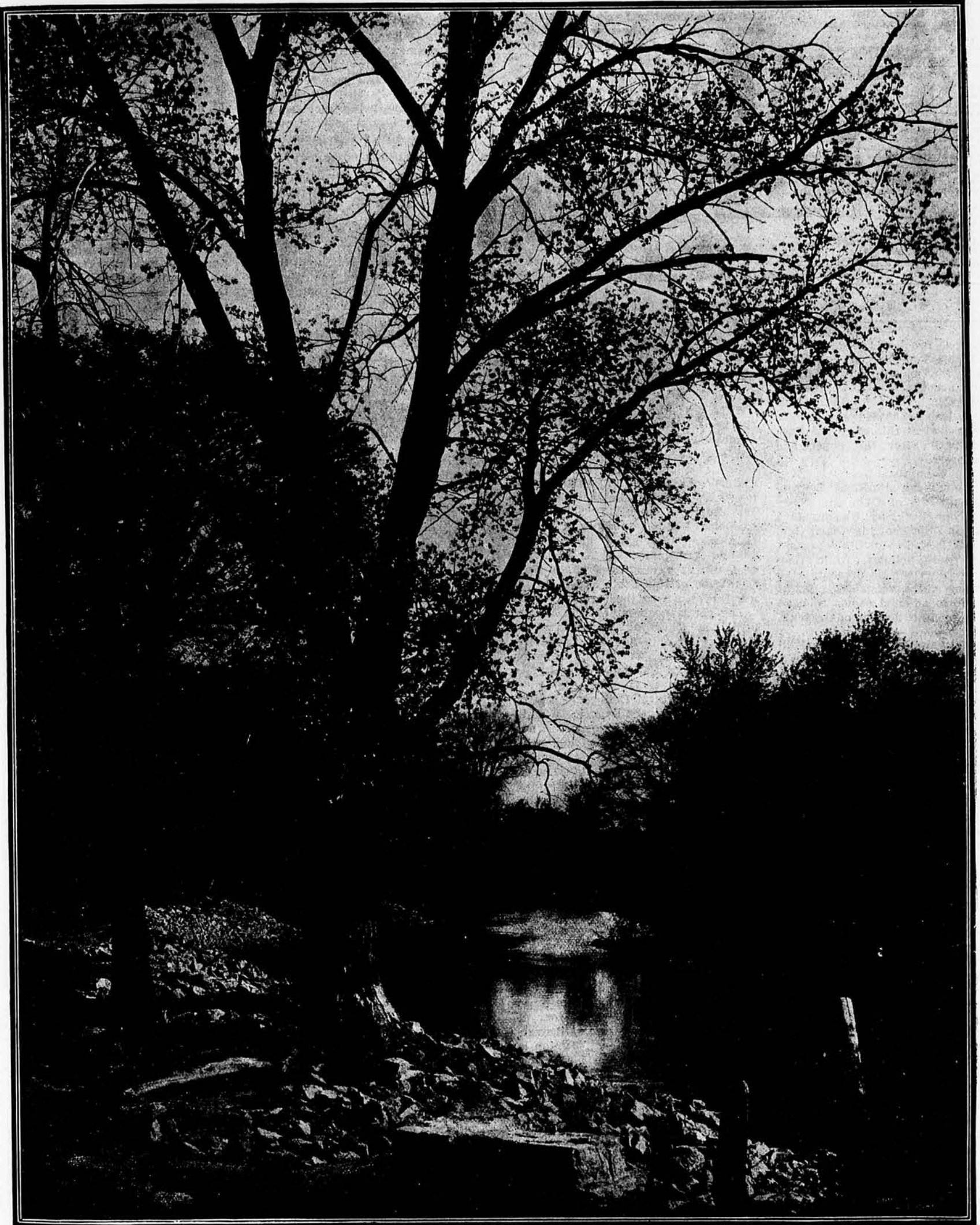


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KANSAS FARMER.

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The most excellent suggestions of Prof. A. M. TenEyck on late crops should be read by all who have to replant on account of the wet season. This valuable bulletin would have appeared in last week's KANSAS FARMER had its arrival at this office not been delayed until after the paper had gone to press.

The Republican National Convention named Taft of Ohio, and Sherman of New York, as its standard bearers in the coming campaign. Judge Taft is understood to represent the Roosevelt policies, while Congressman Sherman represents the more conservative wing of his party. The platform adopted seems to have been designed to accommodate both.

The total value of all railroad, Pullman, street, and interurban railway, telegraph, express, telephone, and pipeline property in Kansas as ascertained by the State Tax Commission for purposes of taxation is \$402,996,446.36. These figures are not quite as great as the total assessment of all property of every kind last year. The 1907 figures for everything read \$436,454,948. Figures are not yet available for making a comparison of the 1907 and 1908 assessments of these corporations, but the increase will compare favorably with the increase of valuation of private properties.

The usual injunction to cultivate the fields for the purpose of preventing the escape of moisture from the soil seems strangely out of place in the greater part of Kansas just now. But the importance of cultivating in order to exterminate a part of the growth of grass and weeds is duly impressed on the mind of every farmer. Without doubt the cornfields of Kansas will this season mature a considerable crop in addition to the one wanted. THE KANSAS FARMER will be pleased to receive suggestions from its readers concerning the program to be followed in giving the corn the best possible chance from this time forward. It should not be forgotten that there may be considerable dry weather before the corn is made.

It is stated that Secretary Wilson, of the U. S. Department of Agriculture, will retire from his long service at the end of President Roosevelt's

term, March 4, 1909. The finger of prophecy is pointed towards Hon. Charles F. Scott, of Kansas, as the likely successor in case of Mr. Taft's election. Mr. Scott, whom Kansas people like to call Charley Scott, is chairman of the House committee on agriculture. No man in Congress knows more than he about the great Department of Agriculture. He is a product of a Kansas farm, a graduate of the Kansas State University, has been in Congress for many years, is an energetic, capable, honest man. His appointment should be acceptable to every farmer throughout the entire country.

NOT IN POLITICS.

THE KANSAS FARMER has been strongly urged to enter into a strenuous discussion of the money question. Well prepared copy on at least two sides of the question has been received from New York.

The editor has fairly well matured views on several aspects of this question. Some of these were set forth in an address delivered last winter before a farmers' institute at Wellsville. This address was printed in THE KANSAS FARMER of March 5, 1908. The most insistent demand for space in these columns is for the propagation of views which are in harmony with those stated in the editor's address. These are not the views urged by writers in Wall Street's interest.

But THE KANSAS FARMER is and must remain essentially an agricultural paper. It sometimes gives a little space to the expression of views on important public questions before such become partisan issues, but the limitations placed on space devoted to such views and the manner of their expression will be observed even at the risk of failing to please some whose good opinion is valued.

THE KANSAS STATE AGRICULTURAL COLLEGE.

This year the graduating class of the Kansas State Agricultural College numbered 114, the largest class that has ever been turned out of the college. The members of the class are divided among the different departments, as follows: Domestic science, 46; general science, 15; agriculture, 17; electrical engineering, 22; mechanical engineering, 6; architecture, 4; and veterinary, 4. A large per cent of these graduates came from the farms of this State and a goodly number return to the farms.

The commencement exercises were held last Thursday morning at 10 o'clock. An able address was delivered by Albion W. Small, professor of sociology in Chicago University.

VALUE TO THE STATE.

The Agricultural College is one of this State's greatest assets. In addition to turning out young men with a knowledge of the most advanced methods of farming, of engineering and the mechanic arts, it is, through the work of the Experiment Station, making possible increase of the size and money value of the crops.

The origin of the institution dates back to 1862. On July 2 of that year, President Lincoln signed the land grant act appropriating 90,000 acres of land to the State. This land was to be sold and the proceeds to be a permanent endowment for the college. The expenses of the college and experiment station are defrayed by National and State appropriations and interest from the endowment fund. The college was founded in 1863. It is now the largest college in the State with a total enrollment this year of 2,137 students. The work of instruction and of the Experiment Station is carried on by a corps of 111 able professors and instructors. The writer has been for two years a student in one of our large Eastern universities and he was impressed by the fact that the merit of men in the different departments of instruction at the Kansas State Agricultural College compares favorably with that of the men of this Eastern institution. Their work is conducted with enthusiasm, and with an evident desire of furthering the agricultural interests of the

State and of helping the individual farmers to solve their problems.

DEPARTMENT OF ENTOMOLOGY AND ZOOLOGY.

The object of the department of entomology and zoology in addition to teaching these branches is to find methods of controlling insects and mammals, through the study of their life habits. This year systematic studies have been made of the chinch-bug, the Hessian fly, the corn-ear worm, the mole, the pocket-gopher, the green-bug, and other mammals and insects. These are the pests which have been particularly destructive in Kansas. This department has at its head a man of eminent ability and with such energy that his explanations of apparently dry and tedious technical matters prove of utmost interest. This man, Prof. Thomas J. Headlee, is a graduate of Cornell University, and the college is fortunate in having a man of his ability at the head of this important department. The practical results of the work of this department are given to the farmers through bulletins and communications in agricultural papers. Readers of THE KANSAS FARMER will remember articles in this paper received from this department on methods of combating some destructive pests.

THE BOTANICAL DEPARTMENT.

In addition to the instruction of students, the work of the botanical department is twofold—plant breeding and the control of plant diseases, caused principally by bacterial and fungous growths. In regard to plant diseases the work is similar to that of the entomological and zoological departments. In plant breeding, however, experiments are made, determining and producing plants best adapted to conditions of this State and different parts of the State. Assistant Freeman, of this department, showed the writer plots where this work was being done with alfalfa and wheat. Six hundred pure varieties of wheat are now being tested for quantity yield. Plots of alfalfa are also being grown for the purpose of getting a drouth-resistant variety for the western part of the State and a heavy, leafy variety, without so much attention to drouth-resisting quality, for the the Eastern part of the State. Professor Freeman is a man of energy, originality, and resource. He has invented an apparatus by which can be determined the exact transpirations of water by the leaves of plants per square inch, thus showing the drouth-desisting qualities of the plant. He has also done much original work in close pollination in alfalfa. When this department has determined crops best adapted for conditions in the State, seed from this is turned over the Professor TenEyck, who produces the seed in large quantities for the use of the farmers of the State.

PROFESSOR TENEYCK'S WORK.

Professor TenEyck, his work and its value to the college are too well known to the readers of this paper to require elaboration. The work of his department, however, is greatly hampered on account of lack of land and buildings. In talking of this he said: "I propose to ask the next Legislature for a special appropriation of \$5,000 for breeding, multiplying, and distributing good seed of wheat and other grains. The millers of the State will stand back of this proposition. I have already conferred with officers in the Southwestern Kansas Millers' Association. My recommendation of selecting, improving, and distributing seed-wheat, and other grains, will doubtless be favored by them in reconsidering the seed-what bill.

"I further recommend that the board ask the Legislature for thirty or forty thousand dollars for the purchase of land. We need at least 200 acres more and such land as will be desirable will cost in the neighborhood of \$150 to \$200 per acre.

"Also recommend that a special appropriation be asked for, of ten or twelve thousand dollars for the purpose of building a barn for the agron-

omy department. This may include, also, a hay and machinery shed.

"Further, that the board ask for special appropriation of forty thousand dollars for erecting a farm mechanics and farm machinery building, to be used for instructional and experimental purposes, and two thousand dollars for a green-house for work in soils."

DAIRY DEPARTMENT.

The dairy department has at its head Prof. John C. Kendall, a young man of energy and recognized ability in teaching dairying and handling dairy farms. Before coming to Kansas he was in charge of a herd of 75 dairy cattle at another educational institution and handled this herd in such a manner that it paid the current expenses of the dairy department.

Professor Kendall believes that as far as dairying goes this State is primarily interested in production more than in manufacturing. Therefore, he is giving particular attention to the production end of dairying in his work at the Agricultural College. His plan is to carry on the dairying at the college exactly as the farmer would on a farm, gradually building up a herd of about forty good dairy cows. He expects to raise all the feed that these cows will need, on forty acres of land and to make the dairy products pay the expenses of the dairy department of the college. He teaches the boys at the college how to make this kind of a profitable dairy farm.

LIVE STOCK DEPARTMENT.

In Kansas we consider live stock one of our most important branches of agriculture. It is therefore fitting that the animal husbandry department should be an important one at the Kansas State Agricultural College. This department has at its head another able young man, Prof. Roland J. Kinzer. The courses in feeding and judging, and the annual stock judging contests at the college are doing much for the live-stock interests in Kansas. On account of lack of funds this department has not been able to build up as extensive herds as are desired. However, the department hopes to receive an appropriation from the next Legislature which will enable it to make great strides in this direction.

DOMESTIC SCIENCE DEPARTMENT.

These departments which have been mentioned are of particular interest to the old and young men farmers of the State. Another, and one of the most important departments of the college, is the domestic science department. This would be expected to be of particular interest to the young and older ladies of the State. The writer observed, however, that it is of great interest to the young men at the college. Prof. Henrietta W. Calvin, who has this year resigned her position, has ably conducted this department. Courses are given in cooking, sewing, home management, nursing, physical training, etc. This has proved one of the most popular departments at the college.

THE MORE TECHNICAL WORK AT THE COLLEGE.

Space will not permit mention of all the departments of the great college at Manhattan. These which have been mentioned are of the greatest interest agriculturally. However, of not less importance to the college and to the State are the more technical courses, such as chemistry, physics, architecture, engineering, veterinary science, and printing.

It should not be expected that all the sons of farmers should become farmers. Some will go into other pursuits and to these the college offers the opportunity of fitting themselves along these technical lines. The technical courses at the Agricultural College have nothing better to recommend them than the fact that the men they have turned out are filling responsible positions and drawing large salaries both in this country and in Europe.

ADVANCEMENT OF THE KANSAS STATE AGRICULTURAL COLLEGE.

The Kansas State Agricultural Col-

lege has attained a high standing among the colleges of the State. Kansas is not satisfied yet, however. This great agricultural State should have the greatest college of agriculture and mechanic arts in the world. The college is not stationary. New appropriations, new buildings, and new courses are continually being added. A new course will be given next year in printing. There is great need for educated printers as there is need for educated men in all other pursuits. Mr. Rickman, superintendent of printing, with his limited resources has turned out some of the best trained men in the art of printing. Beginning with next year the printing department goes into a new building and a complete four-year course in printing will be given.

There is now in process of construction a new building, which cost \$56,000, for the veterinary department. This brings the number of buildings on the campus to 18, with an aggregate cost of \$460,287. The farm consists of 430 acres of land, valued at \$50,000. It is hoped that the Legislature will grant appropriations for four new buildings, which are badly needed, a stock judging pavilion, a dairy building, a poultry building, and a gymnasium.

THE ALUMNI MEETING.

The alumni of the college held a banquet and meeting on last Thursday evening. The interest of graduates of several years' standing was well illustrated by the remarks of C. E. Freeman, of The Arnold Company, 181 La Salle Street, Chicago, in the course of which Mr. Freeman presented the following prepared address of the Chicago alumni, entitled "The Kansas State Agricultural College: Its Functions and Duties—a Letter from the Chicago Alumni to the Alumni Association in Triennial Session, June 17, 1908, Manhattan, Kans." This address says:

"The most noticeable and we believe the most promising tendency of education to-day is towards industrial training. Many causes are concurring to bring about the better education of the great body of our people in the industrial arts and in the application of science to the domestic economies. The results are observable in the founding of trade schools and in the general growth and development of the many technical schools of our country; in their increased requirements for admission and graduation; and especially in the greatly increased demand in the arts and sciences for the graduates of such schools. We have assurance that in the future the demand for better trained men in applied science of all kinds will be yet more insistent. The era of technical schools in America is just beginning, and those who have the responsibility for their development will do well to heed the signs of the times.

"Among the many professional schools, of whatever character, none have a more certain and more promising future than the colleges of agricul-

ture in America. The source of all our material happiness is the soil; the prosperity of the country and of the world depends immediately upon the agriculturist, and no technical schools will in the future occupy a more useful place than such colleges as our own. Their dignity is increasing rapidly. But their only future lies in their development as distinctly professional schools along the same lines as the best schools of applied science and in at least equal pace with them. There will almost remain a place for trade and industrial schools—indeed, their place is now being wonderfully and widely extended! but this elementary education is not the chief function—not the real function of such schools as ours. One is no prophet in saying that twenty-five years hence the high schools of our State will be teaching the elements, at least, of agriculture and the various trades, but the province of the college is not to do this work of the high schools.

"The colleges of agriculture have been richly endowed by the National Government, and means for their further development will be rapidly increased as they learn to use their means wisely. The Nation rightly expects National returns for the money invested in them—expects, not the education of the journeyman in agriculture or plumbing or carpentry, but the training of men and women who shall become powers of industrial good in their various communities—leaders, directors, managers, and teachers of agriculture. And above all else, there is expected from them the discovery of new truths in agriculture and the application of known scientific laws and known facts to the betterment of agriculture.

"Shall our institution, in which we have so deep an interest, and withal so much pride in its past history, be in the future an industrial school only, or shall it struggle to take rank with the highest and best schools of agricultural science in our country? It has long been one of the largest schools called agricultural. Let us earnestly and frankly ask ourselves the question, Is it one of the best? And to this question we are compelled in all candor to answer, No. The impression that the Kansas State Agricultural College is making to-day on agricultural science and agricultural education is relatively and absolutely less than that of several other colleges numerically much smaller.

"There is and will continue to be, in Kansas as elsewhere, a demand for the highest professional training in agriculture and the allied sciences, and this demand will not diminish. The institution offering this kind of training will soon find at its doors, asking for admission, students prepared to meet its high requirements. For schools of lower rank, of more modest ambition, will as surely follow the higher development of the college as night the day. But, that this development may result, this college must be one of those to lead the way. It should be placed at the earliest possible moment in the fullest professional equivalency with the best and highest. Its degree of B. S. must not be given for anything less than full college work of seven or eight years from the grammar school. There must be no necessity for apologies from the alumni. We sincerely believe that its only future lies in this development, even though the immediate result may be a diminution in the number of those receiving its degrees—a diminution which is sure to be counterbalanced by a greatly increased number in the future.

"It may be asked if our institution were to exclude all students who have not pursued four years, or at least three years, of preparatory work above the grammar grades before entering, how many would be left? Unfortunately, if done immediately, only a comparatively small number. But the experience of other States establishes conclusively the fact that such a condition is only temporary. The college requirements at the Iowa State College of Agriculture and the

(Continued on page 718.)

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One month before a subscription expires we enclose a renewal blank on which you may write your order for the renewal, and in the last copy sent on the old subscription we again enclose a similar blank.

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.

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The following combination offers are made as suggestions to our subscribers. If this list does not contain what you want write us. We guarantee the lowest publishers' price, postpaid to any address in the United States on any book or magazine published in the United States.

Remittances made for these combination offers can not apply on back subscription accounts.

Special Offer No. 1.

The Great Magazine Bargain of the year. A saving of 40 per cent on the publishers' prices.

Review of Reviews.....	\$3.00	} Our Price \$3.75
Woman's Home Companion.....	1.00	
Success Magazine.....	1.00	
The Kansas Farmer.....	1.00	
Regular price.....	\$6.00	

Special Offer No. 2.

Another great offer which includes Country Life in America, the most beautiful magazine published.

Country Life in America.....	\$4.00	} Our Price \$5.35
The Garden Magazine.....	1.00	
McClure's Magazine.....	1.00	
The Kansas Farmer.....	1.00	
Regular price.....	\$7.00	

Special Offer No. 3.

Campbell's Manual Soil Culture.....	\$2.50	} Our Price \$2.50
The Kansas Farmer.....	1.00	
Regular price.....	\$3.50	

Special Offer No. 4.

Metropolitan Magazine.....	\$1.50	} Our Price \$2 00
Reliable Poultry Journal.....	.50	
Weekly Capital.....	.25	
The Kansas Farmer.....	1.00	
Regular price.....	\$3.25	

Special Offer No. 5.

Review of Reviews.....	\$3.00	} Our Price \$3.00
Success Magazine.....	1.00	
The Kansas Farmer.....	1.00	
Regular price.....	\$5.00	

Special Offer No. 6.

Vick's Magazine.....	\$.50	} Our Price \$1.50
Green's Fruit Grower.....	.50	
The Kansas Farmer.....	1.00	
Regular price.....	\$2.00	

Special Offer No. 7.

The American Magazine.....	\$1.00	} Our Price \$3.75
Review of Reviews.....	8.00	
Woman's Home Companion.....	1.00	
The Kansas Farmer.....	1.00	
Regular price.....	\$6.00	

Special Offer on Dailies.

The Kansas Farmer one year and any one of the following dailies for the price named.

Topeka Daily Capital.....	\$4.50	Kansas City Daily Star and Times.....	\$5.50
Topeka Daily State Journal.....	4.00		

Special Offer on Weeklies.

The Kansas Farmer one year and any one of the following weeklies for the price named below:

Breeders' Gazette.....	\$2.00	Inter-Ocean.....	1.25
Scientific American.....	4.00	Western Swine Breeder.....	1.75
The Commoner.....	1.60	American Swine Herd.....	1.00
Hoard's Dairyman.....	1.60		

Special Long Time Offer.

The regular subscription price of THE KANSAS FARMER is One Dollar per year. Some prefer to take a cash discount by paying for a longer time in advance. To meet the views of such we will send:

Two years' subscription, in advance, to one address.....	\$1.50
or, five years' subscription, in advance, to one address.....	\$3.00
or, subscription for life, in advance.....	\$9.00

We will accept as payment for all arrearages and one or more years in advance, your check, your note, postage stamps, or currency, which ever best suits your convenience.

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

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Agriculture

Late Crops.

A. M. TENEYOK IN PRESS BULLETIN NO. 162, AGRICULTURAL EXPERIMENT STATION, KANSAS STATE AGRICULTURAL COLLEGE.

Five years ago the agronomy department of this station published Press Bulletin No. 124 on this subject on the occasion of the great floods of 1903. Again excessive rains and floods have destroyed crops on much of the river bottom-lands all over the State. The uplands have washed badly and some of the fields must be replanted. The continued wet weather has also prevented the planting of some fields.

In spite of the unfavorable conditions which now prevail, by skillful handling the land may still be made to produce a profitable crop. After the floods in 1903, this department undertook several experiments in late planting of crops, which have furnished some data on this subject. The information and suggestions given in this bulletin may assist some farmers to take advantage of the opportunity which remains for planting and growing crops this season.

DATES OF KILLING FROSTS.

The dates of the first killing frosts have been recorded at this station by the department of physics for the last twenty-eight years. During the twenty-eight years no frost has been recorded earlier than September 13, although a light frost occurred in 1902 on that date, and light frosts occurred in September in 1889, 1893, 1903, and 1904. Nine years out of twenty-eight killing frosts have occurred in September; October 29 is the latest date recorded for the first. October 9 is the average date of killing frosts, while the average date of September frosts is September 25, and of October, the 11th day of the month. It should be noted that many of the frosts recorded as killing frosts were not so severe as to entirely stop the growth of corn and Kafir-corn. By a killing frost is meant frost hard enough to destroy tomato vines, sweet potatoes, melons, etc.

CORN.

Twenty-nine varieties of corn planted June 17 after the flood of 1903, at this station, made good yields, several varieties yielding over 50 bushels (shelled corn) per acre. Minnesota-grown seed of Triumph flint and University No. 13 dent matured by October 8, but made a less yield than Kansas corn. The following varieties were about mature and out of the way of frost on October 8, 113 days after planting: Early Longfellow, Funk's Ninety-Day, Boone County White, King of the Earliest, Early Mastodon, Pride of the North, Early Cattle King, and Leaming. Other varieties ripe enough to escape much injury by frost were Farmers' Reliance, Golden Row, Nebraska White Prize, Hogue Yellow Dent, and Reid Yellow Dent. Varieties which did not mature enough to make good, sound corn were: Kansas Sunflower, Forsythe Favorite, Mammoth White Dent, Hickory King, and Calico.

The average yields of the ten best producing varieties from late and early planting compare as follows:

DATE PLANTED.	Yield per Acre.	
	Corn (shelled), bushels.	Fodder (air dry), pounds.
May 8.....	53.97	3,208
June 17.....	49.14	2,468

The trials were made in different fields, and soil conditions as regards fertility rather favored the early planted corn.

This trial was repeated in 1904, and again in 1905, with a smaller number of the earlier maturing varieties. Such varieties as Reid, Hogue, Golden Row, Pride of the North, Farmers' Reliance, and Bloody Butcher, planted June 10, 1904, were mature October 8 to 10, but made rather low yields both of grain and fodder. The same varieties planted in 1905, on July 1,

were noted as mature enough to escape injury by frost on October 14, but the yields were again low, ranging from 22 to 32 bushels of shelled corn per acre, and one to two tons of stover. The drier season and less favorable conditions for growth account for the lower yields from late planting in 1904 and 1905.

Different dates of planting trials at this station in 1905 and 1906 with the same varieties of corn favored rather late planting (May 26), both in the production of ears and stover. The varieties tested were Silvermine (medium early), Legal Tender (medium), and Hildreth (late). The seasons were not particularly favorable for late planting. A wet season should favor late planting even more than the average season, as indicated by the 1903 trial.

