

KANSAS FARMER

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THE POOR RAILROADS.

One of the dearest privileges of man is the right to complain. True, the energy expended and the energy destroyed in complaining would have produced much of value except for the waste and the destruction; but who would deny to any mortal the inalienable right to be miserable, at least a part of the time. It is questionable, however, whether immortals should be granted so baneful a privilege.

The situation is brought vividly to view by a brief recently filed with solemnity in the United States Supreme Court by Hon. B. P. Waggener of Atchison, Kansas, in behalf of the Missouri Pacific Railway Company. His lamentation contains the following lugubrious paragraphs:

"There is not an interstate carrier in the country that is not embarrassed, in the discharge of its duties and obligations, under the acts to regulate commerce, as amended June 29, 1906, and other acts amendatory thereof, in its efforts to observe the requirements of Congress, and the In-

terstate Commerce Commission, and, at the same time, follow the rules and regulations of some State commission, or State authority.

"For instance, and by way of illustration—the Board of Railroad Commissioners of the State of Kansas has issued and promulgated an order requiring each, the Missouri Pacific Railway Company, the Atchison, Topeka & Santa Fe Railway Company, the Chicago, Rock Island & Pacific Railway Company and the Union Pacific Railway Company—all interstate carriers, and some operating transcontinental lines—designating Kansas City, Kans., and Argentine, Kans., 'as freight terminal points,' and within ninety days, to 'construct and maintain freight depots and freight terminal facilities from the respective lines within Kansas City, Kans., and Argentine, Kans., as their lines may run, sufficient to accommodate the needs of shippers on their respective lines to such terminals at Kansas City, Kans., and Argentine, Kans.'

"The ingenuity of man can scarcely conceive of any function and power of a railroad company



They Use Automobiles at Garden City, Kansas. Finney County, of which Garden City is the Capital has over sixty machines of this kind. Western Kansas is prospering.

Principal Contents of this Week's Paper

Agriculture, high schools for.....	965
Alfalfa grow? where will.....	969
Alfalfa hay.....	969
Blackballing of Barbara Beals.....	972
Catalpa, hardy.....	978
Dairy profits, cooperative plan for increasing.....	975
Depending upon others.....	972
Doings of the H. S.'s.....	973
Draft horses, a new breed of.....	966
Faith and reason (poem).....	972
Fake, the same old.....	977
Farmers' picnic at Haddam.....	962
Girls on the farm, how to keep.....	972
Gladstone when a boy.....	975
Hedgehog, the sea.....	974
Ice without an ice-house.....	976

Kharkof wheat? how do farmers like.....	969
Law questions.....	962
Lover, a little (poem).....	975
Married woman not liable for husband's debts, property of.....	962
Milking machine on bacteria content, effect of the.....	976
Mother's hands, my (poem).....	973
Passenger rates possible, cheaper.....	962
Poultry notes.....	977
Precipitation in Western Kansas.....	963
Railroads, the poor.....	961
Ring? who ate the.....	975
School property, right to arrest offender against.....	962
Small grain crops.....	970
Wheat and corn, Kansas crops of.....	963

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which has not been taken away, and vested in the Board of Railroad Commissioners. If such laws are valid, we need not worry about the problem of 'Government ownership' of railroads.

An awful situation! is it not? Corporations are immortal, and shall they be condemned to such torments evermore?

Even great corporations might endure grievances if only the distress were universal. But now comes a semi-official utterance showing that not only intrinsically, but by contrast, also, the case of the poor corporations is worse than any ever depicted by the most proficient "calamity howler" of a decade and a half ago. Says the Railway Age:

"The Government report for August estimates a decrease in grain production this year, compared with 1906, of 320,000,000 bushels of corn, 98,000,000 of wheat, 88,000,000 of oats and 11,000,000 of rye and barley, a total of 517,000,000 bushels, or over 13,500,000 tons, of these five cereals alone. The railways and not the farmers will be the heaviest losers by this great decrease, over 10½ per cent, from last year's bountiful harvests; for decreased production of food means higher prices to the producer, and the records show that in years of comparatively small crops the total money value often has exceeded that of previous years in which the number of bushels produced was much greater. But the railways have no benefits to offset decrease of tonnage. They can not increase their rates for transporting the higher priced grain; but, on the other hand, popular influence and legislative action are united in the effort to reduce transportation rates still lower, in the face of constantly increasing cost of labor and supplies and increased taxes, as well as heavy decrease in freight tonnage. Manifestly the three conditions, decreasing rates, increasing cost of operation and maintenance and diminishing volume of business cannot long go on with railways, or any other line of activity, without causing bankruptcy. How long it will be before another era of railway receiverships and foreclosures sets in depends partly on the crops and the general money market, but more on the attitude of State and National Governments."

It will be right and proper at this time for farmers to extend a few words of consolation to the sorely

stricken. Perhaps something on this wise would be appropriate:

"Cheer up, O ye immortals! To travel through eternity under such a cloud of distress is not meet for you. Know ye not that every cloud has a silver lining? Know ye not that money left in the hands of farmers is used to build up the country, to promote prosperity and the general welfare in which ye shall be participants? Put money in the farmer's purse and he will be able and willing to travel and to pay for excursions enjoyed by his wife and daughters. Leave a liberal share of the proceeds of his crops in the bank account of the farmers along your routes and they will produce yet greater crops and develop yet larger local traffic on which you may thrive and grow, and make dividends to your stockholders. True, it seems to be our turn now to receive the lion's share of the results of industry, but if you will be good, and will bear your burdens meekly, and will improve your service, you shall have long life and great happiness and shall be well spoken of in the ages to come. Much as you think it, calamity is not imminent. Calamity comes only to the timid and the complaining. Stand up and be men! Your position in the estimation of mankind may yet be made almost as honorable as that of the producer of wealth from its original source, the soil. Under the present and prospective complexity of the organization of society transportation is almost as essential as production. Be brave and just and ample compensation and even a measure of honor shall be yours."

CHEAPER PASSENGER RATES PROBABLE.

Missouri and Nebraska, the one adjoining Kansas on the east, the other on the north, are enjoying 2-cent passenger rates on their railroads. This results from the action of the recent legislatures of these States in enacting laws fixing the maximum rates at two cents. An attempt was made to enact a similar law for Kansas but it was defeated and a law providing for 500-mile books of tickets to be sold at \$10 per book was enacted in its stead. These mileage books are in very general use by persons who travel a great deal within the boundaries of Kansas and are enabling such to travel at the reduced rate. But the person who makes only an occasional trip is still paying the old rate while his neighbors in Nebraska and Missouri are served at two-thirds the price he is paying.

Naturally, this is unsatisfactory to Kansans who hold that their money ought to buy as much as like amounts of other people's money and that transportation ought to be as cheap in Kansas as in adjoining States.

Feeling in the matter became so intense as to cause Governor Hoch last week to issue a letter urging that the Kansas Railroad Commission to order an emergency passenger rate of two cents per mile. The Commission has not acted at this writing, but it is strongly intimated that the 2-cent rate will be in use within a very short time.

The Commissioners some time ago addressed a communication to the railroads asking that they allow a 2-cent rate in this State pending the litigation over such rate in adjoining States, this rate to be permanent in Kansas if sustained by the courts in Nebraska and Missouri, but to be revoked should the rates be found not sufficiently remunerative to be constitutional. This the railroad declined to do. One reason supposed to influence this attitude on the part of the railroads is that acquiescence with the request of the Kansas Commission would be pleaded by the other States as an admission that the 2-cent rate is remunerative. It is believed, however, that should the Kansas Commissioners issue a peremptory order for the 2-cent rate, thus giving it virtually the force of law, obedience to such order could not be taken as evidence of admission that this rate is remunerative.

Let the 2-cent rate come and let the people rejoice. They will probably increase their going enough to make the rate as profitable to the railroads as the 3-cent rate has been in the past.

In any case, Kansans are entitled to as good treatment as anybody else on the earth.

A FARMERS' PICNIC AT HADDAM.

A two-day's summer picnic was held last Thursday and Friday in a beautiful native grove adjacent to Haddam, in Washington County, Kansas. The occasion was one of social enjoyment chiefly. However to satisfy the minds of those who can not quite approve of devoting time to recreation exclusively, two addresses were arranged for. It was intended to have one address each day but by a mistake both speakers, Professor Cammeyer of the State Agricultural College and the editor of THE KANSAS FARMER appeared on Friday. There were about 2,500 people present. There were also the essential attractions, i. e., the merry-go-round, the sports, the refreshment stands, and, in a field near by, the base-ball game. But the best feature of the occasion consisted of the men, women, and children each of whom added to the attractiveness of the occasion and contributed to the recreation and rejuvenation of all others.

Haddam is in the midst of a prosperous Kansas farming community. Corn, wheat, and alfalfa are the leading crops, and the consensus of opinion gave to alfalfa the premier place as a profit-producing crop. Well-fed horses hitched to neat and comfortable conveyances brought the people from their homes to the grove.

In passing through the country, the visitor sees well improved farms, with sleek cattle and contented hogs in the fields. Washington County is evidently a good place for the farmer.

The chairman of the committee of arrangements for this outing was Dr. H. M. Ochiltree, who appears to know everybody in his portion of Kansas. Surely the arrangements were well made and the hospitality of the community was ably dispensed. The speakers, together with some other friends, had the pleasure of breaking bread with the doctor and his delightful family. It would be impossible to bring away other than the pleasantest recollections of the occasion.

LAW QUESTIONS.

A correspondent who asks information on a question of law inquires whether the editor answers such inquiries by letter.

As a general rule the editor gives attention to such questions only as are of general interest and may therefore properly be answered in the columns of THE KANSAS FARMER. In no case is there any charge for the service. In a few exceptional cases answer has been made by letter, but the editor has not time for extensive investigation, or for writing, on matters that interest only a few.

Let it be well understood that these answers in THE KANSAS FARMER are not written by a lawyer, but by the editor, who was never admitted to the bar. The intention is to give common sense and impartial answers in such terms that they shall be easily understood. It is desired to show how to avoid law suits and to promote equity, and good feeling among neighbors while pointing out their rights under the law.

It is a satisfaction to know that THE KANSAS FARMER's positions on the questions presented have been almost never reversed in court.

RIGHT TO ARREST OFFENDER AGAINST SCHOOL PROPERTY.

EDITOR KANSAS FARMER:—Please state through your columns, whether school officers have any police powers. Could any one of the board detain a trespasser or other violator of the law pertaining to the school grounds and hold such person until the arrival of regular officers of the county?

W. B. EASTMAN.

Reno County.

School officers have no special police powers.

But the general rule of law is that a person other than an officer authorized to make arrests, not only may, but is in duty bound to arrest any person in the act of committing a felony or

treason in his presence. For other crimes less serious than a felony it is also the duty of a citizen to arrest the person who commits them in his presence. For misdemeanors the law is not so well settled. A court would be likely to consider the circumstances attending the offense in the case of the less serious offense.

If in the case mentioned in the inquiry the person offending was willfully damaging the school property in the presence of the member of the school board and refused to desist on request of the member, every conception of propriety, it would seem, should justify the school officer in arresting and detaining the offender in the manner mentioned by the correspondent, and it would be unreasonable to expect that any action would lie against such school officer for doing the right thing, at the right time, in the right way.

PROPERTY OF MARRIED WOMAN NOT LIABLE FOR HUSBAND'S DEBTS.

EDITOR KANSAS FARMER:—A married B and moved to Michigan where A engaged in the mercantile business. Owing to poor health and other reverses A failed, leaving some obligations unpaid. B previous to her marriage owned an improved farm in Eastern Kansas to which she has returned with her invalid husband. Now this farm and all there is on it, is the outgrowth of B's earnings before she was married to A. Now can this farm or the property on it be attached to satisfy A's debts contracted in Michigan, either before or after his marriage to B?

A SUBSCRIBER.

The property rights of married women in Kansas are defined in Sec. 4211, Revised Sta. of Kansas. This section reads:

"The property real and personal, which any woman in this State may own at the time of her marriage, and the rents, issues, profits or proceeds thereof, and any real, personal or mixed property which shall come to her by descent, devise or bequest, or the gift of any person except her husband, shall remain her sole and separate property, notwithstanding her marriage, and not be subject to the disposal of her husband or liable for his debts."

THE ALFALFA CLUB.

The Shawnee Alfalfa Club will meet in regular monthly session at the commercial club hall, 625 Kansas Avenue, Topeka, on Saturday, August 31. An interesting meeting is assured and everybody is invited to come, shake hands.

The Journal of the Twenty-sixth Annual Encampment of the Grand Army of the Republic, Department of Kansas, held at Topeka, May 7, 8, and 9, 1907, is a book of 244 pages. It is intensely interesting to all patriotic citizens, but the intensity of the interest of those whose names are on the country's roll of honor, the roster of the Grand Army, is surely many times greater than that of the layman. The book shows well the energetic administration of Captain P. H. Coney as commander of the Department of Kansas.

