) by Chief Perfection 2d (42559), dam Corrector's Gem (260730) by Corrector (63379). G. W. Allen, Route 4, Tongonoxie, Kas.

FAIRVIEW STOCK FARM.

Special bargains in choice Poland-China gilts, sold bred or open, and a few extra fall boars by prize winning sires. Fall sale September 24.

A. K. Sell, Fredonia, Kas.

Wayside Polands

The Big Kind that Weigh and Win.

125 early springs, both sexes, with size, bone and strength; 60 fall and winter pigs that are extra good ones, including a number of fancy males, out of prolific big boned sows and by Columbia Chief, by Chief Tecumseh 3d, and other noted sires. My prices are right.

H. O. Sheldon, R. 8, Wichita, Kas.

JONES' COLLEGE VIEW POLANDS.

Several first class boars that are herd-headers; from 6 to 12 months old. Prices reasonable.

W. A. JONES & SON, Ottawa, Ks.

Formerly of VAN METER, In., and breeders of CHIEF TECUMSEH 2d.

JOHN BOLLIN,

Route 5, Leavenworth, Kas.

Breeds and Sells Popular Poland-Chinas

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

Highview Breeding Farm

Devoted to the Raising of

Big Boned Spotted Poland-Chinas

The biggest of the big. The prolific kind. Big bones, big hams, big spots. Young stock for sale.

H. L. FAULKNER, Prop., - - Jamesport, Mo.

RED POLLS**Foster's Red Polls.**

15 choice young bulls, a few good females and our 2400 lb. herd bull Dandy 39147 for sale at bottom prices.

CHAS. FOSTER & SON, Elmdale, Kas.

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.

GEO. GROENMILLER & SON, - - Pomona, Kas.

Red Polled Cattle, Poland-China Swine.

Best of breeding. Write or come and see. Chas. Morrison & Son, R. 2, Phillipsburg, Ks.

HEREFORDS**Maplewood Herefords**

5 bulls, all tops, from 13 to 16 months old; and a few choice females, by the 2400-pound Dale Duplicate 2d, son of the great Columbus. Stock guaranteed. Prices reasonable. A. Johnson, Clearwater, Kas.

Mules For Sale

30 average 3-year-old mules for sale.

JOHN B. GREER, - - Marion, Kas.

PIKE COUNTY JACK FARM

Largest importer and breeder of Mammoth Jacks in the United States. Every stall in my barn has a big Mammoth Jack, 15 to 17 hands high, 1000 to 1300 lbs.; that I will sell on one and two years time to responsible parties. If my Jacks are not just as I represent them I will pay all railroad expenses.

LUKE M. EMERSON, Bowling Green, Mo.

HOLSTEIN-FRIESIANS**Rock Brook Holsteins**

Special offer on three bulls ready for service. Grandsons of world's champion, Sarcastic Lad. Also a few younger bulls at very low prices. Correspondence solicited. 100 head in herd.

ROCK BROOK FARM,

Henry C. Glissman, Prop. Sta. B. OMAHA, NEBRASKA.

East Side Dairy Farm Holsteins

Now offers three or four choice registered cows; an opportunity for someone wanting foundation stock to start a herd. Also a few choice bull calves 4 to 5 months. Prices reasonable. Address F. J. Searle, Oskaloosa, Kas.

BRAEBURN HOLSTEINS AND BERKSHIRES.

A few bargains in bull calves. Some choicely bred spring pigs and boars ready for service. H. B. Cowles, Topeka, Kas. Ind. Telephone, 1086.

Holstein-Friesian Cattle

Herd headed by Sir Johanna Aaggie Lad 34984. His four nearest dams averaged 85.9 lbs. milk one day, 727 lbs. butter seven days, 17,824 lbs. milk one year, 727 lbs. butter one year. He is assisted by Calantha Karnilke 47877, dam Colantha 4th's Sarcastic, A. R. C., 21,19 lbs. butter in seven days as senior 2-year-old, by Sarcastic Lad, out of Colantha 4th, dam of the world's record cow—27,482 lbs. milk one year, 1,247.82 lbs. butter one year. Correspondence solicited. B. L. Bean, Cameron, Mo.

JERSEYS**LINSCOTT'S JERSEYS**

Established 1878. Registered in A. J. C. C.

BULLS—In The Kansas Farmer for May 23, is an article on Pure Bred Dairy Cattle for Kansas READ IT. I am offering registered Jersey bulls of excellent individual quality and carrying the blood of the greatest Jerseys in the world. Price \$60. They cannot be duplicated anywhere. A number to pick from. Tabulated pedigrees and descriptions sent for the asking.

R. J. LINSCOTT, Holton, Kas.

ABERDEEN-ANGUS**Allendale Stock Farm**

Pure-bred Aberdeen-Angus cattle. All leading families represented. A few good herd bulls for sale.

W. A. HOLT, - - Savannah, Mo.

POLLED DURHAMS**Polled Durhams**

FOR SALE.

A choice lot of young Double Standard Polled Durham bulls by Kansas Boy X2655, 8-H197989, Senator X5940, 263005 and the grand bull, Belvedere X2712, 190568. Inspection invited.

D. C. VanNice, - - Richland, Kas.

SHORTHORNS

New York Valley Shorthorns and Berkshires. A large number of my Shorthorns must be sold before winter to make room; including my calves sired by Baron Rupert 245287, ranging in age from 6 to 20 months old. And have for sale sows bred to Field Marshall and Lee's Masterpiece, and boars of serviceable age; also 110 May and June pigs to -ick from. Come and select your show stock, or write J. T. Bayer, Yates Center, Kas.