With a full season for growth, the early maturing varieties do not give so large yields as the medium or late maturing varieties, but for late planting the early corn is preferred in order to insure its maturity before frost. The varieties of corn classed in seed catalogues as 100-day corn, such as the Leaming, Reid, Early Mastodon, Iowa Goldmine, Legal Tender, Silvermine, Boone County White, White Pearl, etc., mature in about 110 to 120 days, and these varieties may be planted as late as June 15 with a fair promise of a good crop. Such varieties as the Pride of the North, King of the Earliest, Dakota Dent, Minnesota King and Early Flint varieties, the so-called 90-day corns, may be planted after June 15 until July 1 with a reasonable promise of a crop, assuming September 25 as being the possible date of the first killing frost. If the frost should hold off until October 9, the average date of killing frosts, June planted corn ought to be a safe crop as far as injury from frost is concerned.

Northern-grown seed may mature earlier than Kansas-grown seed of the same variety, but the home-grown seed will usually give the larger yield. Nebraska- or Iowa-grown corn gives good results from late planting in Kansas.

SORGHUMS.

Kafir-corn really requires a longer period to fully mature seed than many varieties of corn commonly grown in this State. The Black Hulled White Kafir-corn, the common variety, will mature seed in 110 to 125 days, depending upon the season. Red Kafir-corn is somewhat more leafy and may be preferred for fodder. This variety matures a few days earlier than the Black Hulled White, but yields a little less seed. Dry or cool weather may check the growth of Kafir-corn and cause it to mature several weeks later than its ordinary season.

Dwarf Milo is less valuable for fodder than Kafir-corn, but produces good yields of grain similar to Kafir grain, and will mature seed in about 100 days.

Jerusalem corn and brown durra ear of less value than Kafir or Milo, both for grain and fodder, but these crops mature early and produce well in the drier western counties of the State.

Such varieties of cane as Early Amber, Black Dwarf and Folger will mature seed in a favorable season in about 100 days. Later maturing varieties, such as the Kansas Orange, Coleman, Red Top, and White sorghum, require 110 to 130 days to mature seed. There is usually a sale at a good price for a limited quantity of cane seed for late planting, for forage, and pasture.

Kafir-corn and cane are not as good crops for late planting for the production of grain or seed as corn. Early Amber cane and Red Kafir-corn planted June 19, 1903, were nearly mature when cut and shocked on October 8, but made rather low yields of seed and stover, due in part to a thin stand. Date of planting trials with Black Hulled White Kafir-corn and Orange cane were carried on at this station in 1905 and in 1906. Plantings made after June 20 in 1905 did not mature seed fully before frost. The largest yields both of seed and fodder were produced from late May and early June plantings. The late plantings

yielded less fodder and only about half as much seed as the earlier plantings. The average yields by the several plantings from May 19 to June 3 compare as follows:

Kafir-corn, 5.35 tons stover and 47.24 bushels grain per acre.
Cane, 7.33 tons stover and 25 bushels grain per acre.

The average yields by the several plantings from June 9 to June 28 were as follows:

Kafir-corn, 3.89 tons stover and 26.86 bushels grain per acre.
Cane, 5.29 tons stover and 12.61 bushels grain per acre.

Thus it appears that corn is a safer and more profitable crop for planting late for grain production than Kafir-corn or cane. If Kafir-corn fails to make good grain it may make good fodder, but this is true of corn also.

During the past five years corn has outyielded Kafir-corn at this station, the average yields comparing as follows:

Corn (ten best producing varieties), 66.92 bushels per acre.
Kafir-corn (average yield of Red and White), 53.61 bushels per acre.

Corn has about ten per cent greater feeding value than Kafir-corn. If the grain is desired rather than the fodder, and good seed of an early or medium early maturing variety can be secured, then plant corn after June 15 rather than Kafir-corn or sorghums.

COW-PEAS AND SOY-BEANS.

These crops are valuable for grain and seed as well as for forage. Among the varieties adapted for planting in this State are the Early Yellow, Ito San, Early Green and Early Brown soy-beans and the New Era, Whipporwill, Black Eye, Warren's Extra Early and Michigan Favorite cow-peas. The Clay and Iron varieties of cow-peas may also be planted for forage.

Date of planting trials carried on at this station in 1904 and 1905 with Early-Yellow soy-beans and New-Era cow-peas indicate that these crops are not apt to mature much seed planted later than June 25. The largest yields of both hay and grain were produced by early June plantings. The June planting of these crops were cut for hay in about 80 days after planting, and matured for seed in from 94 to 108 days, depending upon the season and the date of planting. Plantings from the first to the middle of June usually matured seed in a shorter period than earlier or later plantings. The average yields of fodder and grain for the two seasons by the plantings made from June 3 to 25 were as follows:

Cow-peas, 2.6 tons hay and 14.9 bushels grain per acre.
Soy-beans, 1.7 tons hay and 14.3 bushels grain per acre.

The yield of seed of cow-peas varies greatly in different seasons, the average yield in 1905 being 7.6 bushels per acre, while in 1904 the average yield was 22.2 bushels per acre. Soy-beans are somewhat more regular in their yield. Cow-peas is really a safer crop to grow for forage than for grain.

FORAGE CROPS.

There are few crops which may be planted later or which are superior to corn for forage either for feeding green or cured. Preferably plant rather thickly in rows and cultivate, or sow broadcast the same as sorghum.

Cane or Kafir-corn may be sown broadcast or planted in close drill for fodder production as late as July 15. The early-maturing varieties of cow-peas, such as New Era, Whipporwill, and Black Eye, may make good hay planted as late, while millet, or soy-beans of the earlier maturing varieties, may be planted even later and insure a fair yield of forage if the soil and season remain favorable for growth. Kafir-corn, Orange cane, cane, Whipporwill, cow-peas and many varieties of corn will mature for fodder in about 90 days after planting; Amber cane, Early Yellow soy-beans, German millet and early varieties of corn in about 80 days with favorable weather for growth, while Siberian, Hungarian and common millet will make hay in 60 to 70 days from seed-ing.

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er feeding value than corn fodder, but cane will produce larger yields than any of the other crops mentioned. While Kafir-corn usually ranks second.

A series of experiments in planting late forage crops (plantings made about June 20) was begun in 1903 and repeated each year until 1906. The resulting yields for the four seasons are as follows: millet 1.6, soy-beans 6.1, corn (sowed) 5.7, corn and cow-peas (sowed) 5.1, corn (planted in rows) 5.9, corn and cow-peas (planted in rows) 5.4 tons per acre, respectively. These are yields of field-cured hay or fodder. It should be observed that well-cured soy-beans, cow-peas, or millet hay will contain 16 to 20 per cent of water; corn fodder or corn and cow-peas, 25 to 30 per cent; while Kafir-corn or cane fodder will contain from 35 to 40 per cent, even when the crop is well cured, by leaving in the field for several weeks in the wind-row and bunch.

AMOUNT OF SEED TO SOW.

The amount of seed of the several crops to sow for forage may be denoted as follows: Cow-peas 4, millet 2 to 3, soy-beans 3 to 4, cane 3 to 4, Kafir-corn 2 to 3, corn 2 to 3, corn and cow-peas 2 and 3 pecks per acre, respectively. If the crops are planted in rows, a less amount of seed may be used, as follows: Corn 8, corn and cow-peas 4 and 8, Kafir-corn or cane 4 to 8, cow-peas or soy-beans 8 to 10 quarts per acre, respectively.

Planted in rows for seed production requires amounts of seed per acre as follows: Corn 4, Kafir-corn 3½, cane 3 to 4, soy-beans or cow-peas 8 to 10 quarts per acre, respectively. All crops planted late for seed or grain production should be planted rather thinner than is the usual practice when these crops are planted early in the season.

PASTURE.

To produce pasture quickly at this season of the year, sow millet, or millet with oats, barley, or emmer, a peck of millet with a bushel and a half to two bushels of the grain per acre. Rape may be planted for pasture as late as August first. Sown broadcast or in close drills requires 5 to 6 pounds of seed per acre, while planted in rows two to three feet apart requires 2 to 4 pounds of seed. Rape makes an excellent and very productive pasture for hogs, and may also be used for sheep and cattle.

Sowed corn, sorghum or Kafir-corn will furnish a large amount of pasture, and plantings may be made as late as August 1. Cow-peas and soy-beans will furnish excellent early fall pasture, or better, plant the cow-peas or soy-beans with corn; do not plant with cane of Kafir-corn, as these crops will smother the legumes. For late fall and winter pasture, sow winter rye, wheat or winter barley in the early part of September. This will also furnish early spring pasture the next season.

ALFALFA.

A field which has been flooded should be disked or cultivated as soon as the ground is dry enough. If the crop has been under water too long or is not covered too deeply with silt, the alfalfa may start again. It is practicable to reseed alfalfa fields this fall, when the seed-bed may be prepared by disk and harrowing during the summer. A crop of millet, cow-peas or soy-beans may be grown for forage and taken off early enough to prepare the seed-bed by disk and harrowing for fall seeding. On most of the old fields which need to be reseeded, 8 or 10 pounds of good seed per acre will be enough to sow. In case the field has been in alfalfa for six or eight years it may be advisable to rotate with other crops and seed alfalfa on new fields.

SPECIAL CROPS.

Broom corn, buckwheat, navy beans, and garden crops may be planted, if time and convenience permits, as side crops to bring in a little extra money.

MANAGEMENT OF FLOODED LANDS.

The question of management of flooded land can hardly be discussed here. Send for Bulletin 121, treating on this subject, published after the

1903 floods. However, this suggestion may be offered, that low-lying lands which are apt to flood and wash had often best be seeded down to grasses for pasture or meadow, rather than to be planted year after year with cultivated crops.

A. M. TENEYCK, Agronomist.
Manhattan, Kans., June 10, 1908.

Acidity of the Soil.

In testing some of the soil on my farm I find that it gives an acid reaction with litmus paper that is quite perceptible. What is the best means of counteracting the acid condition? Is sheep sorrel growing on the land an indication of the acidity of the soil? Linn County. FRANK SLATER.

The acidity of the soil may be corrected by the application of lime, preferably in the form of quick lime. However, air-slaked lime or ground limestone may be used. The growth of sheep sorrel on the land indicates that the soil contains too much acid. Also your tests with the litmus paper, if they were carefully made, should be quite conclusive.

It may not be advisable to apply lime in too large quantity or on too large areas at first; better try liming in a small way, noting results. I have mailed you copy of circular No. 2, giving information regarding liming soils, also circular letter on the use of ground limestone. A. M. TENEYCK.

The Colorado Field Pea.

EDITOR KANSAS FARMER:—Professor TenEyck asked me to write to Mr. S. E. Barton, of Cimarron, Kans., giving some information in regard to the Colorado field pea, sending copy of same to you. Below will be found the write-up which I have just mailed to Mr. Barton.

The field pea is a valuable annual legume for both stock and the soil of the farm. It was grown in Canada many years before it was introduced into the United States. For this reason all field peas on this side of the line are usually spoken of as "Canada Field Pea."

Within the last few years farmers of Colorado have realized the value of this crop to the farm. From a type of field peas having a medium to a large pea, selections have been made and a very hardy, good yielding grain pea is being developed known as the "Colorado White Field Pea." These are not yet raised in sufficient quantity to be obtained in the general market. For grain production either the White Marrow Fat or the Black Eyed Marrow Fat have given our people the best satisfaction.

The Canada Green and Canada White are also quite generally grown in Colorado. They yield most excellent forage and a fair amount of grain.

This crop seems to require a cool, moist climate and does best where cool nights prevail. For this reason many mountain valleys in our Rocky Mountain region seem to be peculiarly adapted to field-pea culture.

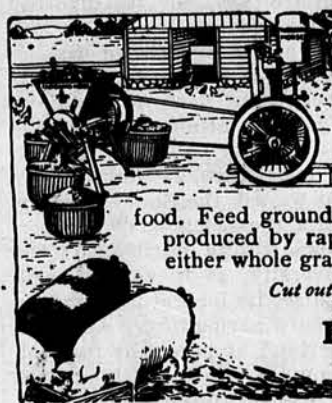
One valley in Colorado annually grows 100,000 acres in this crop, feeding the same to lambs and hogs.

It is possible that many sections of Kansas can grow this crop if it be seeded very early in the spring, February will be even better than March, provided climatic conditions in the spring will permit the preparation of the ground for the crop.

The ground for seed-bed conditions should be moist, well firmed, but not too hard, and in good surface tilth so as to render plant food available to the young plants.

Colorado farmers find the grain drill one of the most satisfactory seeders which they can use. They stop up every other hole, or seed two holes and stop up two right through the drill box. This places the rows 14 inches to 16 inches apart, or two rows 8 inches apart, with 24 inches between each pair of rows. If the farmer desires to cultivate the crop the latter method is the preferable one. Colorado farmers give little or no cultivation to the field pea crop.

Since the vines have a tendency to a recumbent growth, many farmers seed oats or barley with the peas to



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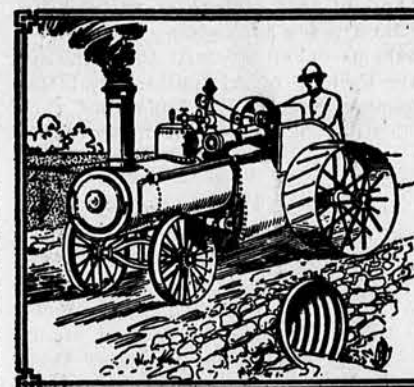


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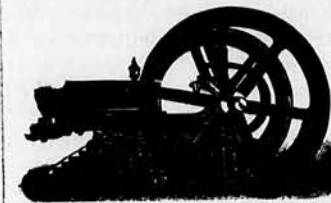
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hold them up. The amount of peas used to seed the ground varies with locality, climatic conditions, and the purpose for which the crop is grown. Here in Colorado, farmers use all the way from 25 pounds to 60 pounds per acre.

The method of cutting the crop is not wholly satisfactory. A mowing machine with a good strong high pea guard attached to the sickle bar is generally used for cutting the crop, but the rank growth of vines has a tendency to clog the mower.

After cutting, our farmers find they can let the vines partly cure in the swath, rake into windrows, and stack same as alfalfa hay.

When grain is the main purpose of the crop, permit 80 per cent of the peas to get into the hard dough before cutting. If forage be the main purpose of the crop, cut as soon as lower vines begin to turn brown.

Peas can be thrashed by the grain separator if concaves are removed and care be used in the thrashing opera-

tion to avoid cracking of peas. A pea huller or sheller made especially for separating the grain from the forage does much more satisfactory work than the average grain thrasher, but the latter can be used where the former is not obtainable.

The writer would not advise seeding field peas in Kansas in ordinary seasons later than March. In the southern part of the State, February seeding should be preferable to March. Try a small area first and seek to get the Marrow Fat pea for grain yield, the Canada White or Green for forage yield.

In Colorado we are seeking to bring the grain yield up to 3,000 pounds per acre. We are using field peas as a substitute for corn in fattening hogs, since this crop is grown where corn can not be successfully matured in the mountain valleys of over 6,000 feet elevation.

W. H. OLIN.

Fort Collins, Colo.

[W. H. Olin is a Kansas product, a graduate of the Kansas State Agricultural College.]

(Continued on page 720)

THE KANSAS STATE AGRICULTURAL COLLEGE.

(Continued from page 715.)

Mechanic Arts are as high as those at the Iowa State University and the number of students at the two institutions is nearly equal. The requirements for graduation at the Washington State College are equivalent to those of the Washington State University and the number of students in each institution is nearly the same—more than sixteen hundred. These cases prove what reason would suggest, that in a very short time our college should have an attendance of well prepared students equal to that of the State University.

"If it had as many in proportion to the population of the State as has Washington State College there would be over three thousand. Where does the fault lie? With the State, the regents, the faculty, or the alumni? We as alumni desire and we confidently expect that in a very few years there will be two or three thousand genuine college students here. The facilities of the college are among the best; at least equal to those of the State University. Its faculty is earnest and able; its means are capable of improvement, if not yet all that could be desired. Have we as alumni, as citizens of Kansas, no duties in the case? We have. Let us in season and out of season urge the dignity, the usefulness, the necessities of our Alma Mater.

"There are other reasons why our college should at once, or as soon as possible, be raised to full college rank. Within the past year the benefits of the Carnegie Foundation have been extended to State institutions of higher education, coupled with the very important condition that all colleges coming within its provision must do full college work—undergraduate work of four years beyond the high school course; that is, at least seven years beyond the grammar grades. This college, as we know, does not and can not at the present time meet those requirements. A stigma upon our college is sure to result. It will immediately be branded as of merely academic rank, unless it raises its requirements for admission and for graduation to conform with the Carnegie condition. Are we not as alumni immediately and deeply interested in the good reputation of our Alma Mater; are we content to be looked at askance by graduates of our State University? We know, better than others, the real good the college is doing, and the excellent training given here; we watch with pleasure the success of so many of its graduates, but we earnestly desire that others shall have no cause to cast scorn upon the institution.

"There is yet another, and still more practical side. So long as this college is not eligible for the Carnegie pensions, there will be greater difficulty in obtaining, and especially in retaining, strong men in its faculty; and higher salaries must necessarily be paid than are paid for men of the same grade in other institutions where the Carnegie pensions are available.

"In any discussion of the future policy of our college, the question of its scope is important—very important at the present time. The institution was founded as a college of agriculture and the mechanic arts. Shall its function in the future be restricted exclusively to agriculture? We believe that the alumni as a body will answer this question by an emphatic no. To limit its scope to agriculture only will be inevitably at the expense of agriculture itself. Agriculture to-day is so broad that it touches—intimately touches—on all sides, many other fields of applied science. Our chemical laboratories, for instance, if restricted to agricultural chemistry, will never reach the highest degree of efficiency—for pecuniary reasons, if for no other. Our instruction in physics, in mechanics, in horticulture, in landscape gardening, etc., all so indispensable to the agriculturist, will suffer if isolated. On every side like conditions will be found. Applied science

in agriculture can not be divorced from applied science in the various arts except at the expense of agriculture itself, and unless the field is broadly cultivated here, most surely will the greatest stimulation for the development of our college, even as a college of agriculture, be wanting. As well might we ask the State to endow a college for the teaching of the German language to the detriment of the State University, as to ask this college to restrict its laboratories and its duties to pure agriculture. And still more important, as surely as this college is content with anything less than the highest professional rank, just so surely will other colleges and universities of our State take up and pursue higher professional work in agriculture and allied subjects. This college must be the leader in applied science, or others will surely usurp its function. Indeed others are already usurping its function. Since this is a college of agriculture, surely the pure food commission should have its only headquarters here. And can any one dream of a valid reason why another State institution should furnish a public inspector of orchards and nurseries?

"And, if this college is to take its destined place in higher education it should be called officially the 'Kansas State College of Agriculture and the Mechanic Arts.' We hope that this suggestion may meet the approval of the regents, the faculty, and the alumni.

"Whatever may be the future policy of our college, its fruition must chiefly depend upon the president. We have only commendation for those men who have occupied this important office. They have largely made the college what it is; we know that they have tried to do their duty unselfishly and conscientiously. We are grateful to them for what they have done for the college, and especially do we appreciate and commend the retiring president. But the college now faces a crisis in its history—the greatest crisis, we believe, in all its history. Is the college to become merely an industrial school, to abandon its college rank and college degrees, yielding to the university professional work in applied science? Or is it to take its place beside that institution—of which, too, as Kansans we are proud—its coequal in its chosen fields, a leader in all industrial education, independent and self-reliant? One or the other result must inevitably follow; it can not occupy an intermediate position; it must go up or down. Which is it to be? And what have the alumni to do in the matter?

"First of all, as a fundamental principle we insistently demand that to whomsoever is given the responsibility for the management of this college must be intrusted the selection of its faculty untrammelled by political or personal interests. He must be given the entire responsibility for the nomination of all members of the teaching and subsidiary staff; all advancements and all dismissals must be upon his recommendation and his recommendation alone. As a wise man he will be governed by his faculty in all such recommendations, but he must not be governed by any reason whatsoever save the personal fitness of each and every member of the college for the duties of his position.

"The responsibility for the choice of the next president must of course devolve upon the board of regents, but the alumni have a duty in the case. In some respects we are better qualified to suggest the kind of man he should be than are the regents themselves, or even the faculty.

"It need not be said that the first qualification is that he shall be a broad and strong man, one whose reputation as an educator and scholar is more than Statewide. He must be one to command respect from both the faculty and the State as an executive, as a man of broad knowledge, as a speaker, as a progressive educator in sympathy with the spirit of the times, and as a man. If he is a professional agriculturist so much the better, but his knowledge of agricul-

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ture should not be his first qualification, though he must be thoroughly in accord with the acknowledged policy of the institution. And he must be an original man. Perhaps no duty of the college is more important than the discovery of new truths in agriculture, or in the application of old truths to agriculture—to discover how to make two grains of corn grow where one grew before. The people of the United States rightfully expect from this and all other institutions of like grade scientific research as applied to agriculture and the allied arts. They have richly endowed the institution largely for that purpose. The president must emphatically be a man in hearty sympathy with such research, one who has done research himself. If the history of our higher institutions of learning in America teaches anything, it teaches that the spirit of the faculty is strongly and dominantly influenced by the example and sympathy of the president.

"We believe that such a man can be found who will take up with his whole soul the responsible duties of the presidency of our Alma Mater. May the alumni do all within their power to aid the regents and faculty in finding him.

"Adopted unanimously by the K. S. A. C. Alumni Association of Chicago at its meeting of June 6, 1908.

"LORA WATERS BEELER, Secretary;
"W. E. WEALEY, President."

As further illustrating his views Mr. Freeman presented a letter from Eugene Davenport, dean and director of the University of Illinois College of Agriculture and Experiment Station, from which the following excerpts are taken:

FACTS FROM EUGENE DAVENPORT.

"1. As to the Experiment Station we are using the following amounts of money in defraying expenses of original research along the lines as indicated:

	Annually.
Live stock investigation.....	\$25,000
Crop investigations.....	15,000
Soil investigations.....	25,000
Orchard investigations.....	15,000
Dairy investigations.....	15,000
Floricultural investigations....	7,500

"The results of these investigations are published from time to time in bulletin form. I am sending you a few of the latest numbers of these bulletins and the last bound volume, from which you can judge something of the character of the work done by the Experiment Station.

"2. The growth of this work is best shown by the following tabular form. I go back to the year 1890 because it best brings out the sudden development of things:

Year.	College Funds	Station Funds	College and Station Employees	Students Registered
1890-1891..	\$5,000	\$15,000	33	1
1891-1892..	5,000	15,000	33	6
1892-1893..	5,000	15,000	33	13
1893-1894..	5,000	15,000	33	5
1894-1895..	5,000	15,000	33	9
1895-1896..	7,000	15,000	33	14
1896-1897..	7,000	15,000	6	17
1897-1898..	7,000	15,000	8	19
1898-1899..	7,000	15,000	9	25
1899-1900..	28,000	15,000	16	90
1900-1901..	28,000	15,000	17	150
1901-1902..	34,000	69,000	23	232
1902-1903..	34,000	69,000	27	284
1903-1904..	90,000	100,000	37	339
1904-1905..	90,000	100,000	37	406
1905-1906..	91,000	110,000	44	430
1906-1907..	91,000	110,000	50	462
1907-1908..	104,500	128,500	61	510
1908-1909..	104,500	128,500		

"3. As to the influence of this department over the agricultural interests and activities of the State, of course, it is difficult to say except in a general way. Before this work be-

came so strongly developed land was considered well sold at seventy-five to eighty dollars an acre. The same land is now sold at from one hundred and seventy-five to two hundred and twenty-five dollars an acre, and in some cases it is sold at three hundred dollars an acre, or more. In the southern part of the State the old, worn wheat lands were at that time worth from twelve to twenty dollars an acre; the same lands are now worth thirty-five to one hundred and fifty dollars an acre. We have been told by many of the best people that this increase in value is mainly the work of the Experiment Station. This is, perhaps, not altogether true, because the upward tendency in land values is notable in all the States; yet nowhere is the increase anything like as pronounced as in this State. There is no doubt that this is largely due to our very careful study of Illinois soils in their various types, and our somewhat marked success in being able to describe exactly what is best to be done on each type. When I tell you that we have now twenty-five soil experiment fields on the various types of soils in different sections of the State you will see that our opportunity to know Illinois soils is very broad. Something like thirty counties have been surveyed acre by acre, and all soil differences mapped down to an area as small as five acres. The effect of this upon the soil values of the State must, of course, be pronounced. We have influenced the fruit production of the State, and are beginning to have powerful influence in the dairy regions, as well as in animal management generally.

"On the college side our influence is longer in showing itself because students must have time to get established in their complicated business. When I tell you, however, that almost every one of our students goes straight to the farm, and that nearly every one of them is successful in a sensible, businesslike way, you will realize what this will mean to the State in a half of a generation.

"Any additional knowledge, I assure you, will be given with the greatest pleasure."

The Kansas State Agricultural College has an excellent foundation for such a development as is suggested by the Chicago alumni.

HARVESTING.

Harvesting is now going on in Kansas with great energy. The return of favorable weather during the latter part of last week made it possible to enter the fields. It is reported that the binders and headers did not on Sunday cease their efforts to save the staff of life for the hungry world.

Except in comparatively few instances of overflowed fields the reports indicate little damage to the crop on account of the wet weather. On the other hand the effects of the dry weather of the early spring were greatly mitigated by the subsequent liberal supplies of moisture, so that fields that had been marked to be plowed up are rejoicing the farmer with a liberal harvest.