The September meeting of the Shawnee County Horticultural Society will be held at Mission Center, on Thursday, September 5. Following is the program: Cider Vinegar, Walter Wellhouse; Picking and Packing Apples, F. L. Peacock; Peaches from Planting to Marketing, Geo. Whiteker; Out-door Topics, Mrs. John Courter. This program was made out in mid-winter. It would have been different if made in May. But there will be a good time at Mission Center.

We publish this week an official summary of the official rain-record of Kansas. It is better that we have accurate information of the past that we may estimate intelligently the probabilities of the future and cast our plans so as to make the most of our opportunities.

Are you sowing your alfalfa? Now is the time in Eastern Kansas.

Miscellany

Kansas Crops of Wheat and Corn.

The State Board of Agriculture issues a statement, based upon assessors' returns and reports from the growers and thrashers, giving the acreage and yield of winter wheat, and acreage and present condition of the growing corn. The statement is the first the Board of Agriculture has given out as to this year's wheat yield.

Wheat.—Assessors' returns for 1907 show that the area sown to winter wheat for this year's crop amounted to considerably more than had hitherto been reported, aggregating for the State 7,051,872 acres. This is about 552,000 acres more than the estimate made by the Board's correspondents in the fall of 1906; is 813,000 acres more than was devoted to winter wheat last year, and greater by 615,000 acres than any previous season's sowings for winter and spring wheat combined. Not only does the area as officially reported exceed all expectations, but it seems also that much of the 21 per cent earlier reported by growers as a failure so surprisingly responded to the greatly improved conditions which followed the Board's June 4 report as to justify its harvesting, considerable of this area returning yields per acre approximating the average for the State. This improvement was made possible by the disappearance from infested localities of the pestiferous green lice, ample moisture, abundant sunshine, and favorable temperatures. Excellent conditions for ripening and in the main for harvesting resulted in grain that will grade well, nine-tenths of the whole being reported as of "good, merchantable quality." Basing the average yield per acre on the entire area sown, Kansas is credited with a total yield of winter wheat in 1907 of 70,057,362 bushels, or an average per acre of 9.93 bushels, as stated at this time by the men who have grown it, and who are now thrashing and marketing it. This year's crop is more than the average annual output for the decade ending with 1906, and while these figures are accurate for all practical purposes they will be subject to some revision in detail later in the year after thrashing is completed.

Returns of assessors also show 183,823 acres of spring wheat sown this year, or 13,200 acres less than in 1906. No figures are given as yet of the spring wheat production, but its yield will add somewhat to the State's total wheat output. Present reports indicate that this fall's sowing will be below that of a year ago. Most of the leading growers report smaller areas probable, while the extreme southwestern and most of the northeastern corner counties will likely materially enlarge their areas. This year 28 counties each raised more than one million bushels. Only three raised two million bushels or more, while last year there were five with more than three million bushels, and there were two with over four million bushels to their credit. Reno County leads this year with a yield of 2,903,927 bushels, followed by Barton with 2,748,320 bushels and Pratt with 2,661,600 bushels. The larger yields per acre are in the northeastern part of the State, as in 1906. Brown and Nemaha, adjoining eastern counties in the northern tier, report the largest yields per acre, averaging 26 bushels; Pottawatomie and Wabaunsee rank next with 23 bushels, followed by Washington with 22, and Marshall and Atchison with 21. The lowest yield is 3 bushels per acre in Sherman, Lane, and Hodgeman Counties.

Corn.—Despite the unfavorable conditions prevailing at the usual planting time the area devoted to corn is over 3 per cent larger than one year ago, aggregating 6,796,315 acres, according to assessors. Reports suggest that for corn this has been a most peculiar season in many localities. Much of that put in early progressed very slowly or had to be replanted, owing to the long-continued and unseasonably cool weather, and most of the crop is

not so far advanced as usual for the time of year. Prospects are widely variant in adjoining counties, and even in adjacent fields because of the different plantings. The present average condition for the whole is 74 per cent, 100 representing a good average stand and satisfactory growth. In the principal corn territory the best outlook is in a block of sixteen northeastern counties north of or adjacent to the Kansas river, and here the higher conditions are reported, each, with one exception, averaging 90 or better. The western two-thirds of the southern half of the State also present a quite promising prospect, and the least favorable seems to be in the southeastern and northwestern counties. The situation in the quartet of famous corn-yielders, Norton, Phillips, Smith, and Jewell, adjoining counties bordering Nebraska, is discouraging, the condition on their combined areas (lacking little of aggregating one-tenth of the State's corn area) averaging but 33.5. Marshall reports more ground planted to corn than any other county, or 191,981 acres, with a condition of 91, while the next largest in area is Jewell, with 188,444 acres and an average condition of 50; the average for Phillips is 40, Smith 20, and Norton 19, the lowest. Doniphan reports the highest condition 107, Jefferson next with 101, followed by Kearny with 98, Nemaha 98, and Shawnee, Geary, Washington, and Barber with 96. Forty-two counties, whose combined corn acreage constitutes about a third of the State's corn field, have conditions of 90 or above, and a general average of 93.8 per cent.

The following table shows, by counties, their winter wheat area as returned by assessors for 1907, their yields as estimated by the Board's correspondents, and the acreage and condition of corn in each:

Counties.	Winter Wheat		Corn	
	Acres	Bushels	Acres	Condition
Allen.	28,008	252,072	72,212	59
Anderson.	18,530	240,890	71,317	80
Atchison.	33,185	696,885	53,586	93
Barber.	63,686	892,658	53,965	96
Barton.	274,832	2,748,320	35,161	94
Bourbon.	14,936	179,832	73,657	56
Brown.	36,880	958,880	115,848	92
Butler.	19,570	156,560	148,902	63
Chase.	5,969	71,628	44,444	54
Chautauqua.	5,385	37,695	59,047	50
Cherokee.	39,899	319,192	74,238	60
Cheyenne.	24,501	171,507	25,325	90
Clark.	29,341	322,751	7,249	90
Clay.	76,824	1,152,360	98,361	73
Cloud.	84,896	1,018,752	99,140	78
Coffey.	34,642	554,272	89,296	77
Comanche.	27,488	357,344	16,207	88
Cowley.	76,124	885,116	128,243	63
Crawford.	32,587	293,283	90,019	49
Decatur.	106,244	689,952	95,859	80
Dickinson.	104,126	1,674,408	92,211	88
Doniphan.	31,216	629,420	63,008	107
Douglas.	34,401	650,416	63,257	92
Edwards.	125,463	752,778	26,297	95
Elk.	8,020	80,200	69,096	52
Ellis.	185,264	1,667,376	25,893	92
Ellsworth.	133,153	1,597,836	37,021	80
Finney.	18,692	168,228	6,452	95
Ford.	142,732	1,141,856	17,495	93
Franklin.	15,991	223,874	81,380	71
Geary.	21,346	298,874	32,940	96
Gove.	94,043	470,215	30,874	90
Graham.	86,752	780,768	71,288	80
Grant.	537	5,370	1,522	90
Gray.	46,176	277,056	8,547	93
Greeley.	2,573	15,438	3,362	60
Greenwood.	7,013	77,143	122,004	70
Hamilton.	10,717	17,401	1,375	93
Harper.	164,941	1,814,351	68,004	93
Haskell.	85,780	1,115,140	72,247	72
Hodgeman.	12,535	100,280	1,818	95
Hoffman.	85,537	256,611	7,782	91
Jackman.	13,179	263,580	99,350	93
Jefferson.	25,207	504,140	96,025	101
Jewell.	48,686	486,860	188,444	50
Johnson.	38,398	537,572	52,330	90
Kearny.	4,420	30,940	4,185	98
Kraigman.	143,346	1,434,360	84,331	88
Kiowa.	94,143	841,430	24,627	94
Lafayette.	42,653	341,224	82,512	64
Lane.	88,230	264,690	9,279	60
Leavenworth.	44,473	667,095	53,692	90
Lincoln.	101,549	1,015,490	59,492	90
Linn.	14,059	168,708	81,716	68
Logan.	32,849	364,245	17,428	63
Lyon.	23,909	286,908	103,327	59
Marion.	86,915	1,129,895	111,162	80
Marshall.	50,323	1,056,783	191,981	91
McPherson.	175,616	1,931,776	86,545	91
Meade.	50,409	453,681	6,796	81
Miami.	30,151	462,265	86,816	75
Mitchell.	111,167	1,000,503	88,768	65
Montgomery.	39,495	315,960	68,350	49
Morris.	13,228	198,420	79,907	77
Morton.	679	6,748	584	80
Nemaha.	13,636	354,536	177,927	98
Neosho.	31,589	253,512	82,787	52
Ness.	126,251	505,094	17,238	79
Norton.	62,754	564,786	121,309	99
Osage.	24,728	420,376	102,426	62
Osborne.	104,899	1,284,228	97,268	91
Ottawa.	102,019	1,284,228	97,268	91
Pawnee.	230,817	1,615,719	20,282	90
Phillips.	87,167	958,837	146,181	40
Pottawatomie.	12,251	281,773	110,329	90
Pratt.	177,440	2,661,600	45,378	93
Rawlins.	96,068	672,476	42,000	76
Reno.	223,379	2,903,927	153,001	81
Republic.	42,050	714,580	152,033	85
Rice.	154,701	1,547,010	71,235	88
Riley.	17,226	292,842	76,486	86
Rooks.	124,742	1,372,162	77,587	56
Rush.	195,876	1,175,256	14,301	90
Russell.	155,846	1,558,460	35,529	79
Saline.	109,559	1,205,149	58,167	89
Scott.	41,410	165,040	12,000	90
Sedgwick.	159,087	1,590,870	142,227	80
Seward.	13,173	144,903	5,438	90
Shawnee.	14,632	292,640	77,401	96
Sheridan.	94,185	376,740	46,323	73
Sherman.	14,244	42,732	17,392	60
Smith.	75,712	529,984	165,972	20
Stafford.	210,299	1,892,691	54,669	91
Stanton.	743	7,430	990	85
Stevens.	3,477	48,678	2,259	80
Sumner.	272,707	1,636,242	118,102	62
Thomas.	116,087	580,435	31,160	71

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Precipitation in Western Kansas.

P. C. DAY, ASSISTANT CHIEF, DIVISION OF METEOROLOGICAL RECORDS, U. S. DEPARTMENT OF AGRICULTURE.

The increasing demand upon the Weather Bureau by the public for information regarding the monthly, seasonal, and annual distribution of rainfall over western Kansas, makes it desirable to have tabulated in convenient form for distribution, and in considerable detail, the various phases of precipitation and other elements that determine the climate of that part of the State.

The following tables show in detail the monthly and annual amounts of precipitation at three representative points in the western part of the State, covering the period from the earliest observation at the respective points to the end of 1906. At Dodge, in the southwestern part of the State, the record extends from 1867 to 1906, inclusive forty years; at Hays, in the central part of the western section, the record extends from 1868 to 1906, inclusive, thirty-nine years, and at Wallace, in the central part of the extreme western section of the State, the record extends from 1870 to 1906, inclusive, thirty-seven years. The variations during the above period of forty years may be assumed to mark the probable limits with which precipitation is liable to fluctuate in that part of the State.

In order that the final averages for the three stations shall be for uniform periods of time, the years prior to 1870 have been omitted in making the monthly averages, and these latter are for the thirty-seven years, 1870 to 1906, inclusive. Monthly and annual means for the 20 year period, 1887 to 1906, inclusive, have also been determined from a number of additional points in the western part of the State, and these, together with the means for a similar period from the three stations above mentioned and others in the eastern part of the State, are shown for comparison in the accompanying tables and chart.

A fortunate distribution of the locations of the early observers makes it possible to secure a chain of six stations well distributed across the central part of the State, from the extreme eastern to the extreme western part, Lawrence, Manhattan, Salina, Hays, Gove, and Wallace, each, except Gove, having practically complete records for the 37-year period, 1870 to 1906, inclusive.

The annual variation due to the geographical location of the stations is shown on the accompanying chart. The figures for the six stations noted

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above show the remarkably uniform rate at which the precipitation diminishes from the comparatively humid eastern to the semi-arid western portions of the State. From Lawrence, in the extreme eastern portion, the annual precipitation, 36.29 inches, diminishes to 31.43 at Manhattan, to 28.84 at Salina, to 23.48 at Hays, to 20.84

at Gove, and to 16.88 inches at Wallace in the extreme western part of the State. The total decrease in the annual precipitation from the eastern to the western part of the State is slightly more than 20 inches, or about 5 inches for each 100 miles westward. This is also graphically shown on the lower half of the accompanying chart by the east-west solid and broken lines running through points on the scale indicating inches of rainfall and showing for the six stations the rate of

decrease westward in the annual and seasonal amounts of precipitation.

Considering the amounts in percentage, the following figures show the percentage of fall westward as compared with the annual fall at Lawrence: Manhattan 87 per cent, Salina 79 per cent, Hays 65 per cent, Gove 57 per cent, and Wallace 47 per cent.

Considering the amounts received during the growing season, April to September, inclusive, as compared with the amounts for the same months

at Lawrence, the rate of decrease westward is considerably less, starting with Lawrence 25.18 inches during the crop-growing season, Manhattan has 23.54 inches, or 93 per cent, Salina 21.90, or 87 per cent, Hays 17.89, or 71 per cent, Gove 16.28, or 65 per cent,

and Wallace 13.83 inches, or 55 per cent of that received at Lawrence.