Stewart & Downs, Hutchinson, Kas.

Stewart & Downs,

SHORTHORNS.

1 BULL—SCOTCH TOPPED, of serviceable age, with plenty of bone and finish, also a few choice heifers. Chief herd bulls: Forest Knight by Gallant Knight and Victor Archer by Archer. Prices reasonable. Call or write

Stewart & Downs, Hutchinson, Kas.

LET US TELL YOU THE STORY OF Old Caney Valley

THE RICHEST REGION IN THE TEXAS GULF COAST COUNTRY

An Alluvial River Bottom Built Up By a Mighty Stream—Twenty to Forty Feet of Soil—Never Overflows

If you are a progressive farmer, and appreciate soil fertility and productiveness and the opportunities which come for money making, with the biggest possible yield of salable produce to an acre of land, then you will be interested in talking to us about this splendid old river basin, which we are placing on the market, in a general way, for the first time in all its history.

Caney Valley is a strip of land approximately seventy-five miles long by ten miles wide, with its south opening at the Gulf of Mexico, between the Colorado and Brazos Rivers. It was formerly the bed of the Colorado, but through ages of successive overflows, the valley and river banks were built up to such a height that the water of the stream could no longer find an outlet there, and the river cut a new channel miles away, leaving here a spot of wonderful soil fertility, untroubled by freshets and overflows, and giving all the benefits and advantages of a river bottom without any of its disadvantages.



Caney Valley Corn—It Yields 50 to 80 Bushels Per Acre, and You Can Grow a Crop of Potatoes or Some Other Profitable Crop After Your Corn is Harvested.

SOIL 20 TO 40 FEET DEEP.

The soil throughout the Caney Valley is 20 to 40 feet deep. It is as rich as any other valley soil on earth. It is free from gumbo or wax, is easily worked, and if properly tilled, yields enormously every season. It produces a most wonderful profusion of crops, and it has been successfully tested in more varieties of farm products than any other land in America.

CLIMATE UNEXCELLED.

The Caney Valley climate is not equaled in any other State in America, and is unexcelled in the Gulf Coast. The growing season is twelve months long. The winters are never cold, the thermometer seldom reaches the freezing point, while the summers are so tempered by the Gulf breeze that they are always pleasant, and an industrious man can work the season through without discomfort. The climate is healthful in the extreme and free from consumption, pneumonia, catarrh, and all similar troubles which are so frequently met with in the colder States.

DEVELOPMENT HAS BEGUN.

Within the last ten years a number of plantations have been improved, however, and they now present to the visitor the most striking evidence of the possibilities of Caney Valley. Progressive farmers have made fortunes in a few years in this wonderfully productive region.

There are a dozen or more plantations now being operated in the valley on thoroughly modern lines, comprising areas of from 1,000 to 3,000 acres each, and their owners are netting \$50 to \$100 per acre per year for every acre cultivated.

WHAT CANEY LAND WILL GROW.

Caney Valley land will produce successfully corn, cotton, sugar cane, potatoes, cow-peas, alfalfa, fruits, melons, onions, truck of all sorts, pecans, English walnuts, and, in fact, practically any product that can be grown inside the boundaries of the United States, and the yield will be greater and cost of production less than anywhere else. Corn, under proper cultivation, will yield from 50 to 80 bushels per acre, and after harvesting a crop of corn a crop of potatoes or some other profitable crop can be grown on the same ground in the same season. Alfalfa will yield six to ten tons per acre, and will sell from \$14 to \$18

per ton, while hogs and other live stock can be grown and put into market condition on alfalfa pastures at a cost lower than in any other section of the United States. Cotton will yield one to one and one-half bales per acre, and will sell for \$50 per bale each year. Sugar cane will yield a net profit of \$25 per acre with one planting in two to five years. Potatoes will yield 100 to 150 bushels per acre, and you can grow two crops per year and give the soil two months in which to rest. All the fruits and trucks can be grown with handsome profits, while pecans and other nuts yield crops of wonderful values.

BUY OLD CANEY LAND AT \$25.00 TO \$40.00 PER ACRE.

We are anxious to tell you more about this wonderfully rich region, and if you will write us, telling us what features interest you most, we will give you more information and send you descriptive literature. Fill out the coupon and mail to-day.

Address all Correspondence to

GRAY REALTY CO.,

Southern Office,
EAGLE LAKE, TEXAS,
Herbert Hurd, Mgr.

202 Century Building,
KANSAS CITY, MO.

CUT OUT COUPON AND MAIL TO-DAY.

GRAY REALTY COMPANY,
Century Bldg., Kansas City, Mo.

I am interested in Caney Valley. Please send me descriptive literature and advise me when the next homeseekers' Excursion will leave Kansas City.

Name.....

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

SHORTHORNS

TENNEHOLM SHORTHORNS.

Herd headed by the Dutchess of Gloster bull, Glad-lator 261086 and Baine 270673, a Cruickshank But-terfly. Cows of Scotch and Scotch topped Bates breeding. 1 yearling Bampton bull (a good one) for sale. Will make tempting prices on a few females. E. S. Myers, Chanute, Kans.

PONY CREEK HERD OF SHORTHORNS.

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