The call for harvest hands has been largely met, but the State employment bureau has been a busy place. Young men from the high schools and colleges have come nobly to the rescue. These make desirable hands in spite of the fact that their muscles are at first rather soft. Many of them know little about farm work but they

are quick to learn and are willing. Coming from good families they are usually well behaved and appreciative of good treatment.

WASHBURN COLLEGE.

Washburn College, the great school at Topeka which rightly prides itself on the spirit and atmosphere of its environment as well as on its rapid growth in size and wealth, is sought by increasing hundreds of young men and women from the best families in Kansas. The standard of Washburn has always been high. Its influence is strong in character building as well as in advancing scholarship. The numerous representation from the homes of the capital city constitutes a home endorsement which is emphasized by the fact that very many of these could easily afford the expense of an Eastern school did they not prefer the safe and sane influences and the superior instruction of the home institution. Association in the classroom and in the social circle with the kind of young people who attend Washburn is an advantage which lasts through life. The earnestness of study at Washburn levels up and not down, producing an equality upon a high plane. This school extends its invitation to KANSAS FARMER young people through the advertising columns.

The next notable political event to claim the attention of the people of the United States will be the Democratic National Convention, soon to convene at Denver. Of the nomination of Bryan to head the ticket there is no doubt. The name for the second place is as uncertain as it was in the case of the Republican ticket named at Chicago. That there will be abundance of issues on which the voters will be divided is already apparent. The campaign promises to be an interesting one which THE KANSAS FARMER will cheerfully leave to the political organs while this paper will continue its special mission of assisting farmers to prosper under any administration.

During the imaginary flurry of last winter, every foreign corporation loaning money on farms in the Western States abandoned the field. On or before April 1 every company had returned. At the present time, the loan companies all make a rush for every loan offered, the demand for money being limited, with an unlimited amount of funds seeking investment. The loan agencies in Topeka all have an abundance of money to loan on farm properties.

Miscellany

Fight to Prevent Butter Famine.

Sixteen of the largest butter manufacturers in the Mississippi Valley States began a gigantic battle against twenty transcontinental railroads and express companies on June 10 before Interstate Commerce Commissioner Prouty of Vermont in Chicago, in an effort to thwart the common carriers' plan to make a sweeping advance in rail tariffs on milk and cream, averaging from 66% to 125 per cent. It is the emphatic claim of these makers of butter that the enforcement of the proposed "excessive, unjust, and practically confiscatory" increase not only would imperil the investment of \$10,000,000 in creamery plants in several States, but would eliminate the net profit of less than one-half a cent per pound on the finished product and force the creameries to suspend business.

The annual production of the petitioning butter-makers who seek the permanency of protection from railroad rate increases temporarily given by an injunction issued by Judge Kohlsaat of the United States Circuit court in September, 1907, is 150,000,000 pounds, which is more than one-quarter of the total output of the United States. These petitioners an-

nually pay the farmers of Illinois, Wisconsin, Missouri, Iowa, Kansas, Nebraska, South Dakota, Minnesota, and Indiana \$50,000,000 for cream, and expend more than \$1,500,000 on railroad freight charges.

Counsel for the defendant carriers have offered the suggestion that the butter-makers add the increase due to the proposed new tariff on cream to the selling price of the finished product. But the makers unanimously have decided not to compel the public to pay more for the necessity. The suggestion is denounced as unfair to the people and likely to result in extensive reprehensible substitution and adulteration.

The Kohlsaat injunction, first of its nature and a novelty, invoked by counsel for the shippers, in that it acted as a staying order against the common carriers, established the principle that the federal courts had a right to interfere in matters involving interstate commerce. Previous to this court order it had been customary for the railroads to notify the Interstate Commerce Commission of an advance in rates, which advance became effective in thirty days. Six other federal judges sustained the Kohlsaat contention by issuing similar staying orders on the roads.

The shippers now have their inning to introduce testimony against the common carriers, intended to destroy the efforts of the latter to overcome the injunction and put into effect the alleged excessive tariffs.

The petitioners show that with rates remaining stationary for the past fifteen years an enormous development in the agricultural States of the Mississippi Valley took place, the complainants having established more than 10,000 cream receiving stations and creameries in all the rich-farming States. The Fairmont Creamery Company, the Beatrice Creamery Company, the Blue Valley Creamery Company, and many other similar corporations extended their enterprises and developed a gigantic business, to the great good of the territory that contributed material for the manufactured product. A territory with an area of thousands of square miles is made directly contributory by the improved fast express and refrigerator service of the common carriers.

It is also charged by the complainants before the Interstate Commerce Commission that the roads are guilty of a criminal conspiracy, and in violation of the Sherman anti-trust law, by all agreeing to put into effect the same increased rates on all of their lines. Another contention given great emphasis by the petitioners is that

the railroads carry for the express companies for half the rate they carry for the public without giving any better service. That, it is asserted by the aggressive butter-makers, shows conclusively that the public is paying too much. "No surrender to the railroads" is the slogan of the butter men that will be interpreted in legal phraseology in the Interstate Commerce Commission hearing.—Jersey Bulletin.

As the hearing of this important case was continued by Commissioner Prouty until September 7, next, the following letter from Mr. John H. Curran, formerly of Kansas, but now residing in St. Louis, will be read with interest. Mr. Curran says:

"In view of the pending action before the United States Interstate Commerce Commission of the allied creamery interests of the country against the railroads in their attempt to increase rates on cream, I feel it is highly important that one fact be brought to the attention of your readers generally throughout the country. It is well known that the railroads have through their efforts arrayed the small creameries of the country against the large centralizers, claiming that under the old rates the centralizers were getting a big advantage over the small creameries, and also claiming that the new rates proposed to be put on by the railroads would discriminate against the centralizers and be in favor of the small creameries. One fact alone will disprove these claims absolutely and settle once for all the question as to the sincerity of the railroads in their endeavor to array these interests against each other. This fact is simply this, that the rates for the shorter distances for hauling cream have been increased to a far greater proportion than the rates for distances up to 125 miles. In other words, the rates for distances up to 30 miles have been increased from 15 cents, the old rate, to 25 cents, the proposed new rate, an increase of 6 per cent, while in no case does this rate of increase apply as strongly for distances from 30 to 125 miles. If the railroads are sincere in their claims that they want

to favor the small creameries, they should have allowed their old rates to remain and raised the rates on the long haul. Instead of that they made a universal higher rate for tariff purposes only and have applied the heaviest increase on the small distances, which would hit the small creameries the hardest. It is time your people should be aware of this fact to the end that they may see the purpose of the railroads, which seems to be merely that they may use the small creameries to 'pull their chestnuts out of the fire.'"

The June meeting of the Shawnee Alfalfa Club will be of more than ordinary interest. Prof. A. M. TenEyck will be present to help solve the difficulties of the alfalfa-growers and to give them new information. The subject of the day is "The Curing and Storing of Alfalfa," and is of itself most interesting under present seasonal conditions. The selection of vice-president from each township in Shawnee County will be an important matter of business.

Shall the club make an exhibit at the National Corn and Cereal Show to be held at Omaha next winter? will be a question to decide.

Shall the club make an exhibit at the Topeka fair? and other questions will be discussed.

The meeting is free to everybody and his wife. Remember that 2 o'clock p. m. at the Commercial Club rooms, 625 Kansas Avenue, are the time and place, and be present.

Don't Stay Fat.

It will be joyful news to thousands of fat people to hear that they can reduce their weight from three to six pounds a week and turn ill health into robust health, and relieve that feeling of fullness and oppression and produce healthy digestion. No dieting or starvation in taking this remarkable discovery. It strengthens the heart and enables one to breathe easily and quickly. Removes double chin, large stomach and fat hips.

Anti-fat is the famous discovery which has caused so much favorable comment on its introduction in this country several years ago. In fact, so prevalent has become the demand for the treatment that the International Remedy Co., 1123 Broadway, New York City, has been formed especially to distribute a free treatment of anti-fat by mail to every one requesting same.

WASHBURN COLLEGE, Topeka, Kan.

An Institution Doing Well All It Undertakes to Do.

Washburn College seeks to combine Eastern thoroughness with Western enterprise. Its ideals are high, its spirit is democratic. It has a broad-minded faculty and an earnest student body. Because of these things and because of its choice location, its superior equipment and its varied courses of study it is for many the best school in the Southwest. Will you not investigate and see if it is not the best school for you?

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The Colorado Field Pea.

(Continued from page 717)

tural College. He is well versed in Kansas conditions, and, though now professor of agriculture in the State Agricultural College of Colorado, has still a warm interest in his thousands of friends in Kansas. The above valuable letter renews Kansas' interest in his energetic career.—EDITOR.]

Intensive Farming.

Many of our readers are acquainted with Mr. Arnold Martin, of Dubois, Nebraska, noted as a seed-corn breeder, a specialist in intensive farming, and institute speaker and educator. In a recent letter to Professor TenEyck, Mr. Martin gives some history of his farming operations, the amount of his present investment, and a brief financial statement of the cost of production and the income from several crops.

Mr. Martin writes: "I have kept a record of my work in operating this small twenty-acre farm for ten years. Took possession of a piece of land as nature made it and made it into a home and kept a record of all the income and expenses, crops grown each year, number of bushels of each, what they sold for and how the money was invested.

"Getting the land ready to farm cost me \$25 an acre, when cleared of the heavy undergrowth of small timber and hazel-brush, roots and stone. The account of my operations on this farm would make a text book for any young man for assisting him in making a home. It is a piece of practical work that ought to be presented in such institutions as the Kansas Agricultural College where young men are trained in agriculture. It would be an inspiration and a help in their future work.

"I will here give a brief outline of the subject as space permits. I started on this farm as many another young man must start, with very little money or property.

I had a team, cow, and chickens valued at.....\$140.00
Household goods.....100.00
Cash.....743.50

Total.....\$983.50

"My present investment, including twenty acres of land, buildings, machinery equipment, improvements, and other general expenses may be stated as follows:

Stock on hand, team, etc.....\$140.00
Household goods.....100.00
First payment on farm.....543.50
Tools bought since on the farm.....505.50
Building material for house and barn.....903.50
Household goods bought since on the farm.....212.50
Paid for nursery stock.....540.50
Garden seed.....52.50
Clover, alfalfa, grass seeds.....46.80
Fence wire.....46.00
Well, windmill, irrigation plant.....180.00
Spent in traveling.....794.00
Paid in bills.....162.00
For insurance.....23.00
Taxes.....72.30
Mortgage paid off.....150.00
Paid interest.....64.00
Paid for two horses.....215.00

Total investment.....\$4,751.10
Fruit sold from the farm.....420 crates
Average price.....\$1.65 per crate
Total received for small fruit.....\$693.00
Total received for pears.....429.00
Received in premiums on fruit.....92.50
Sold show fruit to St. Louis Exposition.....62.50

Gross income.....\$1,329.00
Cost of production and nursery stock.....*964.50

Net profit.....\$364.50
*I have charged the full amount paid for nursery stock.

POTATOES.

Average yield of potatoes per acre from 1897 to 1907, 147 bushels.
Average price per bushel 68½ cents.
Cost of production per 100 bushels, \$32.70.

Potatoes sold in 11 years, 7,791 bushels.
Gross income from potatoes, \$5,042.00.
Cost of production, \$2,483.12.
Net profit, \$2,558.88.

COST OF PRODUCING 100 BUSHELS OF POTATOES.

Plowing.....\$1.50
Harrowing......30
8 bushels of seed.....6.00
Planting, cutting, dropping.....2.00
Cultivating 7 times.....1.00
Hoing and pulling weeds.....2.40
Digging and sorting.....7.50
Marketing.....6.00
Interest on land value.....6.00

\$32.70

"In every 100 bushels of potatoes I sold \$6 worth of fertility, in 7,791 I sold \$467.46 worth of the fertility.

Tools used were: Lister, plow, digger, planter, harrow, Campbell weed-er, five-shovel planter Jumbo, hoe, and potato fork.

CORN.

"Since 1902 I have grown Reid Yellow Dent, from three to five acres. Gave it the very best of care; breeding corn for seed and exhibition. Yield, 72, 83, and 92 bushels per acre on bottom land, and 48 and 56 bushels per acre on upland. I find that one-tenth of the crop on the average has made first grade seed corn in the ear. Sold from \$30 to \$50 worth of seed per year. I have won \$786 in premiums, cash and specials, mostly on corn.

COST OF PRODUCING ONE ACRE OF CORN—FIFTY BUSHELS.

Plowing.....\$1.00
Harrowing......30
Cultivation 7 times.....2.40
Planting and seed......65
Harrowing twice......30
Pulling weeds......75
Cutting corn.....1.00
Husking.....2.00
Interest on land value.....6.00
Manure.....2.50

\$16.90

Alsike Clover for Feed.

Would you kindly advise me as to feeding (pasturing and as hay) of alsike clover? JNO. S. GILMORE.

Wilson County.

Alsike clover is a hybrid between red clover and white clover. It makes less growth than red clover but is more leafy, inclines to stool or spread more than the red clover, and is perhaps better adapted for pasture than either the red or white clover, but as a meadow will not yield the same quantity of hay as red clover. As far as the feeding value of the hay is concerned, there is little difference in the composition of red clover hay as compared with alsike clover hay. However, the alsike clover being a little finer in quality and less stemy is usually better relished by stock, especially sheep and hogs.

The relative compositions of alsike clover, alfalfa, timothy, and red clover hays compare as follows:

	Water.	Ash.	Protein.	Nitrogen free extract.	Fat.
Alfalfa.....	8.4	7.4	14.3	25.0	2.2
Alsike clover.....	9.7	8.2	12.8	25.6	2.9
Red clover.....	20.8	6.6	12.4	21.9	4.5
Timothy.....	15.0	4.5	6.0	29.6	3.0

The above figures are taken from the Farmer's Cyclopedia, by Wilcox & Smith, published by the Orange Judd Co., N. Y.

Clover is generally considered a biennial, namely; the plants die when they produce seed. However, alsike is more of a perennial and a plant may continue for two or more seasons and when alsike is sown with grass and used for pasture the clover may continue more or less permanent, new plants starting in favorable seasons, from seed. Likewise, pasturing prevents the plants from seeding and tends to give them a new lease of life so that they may live longer than in a meadow where the crop is cut regularly for hay or seed.

Alsike clover is known as the wet-land clover. It seems to be a little harder under wet soil conditions than the red clover and is equally hardy on drier uplands, although not so productive as red clover and not nearly so productive as alfalfa where the latter will grow and thrive.

In your section of the State a combination of alsike clover, English bluegrass, and orchard grass, should make good pasture, and the alsike clover, with the bluegrass or timothy, should make good meadow. If you have wet land, red top should be included with the clover and other grasses. If sown alone six or eight pounds of seed of alsike clover is required per acre. Sowing with grasses, requires less seed; perhaps four pounds with fifteen pounds each of English bluegrass and orchard grass, or if the Red Top is included, use ten pounds of each of the grasses. If sown with English bluegrass or timothy for meadow use a similar amount of the clover seed with twenty pounds of English bluegrass or ten pounds of timothy seed per acre.

We have grown alsike clover in comparison with other grasses and legu-

ANGLE OF DISCS NEVER CHANGES

No drill has quite such convenient advantages as our Peoria 5-Disc Drill. Here's the most prominent one. You can change the width between rows by moving an easy-to-reach lever and yet not alter a bit the angle of the discs. You know as well as we that this helps to insure even depth and uniform sowing. Another point; the

PEORIA 5-DISC DRILL

turns on its carrying wheels. It saves your strength; no lifting, no tugging. Whole machine turns in its own length—5 feet. That's another convenience. Depth of furrow is easily regulated. Sows all kinds of grains, large or small as well as peas, beans, corn, etc., without clogging or crushing seed. Can be fitted with grass-seed attachment. Write today, Mr. Farmer. Let's get acquainted. We'll send our free catalog and see that you get one of our drills without trouble to yourself if your dealer doesn't handle our line.

PEORIA DRILL & SEEDER CO., 243 N. PERRY ST. PEORIA, ILL.

mes at this station for several years, the yields of field-cured hay for the years 1904 to 1906, inclusive, comparing as follows:

Name of Crop.	Pounds.
Alfalfa.....	7,698
Common red clover.....	6,173
Mammoth clover.....	4,277
Alsike clover.....	3,520
Timothy.....	4,943
English bluegrass.....	2,681
Orchard grass.....	1,708
Bromus inermis.....	3,483
Timothy and Red Top.....	3,536
Timothy and red clover.....	4,708
Bromus inermis and red clover.....	5,017
English bluegrass and red clover.....	4,514
Bromus inermis and alfalfa.....	5,877

We have not used combinations of alsike clover with grasses in these comparisons. A. M. TENEYCK.

Preparation of Oats Land for Alfalfa.

I have a piece of ground that I want to put in alfalfa this fall. It is in oats now. If I take the oats off as soon as they are ready to stack and then disk the ground several times and sow by the 15th of August, would that be too early, or too late? This piece of ground is fairly rolling. Please send me a circular giving information regarding the culture and use of cow-peas. H. C. HATFIELD.

Nemaha County.

The method which you suggest of preparing the ground for alfalfa after oats would work all right in a proper season. It is doubtful whether you

can get ahead of the foxtail and crabgrass this season by disking. Perhaps it will be preferable to plow shallow as soon after harvest as possible and by harrowing and disking. Keep the weeds down and prepare a good seed-bed for seeding the alfalfa, about the last of August or the first of September. It might be well to sow as early as the 15th of August if the soil is in condition. However, there is some danger from too early seeding in that hot, dry weather may prevail, or heavy, beating rains may occur, thus preventing the seed from germinating, or destroying the young plants.

For more information on the subject, I have mailed you copy of circular No. 10 on "Seeding Alfalfa." Have also mailed you copy of circular No. 8 on "Cow-peas."

A. M. TENEYCK.

Cutting and Storing Alfalfa in a Day.

Have you tried cutting alfalfa in the forenoon and putting it in the mow in the afternoon? What do you think of the method?

Sumner County. W. L. MEUSER.

We have made some experiments in a small way putting alfalfa into the shed green the same day it was cut. We are repeating the experiment on a larger scale this year. Have a shed 24x48 feet with a raised bottom so as to give good ventilation beneath the mow. Ten or twelve acres of alfalfa is being cut and stored in this shed, the plan being to cut in the forenoon, starting the mow as soon as the dew is off in the morning; the rake is started about 11 A. M., and the hay wagons begin to load after the noon hour. The plan is to get the hay well wilted before putting it into the shed, and care is taken not to have any moisture on the hay either from rain or dew after it is cut or when it is stored.

BALES 15 TONS A DAY HAY

The Gem Full Circle Steel Baler offers large feed opening, power head getting greatest baling pressure out of a light team, quick return plunger, allowing two charges to each circle, and brake device which relieves any jerk from the rebound. Easiest for men and horses and bales most. Our press weighs 2,600 pounds, some others only 1,500. Such light presses require constant repairs. We save you \$25 or more in first cost and more every year in repairs. Send us a postal today for prices, 5 days' free trial plan and a free copy of our new "Baler Book."

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GEORGE ETEL CO. QUINCY, ILL.

HAY PRESS SHIPPED ON TRIAL

3 FEEDS TO THE ROUND SELF FEEDER

The I-M-ITT HAY PRESS CO., Dept. L, Kansas City, Mo.

The unfavorable weather has made it very difficult to get the hay into the shed in just the proper condition. The first forenoon's cutting was slightly wet by a shower about 11 A. M. This delayed the raking until about 1:30, and the hay was very green, although showing no moisture on it when it was put into the shed in the afternoon. The hay from about 3¼ acres was spread over the bottom of the shed, covering it to a depth of about 2 feet.

This hay began to heat in a few days and we found it necessary before putting in the rest of the hay to remove the first hay before putting in the second cutting.

The second day's cutting, about a week after the first, was handled without mishap, the day being a fair day and the alfalfa was fairly well wilted when it was stored. The bottom of the shed was covered to a depth of about three feet. This was on June 11, and at this date, (June 15) the hay has not begun to heat.

In spite of the fact that the hay was forked over, I observed that it packed very closely and even if this lot succeeds in curing out, it is difficult to see how the air will get to the next crop which we intend to store above this one.

The last hay put in was in full bloom and more mature than we usually wish to cut alfalfa hay. The first lot stored, which we were obliged to remove as stated, was about one-half in bloom when cut.

The season, of course, has been very unfavorable for curing hay in any way and the shed curing is not proving so successful as I had hoped. I can only restate what I have stated before that in my judgment this is not a safe way of storing alfalfa hay. Under favorable weather conditions and careful handling it may be possible to cure the hay out in good condition by cutting in the forenoon and storing in the shed in the afternoon, but I believe this is not a safe method. Better cure the hay in the field at least 24 hours before putting it into the shed or mow.

Another objection which we observed to handling hay green is the weight of the hay. The work of handling is made much greater and the hay must be handled more slowly than if it were well cured. This method would seem to be useful only when it was necessary to store the hay at once to save it from being damaged by rain.

We expect to continue this experiment, putting up each cutting in the manner described, when I shall be able to report more fully on this

method of making hay. I have mailed you copy of a pamphlet on "Making Hay," which I have recently published which discusses the subject in more detail.

A. M. TENEYCK.

Horticulture

Conservation of Our Natural Resources.

BY GIFFORD PINCHOT, FORESTER OF U. S. DEPARTMENT OF AGRICULTURE.

The conservation of our natural resources is a subject which has received little attention in the past; but the facts in the case are so simple, the principles so elementary, and our duty so clear, that they might be fitly presented in a story like one of the old fairy tales that we all loved when we were boys and girls. Such a story would run like this:

A STORY WITH A MORAL.

Once upon a time there was a young man who had been given a great property in a distant region and who left home to take possession of it. When he reached his property he first made himself acquainted with it. As he explored it and studied its value he began to think how he would make his living out of it. The problem was not a hard one. He found that his property was wonderfully rich, and supplied his needs at the cost of far less exertion than he would have had to make at home, for it was a fair land, well watered, well timbered, abounding in game and fruits, with broad meadows for cattle and horses and sheep, and with no small store of rare and curious minerals and an outcrop of excellent coal. Life was easy, and he lived lavishly and joyously, after the initial hard work of moving in and building his house and raising his first crops was over. He had far more land than he could use, far more game, and what he lacked he was able to buy from home with furs, with timber, with minerals, and with the surplus of his crops.

THEY MARRIED.

By and by he saw and liked a girl and finally married her. Together they prospered on the property, which seemed too rich to make it necessary for them to trouble about the future. Game was still plenty, though less so than at first; the timber, though growing less, was still abundant enough to last longer than they could hope to live; by breaking new land they could always count on marvelous crops; the coal was a little harder to get at, but still close to the surface, and besides the man only dug out the easiest to reach, and when the earth began to cave in he merely started again at a new place. His stock, grazing on the meadows, had trampled out some of the grass, but there was still no lack. That some day strangers would possess their property when they had done with it, and would find it somewhat run down, did not disturb these two people at all.

But children came to them with the years, and by and by these children began to grow up. Then the point of view of the man and his wife changed. They wanted to see their sons and daughters provided for and settled on this property of theirs, and they began to see that what was enough and to spare for them would not support all their children in the same comfort unless they themselves used it with better foresight. Through thinking of their children they were led to live more in the future.

PROSPERITY CAME.

They looked forward and said to themselves:

"Not only must we meet our own needs from this property, but we must see to it that our children come in for their share of it; so that after a while the happiness we have had here may be carried to them." So the family established itself. The

man became respected, and his children grew up healthy and happy around him, and when in the fullness of time he passed away and his children took the place in which he had stood, because of his foresight and care they enjoyed the same kind of prosperity he had enjoyed.

It is a perfectly simple story; we all of us can name scores of men who have done this same thing. The men and the women who do it are not famous, are not regarded as remarkable in any way; they are simply good, everyday, average citizens, who are carrying out the duties of the average citizen.

WHAT WE HAVE DONE WITH OUR NATIONAL RESOURCES.

Once upon a time there was a young Nation which left its home and moved on to a new continent. As soon as the people who formed the first settlements began to examine the value and condition of this new continent, they found it marvelously rich in every possible resource. The forests were so vast that, in the early days, they were not a blessing, but a hindrance. The soil was so rich and there was so much of it that they were able at first only to cultivate the edges of their great property. It was quite plain to these people in the early times that, however much land they might cover, however much they might waste, there was always going to be plenty left. As time went on they discovered greater and greater resources. They found wonderfully rich deposits of metallic ore; great oil and gas fields, and vast stretches of the richest bituminous and anthracite coal lands; noble rivers flowing through broad expanses of meadow; rich alluvial prairies; great plains covered with countless herds of buffalo and antelope; mountains filled with minerals; and everywhere opportunities richer than any Nation had ever found elsewhere before.

ALWAYS A PLENTY.

They entered into this vast possession and began to use it. They did not need to think much about how they used their coal or oil or timber or water—they would last—and they began to encroach on the supply with freedom and in confidence that there would always be plenty. The only word with which they described what they had, when they talked about it, was the word "Inexhaustible."