The distribution north and south over the State is very nearly uniform, except there appears a slight excess in the northwestern part of the State.

Additional tables are given showing

Monthly and annual precipitation at Dodge, Kans.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
1867.....	0.30	0.46	T.	0.57	3.30	2.15	1.05	0.20	0.65	T.	0.15	0.20	9.03
1868.....	0.15	0.05	1.14	0.72	0.82	0.45	T.	2.25	0.60	0.30	0.80	0.80	7.58
1869.....	0.40	1.25	0.26	0.00	0.60	2.30	T.	3.00	0.60	0.55	0.30	0.70	8.86
1870.....	0.30	0.00	1.10	1.70	0.43	2.92	0.63	5.00	2.95	4.10	T.	1.00	20.13
1871.....	1.00	0.83	0.25	5.00	2.75	1.00	1.12	1.56	2.36	0.84	2.10	0.10	16.91
1872.....	0.10	0.44	0.06	2.28	5.86	0.72	5.38	0.50	0.82	0.07	T.	0.26	15.99
1873.....	0.25	0.90	T.	1.02	5.72	2.46	2.71	1.40	2.35	0.46	0.00	0.41	17.68
1874.....	1.02	1.00	T.	2.58	4.06	0.50	T.	0.85	0.82	0.65	1.38	0.74	22.60
1875.....	0.12	0.10	0.04	0.72	2.26	0.78	3.28	2.06	1.32	0.06	T.	0.09	10.78
1876.....	T.	0.05	3.59	0.16	1.15	2.53	2.26	1.03	2.13	1.00	1.35	0.15	15.40
1877.....	0.18	0.66	0.25	3.88	4.96	3.92	1.79	4.09	0.50	3.34	0.56	4.36	27.89
1878.....	0.21	1.18	1.01	1.06	4.63	2.19	1.61	4.48	0.76	0.09	0.60	0.19	17.96
1879.....	0.87	0.08	0.17	0.40	0.90	4.40	3.90	3.75	0.80	T.	0.04	0.12	15.43
1880.....	T.	T.	0.04	0.11	3.01	1.59	4.00	5.17	0.32	1.42	2.43	0.03	18.12
1881.....	0.15	1.63	0.50	0.72	12.82	1.77	5.06	2.86	3.13	2.19	0.95	0.61	38.55
1882.....	0.52	0.22	0.24	0.68	3.87	1.51	3.04	1.07	0.15	1.62	0.11	0.11	13.14
1883.....	0.44	1.42	0.42	0.40	4.31	2.61	5.66	1.66	1.32	3.32	0.12	1.07	28.60
1884.....	0.08	0.28	1.91	1.07	4.47	7.67	6.40	4.82	0.23	1.50	0.83	1.10	30.36
1885.....	0.52	0.47	0.75	1.39	4.07	2.02	6.03	1.80	3.48	1.06	0.36	1.76	23.71
1886.....	1.02	0.46	1.50	1.90	0.40	5.47	2.07	2.46	2.33	0.45	0.24	0.25	19.35
1887.....	0.07	0.53	0.17	2.46	8.69	4.00	1.00	2.28	0.14	0.48	0.35	0.54	15.71
1888.....	0.23	0.73	0.93	4.08	2.86	5.16	4.07	3.00	0.78	0.81	0.06	0.23	22.94
1889.....	1.69	0.34	1.38	2.12	1.54	3.43	2.02	2.14	0.86	2.88	0.77	0.00	19.17
1890.....	0.42	0.89	0.05	2.90	1.19	1.00	0.22	3.45	0.57	0.89	0.50	0.14	11.72
1891.....	0.98	0.27	3.32	2.76	3.36	6.27	5.16	1.36	4.56	3.33	0.12	0.85	32.34
1892.....	0.25	1.01	2.62	0.40	3.23	3.34	0.66	4.69	1.04	0.73	0.31	1.38	19.66
1893.....	0.02	0.34	T.	0.04	1.31	0.76	3.32	1.82	1.74	0.25	0.42	0.10	10.12
1894.....	0.04	1.03	0.40	1.88	0.95	2.80	2.05	0.15	2.03	0.62	0.03	0.62	12.60
1895.....	0.58	2.26	1.31	0.91	0.97	5.32	4.84	2.42	0.06	1.09	0.34	0.21	20.31
1896.....	0.49	T.	0.25	5.60	1.13	1.98	5.41	0.73	1.06	2.45	0.34	0.53	19.87
1897.....	1.44	2.38	0.26	8.21	1.49	2.31	3.91	3.06	0.60	2.66	0.06	0.20	21.58
1898.....	1.74	0.70	0.24	0.97	10.31	4.57	3.14	2.26	3.16	1.87	0.96	1.54	31.46
1899.....	0.08	0.20	0.47	0.65	1.50	11.17	6.56	0.50	1.71	3.94	1.15	0.62	28.45
1900.....	0.17	0.99	0.58	4.08	2.20	2.62	3.07	1.32	4.63	0.92	0.09	0.09	20.76
1901.....	0.13	0.48	0.80	8.45	1.75	2.63	1.81	0.71	2.54	1.64	0.04	0.08	16.06
1902.....	0.34	0.16	1.58	0.76	3.35	2.49	3.73	1.62	0.60	2.26	0.53	0.28	17.70
1903.....	0.08	2.87	0.67	1.97	2.88	1.49	0.59	2.21	0.15	1.28	1.03	0.05	15.27
1904.....	0.03	0.02	0.04	1.54	4.42	2.02	1.71	3.99	1.82	0.37	0.04	1.19	17.19
1905.....	0.84	0.61	1.23	3.84	5.88	1.05	5.75	1.81	1.70	1.05	2.20	T.	25.96
1906.....	0.40	0.87	1.13	1.79	1.63	4.78	4.78	4.19	9.26	1.96	1.50	0.30	32.54
Average, 37 years, 1870 to 1906.....	0.48	0.70	0.79	1.93	3.29	3.10	3.13	2.48	1.99	1.45	0.59	0.58	20.51
Average, 20 years, 1887 to 1906.....	0.50	0.82	0.87	2.26	2.78	3.46	3.19	2.19	1.95	1.57	0.54	0.45	20.57

Figures in italics interpolated from reports at surrounding stations.

Monthly and annual precipitation at Wallace, Kans.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
1870.....	0.17	T.	T.	1.87	0.54	1.80	4.35	1.14	3.18	2.87	0.00	0.13	16.03
1871.....	0.30	0.62	0.80	3.79	2.76	3.07	2.05	1.67	2.40	0.02	2.15	1.26	20.89
1872.....	1.25	0.12	0.60	2.55	4.19	1.00	5.45	1.31	0.25	0.05	T.	0.10	16.87
1873.....	0.35	0.35	T.	0.30	2.92	0.10	1.58	1.26	0.21	0.30	0.01	0.07	7.45
1874.....	0.09	0.68	0.20	0.50	3.31	0.19	1.00	0.13	4.32	1.92	0.66	0.68	13.58
1875.....	0.20	0.51	0.80	1.53	2.72	0.64	5.14	1.79	2.61	0.24	0.20	0.07	16.45
1876.....	0.25	0.15	0.09	1.00	9.61	0.26	1.86	1.69	0.15	0.22	0.94	0.36	16.98
1877.....	0.41	0.61	0.53	2.03	2.67	1.86	0.07	1.62	1.30	1.09	0.06	2.15	14.22
1878.....	0.08	0.13	1.48	0.44	1.65	6.42	3.26	1.00	2.53	2.28	1.25	0.76	19.28
1879.....	0.45	0.36	0.00	0.75	2.44	1.08	7.01	2.24	0.97	0.00	1.26	0.02	16.58
1880.....	0.01	T.	0.02	0.65	5.59	8.94	12.59	2.75	1.37	1.96	0.10	0.02	84.00
1881.....	0.19	0.45	0.42	0.45	0.62	0.69	1.19	1.50	2.50	0.35	0.45	0.01	8.82
1882.....	0.20	1.00	0.00	1.11	1.90	3.00	2.00	1.25	0.25	1.20	0.20	0.30	12.47
1883.....	0.80	1.00	0.45	2.40	3.36	5.00	1.80	2.75	1.05	3.30	0.80	1.25	25.35
1884.....	0.25	0.60	1.70	2.10	3.85	3.25	4.90	2.95	0.40	1.47	0.35	1.04	22.76
1885.....	0.06	0.70	0.12	2.42	3.14	5.58	2.30	2.38	1.32	1.02	0.80	1.17	21.01
1886.....	0.06	0.18	0.85	2.45	0.85	3.20	1.65	2.15	0.65	0.45	0.40	0.17	23.06
1887.....	0.20	0.60	0.15	3.86	3.35	2.30	2.51	4.42	1.46	0.64	0.07	0.21	19.57
1888.....	0.03	0.99	1.01	3.39	2.07	1.48	4.58	1.84	0.00	0.89	0.41	0.04	16.73
1889.....	0.51	0.23	1.72	1.29	1.27	3.40	2.17	2.50	0.05	1.26	0.15	0.00	14.55
1890.....	0.06	0.17	0.00	6.25	0.36	1.49	0.82	0.83	0.56	0.66	0.50	0.00	11.90
1891.....	0.24	0.25	1.06	1.97	2.00	2.68	4.27	0.48	1.80	0.06	0.01	1.60	16.32
1892.....	0.13	0.41	1.32	1.07	4.71	2.10	2.68	4.74	0.00	0.39	0.04	0.06	17.65
1893.....	T.	0.03	0.20	0.07	1.33	1.70	4.26	1.61	0.73	0.00	0.20	0.10	10.23
1894.....	0.03	1.40	0.28	0.69	1.80	1.96	0.79	1.71	0.25	0.23	0.05	0.35	9.54
1895.....	0.56	0.62	0.18	0.86	3.58	3.60	6.48	2.00	1.08	0.24	0.42	0.90	18.52
1896.....	0.16	T.	0.32	0.37	0.39	1.10	4.48	0.00	1.06	0.93	0.07	0.38	14.26
1897.....	0.01	0.15	0.81	2.09	0.49	1.58	2.72	4.83	1.79	4.43	0.85	0.36	19.61
1898.....	0.30	0.00	0.19	0.75	5.17	1.43	3.47	1.20	1.83	0.62	T.	0.70	15.16
1899.....	0.00	0.30	0.32	0.50	1.43	2.08	6.03	0.48	1.10	T.	1.32	0.40	14.15
1900.....	0.03	0.77	0.54	3.41	0.36	3.92	1.29	0.67	0.78	0.22	0.22	0.20	12.48
1901.....	0.56	0.27	0.60	1.46	1.32	2.01	1.88	4.75	1.69	1.67	T.	0.30	16.51
1902.....	0.32	0.58	0.49	0.63	4.80	3.19	3.00	4.07	1.80	1.55	0.28	0.50	21.15
1903.....	0.15	1.90	0.25	1.91	2.77	2.84	5.36	0.73	0.48	0.28	0.78	0.25	17.23
1904.....	T.	T.	0.08	1.75	1.28	6.62	2.60	3.65	2.29	0.91	T.	0.59	19.81
1905.....	0.27	0.68	0.56	4.31	8.11	2.40	3.22	0.32	5.11	0.75	1.35	0.05	27.01
1906.....	0.18	0.19	1.69	4.27	0.99	1.45	3.85	1.95	1.35	1.59	0.91	0.17	18.59
Average, 37 years, 1870 to 1906.....	0.25	0.45	0.56	1.90	2.69	2.57	3.36	1.95	1.36	0.92	0.44	0.45	16.88
Average, 20 years, 1887 to 1906.....	0.20	0.47	0.59	2.20	2.38	2.44	3.32	2.14	1.24	0.87	0.35	0.35	16.55

Figures in italics interpolated from reports at surrounding stations.

Monthly and annual precipitation at Oberlin, Kans.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	^f September.	October.	November.	December.	Annual.
1887.....	0.20	0.85	T.	5.29	1.16	2.27	2.92	5.05	4.65	0.50	0.25	0.12	21.26
1888.....	0.12	0.99	1.82	2.86	5.99	1.00	1.85	2.59	0.71	1.01	0.50	0.00	18.94
1889.....	0.78	0.23	1.24	1.77	3.94	3.22	5.56	1.43	0.30	0.47	0.66	0.00	19.60
1890.....	0.40	0.16	0.00	8.70	0.99	3.06	1.92	1.65	1.05	0.78	1.15	0.00	14.48
1891.....	0.62	0.05	7.28	7.58	6.70	6.56	5.34	2.46	1.40	1.03	0.10	2.15	41.27
1892.....	0.50	2.37	1.92	1.75	6.37	2.28	3.92	2.77	0.06	0.52	0.72	1.10	24.23
1893.....	0.20	0.74	0.30	0.70	2.97	2.94	9.28	2.40	0.95	0.70	0.10	0.50	21.78
1894.....	0.98	1.29	0.68	2.32	0.51	4.37	1.12	0.71	0.64	0.25	0.00	1.10	13.97
1895.....	0.85	1.65	0.25	2.63	3.79	4.87	6.08	2.45	1.35	0.76	1.65	0.50	26.38
1896.....	0.40	0.20	0.90	6.01	4.47	5.86	2.82	2.88	1.50	1.75	0.50	1.10	26.99
1897.....	0.40	1.10	3.30	6.70	0.28	5.00	2.65	4.75	2.94	5.07	0.50	1.80	84.49
1898.....	0.00	0.00	0.40	2.18	5.03	3.43	5.30	1.35	5.61	1.70	1.00	0.40	26.40
1899.....	0.90	0.40	0.85	1.15	3.15	2.37	3.61	2.49	0.26	0.00	2.45	0.25	17.88
1900.....	T.	1.60	1.00	4.50	1.10	1.73	2.58	1.70	1.93	0.00	0.10	0.30	16.54
1901.....	0.20	1.00	3.05	3.95	1.00	8.45	0.37	5.31	5.37	0.50	0.25	0.10	25.15
1902.....	0.85	0.65	1.60	1.35	4.89	3.43	4.53	2.23	1.60	2.36	0.00	1.35	25.76
1903.....	0.20	2.80	0.70	1.30	6.45	1.46	3.75	5.55	0.70	0.47	0.75	0.00	21.13
1904.....	0.00	0.00	0.25	4.10	4.49	5.54	2.86	2.85	2.05	2.41	0.20	0.65	27.90
1905.....	0.95	0.60	1.28	3.13	2.83	2.96	6.67	2.46	2.65	0.80	0.65	0.00	24.98
1906.....	0.60	0.60	2.35	3.48	0.70	2.14	1.71	2.20	1.75	3.40	0.55	0.60	20.78
Average, 20 years, 1887 to 1906.....	0.43	0.86	1.46	3.22	3.34	3.37	3.74	2.80	1.88	1.22	0.60	0.58	23.50

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High Schools for Agriculture.

GUY E. MITCHELL, WASHINGTON, D. C.

Our general country educational course embraces graded schools, and following these, if the boy or girl can be spared from the farm and sent to the nearest town or city, a high school term of from two to four years of mixed, classical, scientific, and business studies. In this the pupil competes directly with his city cousin and the natural trend of this more advanced education inclines him toward city life and city vocations where he believes he can use this education to a better advantage than he can on the farm. Yet he may originally have designed to return to the farm and farm it better than his father did. Why then, should not the high school be provided with an agricultural course? It is a mistake to assume that the farm boy and girl scholars would not in majority of cases select such a course. There are a few agricultural high schools in the country—the agricultural college over which Prof. Hays presided, before he was appointed Assistant Secretary of Agriculture was one in fact, since he allowed short term courses in practical agriculture—and while these may not be on an average as efficient, comparatively as the more usual academic course, the attendance upon them shows their popularity, whereas the common sense in training the country youth in the studies which they can apply when they return to the farm must appeal to every one.

An instance of this is seen in the mixed high school at Waterford Pa., which has a course replete in farm studies where practical things are taught and where about one half of the students, including some of the town pupils elect to take this course. The feature of instruction which chiefly distinguishes this high school course from the ordinary school lies in the prominence given to out door practical work. In plant studies the pupils examine not elaborately prepared drawings of flowers and plants, but the plants and vegetables themselves with reference to their life history and economic uses. While the school building is located in the town, every good farm within a radius of 3 or 4 miles, and nearly every barn and poultry yard in the village and the butcher shops and farm implement stores, furnish, free of cost to the school, expensive illustrative material and extend vastly the teaching force of the high school. The farmers and owners of good live stock either bring their animals to the door of the school to be studied by the class in agriculture or allow the class to go to the barn or the field for the purpose. It is said to be a rare thing

for the good horse or cow to come to the village and get away without being examined by the class of animal husbandry. Or, the class goes to the livery barn, the driver brings his stallion out into the street, puts him through his paces and helps the teacher in calling attention to his good points and the contrast between the draft type of horse and the roadster type. It is an instructive lesson, not only for the class, but for the score or more of farmers and townspeople gathered about. In the same way the

and markets. This is training for efficiency.

In its latest circular the McMillan Fur and Wool Company, Minneapolis, Minn., says of wool:

"Receipts have been large and a good deal still in the country, but market favors buyers because for financial reasons manufacturers consuming lots of wool but will not buy faster than they require. Prices best maintained on fine and fine medium territory wool, strong

Average monthly and annual precipitation in western Kansas, for the 20-year period, 1887 to 1906, inclusive.

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Colby.....	0.38	0.57	0.86	2.74	2.42	3.58	2.84	2.48	1.50	1.05	0.86	0.87	19.85
Cunningham.....	0.57	0.68	1.22	2.51	3.51	3.64	3.66	3.72	2.62	2.17	0.78	0.69	24.76
Dodge.....	0.50	0.82	0.87	2.16	2.73	3.46	3.19	3.19	1.85	1.57	0.54	0.45	20.57
Downs.....	0.66	0.98	1.22	2.48	3.70	4.01	3.13	2.67	2.47	1.88	0.81	0.48	24.43
Ellinwood.....	0.64	1.11	0.94	1.90	3.23	4.44	3.57	3.86	2.52	1.62	0.66	0.58	24.52
Englewood.....	0.46	0.68	0.96	2.14	3.32	3.15	3.78	3.86	2.12	1.76	0.68	0.58	21.97
Garden City.....	0.37	0.84	0.85	2.32	2.42	3.86	3.10	1.83	1.85	1.02	0.82	0.58	18.80
Gove.....	0.48	0.70	0.74	2.45	2.88	3.19	3.54	1.98	2.24	1.22	0.85	0.47	20.84
Hays.....	0.48	0.82	0.92	2.52	3.55	3.39	2.98	3.12	2.47	1.68	0.64	0.61	23.16
Lawrence.....	1.10	1.74	2.81	3.06	4.89	4.55	5.32	4.88	4.14	2.55	1.67	1.28	37.98
Manhattan.....	0.74	1.23	1.67	2.52	4.84	4.58	4.53	3.92	3.12	2.04	1.08	0.68	30.95
Oberlin.....	0.48	0.86	1.48	3.22	3.84	3.87	3.74	2.80	1.88	1.22	0.60	0.58	23.50
Phillipsburg.....	0.52	0.68	0.98	2.54	2.86	3.77	3.51	2.70	2.41	1.49	0.59	0.45	22.50
Salina.....	0.67	0.84	1.26	2.48	4.72	5.01	3.47	3.03	2.38	1.95	0.81	0.66	27.28
Tribune.....	0.28	0.47	0.86	2.51	2.22	2.60	2.80	2.16	1.07	0.87	0.36	0.34	16.84
Viroqua.....	0.45	0.70	0.67	1.80	2.18	2.44	3.47	1.77	2.15	1.14	0.56	0.66	17.99
Wallace.....	0.20	0.47	0.59	2.20	2.38	2.44	3.32	2.14	1.24	0.87	0.35	0.35	16.55

* Record for 16 years only.

Highest temperatures recorded at stations.

Stations.	Length of record.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Colby.....	11	72	77	89	95	100	106	107	108	107	99	81	74	108
Dodge.....	29	74	78	90	93	101	106	108	105	101	84	81	79	108
Englewood.....	12	77	80	95	99	106	113	110	109	107	99	89	84	114
Garden City.....	11	72	75	93	96	101	107	108	112	102	92	83	77	112
Manhattan.....	18	74	72	95	98	101	109	115	110	100	96	96	75	115
Viroqua.....	12	76	78	91	93	105	111	109	107	102	92	85	75	111

Lowest temperatures recorded at stations.

Stations.	Length of record.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Annual.
Colby.....	11	-26	-31	-11	8	17	35	43	41	25	12	-11	-21	-31
Dodge.....	29	-20	-26	-9	13	24	40	50	46	30	10	-18	-15	-26
Englewood.....	12	-14	-24	-8	16	28	35	48	44	28	20	0	-9	-34
Garden City.....	11	-15	-32	-10	14	28	37	45	47	22	19	-2	-17	-32
Manhattan.....	13	-26	-32	-9	17	29	37	40	40	25	11	-9	-16	-32
Viroqua.....	12	-12	-13	-15	15	30	35	45	48	28	22	-1	-12	-15

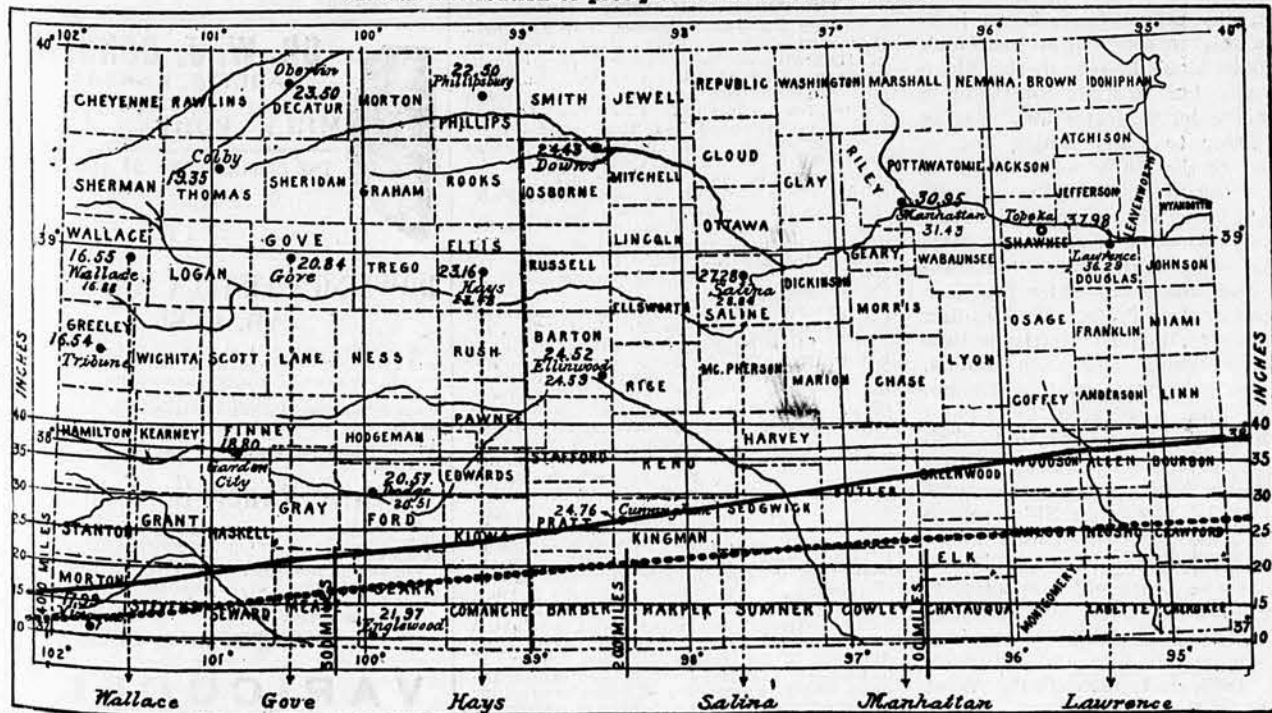
local butcher is an instructor in the high school. The class studying the beef type of cattle or the mutton sheep is taken to the shop and learns the different cuts, the relative values, etc. Thus this little village high school, which pays only \$2,230 a year for salaries and about \$400 for other expenses, has a faculty made up of practical specialists and an equipment in illustrative material such as few technical high schools could afford, while the scholars are being trained in the elements of failure and success, not only on all the farms of the neighborhood, but in the village stores

and sound in staple, suitable for combining. The coarser grades, also of grades like burry and seedy, are very dull, and selling materially lower. Have already reduced quotations, so are not reducing them further."

There are still several localities in Kansas and Oklahoma where THE KANSAS FARMER does not have regular resident representatives. The pay is good and sure. The work is pleasant and profitable. Write us about it.

A wise skepticism is the first attribute of a good critic.—Lowell.

Annual distribution of precipitation in western Kansas.



Grandfather's Cure for Constipation

GREAT medicine,—the Sawbuck. Two hours a day sawing wood will keep anyone's Bowels regular.

No need of pills, Cathartics, Castor Oil, nor "Physic," if you'll only work the Sawbuck regularly.

Exercise is Nature's Cure for Constipation and,—a Ten-Mile walk will do, if you haven't got a wood-pile.

But, if you will take your Exercise in an Easy Chair, there's only one way to do that, because,—there's only one kind of Artificial Exercise for the Bowels and its name is "CASCARETS."

Cascarets are the only means to exercise the Bowel Muscles without work.

They don't Purge, Gripe, nor "upset your Stomach," because they don't act like "Physics."

They don't flush out your Bowels and Intestines with a costly waste of Digestive Juice, as Salts, Castor Oil, Calomel, Jalap, or Aperient Waters always do.

No—Cascarets strengthen and stimulate the Bowel Muscles, that line the Food passages and that tighten up when food touches them, thus driving the food to its finish.

A Cascaret acts on your Bowel Muscles as if you had just sawed a cord of wood, or walked ten miles.