Let us see for a moment what the course of development of this young Nation was. First of all they needed men and women to settle on the land and bring up children and have a stake in the country. That was absolutely necessary before they could develop the great Nation which some of them saw ahead. As the population spread there arose a need that great systems of transportation should be built to knit the country together and provide for the interchange of its products. These railroads called for iron, coal, and timber in great quantities. Then began an unprecedented demand upon the forests. They could not build these transcontinental railroad lines without millions upon millions of railroad ties cut from the forests of the country; and they could not mine the iron and coal except as the forests gave

them the means of timbering their mines, transporting the ore, and disposing of the finished product. The whole civilization which they built up was conditioned on iron, coal, and timber. As they developed their continent, richer than any other from the East coast to the West, new resources became revealed to them, new interests took possession of them, and they used the old resources in new ways.

In the East, the rivers meant to them only means of transportation; in the West they began to see that the rivers meant first of all crops; that they must put the rivers on the land by irrigation before they could grow wheat, alfalfa, fruits, sugar beets, and other crops that make the West rich. They found that to feed the vast population which had grown up in the East they must have the vast ranges of the West to grow meat. They found that the resources of soil and water which produced the wheat, the cotton, and the meat—of iron and coal, and of timber, together made up the working capital of a great Nation, and that the Nation could not grow unless it had all of these things. In taking possession of them our Nation used them with greater effectiveness, greater energy, and enterprise, than any other Nation had ever shown before. Nothing like our growth, nothing like our wealth, nothing like the average happiness of our people can be found elsewhere; and the fundamental reason for this is, on the one side, the vast natural resources which we had at hand, and on the other side the character, ability and power of our people.

Now what have we done with these resources which have made us great, and what is the present condition in which this marvelously vigorous Nation of ours finds itself? The keynote of our times is "development." Every man from New York to San Francisco looks to the development of the natural resources to produce the advantages and the opportunities he wants for his neighbors and his friends. Anyone who questions the wisdom of any of the methods we are using in bringing that development to pass, because he believes we are making mistakes that will be expensive later on, is in danger of being considered an enemy to prosperity. He is in danger of having it thought of him that he does not take pride in our great achievements, that he is not a very good American. But in reality it is no sign that a man lacks pride in the United States and the wonderful things our people have done in developing this great country because he wants to see that development go on indefinitely. On the contrary, real patriotism and pride in our country make it the first of all duties to see that our Nation shall continue to prosper. In sober truth, we have brought ourselves into a condition in which the very serious diminution of some of our most necessary resources is upon us.

THE PROBLEM BEFORE US.

This Nation has, on the continent of North America, three and a half million square miles. What shall we do with it? How can we make ourselves and our children happiest, most vigorous, and efficient, and our civilization the highest and most in-

fluent, as we use that splendid heritage? Ought not the Nation to undertake to answer that question in the spirit of wisdom, prudence and foresight? There is reason to think we are on the verge of doing this very thing. We are on the verge of saying to ourselves: "Let us do the best we can with our natural resources; let us find out what we have, how they can best be used, how they can best be conserved. Above all, let us have clearly in mind the great and fundamental fact that this Nation will not end in the year 1950, or a hundred years after that, or five hundred years after that; that we are just beginning a National history the end of which we can not see, since we are still young." In truth we are at a critical point in that history. As President Roosevelt has said, we are at the turning of the ways. We may pass on along the line we have been following, exhaust our natural resources, continue to let the future take care of itself; or we may do the simple, obvious, common-sense thing in the interest of the Nation, just as each of us does in his own personal affairs.

WE ARE TRUSTEES.

On the way in which we decide to handle this great possession which has been given us, on the turning which we take now, hangs the welfare of those who are to come after us. Whatever success we may have in any other line of National endeavor, whether we regulate trusts properly, whether we control our great public service corporations as we should, whether capital and labor adjust their relations in the best manner or not—whatever we may do with all these and other such questions, behind and below them all is this fundamental problem, are we going to protect our springs of posterity, our resources of well being, our raw material of industry and commerce, and employer of capital and labor combined; or are we going to dissipate them? According as we accept or ignore our responsibility as trustees of the Nation's welfare, our children and our children's children for uncounted generations will call us blessed, or will lay their suffering at our doors. We shall decide whether their lives, on the average, are to be lived in a flourishing country, full of all that helps to make men comfortable, happy, strong, and effective, or whether their lives are to be lived in a country like the miserable outworn regions of the earth which other Nations before us have possessed without foresight and turned into hopeless deserts. We are no more exempt from the operation of natural law than are the people of any other part of the world. When the facts are squarely before us, when the magnitude of the interests at stake is clearly before our people it will surely be decided aright.

Hens will get all the clover they want themselves this time of the year, but cut some and store it away against the time when the snow flies and they can not find any.

Hold on with the oil meal now, unless you want to force your hens to molt early.

FORTUNES IN FIG ORCHARDS

TEXAS FIGS ARE WORLD'S FAIR PRIZE WINNERS

10 Acres Magnolia Figs Worth 100 Acres Kansas Corn Land

Fig Preserves made at Aldine, near Houston, best known. Figs never fail to bear here. One acre set in Figs and one town lot at Aldine, both \$230. Payable \$10 down, \$10 a month, without interest, no payments when sick. Clear warranty deed in case of death. Single crop of figs more than pays cost of land and lot. Local cash market for fruit. There is nothing that offers a surer and steadier income to the investor under proper management than the cultivation of Magnolia figs. Five or ten acres set out in figs will pay all cost in four years, and yield an annual income thereafter of \$1,000 to \$3,000, quite enough to support an ordinary family. If you can't buy five, better buy less, and even one acre pays as well in proportion to the amount invested. If you want to enjoy life in South Texas under your own vine and fig tree or make a small, safe, profitable investment, better than bonds, savings banks or life insurance, write for particulars. AGENTS WANTED.

E. C. ROBERTSON,

Gen. Mgr., 501 Kiam Bldg.,

HOUSTON, TEXAS

Field Notes

LIVE STOCK REPRESENTATIVES.

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

H. B. Cowles, of Topeka, has just sold a number of fine young Holstein bulls and the demand continues. One of these bulls went to J. B. Anderson, Salina, Kans. Another went to H. Saffery, Halifax, Kans., and another to J. B. Kiner, Clay Center, Kans. Holsteins are worth money.

Alysdale evidently produces the right kind of Shorthorns. Mr. C. W. Merriam, owner of "Beautiful Alysdale," reports the recent sale of the fine young bull, Sir Walter 286036, to Mr. P. K. Rigan, of Bala, Kans., and that great young roan Raymond 291446, to W. W. King, of Mission township, Shawnee County. If a bull is a good one he is half the herd, but if he is a poor one, he is pretty nearly all of it. Alysdale bulls are good.

C. M. Albright, of Overbrook, Kans., has a very fine Polled Durham bull that he is offering at a very reasonable price. For his age he is very growthy. He now weighs 1,900 pounds in his every day clothes, and is only a 2-year-old. He measures four feet ten inches in height with a heart girth of seven feet eight inches and a length of eight feet from top of head to root of tail. Across the hips he measures two feet three inches, and looks as broad as a load of hay. He has been used some and is a sure dehornor. He ought to be in the hands of some good farmer or breeder and a letter to Mr. Albright will bring full information and price.

J. S. White & Son, owners of the Capital herd of Duroc-Jerseys, Route 3, Topeka, have taken advantage of the suggestions made in THE KANSAS FARMER and secured a start in the sheep business. As has been stated many times, THE KANSAS FARMER believes there is room for many thousand more sheep in this State and we are glad to know that White & Son have set a good example by buying of the very best for their foundation stock. They have chosen the Cotswold as their favorite breed, and Mr. White lately purchased five bred ewes from a famous breeding farm in Illinois with which to start. One of these ewes is an imported animal which was a prize winner at the World's Fair. These ewes were shown early—about the middle of May—and produced from 14 pounds to 15½ pounds to the fleece. Mr. White showed the writer a sample of wool that was shorn from a ewe that produced 15½ pounds while suckling her lamb. This specimen of wool measured 9½ inches in length, and is very fine. All of these ewes have lambs at side sired by the ram that has won the championship three times at the International at Chicago. He was also champion at the American Royal last fall. The lambs ought to be good ones.

Kansas has 159,241 sheep, and only 188,943 dogs. Which is the more profitable?

E. D. Ludwig's Shorthorns.

One of the best known herds of Shorthorns in Kansas is the Pony Creek herd at Sabetha, Kans., owned by E. D. Ludwig. Mr. Ludwig has been a Shorthorn breeder for a number of years, and is a judge of what a Shorthorn should be. Animals, to stay in his herd, had to be individuals of high merit and full of Shorthorn character and conformation. One has but to visit this herd and look it over, as we did a short time ago, to be convinced that good judgment and care has been used in its management in order to produce so many high class animals.

At the head of this herd stands the Scotch bull, Sybil's Viscount 258398, sired by Ravenswood Lavender Viscount 186158, he by Lavender Viscount 124775, dam of Sybil's Viscount Ortils Sybil (V62, P969). The breeding of this bull, as all Shorthorn breeders know, is as good as can be found anywhere, and he is a credit to his breeding. Individually he is one of the best bulls we have seen in years. He is a show bull to be reckoned with in any show ring in this country. He is red in color, wide, deep, and smooth from end to end. It would be hard to fault him in top line, over the crops, heart, girth, fore and rear flank, and handling qualities. His spring of rib and depth of body is all that could be desired. His covering of flesh is even all over his body.

Mr. Ludwig has another good herd bull in Bashful Conqueror 2d 251505. This is a large, long, smooth bull, evenly and smoothly fleshed, good top and side lines, with long quarters. He is a

little high from the ground and his horns are a trifle large, but he is a good, useful, mellow fellow, and is proving a good sire.

Another bull that was used in this herd for sometime is Bampton Knight 148795, now in service in the well known herd of T. K. Tomson & Son, Dover, Kans.

Mr. Ludwig has a grand lot of cows and heifers from some of the best families in the Shorthorn breed, such as the Victorias, Phyllis, Cowslips, Young Marys, and Rose Marys. Among the good ones are Redbud 2d, from the Brawth Bud family, Rose Lovely, from the Sanspareil family, Roan Lady of the Rosemary family, Bampton Gem of the Truelove family, and 2d Barrington of Wapsie. This last is from the famous Oxford and Duchess families.

These are some of the cows that have been producing for this herd the kind of Shorthorns that are a credit to the breed and which made this herd so well known.

Mr. Ludwig has as good a lot of young stock on hand as he ever raised. Among the lot are two short yearling bulls and three heifers sired by Bampton Knight that are show animals and would be a valuable addition in any herd. Parties wishing Shorthorns should see this herd or write for prices where they will get high class Shorthorns and just treatment. Notice sale advertisement in THE KANSAS FARMER.

John Blain's Poland-Chinas.

Southern Nebraska and northern Kansas is fast becoming noted as the best hog-breeding ground west of the Mississippi. This is due to the fact that the breeders in this section of the country demand the strong, bone, large, smooth hog. The hog that has size and constitution together with quick-feeding qualities to pay when fed out for the market. This condition is due to John Blain, Pawnee City, Neb., as much perhaps, or more, than any other breeder.

Mr. Blain has bred the strong bone, large, smooth Poland-China for years. Hogs to stay in this herd have to be individuals of true Poland-China type and conformation, coupled with size and quality.

It was our pleasure to visit this herd a few days ago and were frank to say that we have never seen a herd that came any nearer being what the breeders of high-class Poland-Chinas are trying to breed. At the head of Mr. Blain's herd is Big Hadley, sired by a descendant of Smeby's Hadley Jr., and L's What Wanted that so successfully stood in this herd and made good in both the show and sale ring. The dam of Big Hadley is Mammoth Beauty, a granddaughter of Chief Tecumseh 2d. Too much can not be said of this hog. He is the true type of what a Poland-China boar should be—large, compact, and perfectly smooth. He will weigh over 800 pounds and not a wrinkle or crease on him anywhere. He has as good a back, loin, ham, and crest from his ears to his hocks as we ever saw in so large a hog and equal to the best of the smaller ones. His legs and feet are short, strong, and straight. He is 4 years old, and stands up on his toes like a pig. This hog has never been shown, but he is a show hog—good enough to win in any company.

Mr. Blain has as good a lot of brood sows as can be found anywhere. They are all long, wide, deep, and smooth, with the best of legs and feet. These sows had suckled or were suckling litters when he saw them, but they showed what a grand lot of matrons they were in their depth, width, and smoothness, with the best of backs and feet. A few of these well known sows are Old Lady Hutch, which had a good litter of pigs; another sow is Old Sussie

M. Best. This sow is 11 years old, and was the dam of Harshaw; Blain's Wonder, so well known and popular in Kansas and Missouri, raised a good spring litter; Graceful S., a full sister to Blain's Wonder, has one of the best litters in the herd; Blain's Sussie, another daughter of Old Sussie M. Best, by Blain's Tecumseh, has also a good, promising litter; Carrie N., by Mogul by Blain's Tecumseh, has a good March litter. All of these litters are sired by Big Hadley.

Lady Goldust has another very promising litter by Big Hadley that now give promise of duplicating her last year's honor, when seven out of eight pigs raised last year sold for \$1,020. The top boar in the sale, Hadley Goldust, selling for \$350, was out of this litter.

Mr. Blain sold at his sale last October fifty-two March and April pigs at an average of \$84 per head. Thirty-three head by Big Hadley averaged \$103.50, seventeen boars by Big Hadley sold at an average of \$136.63.

Mr. Blain has one hundred and twenty-five March and April pigs mostly sired by Big Hadley which are the equal of his last year's crop. These pigs are being fed the best way for breeding purposes, and were looking well when we saw them. The Big Hadley pigs all carried his marks—level, wide back and loin with good hams and feet.

Mr. Blain's sale of spring pigs will be October 21, this year. Watch this paper for his sale advertisement.

Brown's Jerseys and O. I. C's.

We call the attention of our readers to the change in the advertisement of T. O. Brown, of Reading, Kans., in this issue of THE KANSAS FARMER.

Mr. Brown breeds Jersey cattle and O. I. C. swine, and is prepared to furnish choice animals in both these valuable breeds at right prices. King Frost 75846, the 4-year-old Jersey bull that he is offering, is a St. Lambert bred bull of excellent quality, tracing directly to the world's champion cow, Princess 2d, who holds the world's butter record of 46 pounds 12½ ounces in 7 days.

This bull now heads Mr. Brown's herd, where he has done excellent service, and is being offered for sale through no fault of his own, but because a change of bulls is necessary. King Frost is extra large and an outstanding individual, with good color and nicely marked. He is just in his breeding prime, and is fit in every way to head a good herd.

Mr. Brown has some very choice breeding animals among his cows. One of the matrons is a granddaughter of Dorinda Darling, who won fourth at the St. Louis World's Fair; another is a daughter of Loretta's King, who is a son of the celebrated Loretta D., who won first at St. Louis. One of the older cows has produced over 60 pounds of milk per day that tested over 6 per cent in butter-fat.

A show cow and one of the choicest individuals in the herd is a daughter of Companion's Tormentor, a producing bull, whose dams, back to the fifth generation, test from 16½ to 29 pounds of butter each, and whose sire's dams are all tested cows back to the fifth generation.

From such dams as these and others equally well bred, and King Frost, Mr. Brown has a choice lot of young stock, both sexes, that he is offering for sale at attractive prices.

In O. I. C's Mr. Brown is prepared to furnish choice stock from some of the best strains of the breed. His herd is headed by Kerr Wiley, by Togo, he by Sweetstakes and out of Sweetheart. Among the foundation females are a

HORSE OWNERS! USE

GOMBAULT'S CAUSTIC BALSAM.

A safe, speedy and positive cure. The safest, Best BLISTER ever used. Removes all blemishes from horses. Impossible to produce sores or blisters. Send for circular. Special advice free.

THE LAWRENCE-WILLIAMS CO., Cleveland, Ohio.

Learn Auctioneering

at Jones' National School of Auctioneering and make from \$2,000 to \$5,000 a year. Summer term opens July 20. Free catalog. Carey M. Jones, Pres., 1215 Washington Boulevard, Chicago, Ill.

LAND OPENING

25,000 ACRES

Near Kansas City, Mexico & Orient R. R.

IRRIGABLE LANDS IN THE FAMOUS PECOS VALLEY—PECOS COUNTY, TEXAS.

\$20 down holds a valuable irrigable farm in district number one, now being opened up for settlement in the Pecos Valley in Texas, the Nile of America.

The E. C. M. & O. R. R. is opening up one of the richest sections of the Lone Star State. Over one-half of the road is now built and in operation between Kansas City and Topolobampo, Mex., and within a few months the gaps will be closed up and the road be in operation over its entire length at which time these lands will be worth \$100 to \$500 per acre. These lands are now being sold in tracts of 40 acres or multiples thereof, ON EASY TERMS at \$30 per acre including perpetual water right and proportionate ownership in the immense irrigation works now under construction, which, when completed and land settled are to be turned over to the purchasers of the lands to be irrigated—approximately 100,000 acres.

You are now afforded rare and exceptional opportunity to secure a rich irrigated farm before the advent of the railroad quadruples the price.

Full and complete information regarding these lands together with booklets and maps can be had FREE by writing

F. O. HORNBECK, Land Commissioner

Kansas City, Mexico & Orient Railroad KANSAS CITY, MISSOURI

number from the famous Kerr herd, by Kerr Richard, he by Kerr Dick. There are also some very choice sows by Norway Chief, secured at a long price from the Fisher Live Stock Company of Hastings, Neb. These females are noted for size, finish, and producing qualities, and the young stock that Mr. Brown is offering from these matings is simply hard to beat. Reading is on the main line of the Santa Fe, sixteen miles east of Emporia. Mr. Brown lives in town and will be glad to show his stock to prospective buyers. Write him or go and see the stock, and do not forget to mention THE KANSAS FARMER.

A. G. Dorr's Durocs.

A. G. Dorr, of Osage City, Kans., the well known breeder of Duroc-Jerseys, has one of the finest crops of spring pigs that he has ever raised. They are as even a bunch as we have seen this season, and are chuck full of quality, with fancy heads and ears, very fine color, good backs, and plenty of bone, and stretch. These are largely by D's Kant Be Beat, an excellent breeding son of the champion and prize winner Kant Be Beat.

The dams of this young stuff are the right kind, with size, bone, and producing qualities and representing many of the choice strains of the breed.

Mr. Dorr has recently purchased at a long price for use in his herd, the two outstanding young males, Golden Rule II, a son of the noted Golden Rule, and Blue Chief, a great Ohio Chief.

These are both fine prospects, and Mr. Dorr has every reason to expect from them the very best results. Mr. Dorr will be prepared to furnish his many old customers, and a host of new ones, with a choice line of Durocs this fall. Watch for future advertising.

G. S. Hamaker's Poland-Chinas.

One of the best known Poland-China breeders in Pawnee County, Nebraska, is G. S. Hamaker, of Pawnee City. Mr. Hamaker has been breeding Poland-Chinas for over fifteen years, during that time he has kept his herd up to the standard of the Poland-China breed as near as possible, always breeding hogs that had size as well as quality—the kind of pig the farmer wants to raise for the market. Mr. Hamaker raises a large number of pigs but only sells the tops of the litters for breeding purposes, the rest are fed out for the market, thereby giving his customers individuals of high merit. The pigs in this herd are fed and handled to obtain the best results for breeding purposes. They have the run of a good pasture, are fed a combination of food to produce a steady, healthful growth, and avoid the evils that come from over-feeding and lack of exercise.

At the head of this herd stands Prander's Giant Pride 41454, sired by Size Me Up 27190. This is a hog of good size and strong bone, smooth from end to end. This boar is assisted by another good one in the yearling sires by Nick Longworth, he by Perfection J. Know, dam First Choice by Chief Guy's Perfection. This hog was bred by Ed. Klever, Bloomington, Ohio, the most noted Poland-China breeder known to the breed.

The brood sows in this herd are from the Expansion and Tecumseh families



F. J. Searle's Profitable Dairy Farm.

As the years come and go there is a marked advancement registered along all lines of agriculture. The scrub stock that a few years ago roamed our woodlands and prairies have been practically relegated to the dark caverns of oblivion to make way for the animals of a more creditable lineage.

Machinery of the most modern type and improvement have been installed on many of our well regulated farms, thus facilitating labor and in large measure eliminating the old time drudgery of farm life. One of these up-to-date farms is that of the East Side Dairy Farm of Oskaloosa, Kans., owned by F. J. Searle, and is one of the neatest and best equipped dairy farms in Kansas.

Mr. Searle is a young man full of the spirit of progress and enterprise with

distinct ideas and works to a definite purpose and has by strenuous effort, the exercise of good judgment, and the expenditure of a large amount of money, succeeded in establishing a herd of Holstein-Friesian cattle that would do credit to any country.

It is only those cows that possess the quality to "make good" and show a profit to the owner that are allowed to remain on this farm.

A representative of this paper recently visited this farm and was very much impressed with the manner in which every detail was looked after from which the best possible results may be obtained. It is just this kind of method that serves to lift the systems of agriculture to the higher plane in the onward march of the world's progress and gives it the color of a pleasant and profitable industry.

"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 Lanters in the World

ESTABLISHED 1840

PIONEERS AND LEADERS



The Ralph Harris Farm.

Kansas has many great farms where is bred and reared some of the very best specimens of live stock of every breed. Where soil responds to the silent call of nature's forces, yielding in lavish profusion a rich harvest fruitage to gladden the hearts of the sons of toil and placing upon their brow the chaplet of a progressive and prosperous citizenship.

One of these great farms is the one owned by Ralph Harris, of Williams-town, Kans., and is devoted to the breeding of the pure-bred Duroc-Jersey hog.

This farm is comprised of 675 acres of as rich soil as graces the sun-kissed prairies of Kansas, and is improved with the most modern and up-to-date facilities of down to the minute farm manipulation.

On this farm there are about 200 head of pure-bred Duroc-Jersey hogs headed by Kansas Advancer, by Advancer, who was a litter-mate to Proud Advance, I Am Advance, and Reed's Banker.

Kansas Advancer is a young hog of great promise as a sire and carrying with him the individual qualities of a show hog. You seldom see a better back, or set of feet than characterize this hog. He is a splendid specimen of the Duroc-Jersey breed.

The sows on this farm are of a high order and represent some of the most popular blood lines of this famous breed. Among them are Model Queen 6th by Model Chief who was first in class, champion under one year, and reserve grand champion, at the American Royal 1907. This is a sow that is hard

to beat anywhere. She is one of the best sows we have seen of this breed.

Model Queen 5th, second in class standing next to her sister Model Queen 6th, in the American Royal 1907, where two hundred and forty hogs were competing for honors.

Abra, by Doty Boy, Anna Bell, by Nelson's Model, Royal Daughter, and King's Daughter, by King of Colonels. These are all excellent sows, and are doing splendid service on this farm, and are now raising litters by many of the sires that are making history for the red hog.

Mr. Harris is in love with his work and is sparing neither time nor money to make this one of the foremost breeding establishments in the entire country. It is indeed fortunate that such a man as he is enlisted in the cause of a higher order of agriculture. He is not only a breeder of pronounced ability, but a business man as well. But there is a man who is intimately associated with this herd who should not be overlooked in this little review, Buford W. White, whose services Mr. Harris was fortunate enough to retain as manager. When a representative of this paper visited this place he was impressed with his thorough knowledge of the breeding business and his intense interest in the work to which he has been called. Too much can not be said of the man who carries the pail and cares for the pigs from farrowing time until they are ready to go out to some herd to enrich the coffers of their future owner. In this Mr. White is an artist who fulfills his duties nobly and well.

which is all that need be said to the breeders in Nebraska or Kansas in regard to their blood lines. They are a good, useful bunch which is shown in their size, Poland-China character, and conformation and the bunch of uniform pigs raised by them. This herd of sows farrow over eight pigs to the litter, and raises an average of over seven, which shows the kind of breeders they are. Mr. Hamaker had one hundred and fifty of these pigs and they were a good, even lot, showing the marks of their sires in wide, good backs, loins, hams, legs, and fancy heads.

Mr. Hamaker will sell fifty of the top of these boars and gilts at his sale the latter part of October.

Watch the columns of this paper for his sale announcement later on.

Greendale Shorthorns.

Col. Ed. Green, owner of the Greendale herds of Shorthorns, Berkshires, and Shropshires at Florence, Kans., reports that Mr. F. M. Farver, Canton, Kans., recently visited Greendale Stock Farm and bought the intensely bred Cruickshank Shorthorn bull, Artquill, by imported Ardethen Mystery and out of Crowquill 5th, by imported Aberdeen 117795; second dam Crowquill 2d by Royal Consul 2d 113589; third dam Imp. Crowquill by Cumberland (46144) tracing back through Dunblane, Barmpton, Scotland's Pride, and Lancaster Royal. Colonel Green thinks that this bull is without doubt the best bred Cruickshank in the State. Mr. Farver is just starting a herd, and is evidently starting right. If he buys as well as he did from Colonel Green it will not take him long to bring together a high class herd. Colonel Green says that he has one more bull bred like this one and just as good. He also has both red and roan young bulls and one extra good, pure white bull of Cruickshank's Pico-tie family. Greendale Farm has bulls of all ages and at prices to suit the buyer. The way Colonel Green is making prices on these bulls ought to move them out among the breeders and farmers very promptly.

Schedule of State and International Shows—1908.