Cascarets move the Food Naturally, digesting it without waste of tomorrow's Gastric Juice.

The thin, flat, Ten-Cent Box is made to fit your Vest pocket, or "My Lady's" Purse. Druggists—10 Cents a Box.

Carry it constantly with you and take a Cascaret whenever you suspect you need one.

Be very careful to get the genuine made only by the Sterling Remedy Company, and never sold in bulk. Every tablet stamped "CCC." 738

If It's Neuralgia

and those sharp, shooting, agonizing pains drive you almost crazy, take Dr. Miles' Anti-Pain Pills, and get relief. They drive out the pain by their soothing effect upon the nerves. When taken as directed they are harmless, and leave no bad after-effects. That's the reason they are so popular with all who use them. Your druggist can tell you what others in your locality think of them.

"I do positively think that Dr. Miles' Anti-Pain Pills are the best medicine ever put upon the market. I find them so restful and soothing, and without any bad after-effects. I have suffered with neuralgia so that my system would just ache and quiver, and I cannot take opiates; but I can take these tablets, and they always relieve me. No one that suffers with neuralgia need fear to take them as I know they will not form a habit, for if there was any opiate in them I could not take them. Just one in the morning when I feel bad, and I can do my work all day."

MRS. W. H. BURKETT, Macon, Ga.
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.

IF YOU ARE INTERESTED IN ROGUE RIVER VALLEY SOUTHERN OREGON write for 64-page book, profusely illustrated, describing beautiful resources. No cost charge to you in twenty-eight years. Address, Box 23

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LIVE STOCK REPRESENTATIVES.

C. E. SHAFER, Kansas, Oklahoma and Indian Ter.
L. K. LEWIS, Kansas and Nebraska
GEO. E. COLLE, Missouri and Iowa

PURE-BRED STOCK SALES.

Shorthorns.

Oct. 10—J. F. Hastings, Edgerton, Kans.
Oct. 22—A. C. Shallenberger and Thos. Andrews, Alma, Neb.
November 4—Davies County Shorthorn Breeders Association sale at Gallatin, Mo.
Nov. 5—E. D. Ludwig, Sabetha, Kans.
November 6 and 7—Purdy Bros., Kansas City.
Nov. 6—Purdy Bros., Harris, Mo.; sale at Kansas City, Mo.
November 26—M. C. Vansell, Muscotah, Kans.
Feb. 19—J. F. Stodder and others, Burden, Kansas; sale at Wichita, Kans.

Herefords.

Feb. 20—A. Johnson and others, Clearwater, Kansas; sale at Wichita, Kans.
February 25, 26, 27—C. A. Stannard, Emporia, Kas.
February 26—C. A. Stannard and others, Kansas City, Mo.
September 28—James A. Carpenter, Carbondale, Kans.

Poland-Chinas.

September 19—J. T. Hamilton, So. Haven, Kans.
Sept. 21—W. J. Bowman, Smith Center, Kans.
October 3—M. Bradford & Son, Rosendale, Mo.
October 7—T. S. Wilson, Hume, Mo.
October 8—Homer Gruner, Spring Hill, Kans.
Oct. 10—Dr. B. P. Smith and H. J. Reikley, Miltonvale, Kans.
October 10—J. F. Hastings, Edgerton, Kans.
October 10—L. W. Timberlake, Centralia, Kans.
Oct. 11—J. F. Hastings, Edgerton, Kans.
October 12—D. U. Stoyton, Independence, Mo.
Oct. 12—Sam Rice, Independence, Mo.
Oct. 14—E. E. Axline, Oak Grove, Mo.
Oct. 15—John Blain, Pawnee City, Neb.
October 15—Bernham & Blackwell, Fayette, Mo.
Oct. 16—Thos. Collins, Lincoln, Kansas; sale at Salina, Kans.
Oct. 16—Geo. Hull, Burdard, Neb.
October 17—Charlie W. Dingman, Clay Center, Kans.
October 17—J. T. Ellerbeck, Beatrice, Neb.
October 18—C. A. Lewis, Beatrice, Neb.
October 19—Geo. Falk, Richmond, Mo.
October 21—F. D. Winn, Randolph, Mo.
October 22—F. A. Dawley, Waldo, Kans.
October 22—W. N. Meesick & Son, Piedmont, Kas.
October 22—Jas. M. Oskaloosa, Kans.
October 22—John M. Coats, Liberty, Mo.
October 23—A. P. Wright, Valley Center, Kans.
Oct. 24—Geo. W. Crooks, Clay Center, Kans.
October 24—G. M. Hebbard, Peck, Kans.
October 24—J. R. Triggs, Dawson, Neb.
October 25—W. J. Honneyman, Madison, Kans.
Oct. 25—H. G. Chapman, Dubois, Neb.
October 26—Martin Lents, Atherton, Mo.
October 26—A. B. Hoffman, Reese, Kans.
Oct. 26—L. J. Boner, Lenora, Kans.
October 28—Howard Reed, Frankfort, Kans.
October 28—Bollin & Aaron, Leavenworth, Kans.
October 29—Leon Calhoun, Potter, Kans.
October 30—H. B. Walters, Wayne, Kans.
October 30—The Big 3, Centerville, Kans.
October 31—L. C. Caldwell, Moran, Kans.
October 31, H. L. Faulkner, Jamesport, Mo.
November 1—Harry E. Lunt, Burden, Kans.
November 2—Thos. F. Walker, Alexandria, Neb.
November 2—Dietrich & Spaulding, Richmond, Kans.
Nov. 4—Charles Picher, Glasco, Kans.
November 4—C. S. Nevius, Chiles, Kans.
November 5—Lemon Ford, Minneapolis, Kans.
November 5—E. L. Calvin, Bolcourt, Kans.
November 6—W. R. Crowther, Golden City, Mo.
November 7—T. P. Sheehy, Hume, Mo.
November 8—D. E. Crutcher, Drexel, Mo.
November 8—U. S. Ison, Butler, Mo.
November 9—E. H. Harshaw, Butler, Mo.
November 11—Dams & Lorraine, Moline, Kans.
November 12—W. N. Meesick & Son, Piedmont, Kans.
November 12—I. E. Knox and Wm. Knox, Blackwell, Okla.
November 13—J. C. Larrimer, Wichita, Kans.
Nov. 13—W. H. Bullen, Belleville, Kans.
November 14—C. W. Dingman, Clay Center, Kas.
November 16—C. G. Mills, Pleasant Hill, Mo.
November 18—J. J. Ward, Belleville, Kans.
November 19—A. & P. Schmitz, Alma, Kans.
November 19—C. E. Tennant, New Hampton, Mo.
November 20—Bert Wise, Reserve, Kans.
November 20—R. E. Maupin, Pattonburg, Mo.
November 21—F. D. Fulkerson, Brimmon, Mo.
November 21—Everett Hayes, Hiawatha, Kans.
November 21—O. B. Smith & Son, Cuba, Kans.
November 22—C. E. Hedger, Garden City, Mo.
November 23—F. O. Reley, Oregon, Mo.
December 4, Geo. Null, Odessa, Mo.
January 10—Wm. Wingate, Benton, Mo.
January 23—H. B. Walters, Wayne, Kans.
January 23—Dr. B. P. Smith and H. J. Reikley, Miltonvale, Kans.
February 5—C. E. Tennant, New Hampton, Mo.
February 6—R. E. Maupin, Pattonburg, Mo.
February 7—F. D. Fulkerson, Brimmon, Mo.
February 8—Thos. F. Walker, Alexandria, Neb.
Feb. 13—Charles Picher, Glasco, Kans.
Feb. 25—L. D. Arnold, Abilene, Kans.
Feb. 26—W. H. Bullen, Belleville, Kans.
Mar. 12—W. C. Topliff, Esbon, Kans.

Duroc-Jerseys.

Oct. 1—Grant Chapin, Greene, Kans.
Oct. 1—W. H. Halth, Tecumseh, Neb.
Oct. 2—W. M. Putman, Tecumseh, Neb.
Oct. 3—Elmer Lamb, Tecumseh, Neb.
Oct. 4—R. F. Miner, Tecumseh, Neb.
Oct. 5—F. C. Crocker, Filley, Neb.
Oct. 15—Jno. W. Jones, Concordia, Kans.
October 16, 1907—Ford Skeen, Auburn, Nebraska
Oct. 16—G. W. Colwell, Summerfield, Kans.
October 22—J. E. Joines, Clyde, Kans.
Oct. 30—Rathbun & Rathbun, Downs, Kans.
Oct. 31—D. O. Bancroft, Downs, Kans.
Nov. 1—R. G. Sollenbarger, Woodston, Kans.
November 2—Jos. Lynch, Independence, Mo.
Nov. 5—J. C. Logan, Havensville, Kans.
November 15—U. S. Bryne, Agency, Mo.
November 23—Geo. Hannon, Olathe, Kans.
November 26—Marshall Bros. & Stodder, Burden, Kans.
January 21—Jas. L. Cook, Marysville, Kans.
Jan. 22—E. H. Erickson, Olsburg, Kans.
Jan. 23—Samuelson Bros., Bala, Kans.; bred sow sale.
Jan. 23—Grant Chapin, Greene, Kans.
February 4—Chester Thomas, Waterville, Kans.
February 5—C. G. Steele, Barnes, Kans.
February 6—J. F. Chandler, Frankfort, Kans.
February 7—Joseph Reust, Frankfort, Kans.
Feb. 8—Sherman Reedy, Hanover, Kans.; bred sows.
Feb. 18—John W. Jones, Concordia, Kans.
Feb. 19—T. P. Teagarden, Wayne, Kans.
Feb. 20—E. E. Axline and Knapp Bros., Independence, Mo.
Feb. 27—D. O. Bancroft, Downs, Kans.
Feb. 28—Rathbun & Rathbun, Downs, Kans.
Feb. 29—R. G. Sollenbarger, Woodston, Kans.

O. I. C.

October 17—Frank Walters, Rockport, Mo.
Feb. 22—D. E. Reber, Morrill, Kans.
Feb. 18—J. W. and J. C. Robison, Towanda, Kansas; sale at Wichita, Kans.
February 23—R. J. Ream & Co., Kansas City, Mo.
March 12—R. J. Ream & Co., Denver, Col.

Jacks and Jennets.

March 3—Limestone Valley Jacks and Jennets
L. M. McConen & Sons, Smithton, Mo.

A New Breed of Draft Horses.

The Iowa State College, at Ames, is co-operating with the United States Government in a breeding experiment to establish a breed of grey draft horses. An importation of grey Shires and Clydesdales arrived at Ames two weeks ago and they are to be used as the foundation stock in this work.

The object of the experiment is to combine and improve the qualities of the highest excellence of each breed, so far as possible, and to eliminate some of the characteristics that are objectionable from the American standpoint. It is the intention to combine the feet, quality, pastern and action of the Clydesdale with the more massive proportions of the Shire and, while doing so, to establish the grey color and other essential characteristics which will eventually lead to the development of an American breed of draft horses better adapted to American conditions than any of the foreign breeds.

It is the opinion of the best informed horsemen that the crossing of these breeds will not be attended with the usual uncertain results of cross-breeding experiments, as they have practically the same origin and have been bred along quite similar lines for many generations. Lawrence Drew, the most successful Clydesdale breeder of his time, unquestionably made use of Shire blood in his operations and the famous sire, Prince of Wales, is generally conceded to have had a Shire dam. Moreover, some of the most noted show geldings seen in American show rings in recent years have combined the blood of these two breeds.

In adhering to the grey color there will be no radical departure from the original characteristics of these breeds as grey has been a common, if not a prevailing color of both breeds, and many of the best specimens of each breed are still found among the greys. In America grey is the popular draft horse color and other things being equal a grey gelding commands more money on the market than one of any other color.

A study of bloodlines and draft types, deciding Secretary Wilson of the United States Department of Agriculture and Professors Curtiss and Kennedy of the Iowa State College to select the Shire and Clydesdale breeds for the beginning of the experiment, though some of the grey Percheron blood may possibly be used later in the progress of the experiment.

The importation consists of eight animals, one stallion and two mares of the Clydesdale breed, and one stallion and four mares of the Shire breed. These individuals are all of outstanding excellence. Professor W. J. Kennedy picked them from the cream of European studs, and they are an ideal bunch to start the great experimental breed on the way to popularity. The three-year-old Dappled Tom, sired by Stroxtom Tom, a winner of more medals than any other Shire, is an individual of the ton size and he has much of the best blood known to the Shire breed. His dam is Lady Smith 3d, a mare of wonderful perfection. She is a full sister to Lady Smith 2nd, a champion at the Shire horse show of London. Her sire is Nailstone's Coeur de Lion, a twice champion of the Royal Agricultural show of England. Dappled Tom was bought from Thos. Forshaw & Son, the great Shire breeders of Carlton on the Trent. The leading Shire mare is Burford Mettle, a two-year old, weighing over 1,800 pounds, bought from James Gould at Lymm, England. She was sired by Lymm Lion, he by Conquering Harold. Too much can not be said in praise of this filly. She will be shown at the next International. The other Shire mares are also good animals. Madresfield Alice and Madresfield Allen are sisters, two and three years old respectively. They were bred by Lord Beauchamp of Malvern, England. They were sired by Iron Chancellor, first and champion at 1894, 1895, and 1896 Bath, West England, and Essex shows. Kirby Bedon Firefly is a three-year-old, well-bred, a good individual and a winner at several of the leading shows. She

was purchased from A. H. Clarke, Spalding, England.

The Clydesdales are headed by Kuroki, a four-year-old, sired by Prince Shapely by Cedric. He is out of the celebrated Her Ain Sel, of Colonel Holloway's breeding. Kuroki's dam is W. Montgomery, Castle Douglas, who considers him one of the very best Clydesdale stallions that have ever left Scotland. He combines the best blood and the highest excellence of the most successful breeders on both sides of the water.

The two Clydesdale mares are worthy representatives of the breed. Gray Pearl is a five-year-old purchased from Major Duff at Drummond Castle, Keith, Scotland. She was sired by Pearl Oyster, a stallion who sold at a public auction for \$2,000 when a three-year-old. This mare has several firsts and championships to her credit from North Scotland shows. The other mare, Rose of Brownfield, is an eight-year old and weighs 1,950 pounds. She was bred by John Easton, Druffess, Scotland. The show yard record of this mare is quite exceptional, as she captured forty prizes in the Scottish show rings. Her middle and top are of the approved modern type. Her feet and legs are up to the Scotch standard. All in all, she is a splendid type for a brood mare.

This experiment is already attracting much attention. The work with horses at Fort Collins, Colorado, started two years ago is of a kindred scope, except at that point the Government is working toward a breed of carriage horses, while at Ames it is in the interest of the drafters. The federal Government in both instances is furnishing one-half of the funds to carry on the work. Another importation will probably be made next year.

Edwin Snyder, of Oskaloosa, Kans., contributes to the Breeder's Gazette the following humane method of breaking a halter-pulling horse: "I broke a bad halter-puller in this way. I passed the halter rope over the chain or pole to which she was to be tied and fastened around one fore foot. She pulled, of course, but it surprised her when her foot came up in an unlooked for way. Her surprised look was very amusing. She soon became discouraged and quit the bad habit entirely."

Iowa's Agricultural and Industrial Exposition.

The greatest exhibit of Iowa's prosperity in all history was opened this week on the magnificent 275-acre State Park near Des Moines, Iowa. This is the Iowa State Fair and Exposition, now ready for its fifty-third exhibition; and the officials of the Department of Agriculture are confident that the prevailing prosperity of the Hawkeye State, in all agricultural and industrial lines, will be more accurately reflected here than ever before. There will be more live stock, more machinery, more agricultural products, more of every material thing than ever before, and reports from all over the State indicate that the attendance of the people at their Fair will be in accordance with the prosperity of the times.

The American Carriage Horse.

Editor KANSAS FARMER: The authorities of the Kansas State Fair to be held at Hutchinson, September 16th to 20th, have notified the Department that the full classification recommended to State Fairs for American Carriage Horses has been adopted for this year's fair. Coming on the adoption of the classification by the Interstate Fair and Exposition to be held at Kansas City, immediately after the Kansas State Fair, this should be good news for Kansas horsemen who own trotting-bred horses of the carriage type. I trust that you will grant me the space to call the attention of your readers especially to these classes.

Classifications for American carriage horses have been established for this year's fairs by the Blue Grass Fair in Kentucky, and the State Fairs in Iowa, Michigan, and Kentucky. In addition to the fairs at Hutchinson and Kansas City. The Blue Grass Fair was held last week at Lexington, where an excellent showing of American horses was made. With the interest which is being taken in the matter and the prospect that additional fairs will establish such classes for the 1908 season, breeders will have a splendid opportunity to show what our native stock is doing to produce good carriage horses.

In this movement for uniform classifications for American carriage horses, the Department is working with the newly organized American Association of Trotting Horse Breeders. The type desired is as follows: Not under 15 hands for mature horses; smooth, compact, and symmetrical conformation; neck of good length, inclined naturally to arch; sloping shoulders; well-set legs of medium length; sloping pasterns and good feet; short, strong back; well-sprung ribs, well-ribbed up to coupling; smooth loins; full hank;

Verdict for Dr. Pierce

AGAINST THE

Ladies' Home Journal.

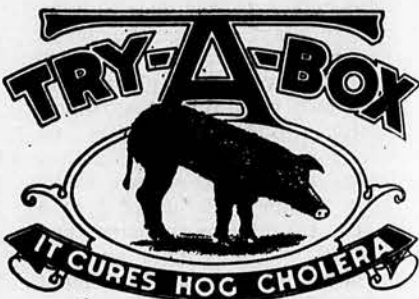
Sending truth after a lie. It is an old maxim that "a lie will travel seven leagues while truth is getting its boots on," and no doubt hundreds of thousands of good people read the unwarranted and malicious attack upon Dr. R. V. Pierce and his "Favorite Prescription" published in the May (1904) number of the Ladies' Home Journal, with its great black display headings, who never saw the humble, groveling retraction, with its inconspicuous heading, published two months later. It was boldly charged in the slanderous and libelous article that Dr. Pierce's Favorite Prescription, for the cure of woman's weaknesses and ailments, contained alcohol and other harmful ingredients. Dr. Pierce promptly brought suit against the publishers of the Ladies' Home Journal, for \$200,000.00 damages.

Dr. Pierce alleged that Mr. Bok, the editor, maliciously published the article containing such false and defamatory matter with the intent of injuring his business; furthermore, that no alcohol, or other injurious, or habit-forming, drugs are, or ever were, contained in his "Favorite Prescription"; that said medicine is made from native medicinal roots and contains no harmful ingredients whatever, and that Mr. Bok's malicious statements were wholly and absolutely false.

In the retraction printed by said Journal they were forced to acknowledge that they had obtained analyses of "Favorite Prescription" from eminent chemists, all of whom certified that it did not contain alcohol or any of the alleged harmful drugs!

These facts were also proven in the trial of the action in the Supreme Court. But the business of Dr. Pierce was greatly injured by the publication of the libelous article with its great display headings, while hundreds of thousands who read the wickedly defamatory article never saw the humble groveling retraction, set in small type and made as inconspicuous as possible. The matter was, however brought before a jury in the Supreme Court of New York State which promptly rendered a verdict in the Doctor's favor. Thus his traducers came to grief and their base slanders were refuted.

If you are Losing Hogs by Cholera, or if Cholera is in your locality, USE



Has never failed where used according to directions.

ALSO A PERFECT PREVENTIVE.

Cures Mango, Expels Worms. An Excellent Conditioner. \$1 per pound Can. Guaranteed or money refunded.

MATT BLACK CHEM. CO., McLouth, Kans.

Address B. H. RAGAN, Mgr.

If you have Cholera in your herd, send for us. If we cure, you pay for medicine and our expenses. If we don't cure, it don't cost you one cent.

DR. W. J. CONNER,
LABETTE, KANSAS.
Breeder and Shipper of
MULE-FOOTED HOGS
THE COMING HOGS OF AMERICA.
They never have cholera. They are the best rustlers in the world. Pigs from 10 to 16 weeks old \$30 per pair. Write for particulars.

DOWLING'S FISTULA AND LUMP JAW CURE.

A scientific remedy and cure for fistula, poll-evil and lump jaw. Price \$2 per bottle. Send us \$1 and we will send you the remedy, and when your animal is cured send us the other \$1. State how long affected, if fistula, poll-evil or lump jaw; whether swollen or running. Give particulars; also express office.

W. T. Dowling & Co., - St. Marys, Kans.

Guthrie Ranch Berkshires.

Headed by Berrington Duke 72946, sire of Ivanhoe, Berrington Duke Jr., and my young herd boat, Revelation 86908, the famous Black Robin Hood sire. For sale—A few choice gilts bred for September and October litters. Also a number of lusty hounds ready for service. Call on or address

T. F. GUTHRIE, Strong City, Kansas.

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, 918 Walnut St. Kansas City, Mo.

straight croup with well set tail; full, round buttocks.

While first attempts are seldom perfect, we shall expect a fairly uniform showing of horses, if these conditions are carefully studied, and no horses shown that do not conform with them. Breeders in sections where buyers of trotting-bred carriage horses are operating can get many a good line on the type desired by watching the operations of these buyers.

Owners of horses desiring to exhibit should, of course, apply to the secretaries of the fairs for further information. Further information regarding the Department's classification may be obtained from Circular No. 113 of the Bureau of Animal Industry, which may be had on application.

GEO. M. ROMMEL,
Animal Husbandman,
Bureau of Animal Industry,
Washington, D. C.

Carpenter's Hereford Sale.

James A. Carpenter, of Carbon-dale, Kans., will hold a big sale of registered Hereford cattle at his farm on September 28. This will be a sale to attract both breeders and farmers. The breeders will be interested, because the offering will consist, almost entirely, of Beau Brummel stuff, and it will be in extra thrifty condition. They will also be interested because this will be an early fall sale and the prices made there will help to fix those of later sales. Farmers will be interested because this will afford them an unusual opportunity to make a choice of cows with calves from among the large number offered.

There will be fifteen bulls, thirty-five cows with calves at foot, and the balance young cows and heifers. All of the females that are old enough will be bred to one of the two herd bulls who are sons of Beau Gondolus and grandsons of Beau Brummel.

Every calf in the sale is a granddaughter of Beau Brummel. One hundred head of good Hereford cattle is an unusual offering to be made by one breeder, and our readers may feel sure of an opportunity for bargains among them. Drop a postal card to James A. Carpenter, Carbon-dale, Kans., for a catalogue and arrange to be present at the sale.

Iams Imports 307 Stallions.

Frank Iams, of St. Paul, Nebr., arrived in New York last week with an importation of 307 stallions, which are said to be the best lot of stuff that he has ever brought over. The importation consists of Percherons, Belgians, and Coaches. Iams will be at Des Moines and Lincoln at the State Fairs during the next two weeks and his exhibits of the famous "Peaches and Cream" stallions which are so well-known to readers of THE KANSAS FARMER, will be one of the big shows of the fairs. Every one who goes to these State Fairs should not fail to look up Iams and his string of big Black Boys. "The kind that takes the ribbons." After the fair is over every intending stallion purchaser should make a trip to St. Paul and see Iams, and his "town of barns" whether you buy or not. It is our opinion that any one who visits this great stud can not leave without making a purchase, if they are in need of a stallion.

Wingate's High-Class Polands.

Wm. Wingate, the Poland-China breeder of Trenton, Mo., who will be remembered as the purchaser of "Storm Center" from the Goodrich Stock Farm at Eldon, Mo., for \$4,250.00, is arranging for a great brood sow sale January 10. Mr. Wingate has been a breeder of Poland-Chinas for several years and has gathered about him one of the best herds in the country. A review of the Poland-China sales of the past few years will disclose the fact that he has always been in the market for the best of the offerings. Perfect Chief, by Chief Perfection 2d, stands at the head of his herd and is proving a wonderful breeder. He is a great individual himself and possesses the ability to transmit this excellent quality to his get. Some of the best young things on Mr. Wingate's farm are by this hog. Keep the his date in mind and watch for further mention of this great herd.

Faulkner's Big-Boned Spotted Polands.

H. L. Faulkner of Jamesport, Mo., is known the country over as a breeder of "The Big-Boned Spotted Poland-Chinas." A few years ago Mr. Faulkner conceived the idea that the breeding of a farmer's hog would pay, so he went to Illinois and purchased a big spotted Poland boar and began breeding this character of hogs.

At first his territory was confined to his immediate community, but the fame of his herd soon began to widen until today he ships hogs to all parts of Missouri and to Kansas, Oklahoma, Iowa, Nebraska, Texas, California, and Mexico.

Budweiser, the hog that heads his herd, is of great scale, smooth and a great breeder. The fact that he gets repeated orders for this stuff is evidence that they are making good. More will be said later about this herd.

A Successful Breeder of Poland-Chinas.

One of the successful breeders of Poland-Chinas in Missouri is B. F. Ishmall of Laredo, Mo. He has a great collection of high-priced brood sows on his farm by some of the most noted boars of the breed and out of dams of the highest quality, known to Poland-

FREE TO THE SICK

To the people who want to regain their youth, who want to feel like they did when they were budding into manhood and womanhood, we offer a book which will show them the road to happiness—a book of 100 pages, which is brimful of the things they like to read, which will give them courage and enlighten them as to the cause and cure of their troubles. It will point out the pitfalls and guide them safely to a future of strength and vitality. It is beautifully illustrated. It tells what other people have suffered and how they have cured themselves. It is free. We will send it, closely sealed, without marks, if you will send this coupon. If you are not as strong as you ought to be, SEND FOR IT TO-DAY.