Blue-Grass Fair, Lexington, Ky., Aug. 10-15, 1908; Jouett Shouse, secretary.

Iowa State Fair, Des Moines, Aug. 20-28, 1908; J. C. Simpson, secretary.

Ohio State Fair, Columbus, Aug. 31-Sept. 4, 1908; F. L. Calvert, secretary.

Nebraska State Fair, Lincoln, Aug. 31-Sept. 4, 1908; W. R. Mellor, secretary.

Minnesota State Fair, Hamlin, Aug. 31-Sept. 5, 1908; C. N. Cosgrove, secretary.

Wisconsin State Fair, Madison, Sept. 7 to 11, 1908; John M. True, secretary.

Colorado Interstate Exposition, Denver, Sept. 7 to 12, 1908; C. E. Stubbs, general manager.

Indiana State Fair, Indianapolis, Sept. 7 to 11, 1908; Charles Downing, secretary.

South Dakota State Fair, Huron, Sept. 7 to 11, 1908; C. N. McIlvaine, secretary.

Kentucky State Fair, Louisville, Sept.

14 to 19, 1908; J. W. Newman, secretary.

Michigan State Fair, Grand Rapids, Sept. 3-11, 1908; I. B. Butterfield, secretary.

Kansas State Fair, Hutchinson, Sept. 14-19, 1908; A. L. Sponsler, secretary.

Tennessee State Fair, Nashville, Sept. 21-26, 1908; J. W. Russwurm, secretary.

Illinois State Fair, Springfield, Sept. 25-Oct. 2, 1908; J. W. Dickerson, secretary.

Washington State Fair, North Yakima, Sept. 28-Oct. 3, 1908; G. A. Graham, secretary.

Inter-State Live-Stock Show, St. Joseph, Mo., Sept. 21-26, 1908; M. P. Irwin, manager.

Missouri State Fair, Sedalia, Oct. 3-9, 1908; John T. Stinson, secretary.

American Royal Live-Stock Show, Kansas City, Mo., Oct. 12-17, 1908; A. M. Thompson, secretary.

North Carolina State Fair, Raleigh, Oct. 12-17, 1908; Joseph E. Pogue, secretary.

International Live-Stock Exposition, Nov. 28-Dec. 5, 1908; B. H. Heide, manager, Chicago, Ill.

Horse Collars.

Hot weather and heavy work is making the farmers' horses sore on necks and shoulders as usual. The subject of horse collars naturally interests the farmers at this time of year. The Whipple humane collar is forging ahead with tremendous strides. The factory at Omaha has been turning out 200 collars per day for some time but the demand has made it necessary to increase the output to 400 per day.

Their proposition is fair. They give fifteen days' trial of their collars and if they make sound horses sore, or do not cure horses already made sore by the old style collar, while working in the humane collar, they may be returned. As they have followed this method continually their collars must be giving satisfaction.

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T. A. GIEVENS.

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CHICAGO

as follows: "I bought some of your collars a few months ago and have used them on young horses which I have worked very hard and they did not hurt them in the least. They do not show they ever had a collar on. I have also used them on a shoulder that had a lump (caused by an old style collar) and it disappeared while at work. They are all you claim for them. I have just bought some of your collars which will replace all of my old collars."

A Good Four-Horse Gang, Sulky and Disk Plow Eveners.

One of the most difficult things to get in the way of eveners is a good 4-horse eveners for a gang, sulky, or disk plow. There are many kinds made—some home-made—others made to sell, but the majority of them fail to work satisfactorily.

The reason is usually because the principle upon which they are made is not correct. It is not so easy a thing as many imagine, to make eveners for

more than two horses that will work nicely—give even draft to each horse and cause no trouble. Every farmer who has tried them has learned that.

There is a firm in Carroll, Iowa, who has made a specialty of making 2-8-4- and 5-horse eveners for fifteen years and over and the big success they have made is the best proof that their eveners are the best on the market. We refer to the Heider Manufacturing Company, Carroll, Iowa.

Their eveners for sulky, gang, and disk plows are simply fine. Their 3-horse eveners are particularly good for use on hay wagons where loader is used, manure spreaders, etc., in fact, anything where they want to use three horses on an implement with a pole.

If you'll write a postal they will be pleased to send you their Evener Catalogue which shows a large line of their goods. They also manufacture some excellent ladders. Mention this paper when you write.

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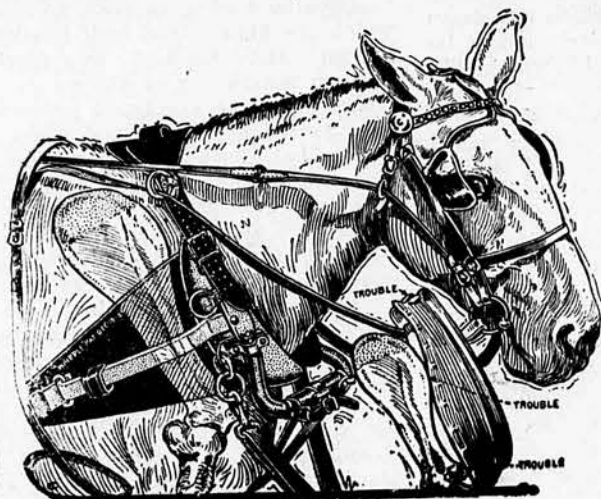
SORE necks and shoulders on your horses will give you lots of trouble during Harvesting and Fall Plowing. Why not get a pair of "Whipple" Humane Horse Collars? They can be changed from horse to horse, as the old style collars make them sore, and the horses while working in them will get well as quickly as if they remained idle.

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Home Departments

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THE OLD FARM.

When the busy day is over with its
anxious hopes and fears,
And the telephone stops ringing and
the last clerk disappears
With a sigh I lean back weary in my
swinging office chair.
And my thoughts go back to childhood
and the old farm that is there.

I can see the dear old homestead, broad
and low, beneath the trees,
And the row of shining milkpans sun-
ning in the fresh, sweet breeze;
I can see the barn and horses, and the
orchard on the hill.
Where we gathered golden pippins for
the old straw cider mill.

I can see the upland pastures dotted
o'er with grazing sheep.
And the wheat fields waving golden,
ready for the men to reap.
I can see the old stone fences, where
the chipmunks used to play
And the cornfield, and the meadow with
its piles of fragrant hay.

I can see the cattle standing 'neath the
willows of the brook
Where I used to fish minnows with a
bent pin for a hook;
And the pond where grew the lilies
that my mother used to prize.
Ah, the light of heaven's shining now
within those dear old eyes.

And I sigh while fancy lingers o'er
each well-known pleasant scene
Of the happy days of boyhood thrown
by memory on the screen;
And I'd give all I have gained since, all
my wealth and treasures rare,
To go back again to childhood and the
old farm that is there.

—Maxwell's Talisman.

The Viewpoint.

The place we stand when we look at something, it may be a landscape, a picture, a situation in life as a circumstance makes a great difference in the view we get. The place from where we get our view, from where we look at anything is called the viewpoint. If we have an elevated position, we may see for miles around, and it may be very delightful to take in the broad expanse of country. From this elevated viewpoint, looking forward or backward, one sees only the one grand scene. All the pitfalls, the rough and unattractive features are unseen. Our viewpoint may give us a very short range. It may be obscured by hills and rugged scenery. It may be such that only a small part is visible at a time. Some people's viewpoint is as though they were looking through a narrow space and can get only a part of what is beyond.

The viewpoint is an important factor in life—to have the right one and also to take into consideration what and where it is, and to consider and understand the viewpoint of others when looking at the same situations.

Many controversies and misunderstandings among men might be brought quickly to a terminus if each one concerned would look at the thing from more than one viewpoint and each would at least consider that there is more than one point of view. Charity, that most beautiful virtue, would grow and spread abundantly. Family jars, and divorces would be fewer. Lovers' quarrels and broken engagements almost unknown if every one would try to look at the question or circumstance and see it from the standpoint of the other. Children are often made to feel that they are treated unjustly and are sometimes unnecessarily punished for misdemeanors, because parent and teachers do not understand all the whys and wherefores. The child's viewpoint should be considered, although it may be wrong and distorted. Often punishment will harden the heart and alienate the affections, because the child's conception of the act was not evil, or it was prompted by right motives. I am reminded of an incident of a little 4-year-old girl who ran away from home and was lost. She had never done so before, but it caused her parents a great deal of uneasiness and trouble. When she was restored to her parents, and mama kindly and lovingly questioned her why she did so, she said, "You are so tired mama,

I wanted to get you a present." The little one's act was really one of love and sympathy. A present to herself, especially when she was ill, was a comfort and she thought that she would give her mother pleasure. It would have been a serious mistake to punish the child for the offense.

It is important, it is necessary to our happiness and usefulness that our own viewpoint is what it should be; that it is such that we may see clearly and extensively. That we are sure that nothing no matter how attractive in appearance, obscures our vision at a near range, from the real and true and greater things.

It shows a charitable nature and a broad and thoughtful mind to give heed to the viewpoint of others. It shows greatness of heart even to change one's own viewpoint to a lower in order to see from that of another, whose station in life is much below one's own.

Hygienic Cookery.

MRS. HENRIETTA W. CALVIN, PROFESSOR
DOMESTIC SCIENCE, KANSAS AGRICULTURAL COLLEGE.

FOOD PRESERVATION.

In an effort to extend the time when a food might be useful, certain methods for its preservation have been practised. The first method was that of drying. Fruits, vegetables, and meats can thus be kept for many months. Later certain substances were added to the food to preserve it, examples of the added substances being salt, smoke of wood, lye, vinegar, spices, and sugar. In still more recent times preservation by cold storage has become of great importance in commercial enterprises.

Canning, the most useful method of food preservation available to the householder, is dependent upon the success of two operations: (1) The killing of all micro-organisms that might cause a deterioration of food to be preserved. (2) The exclusion of further entrance of all micro-organisms. The two most common causes of canned food deterioration are fermentation of the food and mold growing in or upon it.

FERMENTATION.

Fermentation in fruits is caused by micro-organisms; the one that is most troublesome is the wild yeast which exists on the outside of all ripe fruits during warm weather. These yeast plants grow rapidly in fruit juices unless killed by boiling. One-half hour of boiling is required for the perfect sterilization (micro-organism killing); less than that may leave some of these microscopic plants in a condition suitable for growth.

MOLD.

Mold is also a small plant which grows well upon both uncooked and cooked foods. It is more difficult to kill when in certain stages than is yeast, and requires longer boiling or a higher temperature. Jars that have been kept in a cellar which was damp and moldy are particularly apt to be contaminated with mold, which will grow in or on the fruit unless the jars, with their lids and rubbers, are very thoroughly boiled before being used.

The object in cooking food to be preserved is primarily to kill these micro-organisms, not, as some suppose, to soften the food.

SELECTION OF FRUIT.

Fruit for preservation should be fully ripe that it may be of good flavor, but not overripe, for in that condition there will be many yeast- and mold-plants which have started to grow and that will be difficult to kill. It should be freshly picked and as free from dust as possible, as dust

also carries micro-organisms that will hasten the decay of the food. The fruit should not be gathered in damp, hot weather, for a similar reason to the above; that is, in damp, warm weather all micro-organisms increase rapidly, and under such conditions there will be more of these to contend with.

JARS.

The jars used should be of such construction that they may be easily and thoroughly cleansed and that all possibility of the entrance of air and micro-organisms will be precluded. The jars, with their lids and rubbers, should be thoroughly washed and scalded, then placed in boiling water and boiled until the fruit is ready to can. When the fruit is done the jars should be placed, without wiping, into a pan covered with a wet paper, the rubber placed in position, and the jar filled running-over full. The lid should be placed in position and screwed down. The filled jar should be wiped off and inverted, to test if it is inclined to leak. It should remain inverted until the following day, when it may be labeled with the name of the fruit, method of preparation, and date of canning.

GENERAL RULES FOR CANNING.

The addition of sufficient sugar to agreeably sweeten fruits has no effect upon the keeping qualities of the food, but is advantageous inasmuch as the sugar thus used penetrates into the substance of the fruit and increases its palatability.

One-half cup of sugar to each quart of fruit is a good general rule, but one which will require some modification where excessively sour fruit is used. The time at which the sugar is added, whether when fruit is put on to cook or later, will depend upon the texture of the fruit itself. Where the fruit is tender and inclined to break during cooking the sugar should be added before the material is heated. The sugar will slightly toughen the fruit and it will retain its shape better. If the fruit is tough it should first be softened by boiling and the sugar added after the fruit has become tender, for, as above stated, the sugar toughens fruit when added before cooking.

Not more than four quarts of fruit should be boiled at one time in a kettle, because where there is a large amount portions will be mashed and overcooked and other portions insufficiently cooked, and the quality of the canned article is injured.

No tin or iron utensils should be used in cooking fruit or vegetables for canning.

The filled jars should not be placed in a draft of air while hot, as there is danger of their breaking.

It is desirable, though not absolutely necessary, to store canned fruit in a cool, dark place.

The same general care is required in the preparation of fruit preserves as in canning.

Three-fourths of one pound of sugar is added to each pound of pared fruit, the fruit and sugar being long and carefully cooked together.

Preserved fruit will not ferment because the sugar added makes it too solid for yeast organisms to grow in it, though mold will grow upon it, if it is not protected from these.

Jams, butters, and marmalades are modifications of preserved fruits in which the fiber of the fruit has been broken and mashed by forcing through a colander or sieve.

Sweet pickles are fruits preserved in a syrup of vinegar and sugar to which has been added cinnamon, cloves, and other spices.

Jellies are prepared from fruit juices and sugar. The fruit should be fresh and slightly underripe. It should have only sufficient water added to keep it from burning. When tender, the fruit should be strained through a bag of double cheesecloth or a single thickness of flour-sacking or cheap flannel. The fruit juice, after draining, should be measured. Four cups of the juice should be placed in a large-bottomed kettle and boiled rapidly until reduced to three

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cups. Three cups of sugar should then be added and the mixture boiled up once and skimmed, after which it is ready for the jelly glasses. One spoonful of melted paraffin should be poured over each glassful of jelly before the cover is put on. The rapid boiling and preparation of but a small amount at each cooking are the two things that will insure success.

Vegetables may be canned successfully, but to do this it is necessary to place the cleaned, prepared vegetables in clean jars, place the rubber and lid in position without screwing down, arrange the jars on a support in a kettle or wash-boiler, surround the jars with cold water and bring to a boil. After they have boiled fifteen minutes screw lids down tight and continue to boil from two to four hours. The long boiling does not injure.

CONCERNING CONTESTS AT FARMERS' INSTITUTES.

For bread contests the bread should be baked in separate bread-pans, of the following dimensions: 4¼ inches by 8½ inches by 3 inches in depth.

For fruit-canning contests the fruit should be in pint jars, and include as many varieties of fruits and vegetables and as many modes of preparation of each kind as is possible. Jellies should be in one-half pint jelly-glasses, plainly marked and covered with paraffin. Each contestant should agree to use no preservatives other than vinegar, salt, and spices.

The Ideal Life.

The country life has always been pictured as a strenuous one, but Bolton Hall, a writer for the Circle, describes it as an ideal place to live the simple, unostentatious life. He pictures it as the only life worth living, the happiest and most carefree of all. He says in part:

The simple life does not consist in becoming careless and slouchy, or wearing unbecoming hats, or in alienating the affections of one's spouse by making one's self a drudge. It consists in natural social surroundings, suited to cultivated tastes, where parents and children can live instead of merely making a living.

The simple country life means a material reduction in the cost of living. The home itself can be less pretentious and more commodious. The modern American bungalow gives the maximum of comfort and dignity at the minimum of expense, and is rapidly taking the place of the ordinary suburban or country home.

Esthetically, the country means stretches of field, meadow, and woodland, liquid bird-notes, filmy gossamer webs in the mornings, cooling dews in the evenings, the perfumed breath of the blossoms and fruit, an opportunity to get near to nature's heart.

From the practical viewpoint it means to me working in the "rich-

blossoming elbowed earth," tilling the soil, producing what one eats, testing the resources of nature first hand, winning vigor and a clean conscience from natural relations to the soil. It means knowing one's human neighbors and wild ones, as they really are; it means hours with one's family; well-earned rest; to be a producer as well as consumer and thus fill one's proper relations to mankind.

It means further a new opportunity not only for me, but for those who have never had a chance. They have it now. A new boom is on, the farm-land boom; a new development is beginning, intensive agriculture; a new discovery, the riches of the soil; a new opening, the intelligent use of "the little lands."

The Young Folks

THE MERRY HEART.

When you come to a wearisome bit of the road,
Where the stones are thick and the path is steep,
And the back is bowed with the heft of the load,
As the narrowing way is hard to keep,
Don't stop just then for a wasteful sigh,
But challenge the worst with steady cheer;
If nowhere else, there is help on high,
God's angel will hasten your pioneer.

When you reach a lonesome bit of the road,
Curtained about with mist and murk,
And you hear faint sounds from the dread above,
Where shivering grim hobgoblins lurk,
Just laugh to scorn their doleful cries—
This is the place to whistle and sing;
Brush the fog from your fearless eyes,
And close to the faith of your fathers cling.

When you stand at a sorrowful bit of the road,
And a hand you loved has loosed its clasp;
When streams are dry that in sweetness flowed,
And flowers drop from your listless grasp;
Even now take heart, for farther on
There are hope and joy and the dawn of day;
You shall find again what you thought was gone;
'Tis the merry heart goes all the way.

—Margaret Sangster.

The Atlantic Fleet at Seattle.

[Some time ago we printed a letter concerning that great event, the visit of the Atlantic fleet to the Pacific Coast. At that time the fleet was in the Government harbor in Southern California. It has continued on its way, and eventually arrived at Seattle, from which place we have another graphic letter, giving us another glimpse, as it were, of this world-famous cruise.]

The fleet came in Saturday at 8 p. m. We were in the twelfth story of the American Bank building so you can imagine what a fine view we had. The flag-ship, Connecticut, came first, the Kansas next, then the Rhode Island, Kearsage, Minnesota, Louisiana, Ohio, Nebraska, Kentucky, Virginia, Oregon, Washington, the Relief, and so on. They anchored in a half circle in the harbor with the Connecticut in the center, it being the flag-ship. About 400 boats, of all kinds and sizes, went to meet the fleet and the mayor, on one ship, presented the Admiral with a gold key to unlock the harbor of Seattle and the hearts of the people.

The Japanese sent up day-light fireworks out on the bay and they would burst in the air and a string of United States flags and navy flags and paper sailor boys would come floating down. It was very pretty.

We then went down to the water front and watched the sailors land. You know the sailors on each ship are divided into four divisions, and one-fourth goes ashore every twenty-four hours, so in that way they have plenty on board. In the evening the city was lighted up. It was simply astounding, it just took your breath away it was so awe-inspiring. All the buildings were decorated in hundreds of flags and they used so much bunting that there was a famine of bunting. Along each side of the sidewalk was a string of red, white, and blue electric lights about twelve feet from

the ground. There were about twelve miles of these lights. Just think of it! And all the skyscrapers and buildings had "welcome" in lights, and the depot had on top a large anchor and mammoth flags of lights on each side, and on the street crosswise was a large ship, made of lights the width of the street, suspended in the air. Lots of buildings had ships in lights across the front and as these all faced the bay, and Seattle is very hilly, they showed off to great advantage.

We were up in the office watching the flag-ship signal the other ships. It was 9 o'clock and very dark, when, as if by magic, every ship lighted up at once and showed an outline of sixteen large ships. It looked as though they were in the air, it was so dark and not a star out. In order to make it look more like fairyland, four searchlights on every ship at the same minute flashed on the city and they kept rowing back and forth. Talk about ghostly things! they looked like phantom ships. The Japanese then gave their night fireworks. They were simply marvelous, all kinds of flags, and a representation of Niagara Falls, of fountains, etc.

Sunday they went all over town and Monday they had a barbecue in the park and roasted eight or ten oxen and gave it away. They had all sorts of games.

Tuesday was the day! There was a parade of all the sailors, and officers, and soldiers, and lodges. I never saw anything to equal it. The sailors, in their blue suits trimmed in white braid with their sailor caps and their characteristic swagger, and the soldiers in uniform, so stiff and straight were a great sight.

There are nine hundred men aboard each ship, and there are sixteen ships so you can imagine how many we entertained. In the afternoon we watched the races, and now comes the important part. We were the special guests of the captain of the U. S. S. Kansas. There were about twelve of us. He sent a sailor ashore to escort us to the dock and we went in a Government launch. (People who pay to go on board or who are not invited are only allowed on the top deck.) A lieutenant met us and the sailor (his name was Jack) handed him the letter the captain wrote, and we were taken down to the reception room. The upper deck was crowded. Captain Vreeland came in and we had a long talk. We saw the wonderful silver set that the State of Kansas presented to the U. S. S. Kansas about a year ago. It is beautiful. There were two cannons pointed out over the water in each room. The furniture was mahogany. The captain took us in his private apartments (my, I was glad I was from Kansas). The apartments were furnished lovely and he had a bed, the sailors only have hammocks, and he had a lovely bathroom. We also saw the picture of Governor Hoch's daughter who christened the ship. The captain then called Jack and told him to take us everywhere. He showed us the guns. It costs \$500 to \$900 every shot they fire.

When mealtime comes they let down tables from the ceiling for the sailors. They hook their hammocks up and they are so close together that they touch. Instead of having trunks they have big, white canvas bags.

We visited the bakery and got a slice of bread for a souvenir. They bake 1,400 loaves of bread every twenty-four hours. It is done by electricity. We went down the ladder—they call them ladders because they are so narrow and steep. They have a barber shop and sailor barbers. We went into the ice plant. My it was cold! They freeze four tons of ice a day. They have a lovely hospital and a surgeon and an operating room. They had a few in the hospital that were sick. We saw the junior officers' apartments. They each had a small room and a bed and a private dining room. They have a large telephone room. We also saw the machine room and the laundry for the

officers. Each sailor does his own washing. We visited the kitchen too.

They have about 1,780 electric light power. We went up on main deck and then again to where the signaling is done, and the searchlights, and the like.

There are about twelve decks I think and we had to climb up and down so you can imagine how I felt. I got a hat band with U. S. S. Kansas on it. O, yes. Seattle presented each ship with a tiny live teddy bear. They are awfully cute and the sailors went wild over them. The Kansas got the best bear and they named it Burinski and it has licked four cats and three dogs that they had on board.

Jack escorted us ashore and up-town and gave us his address and took ours and is going to write. He is a typical sailor lad, but he is more manly and not so lazy as some. He is about twenty-five years old. He is chief bugler and the private messenger of the captain and rapidly rising in promotion.

I tell you, you want to be proud of Kansas. The Kansas runs 18½ knots an hour and 19 is the fastest. Captain Vreeland says it is one of the best in the fleet. He is from Kansas himself. There were over a half million of people in Seattle and we spent thousands and thousands of dollars but the sailors appreciated it. Everything was open to them, street cars, theaters, and everything was free.

JOSEPHINE BAIN.

King County, Wash.

The Little Ones

THE UNWILLING GUEST.

Teddy and Tabby were asked to take tea
With Lucille and Eva, Baby Polly, and me.
The dolls were quite proper, Teddy sat like a man;
'Twas Tabby's behavior that spoiled our plan.
She jumped from the table, giving all such a scare
One doll fell right over the back of her chair!
But Tabby rushed off, not seeming to care,
With Polly's best bib on, I had lent her to wear!
And never again to tea I'll invite
A cat whose "tea" manners are so impolite!

—Pauline C. Bouve, in Youth's Companion.

Giving.

Come, let us see what the world is doing this glorious June weather. Why do not those two robins eat their worms on the ground instead of flying up in that high tree every time? Because they are giving them to the five birdies in the home under the leaves. Why is pussy dragging that little squirrel home from the field in the hot sun, panting as she goes? Why not eat it by the fence, where she found it? She is going to give it to the furry little kittens in the barn. Why is that old hen scratching at such a rate, making the dirt fly like fun? She is setting her table for the ten little chicks and is going to give them a worm or two for their lunch. Here is another mother setting her table. How much bread and meat, potatoes, and pudding she puts on! How can she eat so much? Ah, she does not eat it all; she is going to give her boys and girls their dinner. Giving, giving, everywhere!

Some people seem to think this world was made for getting, but the fact is it was made for giving. God, our Father in heaven, began it by giving this beautiful earth. And when He made the world it seemed as if He said to everything, "Give! give!"

The sea gives the vapor to make the clouds, the clouds float away to give it in falling drops to the fields, the fields give fruit trees, berries, grain, cotton, for us, and grass for the animals. These give us help to do our work, milk and meat for food and wool and silk for clothing. All give something. Even the fierce tiger gives food to its young.

There is a spot on earth that takes and gives nothing. Into it flows a

The Knock-out Blow.

The blow which knocked out Corbett was a revelation to the prize fighters. From the earliest days of the ring the knock-out blow was aimed for the jaw, the temple or the jugular vein. Stomach punches were thrown in to worry and weary the fighter, but if a scientific man had told one of the old fighters that the most vulnerable spot was the region of the stomach, he'd have laughed at him for an ignoramus. Dr. Pierce is bringing home to the public a parallel fact; that the stomach is the most vulnerable organ out of the prime ring as well as in it. We protect our heads, throats, feet and lungs, but the stomach we are utterly indifferent to, until disease finds the solar plexus and knocks us out. Make your stomach sound and strong by the use of Dr. Pierce's Golden Medical Discovery, and you protect yourself in your most vulnerable spot. "Golden Medical Discovery" cures "weak stomach," indigestion, or dyspepsia, torpid liver, bad, thin and impure blood and other diseases of the organs of digestion and nutrition.