We have the grandest invention of the age for sick people; the surest and easiest cure for all nervous and chronic diseases. Its wonderful power is directed to the seat of the nervous system, through which its vitalized strength penetrates into all parts of the body, carrying new life into every organ or part which has been weakened by disease or dissipation, restoring energy to the brain and power to the system. No sick man, no sickly or delicate woman, will ever regret a fair trial of

DR. McLAUGHLIN'S ELECTRIC BELT

for it is a positive cure for all weaknesses in man or woman. It is a wonderful tonic, a vitalizer. When you arise in the morning, after having worn it all night, you feel the vigor of youth in your veins. It floods the body with warm, glowing vitality that makes the nerves strong, quickens the circulation, restores natural vigor and makes its wearer feel like one born again.

When your neighbor says it cured him, when over 10,000 people have been cured by it, you might have confidence in this wonderful Belt. If you have failed in other means, that is no argument against it, for nine out of ten of its cures were made after all else had failed. It pours vitality into the nerves and muscles, restoring the strength, and it must cure.

You want to know why it will cure? Electricity is the foundation of health and strength. The most learned scientists say it is life itself—without it we cannot live. Isn't it reasonable, then, to conclude that weakness, pain, and sickness indicate a deficiency of Electricity in the ailing body. When we are full of it we are strong and we do not complain. The strong man, physically and mentally, never complains. His eyes are bright and snappy, his gait is full of energy, his speech is positive, his work is recreation. Don't you want to be like him instead of the weak, ailing, tired, nervous person you are? You can if you will replenish your body with the elements it has lost.

Write Today for Free Book and Full Information.

No one should be without this book. We send it sealed, free, one for men and one for women. If you are ailing, write to-day. Don't put it off. Address.

Dr. K. F. McLaughlin Co., 203 Altman Building
KANSAS CITY, MO.



Chinadom. Mr. Ishmall has been a liberal purchaser of the very best stuff in the best sales of the country, and the offering in his sale this fall will be the producer of these great sows and sired by the boar that have and are now making history for the breed. A more extended and explicit reader on this herd will be given later. Watch for further announcements.

A Good Herd of Durocs.

W. E. Marrs, proprietor of The Albany herd of Durocs at Albany, Mo., is going to be in line this fall with something good for those interested in the Duroc Jersey hog.

Mr. Marrs has a grand lot of brood sows on his farm, and he has some young stuff from there that are good enough to interest the best breeders of this character of hogs, and his October sale promises to outstrip any of his former efforts in that direction. He has a herd of about 200 hogs, and out of this herd he will be able to select an offering that will meet the demands of the critical breeder. More will be said of this herd later.

Snyder Brothers' Good Sale.

The public sale of Poland-Chinas held by Snyder Brothers, Winfield, Kansas, on August 21, was a very successful sale, making an average of \$72.00. The sows averaged about \$200. The attendance was very gratifying from a breeder's standpoint and the good average prices is very encouraging to the fraternity.

Detailed sales were as follows:

BOARS.
Keep Corrector by Corrector 2d, Ed McDaniel, Parsons, Kas., (one-half interest) \$305.00
Masterpiece by Corrector 2d, L. C. Caldwell, Moran, Kans., 100.00
Lord Bacon by Corrector 2d, W. W. Martin, Anthony, Kans., 100.00
Winner by Simply O. K., L. W. Burnett, Arkansas City, Kans., 42.00
Prognosticator by Simply O. K., Hodge & Moore, Gueda Springs, Kans., 25.00
Special Lad by Cute Special, A. Hofer, 54.00
He Shines by Mellow Sunshine, Ed McDaniel, 21.00

FEMALES.
On's Tecumseh Lady, by On & On, E. L. Jimison, Oneida, Ill., 140.00
Fancy Sunshine by Correct, J. B. Freese, Bayneville, Kans., 105.00
Roulette Wonder by High Roller, Hebbard & Roy, Peck, Kans., 200.00
Zulla by E. L. 2d, Rule & Coats, Cleveland, Okla., 100.00
Flexible, by Keep On, Frank Zimmerman, Centerville, Kans., 130.00
Hester by Prince Proud, Geo. F. Beezley, Girard, Kans., 77.50
Minerva, by Mischief Maker, Dietrich & Spaulding, Richmond, Kans., 110.00
Modelena, by Arsenal, Frank Huddleston, Ada, I. T., 90.00
Chocolate, by Arsenal, H. H. Kuper, Hunter, Okla., 115.00
Ohio Beauty, by Captivator, W. R. Coleman, Kingman, Kans., 75.00
Marie Minstrel, by Minstrel, L. C. Caldwell, 65.00
Dolly B., by Standard Perfection, H. H. Kuper, 80.00
Roller Lass, by High Roller, I. E. Knox, Nardin, Okla., 70.00
Elsie, by Nonpareil, G. E. Hayden & Sons, Newkirk, Okla., 102.50
Roller Lady, by High Roller, Ed McDaniel, 99.00
O. K. Perfection, by Simply O. K., J. B. Adams, Moline, Kans., 32.00
Perfection Maid, by Simply O. K., A. W. Schriver, Clearwater, Kans., 29.00
Model Radium, Chas Lambert, Winfield, Kans., 16.00
Knox Lady, by On & On Chief, Dr. H. L. Snyder, Winfield, Kans., 77.50
Silver Tips, by Corrector 2d, H.

E., Lunt, 77.50
Silver Tip 2d, by Corrector, H. E. Lunt, 77.50
Lady K., Geo. W. Lorange, Moline, Kans., 19.00
On Chief Gem, by On & On Chief, Frank Huddleston, 62.50
Special Beauty, by Cute Special, F. M. Giltner, Winfield, Kans., 50.00
Special Dimple, by Cute Special, F. M. Giltner, 25.00
Special Spot, by Cute Special, Fred C. DeMott, Arkansas City, Kans., 50.00
Theckla, by Perfection E. L. J. R. Roberts, 151.00
Perfect Gem 4th, by Chief Perfection 2d, J. B. Freese, 190.00
Perfection Star, by Chief Perfection 2d, Frank Huddleston, 100.00
Shiney I Know, Geo. W. Lorange, 26.00

Berkshires Killed by Lightning.

A daily paper is authority for the statement that the two highest-priced Berkshire sows that were sold by Chas. E. Sutton, at his recent sale held at Lawrence, Kans., were killed by lightning on Thursday last. If this report is correct, the sows that were killed were Dutchess 323d by Chalmers Duke 23d, and Lee Dutchess 19th by Lord Lee. These sows have both been purchased by A. J. Lovejoy & Son, Roscoe, Ill., for \$250 and \$240 respectively, and their loss will be keenly felt, not so much because of their cost as because of their breeding and individuality.

Hodgeman County Live-Stock Association Sale.

The Hodgeman County Live-Stock and Fair Association will hold its annual fair and sale on September 23-26. At this fair and sale a large number of stockers and feeders will be disposed of. This will afford a splendid opportunity for interested farmers to combine business with pleasure.

Gossip About Stock.

J. F. Hastings of Edgerton, Kans., will hold a sale of Poland-Chinas on October 10th. At the same time he will disperse his Shorthorns and in the future will devote his entire time to breeding pure-bred hogs. In the offering of hogs will be some choice gilts by Chief Perfection 2d, Corrector 2d, Grand Chief, Top Chief, and Go On.

A good medium brings results. We are in receipt of a letter from the Rogue River Land Company, dealers in fruit lands, Medford, Ore., in which they say: "We have had excellent results from our advertising in THE KANSAS FARMER and shall do some more business with you during the coming winter. Rogue River Land Company, by Wm. M. Holmes."

Have you written W. C. Topliff, of Esbon, Kans., proprietor of the Esbon herd of Poland-Chinas, for prices on spring pigs? He has 100, both sexes, the best he has ever raised. These are bred right, and fed right, and will be priced worth the money. You will get a square deal when you buy of Walter Topliff. See his card in THE KANSAS FARMER and write or call at once.

R. M. Buck, of Eskridge, Kans., is advertising some Shorthorn bulls for sale. He also breeds Poland-Chinas and he has some fine spring pigs, both sexes, ready for shipment. His Shorthorns and Poland-Chinas are all from champion and prize-winning families, are well-grown out, and will be priced worth the money. Write Mr. Buck for prices or visit him and inspect his herds. Visitors are always welcome.

O. B. Smith, one of the oldest breeders of Poland-Chinas in Republic County, will hold a closing out sale November 21. Mr. Smith will move to Colorado and in this sale will dispose

Worms all Over the Ground

Drexel Mo., Route 2, Jan. 24, 1907.
F. J. TAYLOR CO.
Bag of Tonic received and I put it in box as directed. My hogs eat it fine and I think it has done them good from the worms I see scattered over the feed-lot. I believe it is all right, especially for hogs. Will let you hear from me when it is all gone. I remain yours for a fair trial.
W. G. BINKLEY.



Taylor's Stock Tonic does more than drive out the worms. It puts your hogs, cattle and horses in the pink of condition, makes them grow faster and stronger, prevents cholera, black-leg and all diseases arising from imperfect digestion.

We want you to know all about our Stock Tonic so we will send you 50 pounds on trial if you will send us this advertisement.

In 30 days you will send us \$2 for the tonic, or return the empty bag if it is not satisfactory, and there is no charge. We are sending out thousands of bags on this basis and practically every one is paid for. It shows the merit of the goods and the honesty of the farmers. Cut out this ad to-day and send it to us.

F. J. TAYLOR CO.,
361 Live Stock Ex., Kansas City, Mo.

Fli-Kil

is a safe, sure, efficient non-offensive remedy for
Keeping Flies Off Cows, Horses, Mules and all Live Stock.

Indispensable in dairy and stable. Saves annoyance and irritation. Cows rest easy, digest and secrete their food better and produce more milk and butter. It makes milking easy and safe; protects teams. Will not gum the hair. Easily and cheaply applied with sprayer. Buy now; use before the animals run down. At dealers. Quart 40c; 1/2 gal. 60c; gal. \$1. Trial gallon direct, express paid, \$1.25. Don't take a substitute. Illustrated book free. Address,
Moore Chem. & Mfg. Co.,
Dr. H. J. Whittier, Pres't.
1501 Genesee Street, Kansas City, Mo.

REVOLUTION PATENTED BUCKLES...

When used will save more than one-half the cost over old way of repairing harness. No stitching, no riveting. Send 25c to pay for sample assorted set of Buckles, postpaid. Free illustrated catalog. Big profits to agents.

Topeka Buckle Co.

224 Kansas Ave. Topeka, Kansas.

That ONE Reliable Healing Salve

BALMOLINE
CURES galls and sores while horses work. Restores the new hair (natural shade). Heals quickly, surely, man or beast. And never leaves a scar.

Druggists or by mail 25c. Trial box 40c from Balmoline Co., Sta. A, Abilene, Kan.

HORSE OWNERS! USE

CAUSTIC BALSAM.
A safe, speedy and positive cure. The safest, best BLISTER ever used. Removes all blemishes from horses. Impossible to produce scar or blemish. Send for descriptive circulars.

THE LAWRENCE-WILLIAMS CO., Cleveland, O.

of all of his great brood sows, which he has been selecting for years. This will be a good place to look for some choice breeding stuff, and we ask our readers to kindly watch for his sale, which will be advertised in this paper.

Secretary F. L. Houghton, of the American Holstein-Friesian Association reports the following transfers of cattle in Kansas last week: Evening Carol, Tilly Lou, Leda Beauty Hengerveld, Leda Hartog Twisk 6th's Queen and Sundrie Sunbeam, McKay Bros., Buckingham, Iowa, to F. J. Searle, Oskaloosa. Caroline Pieterse, Klostler Florizel 2d and Queen Mab Wytje, M. S. Babcock, Nortonville, Kans., to J. S. Oyler, London.

W. C. Whitney of Agra, Kans., is advertising some crackjack fall Duroc boars. He also has 225 early spring pigs, both sexes, of the best breeding, that are now ready to ship. These have been grown on alfalfa pasture with plenty of the right kind of feed, and are well developed. Mr. Whitney ships nothing but tops on mail orders, and in ordering from him you are sure to get the best. Look up his card in THE KANSAS FARMER and write him for prices and descriptions today.

We call special attention to the combination sale of Duroc-Jersey swine of thirty selected animals from the Otatop herd of John W. Taylor and Spring Lake herd of R. C. Williamson, of Edwardsville, Kans. The sale will be held at Bonner Springs on September 7 as advertised in this issue of the paper. It will be noticed that the gilts and boars are sired by notable herd heads, consequently the offering is exceedingly desirable. And as it is the first sale of the season it will certainly be a bargain day for buyers that want Duroc-Jerseys bred in the purple.

Bert Finch, of Prairie View, Kans., is raising the right kind of Durocs. His herd is headed by a good son of Ohio Chief, and the sows carry some of the best blood lines of the breed. He has 100 early spring pigs with plenty of bone and stretch, representing the blood of Ohio Chief, Kant Be Beat, Top Notcher, and Morton's Prince. These have been grown on free range with plenty of alfalfa, and are hard to beat. Mr. Finch has plenty of young stuff, both sexes, for sale, at reasonable prices. Look up his card in THE KANSAS FARMER, and write him before the best of these are sold.