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HENRY W. ROBY, M. D.

Surgeon, 708 Kansas Ave., Topeka, Kans.

clear, crystal river, but out of it flows no pretty brooks nor dancing stream. It swallows all and grows salt and bitter. You all know it. It is the Dead Sea.

There are Dead Sea people. They take all they can get and give nothing. They grow bitter, too. They are selfish misers. They try to enjoy everything, but they enjoy nothing because they are working on the wrong plan, not on God's plan.—Selected.

Miscellany

Mound-building Ants.

EDITOR KANSAS FARMER:—Judging from your correspondent's description I think he must be troubled with the mound-building prairie ant.

This ant is widely distributed on the western plains in this and other States. It lives in the colonies and constructs mounds each of which is located near the center of a bare circular area. The members of a colony, consisting of workers, large and small, fertile females and males, live in galleries and chambers within the mound in the earth below. The mounds are pierced with one or more openings through which the ants go and come. The openings are closed at night or on the approach of a storm. The nests should be fumigated with carbon bisulfide while the passage-ways are open.

We have found the following method of fumigating at once the simplest and most successful manner of destroying the ants: The fumigation should be set while the openings to the nest are open and preferably in the morning or at noon; use a vessel such as a galvanized wash tub; place it bottom-side up over as much of the mound as possible; stop up those openings which the tub will not cover by packing soil over them; place under the tub in a shallow pan or dish, one to three ounces of carbon bisulfide, depending upon the size of the nest; quickly set the tub down and pack soil about the rim, rendering it as nearly air-tight as possible; allow to stand thus for at least five hours.

The vapor of carbon bisulfide is heavier than air and, as the chambers and galleries are all connected, the forming vapor will sink down and displace the air in the deepest chambers and finally come to fill all chambers and passages of the nest. All of the inhabitants will be suffocated. This method has been tried over and over again, the nest being opened to its lowest chambers and all the ants found dead beyond the possibility of a doubt.

T. J. HEADLEE.


Cucumbers May be Planted Late.

There is a special incentive in growing a surplus of cucumbers in that, like the oil in the widow's cruse, you may gather, and yet gather more and more through the entire season, the vines bearing still better for the close picking. It is not so with the early cabbage. When you gather them, you are done unless the ground is replanted. But cucumbers persist; and if the local market becomes glutted, just pickle them and see how quickly the prime home-made product will sell next winter after the town people get acquainted with your goods.

Cucumbers for pickling may be planted as late as July, though to get the benefit of the entire season, they should be started as soon as danger from frost is over.

PREPARATION OF SOIL.

A light, rich soil is preferable and the popular notion that high fertilization tends to produce vines in abundance with little fruit is a mistaken one. Enrich in the hill as highly as the cabbage, and the reward will be not only more luxuriant foliage but correspondingly more thrifty and more numerous fruits. There is nothing better than poultry droppings,—a half-pailful in each hill,



KRESO-DIP

FOR ALL LIVE STOCK ALWAYS THE SAME

Kills Lice, Mites, Ticks, Fleas, etc. Cures Mange, Scab, Ringworm, etc.

EASY AND SAFE TO USE.

FOR SALE AT DRUG STORES EVERYWHERE. WRITE FOR FREE BOOKLETS.

BRANCHES:
New York, Kansas City, Baltimore,
New Orleans, Boston, Chicago,
St. Louis and
Minneapolis, U. S. A.

PARKE, DAVIS & CO.
DEPARTMENT OF ANIMAL INDUSTRY,
DETROIT, MICHIGAN, U. S. A.

BRANCHES:
London, Eng. Montreal, Que.
Sidney, N. S. W.
St. Petersburg, Russia.
Bombay, India.



It Doubles Up in Kansas.

Mr. W. K. Miller, of Kiowa County, Kansas, sends THE KANSAS FARMER a double corn cob which measures 9 inches in length and which is very nearly perfect. The picture herewith was made from a photograph taken by THE KANSAS FARMER man. The cornfield from which this freak ear was obtained grew in Pratt County, on upland, and yielded 50 bushels per acre. This corn was grown on land where it is 120 feet to water. Can anyone beat this short-grass country freak?

but see that it is thoroughly mixed with the soil.

THE PLANTING.

Plant in rows three feet apart, and six feet apart in the row, alternating the hills in two adjacent rows to bring them a greater distance apart. Plant six to ten seeds in a hill, thinning the plants out to three or four of the strongest when danger from frost and bugs is past. Cultivate with a one-horse cultivator if you have no garden cultivator, using this until the vines are too large. Very little hand work will be necessary, and this a woman can easily do. Hoe

well during dry weather to keep the soil loose and receptive to all the moisture in the atmosphere.

If there is danger of drouth or the vines turning yellow and yielding bitter fruit through impoverishing of the soil, dig a hole between each four hills and sink an old pail or can with a perforated bottom and half filled with stable manure. Keep these cans filled with water, and the liquid manure will work through to feed the eager rootlets. This must be done after the cultivation is stopped but before the vines cover the space. Care must also be taken to sink the cans well below the surface. If the root growth is enticed surface-ward it will more readily succumb to dry weather.

PICK THE FRUIT EVERY OTHER DAY.

Pick the fruit every other day, discarding all irregular growths at sight, as they are a needless drain upon the plants. Never let more than enough cucumbers ripen seed to supply your own need. It costs the vine more to mature one cucumber than to grow a couple of dozen slicers or pickles. If some elude your eyes,—and they almost always will,—pick as soon as discovered, and use for slicing or sweet pickles.

Children may make a little spending money with a half-dozen vines, and the culture and disposal of the product are good drills in gardening and business.—Bessie L. Putnam, in Inland Farmer.

Kansas as a State, comes in for a good share of teasing about its long-whiskered men, etc., but, whatever may be her shortcomings she comes to the front with a record of having twenty-five counties without almshouses, thirty-seven counties without a single criminal case on the docket, and 85 out of 105 counties without a pauper. With all this in addition to a bad taste for oil trusts and grog shops, Kansas doesn't look so "worse."—Farmer's Wife.

There are hogs among hens. Any among yours? Get them out where they can not rub those that are slower eaters.

When you go into the hen business go in to make something out of it. Too many men already playing with poultry.

Drop of the meat rations in grass-hopper time. Save that for cold weather, when the hens are shut in.



30 DAYS' SALE TALKING PARROTS

Double Yellow Head—The Hummer Talker—The only parrot that learns to talk, whistle and sing like a person. Write today for particulars and pictures of birds. Don't delay. Deer Lake Park, Severy, Kans. Note—We guarantee every parrot to talk or refund the money.

Res. Tel. 775. Office Tel. 102.
L. M. PENWELL,
Funeral Director and Licensed Embalmer.
511 Quincy St. Topeka, Kansas.

Headache Sufferers

Do you want relief—in just a few moments and no bad after-effects.

If so, you have only to take, Dr. Miles' Anti-Pain Pills.

If subject to headache, have them with you always. No harm can come from their use, if taken as directed, as they contain no opium, chloral, morphine, cocaine, chloroform, heroin, alpha and beta eucaine, cannabis indica or chloral hydrate, or their derivatives.

Ask your druggist about them.

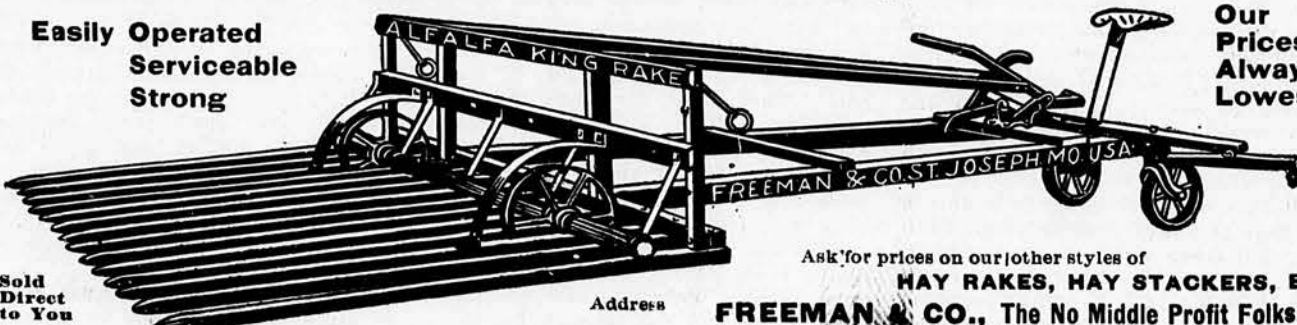
"It gives me great pleasure to be able to refer to the Dr. Miles Anti-Pain Pills as the best remedy we have ever had in our house for the prevention and cure of headache. My wife who has been a constant sufferer for years with the above complaint, joins me in recommending Dr. Miles' Anti-Pain Pills, hoping they may fall into the hands of all who suffer."

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

A singing hen is always a busy hen. And have you ever noticed that it is the busy hens that bring you in the eggs?

ALFALFA KING RAKE

Easily Operated
Serviceable
Strong



Our
Prices
Always
Lowest

especially adapted to Alfalfa Haying. The best rake ever operated in an alfalfa field and good for all kinds of clover, tame and wild hay. Gathering forks will cross the laterals and not catch or lose the hay.

Ask for prices on our other styles of

HAY RAKES, HAY STACKERS, ETC.

FREEMAN & CO., The No Middle Profit Folks,
K. 68, St. Joseph, Mo.

Weather Bulletin

Following is the weekly weather bulletin of the Kansas Weather Service for the week ending June 23, 1907, prepared by T. B. Jennings, Station Director.

DATA FOR THE WEEK.

	Temperature.			Precipitation.		
	Maximum.	Minimum.	Mean.	Departure from normal.	Total.	Per cent of sunshine.
WESTERN DIVISION.						
Blakeman.	99	44	68	1.63	50	..
Colby.	93	48	71	0.55	86	..
Coolidge.	94	57	72	0.39	75	..
Dodge City.	94	57	72	1.13	50	..
Dresden.	96	47	64	1.76	51	..
Farnsworth.	92	49	68	1.17	..	..
Hugoton.	92	49	68	0.69	51	..
Liberal.	98	53	72	3.71	47	..
Norton.	94	49	68	1.00	94	..
Scott.	90	44	66	0.79	54	..
Ulysses.	97	52	70	1.06	..	..
Wakeney.	90	43	70	0.98	..	..
Wallace.	100	44	68	1.24	65	..
Division.	98	48	71	1.01	57	..

MIDDLE DIVISION.						
Alton.	93	50	66	1.83	50	..
Chapman.	90	52	70	0.83	59	..
Clay Center.	92	50	69	0.48	..	..
Concordia.	90	52	68	1.52	63	..
Cunningham.	96	54	72	0	..	..
Ellis.	88	50	72	0.35	57	..
Elliswood.	93	55	74	0.84	60	..
Ellsworth.	86	51	67	0.77	..	..
Hanover.	91	50	68	1.30	50	..
Harrison.	84	49	66	3.14	52	..
Hays.	95	51	70	0.84	62	..
Hutchinson.	94	54	73	0.29	73	..
Jewell.	93	48	66	2.09	59	..
Kingman.	94	55	75	0.05	57	..
Lebanon.	94	48	68	3.45	44	..
Macksville.	90	54	71	0.70	..	..
McPherson.	92	52	71	0.72	50	..
Marion.	98	57	76	1.38	42	..
Minneapolis.	90	52	70	0.48	67	..
Norwich.	90	55	75	0	66	..
Phillipsburg.	84	48	66	3.34	..	..
Pratt.	96	58	77	2.77	35	..
Republic.	90	50	70	0.18	..	..
Rome.	90	54	72	0.77	..	..
Salina.	91	53	72	1.01	..	..
Wellington.	88	52	70	1.02	56	..
Wichita.	88	57	74	1	..	..
Winfield.	91	54	75	1.01	57	..
Division.	98	48	71	1.01	57	..

EASTERN DIVISION.						
Baker.	86	49	66	0.92	15	..
Burlington.	91	50	74	0.57	71	..
Columbus.	90	55	74	0.17	50	..
Cottonwood Falls.	88	49	72	1.33	31	..
Emporia.	87	54	72	1.01	..	..
Eskridge.	84	52	66	2.06	57	..
Eureka.	..	..	..	0.22	..	..
Fort Scott.	90	50	74	0.09	71	..
Frankfort.	88	48	70	0.31	55	..
Frederick.	92	56	72	1.50	59	..
Garnett.	87	49	..	0.57	57	..
Grenola.	87	49	..	0.28	64	..
Independence.	88	51	73	0.16	59	..
Iola.	90	52	74	0.06	42	..
Kansas City.	90	52	74	0	55	..
Madison.	88	55	70	-1.03	55	..
Manhattan.	89	59	..	0.27	72	..
Osage City.	88	48	66	2.41	..	..
Oswego.	90	52	74	2.53	..	..
Ottawa.	90	52	74	0.08	50	..
Paola.	88	47	70	1.21	79	..
Pleasanton.	90	48	72	1.76	56	..
Sedan.	86	50	70	0.40	73	..
Topeka.	93	52	74	0	65	..
Valley Falls.	88	54	70	2.03	49	..
Division.	88	54	70	1.60	49	..
State.	93	47	71	0.95	57	..
State.	100	44	70	1.04	59	..

DATA FOR STATE BY WEEKS.

April 13.	89	19	55	0.91	54	..
April 20.	92	30	60	0.79	53	..
April 27.	92	37	65	0.64	60	..
May 4.	92	37	65	0.08	62	..
May 11.	78	15	49	1.32	47	..
May 18.	88	29	52	1.12	67	..
May 25.	95	37	67	1.74	66	..
May 31.	102	33	68	1.33	64	..
June 7.	97	40	69	2.83	49	..
June 14.	100	41	71	2.97	53	..
June 21.	93	43	70	1.04	59	..
June 28.	100	44	70	..	..	..

*Too late to use in means.

GENERAL SUMMARY.

The week was cool, the mean temperature being 3° below normal. The deficiency was greater in the northern portion than in the southern. The first part of the week was quite cool, but the latter part was warm. There was much bright sunshine in the southern portion of the State, while in the northern portion there was more cloudy weather than usual. There were some light showers on the 16th and 17th in the southern portion of the State, some stations reporting no precipitation during the week. But in the northern portion of the State the rainfall was quite heavy. Heavy rains occurred in the northwestern counties on the 16th, in the northeastern counties on the 17th and 18th, and the heaviest rainfall occurred in the Republican and Solomon River counties. The weather cleared after the rains of the 18th and 19th.

EASTERN DIVISION.

Allen.—During the fore part temperatures were somewhat below normal, and during the latter half as much above normal. The only measurable precipitation, 0.20 of an inch, fell on the 16th. There was much less than the usual amount of sunshine. The Neosho River flooded the lowlands from the 17th to the 20th.

Bourbon.—There was more sunshine and less rainfall than the previous week, and the change was beneficial.

Brown.—Rain fell on every day till the 20th. Temperatures were low the fore part, but rose as the week progressed.

Chase.—The weather was more favorable than that of the previous week. Rains on the 16th and 19th amounted to 1.33 inches. High winds blew on the 18th.

Chautauqua.—Warm, dry weather, which was much needed, prevailed this week.

Cherokee.—The ground was too wet for cultivation from the rains of the preceding week, but only light rains occurred and conditions were more favorable the latter part.

Coffey.—Monday, Friday, and Saturday were clear, and the other days were partly cloudy, with but two rains, and those not heavy. Warm weather prevailed the latter part.

Elk.—Quite low temperatures prevailed the fore part, but conditions were more favorable the latter part.

Franklin.—The week was warmer and considerably drier than the previous one.

Greenwood.—The week was dry and the latter part quite warm, with plenty of sunshine.

Madison.—Rain fell on only two days, and the weekly amount was less than a half an inch. Temperature extremes were 89° and 59°.

Jefferson.—A heavy rain of 3.87 inches occurred on the 13th after which very little rain fell till the 19th, when 1.50 inches was received. The sunshine was deficient and temperatures were much below normal until the last two days.

Labette.—Dry and partly cloudy weather prevailed. Linn.—After the 16th warm, dry and clear weather prevailed, and this change from the excessive moisture of the previous weeks was very beneficial.

Lyon.—The maximum temperature failed to reach 75° the first three days, but after that the weather gradually became warmer till the week closed, and no rain fell on the last three days.

Ellsworth.—Temperatures were below normal until the close, a minimum temperature of 51° occurring on the 14th. Rain fell on the 15th, 16th, and 17th, aggregating 0.77 of an inch.

Jewell.—Heavy rains fell on the 16th and 18th, and light rains on all the other days excepting the 19th. The minimum temperature was 49° on the 14th and the maximum 84° on the 19th.

Kingman.—The week was dry and the latter part quite warm. There was much more sunshine than occurred on the previous week. High winds blew on the 17th, 18th, and 20th.

McPherson.—The rainfall was 0.72 of an inch, which was more than was needed. Temperatures ranged from 52° on the 14th to 92° on the 19th.

Marion.—Rains on the 16th, 17th, and 19th amounted to 1.38 inches. Temperatures rose as the week progressed, the minimum being 57° on the 15th, and the maximum 93° on the 20th.

Osborne.—Rains fell on every day but the last, and the sunshine was very deficient. Temperatures were considerably higher the latter part.

Ottawa.—The first half was cool and rainy, the latter half dry and quite warm, with plenty of sunshine. The rainfall, 0.48 of an inch, was all that was needed.

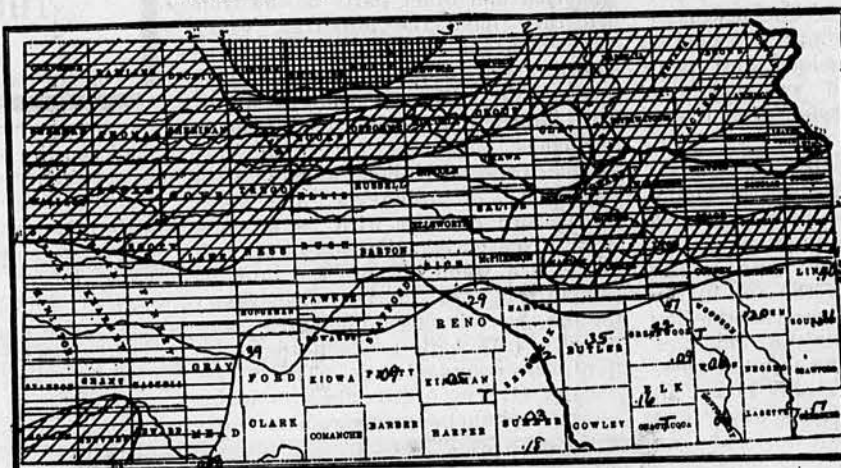
Phillips.—The week was cloudy and very wet. Light rains fell on every day till the 18th, when 2.23 inches was received. On the 17th there was a high wind and some hail.

Pratt.—The weather was dry, with the exception of light showers on the 14th and 15th, and temperatures of 90° or above occurred on the 14th, 16th, 17th, 18th, and 19th.

Reno.—Warm, sunny weather prevailed after the first two days. The rainfall, 0.29 of an inch, was all that was needed, as the ground was already soaked from the rains of the previous week.

Republic.—On the 17th 2.77 inches of rain fell. Temperature extremes were 90° and 50°.

RAINFALL FOR WEEK ENDING JUNE 20, 1908.



SCALE IN INCHES.

Less than .50. .50 to 1. 1 to 2. 2 to 3. Over 3. T, trace.

Marshall.—The rainfall was much in excess of what was needed, and but fifty per cent of the possible amount of sunshine was received. The fore part was unseasonably cool, but the latter part was much warmer.

Miami.—There were three clear days and three days on which rain fell, the weekly precipitation being 1.76 inches.

Montgomery.—The first three days were cool, the last four much warmer. A minimum temperature of 54° occurred on the 14th and 15th, and a maximum of 90° on the 19th.

Osage.—The wet weather continued until the 19th. Hall and high winds occurred on the 19th.

Shawnee.—Damp, showery weather, with very little sunshine, prevailed until Friday, the 19th, after which the days were clear and the temperature was above the normal. High, southerly winds occurred on the 17th and 18th. A severe thunderstorm, with excessive rainfall, occurred on the night of the 18-19th.

Wabunsee.—Rains fell on the 13th, 17th, and 19th, aggregating 2.92 inches. The rainfall of the 19th, 1.64 inches, was accompanied by some hail.

Wilson.—A severe local windstorm occurred between one and two o'clock on the morning of the 13th. Only one light rain occurred.

Wyandotte.—The weather was cool until the last three days. Thunderstorms occurred on the 17th, 18th, and 19th, that of the 19th being accompanied by excessive rainfall.

MIDDLE DIVISION.

Barton.—A thunderstorm, accompanied by 0.82 of an inch of rain, occurred on the 17th. The first four days were cool and partly cloudy, but the week ended clear and sultry, the maximum temperature exceeding 90° on the 18th and 20th.

Butler.—The weather was cloudy and unusually cool until the 17th, after which temperatures rose steadily till the week ended. The last two days were clear. Rain fell on but one day.

Clay.—The latter part was very favorable, with the temperature above 90° the last three days, and no rain fell after the 18th.

Crowley.—This was the first week in over two months that no rainfall was received, and the ground rapidly dried from the wet weather of the previous weeks. Summer temperatures prevailed the last two days.

Dickinson.—The week began cool, cloudy, and damp, but ended warm and clear, with no measurable precipitation after the 16th.

Ellis.—The fore part was cool and wet, but warm, clear weather followed, with a maximum temperature of 95° on the 20th. The total rainfall was 0.84 of an inch.

Salina.—Maximum temperatures ranged in the seventies until the 17th, after which a maximum of 91° was attained on the 18th and 20th. The rainfall, which occurred on two days, was 0.77 of an inch.

Sedgwick.—The week was very dry, only a few light rains occurring. The temperature was somewhat below normal.

Smith.—The week was very wet, and temperatures averaged below normal.

Stafford.—Rain fell on but one day, the 16th.

Sumner.—The first part was cool, the latter part quite warm. The precipitation was 0.03 of an inch. The ground is drying slowly.

Washington.—Rains fell on every day but the last, aggregating 1.30 inches. The Little Blue River is still out of its banks.

WESTERN DIVISION.

Decatur.—Very favorable weather characterized the week. The rainfall amounted to 1.13 inches, and the last three days were entirely clear.

Ford.—The rainfall was light, but sufficient for all needs. The sunshine was below the average. The mean temperature was a degree above normal.

Grant.—The week began cool and cloudy, but the last three days were warm and clear. The rainfall was 0.79 of an inch.

Hamilton.—A welcome rain of 0.55 of an inch fell on the 13th, after which the weather was clear, with maximum temperatures of 90° or above the last four days.

Lane.—Showers the first four days amounted to 1.76 inches which is all that is needed at the present time.

Norton.—Rains fell on the 15th, 16th, and 17th, that on the 16th amounting to three inches and being accompanied by a severe hailstorm.

Rawlins.—The fore part was cool and cloudy, with a good rain on the 15th. Light showers fell on the 14th, 16th, 17th, and 18th, the weekly amount being 1.25 inches. The week ended clear and warm.

Scott.—Conditions were very favorable. All the moisture needed fell the first three days and warm, clear weather prevailed the latter part.

Seward.—The fore part was cool. A very severe storm occurred on the evening of the 15th, accompanied by high wind and hail.

Stevens.—Rains on the 15th and 16th amounted to 1.17 inches. Temperatures above 90° occurred the last three days.

Thomas.—A splendid rain of 1.70 inches fell on the 15th and lighter showers on the 14th, 17th, and 18th. Temperatures rose steadily till the week ended, reaching a maximum of 99° on the 20th.

Trego.—Rains, amounting to 1.06 inches, fell on the 15th, 16th, and 17th. A minimum temperature of 52° occurred on the 15th, and a maximum of 97° on the 20th.

Wallace.—The fore part was wet, with precipitation amounting to 0.89 of an inch. Temperature extremes were 49° on the 18th and 100° on the 20th.

A Wonderful New Hay Press.

The George Ertel Company, of Quincy, Ill., pioneer hay press makers, have just placed on the market their latest development in hay presses. It is a press that one man can operate and with one horse he can bale a ton an hour. This is made possible because it has an automatic, self-feeding device, and a wonderful ingenious, yet simple device for self-threading of the bale wire, so that no partition blocks are necessary. A great time and work saver is the hopper with bars at the side instead of being solid. This permits the tines of the fork to go through instead of hitting the side when the hay is being put in.

With this press a man can do his own baling in his spare time, instead of having a big baling crew around when he would like to be doing other work, or the press being mounted on wheels, it

can be taken right into the field and the hay baled at the windrow. Circulars and full information will be sent free if you write to the George Ertel Company, Quincy, Ill. Their name is well known, as they have been in business for over forty years. They also manufacture incubators as well as hay presses.

PURE-BRED STOCK SALES.

Herefords.

September 15, 16—J. F. Gulic, Jasper, Mo.

Shorthorns.

June 11—H. E. Hayes, Olathe, Kans.

Poland-Chinas.

May 30—H. H. Harshaw, Butler, Mo.
August 4—J. F. Hastings, Edgerton, Kans.
September 10—P. P. Crabbe, Moberly, Mo.
September 10—Leslie McCormick, Ladonia, Mo.
and M. D. Porter, Vandalla, Mo., at Vandalla.
September 11—G. W. McKay, Laredo, Mo.

September 22—B. F. Ishmael, Laredo, Mo.
September 23—Knorr, Bros., Pleasant Hill, Mo.
September 24—A. K. Sell, Fredonia, Kans.
October 10—H. H. Harshaw, Butler, Mo., at Harrisonville, Mo.
October 10—N. R. Riggs, Lawson, Mo.
October 12—E. E. Axline, Oak Grove, Mo.
October 17—J. F. Burnham, Fayette, Mo.
October 17—Frank Michael, Erie, Kans.
October 19—Herman Groninger, Bendena, Kans.
October 20—J. L. Dorsh, Huron, Kans.
October 20—Bolton & Aaron, Leavenworth, Kans.
October 21—Leon Calhoun, Potter, Kans.
October 22—T. R. Pitcher & Son, Topeka, Kans.
October 23—A. P. Young, Lexington, Mo.
October 26—Geo. J. Hibbs, Pattonburg, Mo.
October 27—C. E. Tennant, New Hampton, Mo.
October 28—R. E. Fulkerson, Brimson, Mo.
October 29—F. D. McKay, Laredo, Mo.
October 30—Geo. W. Summers, Clifton Hill, Mo.
November 6—J. E. Summers, Clifton Hill, Mo.
November 7—D. C. Stayton, Blue Springs, Mo.
November 10—H. H. Harshaw, Butler, Mo.
November 19—Leyhe & Purcell, Marshall, Mo.
November 20—Sensintaft Bros., Brookfield, Mo.
November 25—F. G. Niese & Son, Goddard, Kans.
January 21—H. H. Harshaw, Butler, Mo., at Sedalia, Mo.
January 25—Frank Michael, Erie, Kans.
February 4, 1909—F. G. Niese & Son, Goddard, Kans.

February 21—J. W. Hoyle, Dwight, Kans.

February 25—H. H. Harshaw, Butler, Mo.

Duroc-Jerseys.

October 6—N. J. Fuller, Garnett, Kans.
October 7—J. F. Staadt, Ottawa, Kans.
October 8—H. R. Glurich, Wellsville, Kans.
October 9—C. R. Green, Spring Hill, Kans.
October 28—Watts & Dunlap, Martin City, Mo., at Independence, Mo.
October 27—B. B. Adams & Son, Thayer, Kans.
October 28—S. A. Hands, Thayer, Kans.
October 29—G. W. Unwell, Sumner, Kans.
November 11—Sam'l Drybread, Elk City, Kans.
November 12—Frank Drybread, Elk City, Kans.
November 13—J. J. Baker, Thayer, Kans.
November 14—O. W. Simerley, Parsons, Kans.</

Dairy Interests

Milk.

HENRY M. ROBY, M. D., TOPEKA.

In any fair, unbiased exegesis of that magnificent English epic, that neither Homer, nor Milton, nor Shakespeare are charged with writing, the central figure around which all others must revolve and cluster, is revealed to us in these two significant lines:

"This is the maiden all forlorn
That milked the cow with the crumpled horn."

Around this central figure all other figures and factors, wheel and whirl and rush and skim like planets around a central sun. The long dead poet had altogether too much sense to want his name kicked about the world like a foot-ball, as Shakespeare's and Bacon's are, so he clipped the corner of his manuscript, which is usually devoted to telling who the proud author is, and left us simply the epic of the ages for our time-long and world-wide advantage and we waste no time in a vain discussion of who was the author.

Just see how logically the story is told: a maiden all forlorn milked a cow with a crumpled horn and then everybody and everything about the place got busy. Leading up to the central event we find the rat in the malt, the cat chasing the rat, the dog worrying the cat till the old cow gives him a toss-up. Then all is quiet till Jack, in the guise of a hobo "all tattered and torn," comes along and kisses the "maiden all forlorn" and the old rooster, who is up early enough to see the performance, straightway calls the priest. The story is then ready for the poet, and he begins very properly at the climax, "this is the house that Jack built." The rest of it is plain and easy to make out, with a few incidental hints as to current events and surroundings. Jack was tattered and torn when he came on the scene. He had no money to build a house with, but he mated with the milkmaid and it soon came. So did the new house. Milk did it. There was nothing else in sight that could do it.

It was milk that made Jack a millionaire
With the oil of lavender on his hair.
It was milk, just everyday, common milk,
That dressed Jack's wife in the finest silk.

But that was long before our day, and it took less to make a millionaire than it does now. Milking machines and patent teat-tuggers had not then been dreamed of. Milkmaids did not flit around in automobiles and spend the summer in Newport and the winter in Mexico.

There are a good many Jacks in the world to-day who have sense enough to get close up to the cow and the milkmaid and stay there. And lots of us less fortunate mortals take off our hats to them. There is an old adage "that money makes the mare go," but milk makes the money go, especially for us who have neither cows nor milkmaids. There is no better place to get the proof of that proposition than right here in Kansas.

In the year 1906 Kansas sold \$3,526,016 worth of milk, and it is estimated that fully as much more was consumed by the producers without being sold; enough to buy a good many automobiles and to pay for a good many outings for Jack and his milkmaid.

The world's butter sales amount to 3,500,000 pounds a day, and about as much more consumed by the makers; enough to "grease the wheels" pretty thoroughly. But what becomes of it all? It goes to make brawn and brain, mostly.

So far I have spoken only of cow's milk, but there is a large, though unknown, supply of milk derived from goats, asses, and sheep, besides the "milk of human kindness," or mother's milk, which the human race feeds on.

Before being eaten, a good deal of the milk of the world is split up into cream, butter, cheese, buttermilk, skim-milk, curds, whey, kumiss, and condensed milk for convenience and to suit the palate.

A pound of average cow's milk contains 533 grains of water, 350 grains of casein (cheese), 245 grains of butter, 215 grains of sugar, and 70 grains of mineral matter, and every one of these elements help to build and repair the human body.

All the chemical elements found in the milk are found in the human body and in almost the same relative proportions. Milk is an ideal food. Eggs also contain nearly the same chemical elements as the body, making milk and eggs our two best varieties of food, the two kinds that will sustain life the longest and the best. But no single article of food is as good for adult life as a mixed diet, which includes all the known foods.

The word "milk" has a very wide range of uses in the world. In South America and other parts of the tropics they have the milk-tree, which furnishes food for many people. The "milk in the coconut" does the same thing; the milkweed whitens all of our prairies; the milk of magnesia furnishes medicines for many sick people, especially those afflicted with "milk-leg," or milk-fever, and some people are afflicted with "milk sickness" from eating diseased meat, and there is a whole lot of "the milk of human kindness" in the world. Some of the world's great beauties take a daily milk bath to keep them delightfully complexioned. The glass-makers give us a milk-glass to make a white light; some women have milk-knots in their breasts; some professional cooks serve their customers with milk-meats made of milk, butter, and cheese; children have milk-teeth and milk-molars; the mason uses milk of lime to whiten the walls of buildings; the gardeners raise milk-parsley to flavor food with, and milk-peas for the table, and the milk-thistle for decorations; children who eat too much milk have milk-thrush; the beekeeper beats the milk-pans to settle the swarming bees; speculators milk the market, and milk the telegrams of other speculators; some people are milk-full and have no room for more; rock milk or the toad stool cures chilblains and other ailments, and there is the great milky way, hung up in the sky, over which the mythological milkmaids dance. Then there is the milk-vetch and the milk-wretch and this last is a kind of milk-snake, the meanest milk-sop of all, for he milks your milk just as the speculator milks the market, only he goes to the pump to do it. He poses as an artist. He knows that many people are color blind and that the color of milk combines all the seven primary colors of the rainbow. But he thinks such a combination of all colors is hard on the eyes, so he goes to the pump and dilutes the milk to make it carry a more delicate and tolerable tint. He thinks the natural color of milk needs refinement and he refines it accordingly, just as the miller refines his wheat to get the most delicate shade of white flour, so the milk-man refines our milk and then he argues that as too heavy a quantity of powder puts too much strain on the musket or cannon, so too heavy a quantity of milk puts a strain on the test tubes at the creameries and he dilutes it. He comes around very early in the day and gives us for morning's milk, that which the cow and pump gave him last night, fearing that otherwise we might be afflicted with milk-liver. He gives us enough of it every day to float all the navies of the world, knowing that the more he gives the more he gets for it.

Jump into your flying machine and come with me and have a look over the milk-flooded world. See all the long lines of smoke, moving, even before dawn, towards all the great cities on the planet. They show the milk-trains coming in to supply millions of people with cream for their coffee and babies and milk for the elders. Let us tarry a little, and we

The "TUBULAR" Has a Marvelous Advantage over Others.

In reference to this picture comparison of separator bowls the manager of a prominent agricultural publication recently wrote us:—

"It seems to me that this is the most emphatic way of showing the vital features of your Tubular Separator that I have ever seen. As I look upon the matter the bowl or what is in it practically does the whole of the work, so it is easily apparent that the Tubular has a marvelous advantage over others."

Only one thing better for a dairyman to see and study than this comparison of bowl parts, and contents, and weights.

That's the Tubular itself, in his own dairy.

We have been building separators, at our West Chester factory, for 23 years. We know them all and what the different bowls can do—on paper and in the dairy.

The quoted comment is absolutely true. The Tubular will prove it in your dairy. Our guarantee makes every purchaser safe—in buying today, and in using for a life time.

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THE SHARPLES SEPARATOR COMPANY.

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shall see the long, black lines of labor proceeding to field, shop, factory, counting-house, and office for the day's labor, with energy and intellect nourished and thew for the day's tussle, largely on the product of uncounted milk-glands—and the pump.

This is the milkmaid's milky way
That shines and shimmers from day to day,
A stream of gladness that gleams and flows
Wherever a hungry mortal goes.
And down where the milky flood has rolled,
There follows a stream of gleaming gold
With which so many are housed and clad
In a way to make the old growlers glad.

The Centralizer.

BY J. H. CURRAN, OF THE COLONIAL CREAMERY COMPANY, ST. LOUIS, MO.

Centralizing is simply cooperation grown tall. A local cooperative creamery is simply an infant centralizer. What matter if the cream or milk is hauled five miles, or shipped a hundred miles? What matter if 10,000 pounds or 1,000,000 pounds are made in one plant? The haul enters very little into the quality—nearly everything is in the hauling of the milk or cream at the farm after all. The evils of hauling on trains can be and will be reduced to nothing. The evils of poor handling can be and, in a great measure, will be eliminated.

We are in a transition period. I never met a farmer, who had had experience, who did not think the hand separator was the thing for him. And after all who is the court of last resort in this matter? Is it not the farmer producer? It is not the creamery manager or the government official who should say what is best for the producer, it is the farmer himself who does the work and furnishes the capital, and who at the last is going to do just as his best judgment dictates as to the methods for making and marketing his products.

The only cooperation that is worth a cent is that cooperation which makes for peace and profit between the farmer and the creameryman. Look around you and note the successful creameries, both cooperative and otherwise, and see that the reason for the success of every one which is winning out lies in the personality of the manager.

Look back at the history of all the dead cooperative creameries in the country and in nine cases out of ten you can find the barb that stung them was poor management.

The quality of brains required, the fact that brains cost money, the further fact that in a larger output is found the saving and profit necessary to afford brains, coupled together form the main reasons for the centralized creamery, and prove that their growth and development is both natural and inevitable.

Freedom of trade is a sort of subconscious demand of the American farmer. Cooperative creamery man-

agers often wonder why some of their best patrons, even some of their largest stockholders, refuse to patronize their home plant. The reason is that to them cooperation means a bondage to one market, and although they have many excuses, none of which are adequate, the real reason is an antipathy to being held to one thing when others are offered.

This feeling is noticeable in every line of cooperative endeavor and will explain why socialism has gained so little permanent hold on the American people.

In every line of farm production, that system will win which, first, accords the producer the greatest freedom of action; second, the largest measure of satisfaction in practice; and third, the biggest steady profit on his products, still yielding a fair profit to the manufacturer.

Plenty of competitive markets will give the first. I do not know a single centralizer in the country which has not from five to fifteen fierce competitors.

Cordial, forbearing personal contact, together with square and honest treatment, will yield a large measure of the second.

The third requirement can only be accomplished by economic manufacture and distribution. This means centralization. Increase your make and thus reduce the cost per pound. Ship in carlots and reduce your freight. Make a uniform product, in salt, color, flavor, and aroma, and build up the demand. It is very simple and plain.

In fighting the centralizer, Government officials and others are fighting a principle. There is not a line of industry in the world to-day which is not seeking the avenues of cheaper production, manufacture, and distribution, in other words, the easiest, cheapest path from producer to consumer.

Being in an undeveloped state, the centralizer is open to criticism as to some of its methods. These can and will be smoothed away. All creamery managers, cooperator and centralizer, being human, some of them are short-sighted enough to attempt to be arbitrary. These will finally be eliminated by subtraction, for no business on earth can endure when built on unfair and burdensome methods.

The hand separator and the centralizer have come to stay. The system needs the help of Government resource to help it to develop along sane and safe lines; not hindrance.

Two parties alone are concerned in the present controversy—the producer and the consumer. Government should have in mind only the balance between the profit of the first and the cost to the latter. Methods of manufacture and distribution must ever be the best and latest. Forward, not backward should be the watchword. The world is strewn

with remains of out-of-date factories and carriers. It is terrible, but it is right. People financially interested reason toward their pockets.

I speak for a larger and more generous view of the whole subject, on the part of those who should be disinterested.

The Poultry Yard

CONDUCTED BY THOMAS OWEN.

Poultry Notes.

Keep a good watch over your chicks during this wet weather and see that they have dry quarters or you are liable to lose most of them.

Such continued wet weather we have rarely seen and the mortality among chicks has been enormous. We have heard of several parties losing four and five hundred chicks each.

It is now too late to commence hatching again, and the only thing one can do is to be as careful of the surviving chicks as he can. Keep them dry and warm.

Lettuce is an excellent food for young geese and ducks. Usually there is more in the garden than the family uses. This can be fed with profit. It pays to raise it for young waterfowl, and all kinds of poultry like it.

Clipping off the flight feathers of a wing to prevent a fowl from flying over a fence causes it to look misshapen or one-sided. There is no necessity for cutting off the feathers. The object can be attained by cutting off the inner web of four or five of the long flight feathers, so they can not hold against the air and the wing will retain its place, and the outside of the same will not be disfigured. Do not destroy the wing by clipping it after the molting season on such fowls as are intended for selling or showing.

There is a limit to the profit-earning of a chicken, and it must be sold when that limit is reached or before. Unless a bird is growing into money, or laying eggs, or hatching chickens, it is a dead expense. Just about this time is the time to clean up and get rid of everything that is not needed for next season's breeding. We have written of this matter before but all mortals are so prone to forget or to postpone duties that ought to be performed at once, that we will be pardoned for reiterating the advice.

Half-hearted effort will never bring success in poultry-raising or any other line of endeavor. If you expect to accomplish anything worth while you will have to be an enthusiast and get a hustle on you. If we could raise prize-winners or extra heavy layers without giving any special thought to mating or care in rearing the fowls, what encouragement would there be for the fellow who works hard?

Two things cause expense in the poultry business. The first is loss or waste; the second feed. Prevent waste and make a pound of feed produce the greatest possible gains and you have solved the mystery of profits in the poultry business. Cleanliness is more than half the battle in preventing loss. Keep the lots, the yards, and the houses as clean as you can and you will find that the losses of last year will be reduced fifty per cent.

Any successful business is the result of a healthy growth. By this is meant the beginner should start in a small way and grow into greater things. The poultry business is no exception to this rule. Only those who begin in a small way and then grow, ever succeed. The poultry history of the country is filled with failures of those who thought they could

HOW AND WHY DE LAVAL CREAM SEPARATORS ARE SWEEPING THE FIELD

On June 1st a creamery skimming station four miles from Milton, Wis., closed its doors. Thirty-two farmers had been having their milk skimmed there. When the station closed they were compelled to buy their own separators. Thirty-one of them bought DE LAVAL machines, notwithstanding agents of eight different makes of separators were on the scene hot after the business. This is only a fair example of how the 1908 improved DE LAVAL is making a "clean sweep" of the separator business in every dairying section from the Atlantic to the Pacific.

The De Laval factory has been working every available man night and day since early in February and is now more than 2,000 machines behind orders, so great has been the demand for the new and improved machines.

The 1908 DE LAVAL machines are simply so overwhelmingly superior in every way to anything else in the shape of a cream separator that it is only natural that well informed buyers everywhere will have nothing else. They are beautiful in design, perfect in construction and everlasting in daily use. They are made in ten new styles and ten new capacities, with a size for every dairy from the smallest to the largest, and are sold at ten new prices that are just right and much the cheapest of all for the values given.

A new 1908 catalogue, constituting a separator education in itself, and any desired particulars are to be had for the mere asking.

THE DE LAVAL SEPARATOR CO.

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begin with a ten thousand capacity plant and make it pay as large a percentage as the farmer who has only one hundred hens.

Do not waste too much time trying to cure a fowl afflicted with some disease that you do not understand. Better kill them at once unless they are valuable exhibition specimens. Keep your fowls clean and dry and there will not be much danger from disease.

Profit in Selection of Poultry.

EDITOR KANSAS FARMER:—The profit in poultry culture lies in having good hens—hens that are producers and return a profit in eggs over cost of feed even when eggs are low in price, and that also lay when eggs are high. It means only keep the producer, or in other words only healthy, vigorous laying strains and those hatched to lay at the right time. We should only keep the number that we can properly house and care for. Fifty properly cared for chickens will bring more real profit than two hundred and fifty left to care for themselves with the branches of the trees their only shelter in cold, snowy weather.

Our poultry house is nothing elaborate but it furnishes ample shelter from cold. It may seem not quite right to begin talking of cold weather before warm weather begins but if we do not look to the future we will never succeed, not in the poultry business. Let us help our young pullets to maturity by giving them proper feed at the proper time. A poor, half-starved pullet will never materialize into a hen full of vitality. I have had pullets that produced twenty-six eggs in one of the coldest winter months and many in the same flock would lay twenty in the same length of time. This shows strong vitality and healthy, thrifty condition. Such hens are the ones to breed from if we wish to increase our profit.

At one time I believed that to have a profitable flock for winter one must have all young pullets, but of late the hen is winning my esteem. When we have a good hen we should keep her at least two years. A hen will not lay quite as many eggs the second season as she did her first,

but will lay almost as many, and the eggs are much larger. She can be molted in sixty days while it takes five months to grow a pullet to laying age and the pullet is an unknown quality while with the hen you know what she is.

Some hens retain their productiveness for several years. I think it not wise to keep them more than two years unless they are very valuable breeders, then we can keep them several years to an advantage.

One flock of select White Leghorns show a record for four years as follows: First year, 144 eggs per hen; second year, 108; third year, 81; fourth year, 59. These hens were well cared for during the whole time. While there may be great variation from these figures still they represent a fair average.

While the first factor in securing winter eggs is to have the right kind of hens or pullets, their feed and care must not be overlooked. Some poultry-breeders are of the opinion that if they feed correctly the hens must lay. While feed is important it is not the whole thing. A hen can not do her best without suitable food, but a poor hen will not do credit with any kind of care.

I have tried most of the breeds that are standardly bred to-day, and for laying and paying I find nothing that surpasses, or even equals, a good strain of Rhode Island Reds or Single Comb Buff Orpingtons. There are ten varieties of Orpingtons, all of which are good layers and one can get birds in their own fanciful color. For the table they equal the turkey and as egg-producers they are, beyond a doubt, in the front rank. In a laying contest in England they were proven by the Government test to lay from two hundred and forty to two hundred and fifty eggs in a single year. They are the largest of the clean-legged birds.

MRS. LIZZIE B. GRIFFITH.
Emporia, Kans.

And I learned amid the darkness
By the spirit's sight to see,
Learned that angel hosts were ready
In my need to come to me.

Learned to welcome pain and trials,
Wings to bear my soul above,
Learned to know that round about me
Are the arms of Changeless Love.
—Ida L. Lewis.

PLYMOUTH ROCKS

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.

DUFF'S BARRED ROCKS—Choice standard stock by standard mating. We breed them now exclusively, and have the very best. Eggs and stock in season. Write your wants. A. H. Duff, Larned, Kans.

ONE DOLLAR

buys 15 eggs from Smith's laying strain of Barred Rocks the balance of the season. Eggs shipped as they come; choice. Choice breeders. Prices right. CHAS. E. SMITH, Route 2, 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.

WHITE WYANDOTTE EGGS for hatching \$1 per 15 or \$5 per 100. Mrs. E. F. Mey, Bonner Springs, Kans.

LEGHORNS.

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.

S. C. B. LEGHORN EGGS—\$0 for \$1, 100 for \$3. Mrs. P. E. Town, Route 3, Haven, Kans.

STANDARD-BRED S. C. Buff Leghorns founded by stock of prize-winners of Chicago and St. Louis World's Fairs, and have taken 1st wherever shown. Stock for sale; eggs in season from pens scoring 90 to 95. No. 1 pen, \$2.50 for 15; No. 2, \$1.50 for 15. S. Perkins, 801 E. First St., Newton, Kans.

Rose Comb Brown Leghorns Exclusively
Farm raised. Eggs per sitting of 15, \$1; per 50, \$2; per 100, \$3.50. P. H. Mahon, R. R. 2, Clyde, Cloud Co., Kans.

BUFF ORPINGTONS.

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.

BLACK SPANISH.

BLACK SPANISH EXCLUSIVELY—For 12 years winners of all fairs at Kansas and Nebraska State shows, 1908. Eggs balance of season, \$1 per 15, \$5 per 100. H. W. Chestnut, Centralia, Kans.

RHODE ISLAND REDS.

R. C. Rhode Island Reds

Eggs, \$1.00 for 15,
\$5.00 for 100.

Mrs. Wm. Roderick, R. 1, Topeka, Kans.

SCOTCH COLLIES.

SCOTCH COLLIES—Pups from trained parents, \$5 each. Will Killough, Ottawa, 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 Compound (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.

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 door. Solid comfort at moderate prices. A trial will please you.

When writing our advertisers please mention this paper.

THE MARKETS.

Kansas City Grain and Produce.

Kansas City, Mo., June 22, 1908.

There was fair life to the speculative market to-day, but as of late most of the trading was of a professional nature. Outsiders continue to keep out of the market as a rule, the country being disposed to hold back until the new crop is harvested. Clear weather is now being had in this section and for the past three days the farmers have all been busy in their wheat fields. Statistics continue bullish and the cables were both for and against the market. Liverpool came in $\frac{1}{4}$ ¢ lower at the close, but Berlin was up $\frac{1}{4}$ ¢ and Budapest was $\frac{1}{4}$ ¢ higher. Paris, however, was $\frac{1}{4}$ ¢ lower to $\frac{1}{4}$ ¢ higher. With this showing buyers were inclined to bid up a little stronger, but were cautious in their trading. July wheat started the day $\frac{1}{4}$ ¢ lower, then sold up $\frac{1}{4}$ ¢, when the market weakened and lost $\frac{1}{4}$ ¢ and finished $\frac{1}{4}$ ¢ off from Saturday. September followed the earlier option and finally closed $\frac{1}{4}$ ¢ higher than Saturday. Corn, like wheat, showed a little more strength but trading in it was light and mainly among professionals.

Kansas City futures to-day and Saturday:

	WHEAT	CORN
July	81 $\frac{1}{4}$ ¢	67 $\frac{1}{4}$ ¢
Sept.	79 $\frac{1}{4}$ ¢	65 $\frac{1}{4}$ ¢
Dec.	82 $\frac{1}{4}$ ¢	64 $\frac{1}{4}$ ¢

In store: Wheat, 679,000 bushels; corn, 32,200 bushels; oats, 14,900 bushels; rye, 2,000 bushels.

Wheat—Receipts past 24 hours, 38 cars; shipments, 3 cars. Receipts same time last year, 53 cars; shipments, 60 cars. Inspections Saturday, 38 cars. The flood situation had so far improved as to admit a number of the elevators to enter the market and it showed more life and strength than for some days. The receipts were light and the tables were cleared without trouble and the best hard wheats called in higher and more could have been sold if here. Liverpool came in $\frac{1}{4}$ ¢ lower at the close. Berlin was up $\frac{1}{4}$ ¢ and Budapest advanced $\frac{1}{4}$ ¢, while Paris was $\frac{1}{4}$ ¢ lower to $\frac{1}{4}$ ¢ higher at the close. On ocean passage decreased last week 6,854,000 bushels. The primary receipts were 480,000 bushels, against 700,000 bushels the same day last year; shipments, 158,000 bushels. Export clearances from the four Atlantic ports, 291,000 bushels. In Chicago July closed the same as Saturday, while here the same option finished $\frac{1}{4}$ ¢ higher. By sample on track here at Kansas City: No. 2 hard, choice turkey, 3 cars 98¢; fair to good turkey, 1 car 97 $\frac{1}{4}$ ¢, 2 cars 97¢; dark, 2 cars 96¢; yellow and ordinary, 1 car like sample, 94 $\frac{1}{4}$ ¢. No. 3 hard, fair to good turkey, 3 cars 96¢; dark, 1 car 95¢, 4 cars 94 $\frac{1}{4}$ ¢, 1 car 94¢; yellow and ordinary, 1 car 94¢, 3 cars 93¢. No. 4 hard, turkey and dark, 1 car smutty 92¢; fair to good, 2 cars 94 $\frac{1}{4}$ ¢, 2 cars 91¢; ordinary, 1 car 89¢. Live weevil hard, 5 cars, 37¢, 3 cars 88¢. Soft wheat, No. 2, nominally 95¢. No. 3 soft, fair to good, 1 car like sample 83¢. No. 3 soft, fair to good, 1 car 91 $\frac{1}{4}$ ¢, 1 car 89 $\frac{1}{4}$ ¢. Mixed wheat, rejected, 1 car live weevil 82 $\frac{1}{4}$ ¢.

Corn—Receipts past 48 hours, 6 cars; shipments, 5 cars. Receipts same time last year, 20 cars; shipments, 20 cars. Inspections Saturday, 5 cars. There was very little in to-day and all was wanted at higher prices. The flood has so far subsided as to enable the railroads to handle the trade that is offered to them and the situation had therefore much improved. Buyers were not only more willing to take hold but sales showed to advance all around. Home dealers got most of the offerings and more could have been sold if here. Liverpool came in unchanged to $\frac{1}{4}$ ¢ lower at the close. On ocean passage decreased 1,072,000 bushels. The world's shipments last week were 2,689,000 bushels, against 7,873,000 bushels the same week last year. In Chicago July closed $\frac{1}{4}$ ¢ higher than Saturday, while here the same option advanced $\frac{1}{4}$ ¢. By sample on track here at Kansas City: No. 2 mixed, 1 car 72¢, 1 car 72¢; No. 3 mixed, 1 car 72 $\frac{1}{4}$ ¢, 2 cars 72¢. No. 2 yellow, nominally 73¢. No. 3 yellow, nominally 72 $\frac{1}{4}$ ¢. No. 2 white, 2 cars 76¢. No. 3 white, nominally 75 $\frac{1}{4}$ ¢.

Oats—Receipts past 48 hours, 16 cars; shipments, 7 cars; shipments, 20 cars. Inspections Saturday, 2 cars. There were more in to-day than for a week or more and the market was dull all day. Only a few sales were made and they were to home dealers at prices the same as Saturday, though buyers were inclined to be bearish and at the close quite a number of cars had to be carried over unsold. The primary receipts were 423,000 bushels, against 424,000 bushels the same day last year; shipments, 267,000 bushels. Export clearances from the four Atlantic ports, 1,500 bushels. In Chicago July closed the same as on Saturday and here there was nothing doing in a speculative way. By sample on track here at Kansas City: No. 2 mixed, nominally 60¢. No. 3 mixed, fair to good, 1 car 48¢. No. 2 white, choice, 1 car 52¢; fair to good, 1 car 51¢; color, nominally 51¢. No. 3 white, choice, 1 car 51¢; color, nominally 50¢.

Flour—Dull but unchanged. Quotations: Hard winter wheat patents, \$4.30@4.35; straight, \$4.35@4.55; clears, \$3.70@3.90; soft patents, \$4.90@5.15; straight, \$4.60@4.80; clears, \$4.50.

Corn Chop—Higher with corn. Country \$1.35 per cwt., sacked. Cornmeal—Dull but higher. Quoted at \$1.50 per cwt., sacked. Bran—Steady but dull. Mixed feed, \$1.05@1.06 per cwt.; sacked; straight bran, \$1.02@1.04; shorts, \$1.05@1.10. Flaxseed—Higher at \$1.08, upon the basis of pure.

Cottonseed-Meal—All points in Kansas and Missouri, taking Kansas City rates, \$27.90 per ton in car lots.

Ground Oil Cake—Car lots, \$60 per ton; 2,000-pound lots, \$31; 1,000-pound lots, \$16; 100-pound lots, \$1.70.

Seeds—Timothy, \$3.80@4.25 per cwt.; red clover, \$14@17 per cwt.; Kafir-corn, \$1.26@1.30 per cwt.; cane, \$2.25@2.30 per cwt.; millet, \$1.35@1.55.

Alfalfa—Per cwt., \$11@14. Broomcorn—Quotations: Choice green self-working, \$70@75; good self-working, \$60@77; slightly tipped self-working, \$50@60; red tipped self-working, \$40@50; common self-working, \$30@40.

Kansas City Live Stock.

Kansas City, Mo., June 22, 1908.

Small receipts of live stock began to arrive here last Thursday, and there was a pretty good run on Friday. Rains west of us late last week kept the rivers here in a threatening state, and above the danger line. This has held down the run to-day, which amounts to 3,000 cattle, 5,000 hogs, and 3,000 sheep. There was a big break in cattle prices at all the markets last week, account of liberal supplies, especially of quarantine cattle. The daily newspapers in the big cities all over the country have exploited the high price

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, 205-4-7, 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.

MISCELLANEOUS.

Taft's Life and Speeches. Official edition, with chapter by President Roosevelt. Only \$1.00. Big terms to agents. Freight paid. Outfit ready. Send ten cents postage. Ziegler Co., 288 Fourth St., Philadelphia.

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

SEEDS AND PLANTS.

FOR SALE—Seasonable Seeds and Plants: Millet, cane, buckwheat, cowpeas, turnip and all other seeds; sweet potato, cabbage, tomato, celery, egg-plant and pepper plants. Ask us for prices. The Barteldes Seed Co., Lawrence, Kans.

200,000 Celery Plants.

200,000 large, healthy celery plants for sale. White Plume, Golden Self Blanching, and Silver Self Blanching are the best varieties. 300 plants packed carefully and delivered at express office for \$1, or 1,000 for \$3. Plants ready to ship any time from June 10th to July 15th. A leaflet telling how to grow crisp, tender celery mailed on receipt of 2 cent stamp to pay postage, or free with plants.

600,000 Sweet Potato Plants

600,000 Yellow Jersey and Yellow Nansamond sweet potato plants at \$1.50 per 1,000. Ready to ship now. No order accepted for less than 1,000. We are large growers and guarantee our celery and potato plants to be the best you can get anywhere. Write for circular to-day. Henry B. Jeffries, Ottawa, Kans.

SEED CORN—Early maturing Western Yellow Dent, Farmers Interest and Boone County Special. Each ear tested, sold on approval orated or shelled. DeWall Bros., Box "F", Proctor, Ill.

CATTLE.

EAST SIDE DAIRY FARM HOLSTEINS—Butter Boy Pietertje 34 heads herd; his dam's record is 17.49 pounds of butter in seven days and over 12,000 pounds of milk in 104 months. Average record over 20 pounds, official. Other noted families included in herd. Only bull calves for sale at present. Inspection and correspondence solicited. F. J. Searle, Okaloosa, Kans.

FOR SALE—One richly bred Shorthorn bull and a number of good females. Owing to limited pastures will sell these so the buyer can grow them out and save some good money. C. W. Merriam, Topeka, Kans.

REGISTERED ABERDEEN-ANGUS—7 yearling bulls for sale. American Royal prize calf at head of herd. Wheeler & Baldwin, Delphos, Kans.

ABERDEEN ANGUS—Yearling bulls, extra good. Sired by Blon Erica 78022, for sale at reasonable price. T. R. Culver, Garnett, Kans.

REGISTERED Holstein-Friesian bull for sale; 3 years old. J. E. Huey, R. 8, Sta. A, Topeka, Kans.

SWINE.

HORSES AND MULES.

FOR SALE—One black team, 6 and 7 years old, weight 2600 pounds. Mr. and Mrs. Henry Schrader, Wauweta, Kans.

of beef lately to such an extent that consumption has been greatly curtailed, which, together with the heavy runs, put buyers in a position to hammer the market successfully. Prices are steady to 10¢ lower to-day, and whereas a top of \$8 or better would have been possible a week ago for fancy steers, \$7.60 would be about the limit to-day. Sales of steers ranged from \$5.25@4.90 here to-day. Cows and heifers are also lower to-day, at \$3@6.50.

The hog market opened five higher, but improved up to the close, when sales averaged 15¢ higher, top \$5.90, bulk \$5.70@5.85. Quality of sheep is not very good to-day, market slow. Choice spring lambs worth \$6.50, muttons \$4@5.25. The stock yards, with the exception of the quarantine cattle yards, are in as good condition as before the late flood, and all the facilities for handling stock are in use. The quarantine cattle yards will be in operation in a few days to the river continues to fall. With the exception of the Morris plant, all the packing houses are in operation and will be able to produce the usual output within a day or two. Morris & Co. are buying live stock for shipment to their plants at other points. All the railroads out of Kansas City are open and outside order buyers are in the market the same as before the flood.

J. A. RICKART.

South St. Joseph Live Stock.

South St. Joseph, Mo., June 22, 1908.

During the past week the receipts of cattle have been only moderately liberal at Western markets and yet they have been sufficient to force the most severe break in prices seen during the current year. This is not at all surprising inasmuch as fat cattle prices have been forced up to a historic level, in fact, almost up to the records of 1902, and it has only been two or three times in the past ten years that prices have been as high.

Along with the rapid rise in corn fed fat beef cattle the prices for all classes of grass stock were worked up very high, and under the pressure of sensational newspaper reports as to high prices of beef consumption was greatly curtailed and even the moderate supply proved larger than demand called for. The slump in prices amounted from 40¢@75¢ with the heaviest end of it falling on grassy half fat stuff. It is not likely that the season will again see this class of cattle selling so high, while at the same time it is not improbable that the fully fat dry lot stock may again go to the high level. It is not likely that the next few months will see a large influx of

IMPROVED WHEAT, alfalfa and stock farm, 800 acres, 320 cultivated, 220 wheat, 50 alfalfa land, 8 miles of fence, springs in pasture, orchard, county seat, R. R. 8 miles, school 1 mile. \$12.50 per acre. Terms. Thos. J. Stinson, Spearville, Kans.

FOR SALE—Good 7-room house, barn, well, 6 lots, fenced, near Washburn. Mrs. Theodore Saxon, 1287 Harrison St., Topeka, 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.

FOR QUICK SALE.

160 acres, well improved, near Geneseo, fine quality wheat and alfalfa land, 100 acres in wheat. Will bear closest investigation. Bargain at \$9100. \$5100 cash will handle. I. R. Krehbiel, Cashier Lorraine State Bank, Lorraine, Kans.

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.

OKLAHOMA FARM.

160 acres 9 $\frac{1}{2}$ miles from Kingfisher, on rural route and rural telephone, close to two churches and school. 120 acres in cultivation, 8-room house nearly new, and other buildings, fine grove, orchard, 2 wells and cistern, good wheat, corn, oats, cotton and alfalfa land. A great bargain at \$81.90 per acre. H. F. Stephenson, Kingfisher, Okla.

MISSOURI FARMS FOR SALE

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

John W. Everman, J. Gallatin, Mo.

Wanted---Farm Loans

In Shawnee and adjoining Counties for our own investment; not to sell—payable at Topeka.

RESOURCES - - \$1,100,000

SHAWNEE SAVINGS BANK, Topeka, Kansas.

A Cheap Wheat Farm in Stanton Co., Kans.

160 acres level as a floor. Deep, black soil, ready for the plow. In German settlement south part of the county. Price only \$800.

ALBERT E. KING, McPherson, Kans.

cattle from the corn belt section but the Southwest is ready to send in increased supplies of grassers and it will not be more than a month to six weeks at the outside until the northwest ranges will begin marketing their summer crop. While the outlook does not favor a big total of marketing for the summer it will in all probability be large enough to meet the demands unless prices go down to a point that would again prove attractive to the consuming trade. The market for cows and heifers is relatively in the same condition as that for steers, and shows about the same decline. Stock cattle trade has not been large at any time but with this break in prices and the condition of the beef trade it is likely that more cattle fit to go back to the country will be available.

The surprise of the whole live stock trade during the past week has been in the live hog market; receipts have been running above expectations at all markets and yet instead of the big June slump in prices that was so freely predicted, the market has taken a sudden spurt and prices have been working up rapidly since the middle of last week. The advance in the past seven days has been 35¢@40¢ and a fairly liberal Monday's run at all points was absorbed very quickly at prices closer to the 6¢ mark than they have been this season. There is no doubt that one of the stimulating factors in the trade has been the high prices of beef driving meat consumption over to pork, as the latter is much the cheaper meat and much more economical, for the average housekeeper. It is not safe to predict a much further advance in the market and yet all indications seem to favor good prices for the summer crop.

It might be well to mention in connection with the hog trade of recent days that during the past week the St. Joseph market has been tested thoroughly as to ability to absorb big receipts. During last week a total of 96,500 were marketed at this point, which is more than 20,000 above the previous high records for these yards and among the big records of markets outside of Chicago. The supply was handled readily with the market keeping full pace with the markets at other points. The receipts of sheep and lambs have not been large during the past week and have yet showed a tendency to increase. Very little fed stuff is now being handled, the bulk of supply being grass stock from the West. The market has been a fluctuating one but confined to comparatively narrow limits. It is likely that the market is now close to a summer level.

WARRICK.

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Kansas Farmer
Get Results
Are You One of Them?

DUROC-JERSEYS

Deep Creek Herd Duroc-Jerseys
Choice spring boar pigs and gilts for sale; also fall gilts. C. O. Anderson, Manhattan, Kans.

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, Kans.

Vick's DUROCS are bred for usefulness. Choice young stock for sale by such great boars as Vick's Improver 47385, Red Top 32241, Fancy Chief 24928 and other noted sires. Correspondence invited. Visitors coming to Junction City and telephoning me will be called for. W. L. VICK, Junction City, Kans.

HILLSIDE DUROCS and HEREFORDS

Choice boars ready for service. Bred gilts and fall pigs, both sexes. Mc's Pride III, Oom Paul V, and Crimson Knight 2579 in service. Six good Ankle bred Hereford bull calves. Prices to correspond with the times.

W. A. WOOD, Elmdale, Kans.

PEERLESS STOCK FARM

DUROC-JERSEY HOGS

FOR SALE.

R. G. SOLLENBERGER, Woodston, Kans.

Silver Lake Durocs.

Fifty fall pigs will be priced right, either sex. Bred gilts will be priced right on mail orders. Boars in service, Lone Jack 30281, Paul Jumbo 42209.

W. C. WHITNEY, Agra, Kans.

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, Kans.

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 bred mostly by Baron Ury 24 124970, Bold Knight 179064 and Headlight 24 243936.

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

K. & N. Herd Royally Bred Duroc-Jersey Swine

Have a few gilts that I will sell at reasonable prices, bred for April farrow. Also a few fall boars of September, 1908, farrow. Write for prices and description.

R. L. WILSON, Chester, Neb.

FOUR-MILE HERD DUROCS

Choice fall boars by Orion Jr. 31497 and Ohio Chief 24 41197. 50 spring boars, growthy, heavy bone, good feet, nice color; sired by the above named males, and E's Kant Be Beat 57563, Crimson Chief 31263, Rose Top Notcher 54059, You Bet 31111, Tip Top Notcher 20729, and other noted sires. Sows of the best and leading families. Write or visit herd. Visitors met at trains.

E. H. Erickson, R. 1, Olsburg, Kans.

Timber City Durocs

Three herds under one management. Breeding stock for sale. Let us book your order for a growthy spring boar of February and early March farrow. Write to either place.

SAMUELSON BROS.,

Cleburne, Manhattan, Moodyville, Kans.

Orchard Hill Herd Duroc-Jerseys

A few good spring boars yet for sale.

R. F. NORTON, Clay Center, Kans.

OAK GROVE HERD OF DUROCS

Herd headed by Choice Goods H. 38471 by Hunt's Model and Corrector's Model 34381. I have for sale a few choice males of spring and fall farrow that will be priced worth the money.

Sherman Reedy, Hanover, Kans.

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, Kans.

Fairview Herds--Durocs, Red Polls

Some good young boars by Crimson Challenger 43877 for sale. No females or Red Polled cattle for sale now.

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

Stray List

Week Ending June 11.

Neosho County—O. M. Johnson, Clerk. MARE—Taken up by D. E. Kyle in Mission tp., May 18, 1908, one 7-year-old bay mare pony, branded M H on right shoulder; valued at \$30.

Wilson County—W. H. Conan, Clerk. MARES—Taken up by W. W. McCarty, May 16, 1908, one bay mare, horseshoe brand on left hip; valued at \$25. One yearling black mare colt, valued at \$12.

Week Ending June 18.

Jackson County—J. W. Martin, Clerk. HORSE—Taken up by E. G. Brown in Liberty tp., May 28, 1908, one 12- or 15-year-old gray horse; valued at \$25.

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, 615 Central Bldg., Kansas City, Mo.

DUROC-JERSEYS**RALPH HARRIS FARM
DUROC-JERSEY HERD**

STARTED 1898, second in class American Royal 1907, farrowed 12 pigs by Red Wonder, Grand Champion Iowa State Fair, 1907, on 22d of April. All are living. Average weight at 13 days old, 7 pounds, 13 ounces. Remember this litter when looking for a boar in a few months. Address, RALPH HARRIS, Prop. B. W. WHITE, Mgr. WILLIAMSTOWN, KANS. Farm station, Buck Creek, on the U. P., 45 miles west of Kansas City.

Lamb's

HERD OF DUROCS is built along the most fashionable blood lines and is noted for the individuality of its makeup. Fifty fine pigs sired by the great Hanley, Lincoln Top, Buddy L. by Buddy K. IV. Crimson Jim, Ambition and other great sires. We invite correspondence with prospective buyers.

Elmer Lamb, Tecumseh, Neb.

SPRING CREEK HERD DUROC-JERSEYS 15 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 75741. Ola Nordstrom, Clay Center, Kans.

GAYER'S DUROCS: 36 choice fall gilts and 14 topy fall boars by Golden Chief, 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, Kans.

CEDAR LAWN DUROCS.

Special bargain for 30 days. My herd boar Parker 7530 and a choice lot of his get, both sexes. Gilts sold open or bred to Long Wonder 21867. Prices right. Call or write,

F. M. BUCHHEIM, R. R. 3, Lecompton, Kans.

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, Kans.

ROSE LAWN Duroc-Jerseys

Gilts bred to farrow in April and May, either sired by or bred to Tip Top Perfection 34579, by Tip Top Notcher, grand champion of the breed, also pigs in pairs or trios. And a few Hereford cattle and Lincoln sheep for immediate sale.

L. L. VROOMAN, Rose Lawn Place, Topeka, Kansas

BERKSHIRES**MAPLE HEIGHTS HERD BERKSHIRES**

Kansas Longfellow, champion Nebraska State Fair, 1907, and Berrington 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. Nielson, Marysville, Kans.

60 Berkshires For Sale 60

from weaning pigs up to matured animals, including herd boars and old herd sows of Lord Premier, Black Robinhood, Berrington Duke, Masterpiece and Lord Bacon families.

G. D. WILLEMS, Inman, Kans. Thirteen years a breeder of Berkshires.

Guthrie Rancho Berkshires

The Guthrie Ranch Berkshire herd, headed by Berrington 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, Kans.

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 millfeed. They are bred right, and best of all they are priced right. Write for anything in Berkshires to,

E. D. KING, Burlington, Kans.

Knollwood Berkshires

Headed by Pacific Duke 56691, dam Marjorie 37491 by Baron Duke 23d 50000, a son of Baron Lee 4th, the sire of Lord Premier and Dutches 120th 28675, grand dam of Premier Longfellow. Stock of all ages for sale. All stock guaranteed as represented.

E. W. MELVILLE, Eudora, Kans.

GEO. W. BERRY, High-Class Berkshires

R. F. D. No. 4, Lawrence, Kans.

Breeder of Masterpiece, head of the superb Masterpiece family; also Black Robinhood, head of the great Black Robinhood family. For sale—Show pigs and herd headers, fall of 1907 farrow. Choice boars and gilts at moderate prices.

BERKSHIRES**Ridgeview Berkshires**

—FOR SALE—

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

MANWARING BROS., Lawrence, Kansas

Sutton's Berkshires

Best imported and American breeding. Fancy boars, herd headers, \$25 to \$50; good boars, 100 to 125 lbs., \$15 to \$25; fancy gilts, bred to show boars, \$35 to \$50; promising open gilts, \$15 to \$30. Strong bone, fancy heads. Every one good.

We offer you Size, Quality and Finish.

SUTTON FARM, Lawrence, Kans.

POLAND-CHINAS

Becker's POLAND-CHINAS. Choice fall and spring pigs, either sex, by Dandy Rex 42706, first in class at Kansas and Colorado State Fairs, 1905-6. Prices reasonable.

J. H. BECKER, R. 7, Newton, Kans.

SUNNY SLOPE POLANDS

A number of spring pigs, either sex, the farmers' kind, at bottom prices. Gilts will be sold bred or open. Also a litter of Scotch Collie pups, the great watch and cattle dog.

W. T. HAMMOND, Portia, Kans.

BOARS! BOARS!

Choice spring males, at right prices, by Grand Chief, Masterpiece, Nonpareil, Choice Chief, E. L. 2d, and other noted sires. Call on or write

THOS. COLLINS, R. 4, Lincoln, Kans.

Stalder's Poland-Chinas.

I have pigs for sale from the leading strains of the country. Prices reasonable. Write for full particulars.

O. W. STALDERS, Salem, Neb.

Maple Valley Herd Poland-Chinas

Some fine gilts bred for April farrow that were sired by On The Line 113401s and Col. Mills 42911, and are bred to Meddler's Dream 43921. Also some choice young boars; one fine Shorthorn bull calf; B. P. Rock eggs \$1.50 per 15. Have 120 Poland-Chinas and can fill any kind of order. C. P. Brown, Whiting, Kans.

SUNFLOWER HERD.

POLAND-CHINAS—Herd boars, Meddler's Defender (19147) by Meddler (99999), dam Excitement (289596) by Corrector (63379); Allen's Corrector (128613) by Corrector (63379), dam Sweet Brier (261790) by Chief Perfection 2d (42359); Kansas Chief (129888) by Chief Perfection 2d (42359), dam Corrector's Gem (260720) by Corrector (63379). G. W. Allen, Route 4, Tongonoxie, Kans.

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, Ia., and breeders of CHIEF TECUMSEH 2d.

JOHN BOLLIN,

Route 5, Leavenworth, Kans.

Breeds and Sells Popular Poland-Chinas

The State and World's Fair winning boars, Nemo L's Dude and The Picquet, 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.

CHESTER-WHITES**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, Onaga, Kans.

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

GALLOWAYS**Smoky Hill Galloways.**

Choice young stock of both sexes for sale. Large herd to select from. Acclimated to buffalo grass country, equally good for Eastern breeders.

Smoky Hill Ranch, Wallace, Kans.

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, Kans.

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, Kans.

SHORTHORNS**TENNEHOLM SHORTHORNS.**

Herd headed by the Dutchess of Gloster bull, Gladiator 261035 and Barney 275673, a Cruickshank Butterfly. 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.

New York Valley Herds Shorthorn Cattle and Berkshire Hogs.

A large number of my Shorthorns will be sold at private sale, for lack of room, including 3 bulls from 15 to 24 months old; also 10 fall and winter bulls and heifers, and 20 head young females. Two September boars and 51 May pigs from prize winning stock. See them or write. J. T. Bayer, Yates Center, Kans.

SELDEN STOCK FARM.

Scotch and Scotch topped Shorthorns for sale. 8 young bulls from 8 to 24 months old, all reds and good quality. Sired by Baron of Maine Valley 17876 and Secret Emporor 232647. Prices reasonable. Inspection invited.

HOADLEY & SIGMUND, Selden, Kans.

Prospect Farm Shorthorns

The oldest Shorthorn breeders in Kansas. The largest herd of Cruickshanks in Kansas. Herd headed by Violet Prince 145647 and Orange Commander 226590. Young stock of both sexes and some cows for sale. Quality and prices right.

H. W. McAFEE,

Bell Phone 59-2. Topeka, Kansas

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, Kans.

Greendale Stock Farm

25 YOUNG BULLS by Imp. Ardathan Mystery and Best of All for sale at bed rock prices. Can also offer some good Berkshire swine and Shropshire rams. Correspondence solicited.

COL. ED GREEN, Prop., Florence, Kan.

Pedigreed Shorthorn Cattle

Would be pleased to quote you prices on any or all of the following cattle: One red 2-year-old bull, 15 well grown bulls ranging from 10 to 15 months, 30 head well grown 2-year-old heifers, and 40 head well grown yearling heifers. Most of this lot are sired by the Scotch or Scotch topped bulls, Headlight 2d 243805, Bold Knight 179054, Sunflower Boy 127337 and Baron Ury 2d 124970.

C. W. TAYLOR,

Railroad Station, Pearl, Kans. Address mail Enterprise, Kans., Route 2.

JERSEYS**LINSCOTT'S JERSEYS**

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

BULLS—In The Kansas Farmer for May 28, 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 \$30. They cannot be duplicated anywhere. A number to pick from. Tabulated pedigrees and descriptions sent for the asking.

E. J. LINSCOTT, Holton, Kans.

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Some choice young bulls and heifers, also a few good cows for sale. Prices reasonable.

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