Have you written G. F. Hart, of Summerfield, Kans., about the toppy young bulls he is advertising? If not, look up his card in THE KANSAS FARMER, and write him today. Mr. Hart breeds Shorthorns, and they are of the best quality. He has young cattle of both sexes for sale at all times. His herd is headed by the pure Scotch bull Secrete Prince, who was first in class at the Nebraska State Fair, 1906. Mr. Hart's herd is one of the largest and best in that part of the State, and he always has a good selection. You can make no mistake in ordering from him. Write him, or visit his herd three miles

Health is Woman's Wealth

Don't Trifle with It, Don't Neglect It
Guard It As Your Dearest Treasure.

ZOA-PHORA.

For Maiden, Wife and Mother, Watch
First Indications of Disease or
Derangement of the Delicate Organs.

Dear daughter, sister, wife or mother, do you realize that health is more to you and your family than all other earthly blessings? Do you now that to have perfect health and keep it should be your greatest desire?

Why? Because health—a woman's normal health—will enable you to be and to do and to feel just as a woman should. That's what you want, isn't it? Now listen! Zoa-Phora is made for women. It is admirably adapted to assist nature in building up her delicate and beautifully constructed constitution. For the well and slightly ailing it is a nerve-tonic and tissue-builder. It contains no opiate or narcotic drug to injure the system and is used with perfect safety by the young daughter, wife or mother. For the more seriously afflicted—women suffering with any form of womanly weakness or disease—Zoa-Phora is worth its weight in gold, as is testified by women everywhere. Hundreds of these women live in your own State—some of them right in your own neighborhood. Ask them about Zoa-Phora.

On March 7, 1903, Miss Retta Griffith of Columbiaville, Mich., wrote, "I will gladly send my testimonial for Zoa-Phora, as the greatest, most strengthening tonic I have ever known for women. I suffered with leucorrhea and painful menses for nearly six years. I took different kinds of medicines and doctored with three different doctors, but they did me no good. They said I would have to have an operation, but thanks to Zoa-Phora, it has nearly stopped the pain and has entirely cured the discharge. I was so weak that I could not sit up a whole day at a time, but now I am entirely well." On April 13, 1907, Miss Griffith writes, "You may refer any one to me and I will still gladly recommend Zoa-Phora." Does this not prove that the results from the use of Zoa-Phora are permanent?

The best way to become assured that Zoa-Phora will help you is to go to your druggist and obtain a bottle and begin the treatment at once according to plain directions found in the package. Just ask for Zoa-Phora—no other explanation will be needed and no mistake will be made. You will receive the medicine already prepared, compounded in just the right proportions, and put up in sealed, sterilized, one dollar bottles.

west of Summerfield, Kans. In writing, please mention THE KANSAS FARMER.

J. F. Cook & Co.'s importation of Catalonia and Malyorca Jacks arrived on August 12, by The White Star Line, per Steamer Bovie, at New York City. There were fifty head and they are the finest and largest importation of Catalonia and Malyorca's ever brought to the United States. They were shipped by express to their farms at Lexington without the loss of a single one. A number of them were prize winners in Catalonia and on the Malyorca Island and they will be exhibited at the Blue Grass Fairs in Central Kentucky, Kentucky State Fairs, Louisville, Ky., Tennessee State Fair, Nashville, Tennessee. They also brought over five Tamworth hogs, which are in quarantine at Athenia, New Jersey. The first and second prize boars and first and second prize gilts at the Royal Show, Lincoln, England, and an aged sow, which was a large winner last year. The Royal Show is the greatest Live Stock Show held in England. This will be a great addition to Cook & Co.'s large herd of Tamworths.

S. C. Bartlett, of Wellington, Kans., one of our regular advertisers, who breeds Red Polled cattle extensively, reports that his fine herd is doing nicely, and that he has sixty-five head at the present time. Among these are some very fine young cattle, both sexes, which are for sale at right prices. Those who are interested in this valuable breed of cattle can make no mistake in buying from Mr. Bartlett, for he always keeps the best, and gives his customers a square deal. These cattle possessing, as they do, size, early maturing, and milking qualities, with their fine, even color, and absence of horns, are especially desirable to farmers and breeders who are interested in a dual-purpose animal. Mr. Bartlett also breeds Percheron horses, O. I. C. swine, and Plymouth Rock chickens. He is a producer of show stuff and will be found at the fairs this fall with an exhibit of his own breeding.

Look up Mr. Bartlett's advertisement in THE KANSAS FARMER and write him or call and see him. Visitors are always welcome. In writing, please mention THE KANSAS FARMER.

A few days ago one of the fieldmen of THE KANSAS FARMER visited the stock farm of E. W. Melville, at Eudora, Kans. Mr. Melville is one of the old subscribers of THE KANSAS FARMER and has a complete file of it since its first issue. Mr. Melville has a very fine herd of Berkshires, headed by the great breeding boar Pacific Duke 36691, who was sired by Baron Duke 50000, he by Longfellow. Pacific Duke is pretty well known in the West, as he is the sire of some of the best individuals that we have found while visiting some of the good herds this summer. Among the sows in Mr. Melville's herd is Lady Duke, Pacific Princess, Model Princess, Pacific Lady, Lady Plattsburg, and Lady Pacific, all sired by Pacific Duke and from their individuality we are convinced that Pacific Duke is one of the greatest sires in the State. Mr. Melville starts his advertisement with this issue of THE KANSAS FARMER, and as he has about 50 choice spring pigs, we believe that he can please anyone who wants a good herd header or a few good gilts. Write him and mention THE KANSAS FARMER.

Chas. Dorr, Route No. 6, Osage City, Kans., is an extensive breeder of Duroc Jersey swine. He has 120 fine pigs of both sexes for this season's trade. His herd board, Ohio Chief, Jr., 24905, is especially worthy of mention, for he is an individual of great scale, wonderful quality, and the very best breeding. His sire is Ohio Chief 14387, he by Top Notcher 3803. Ohio Chief 14387 is a brother to Tip Top Notcher, the World's Fair champion. Ohio Chief, Jr., is an outstanding individual, that once seen can never be forgotten. He weighs in breeding condition 900 pounds and is still growing. He can easily be made to weigh 1,000 pounds in show condition, for he is so large. He is not lacking in quality, and has strong back and loins, great bulging hams, good length and depth of the body, broad and ears, and stands up on strong, short legs. Mr. Dorr expects to exhibit him at some of the leading fairs and shows of the country this fall. He also has other herd boars that are very good, such as Dorr's Model, a grandson of Hunt's Model, Tip Top Jr., bought of W. L. Addy & Son, of Parnell, Mo., also Peteron Bill out of Ottawa Bill, from F. A. Burge, Ottawa, Kans., and some pigs by Kansas Oom Paul out of Oom Paul 2d.

The fieldman of THE KANSAS FARMER recently visited C. P. Brown of Whiting, Kans., the popular breeder of Poland-Chinas, and found his fine herd in the best possible condition. He has sixty-five spring pigs, a good share of which are of early farrow that are hard to beat. They are by his herd boars Colonel Mills, On the Line, and Medler's Dream, and out of as fine a bunch of brood sows as we have seen. Mr. Brown has twenty-five spring males that are very fine with plenty of size, bone, finish, and fleshing qualities, that are fit for a place in good herds. We were also shown a fine litter by the great show boar Indiana and out of a Corrector dam, that are out of sight. These are young, but are great prospects for next spring's trade. Mr. Brown, who is a regular advertiser in THE KANSAS FARMER, reports business good and is booking orders for shipments to Oklahoma, Indian Territory, and Texas, as well as taking care of his growing trade in Kansas. Mr. Brown has a number of his best sows bred to On the Line, for early fall farrow, and expects to have a nice line of stuff for the trade next spring. Write him your wants, for he can supply them, and will give you satisfaction, and your money's worth.

In a conversation with J. F. Ensor, of Olathe, Kans., a few days ago, he said: "From the numerous inquiries I received for hogs in the early days of my pure-blood stock business, I was convinced that the future demand would always be for breeding stock

GET MY PRICE—THE LOWEST Ever Made on a First-Class MANURE SPREADER



**Yours
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30 Days**

**Direct
From
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\$25,000 Guarantee

LET me tell you something. I'm making a quotation on the Galloway Wagon Box Spreader SO LOW that farmers all over the country are taking notice—and sending in their orders while they can get them at this figure.

Some spreader experts said it couldn't be done—that a first-class spreader couldn't be turned out for the figure I'm quoting this season.

BUT I'VE PROVED THAT IT COULD BE DONE—at least I'm going to keep on thinking I have, as long as farmers back me up in this way.

The name GALLOWAY is a guarantee of manure spreader excellence all over the United States. But it isn't the only one I give you.

In addition I have put up a \$25,000 legal bond that each and every Galloway Spreader shall make good in every respect. It's an absolute guarantee and I stand to lose if the Spreader fails in one particular.

But before you risk one cent of your money on my spreader I send it to you to try 30 days free. Thirty days gives you an opportunity to test the Galloway to your entire satisfaction. If it is not everything it is claimed to be—it does not do all that the best spreader ought to do—send it back, and I will return every cent of your money without question.

The William Galloway Co., 389 Jefferson St., Waterloo, Ia.
Ask me also for my large Farm Implement Catalog.



William Galloway, President

with great length, other points not expected, and even today every letter brings the demand for a lengthy sow or boar. Consequently I set to work to build up a herd of breeding stock possessing this very desirable point, and I am now glad to inform my customers that I am prepared to supply them with this type of breeding stock, and at the same time other important points not to be overlooked. In order to accomplish these results, I have purchased from the noted herds, animals whose mating would beget just what the breeder and farmer would want." Mr. Ensor's herd is now headed by Eureka Tip Top 43641 by Tip Top Notcher. Eureka Tip Top, like his illustrious sire, is an animal of great size and in moderate flesh weighs about 900 pounds, and when properly fitted would be as large as Tip Top Notcher, who weighed 1,100 pounds when shown at St. Louis. He stands up straight on his feet, has a wonderful spring of ribs, a grand, good back, and moves around surprisingly active for a hog of his size. Mr. Ensor's other herd boar is Olathe Chief 61629, an October yearling sired by Ohio Chief. It is our opinion that this is one of the greatest individuals that Ohio Chief ever sired. Every old breeder knows the record of Ohio Chief, but for the new beginner we might repeat that he was twice grand champion at the International Fat Stock Show at Chicago, and has more blue ribbons to his credit than any hog, living or dead, and is conceded by every one to be the champion Duroc of the world. Olathe Chief has for his dam Helen Blazes the 3d, a daughter of Helen Blazes, who in her day sold as the highest priced sow that ever went through the auction ring. The sows in Mr. Ensor's herd are mostly mature females, with great length, massive, broad backs, and represent the blood lines of the most noted sires and dams of the breed. Some of the blood lines represented are Ohio Chief, Tip Top Notcher, Buddy K. 4th, Higgins' Model, Nelson's Model, Orion, Hanley, Lord Gold Finch, and Oom Paul. Mr. Ensor offers a few of these mature sows for sale. They are bred for early farrow to one of his great boars. He also has a fine lot of last fall's gilts and a few fall boars, and a nice bunch of spring pigs for sale at prices within the reach of those who are trying to improve the herds. If you need some new stock, write Mr. Ensor and tell him what you want or call and inspect his herd.

M. C. Vansell, Muscotah, Kans., announces a dispersion sale of his splendid herd of Shorthorn cattle, which will be held at his farm near Muscotah, on November 26, 1907. Further announcements will appear in this paper.

New Advertisers.

Kalamazoo Stove Co., stoves.
Jones of Binghampton, pays the freight.
Starke Bros. Nursery, trees.
American Well Works, well drills.
F. E. B. Ball, wanted, agents.
Barteldes Seed Co., grass seed.
Otto Grienke, 80 acre farm.
W. T. Dowling & Co., lump jaw cure.
Walter Pleasant, Holsteins.
J. F. Ensor, Duroc-Jerseys.
E. W. Melville, Knollwood Berkshires.
Wm. Galloway Co., manure spreader.
A. B. Garrison, Poland-Chinas.
W. O. Rule, Shorthorns and Durocs.
M. J. Welch, farm and alfalfa lands.
Inter-Locking Fence Co., fences.
F. E. Whitlow, mules.
Jas. A. Carpenter, Hereford Sale.
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Mrs. Winslow's Soothing Syrup

has been used for over FIFTY YEARS by MILLIONS of Mothers for their CHILDREN while TEething, with perfect success. IT SOOTHES the CHILD, SOFTENS the GUMS, ALLAYS all pain, CURES WIND COLIC, and is the best remedy for DIARRHOEA. Sold by Druggists in every part of the world. Be sure and ask for Mrs. Winslow's Soothing Syrup and take no other kind. 25 Cents a Bottle.

An Old and Well-tried Remedy

INTERLOCKING FENCE

Made of heavy wire, is very stiff, strong and durable, requires few posts. Stock, hog and chicken proof. Sold direct to the farmer at lowest factory price, freight prepaid, on 30 DAYS' FREE TRIAL. Catalog and price list free. Interlocking Fence Co., Box 19, Morton, Ill.

Douglas County Fair & Agricultural Society

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R. B. WAGSTAFF, Sec'y, Lawrence, Kans.

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One of the newest and most centrally located hotel in the city. Absolutely modern in every detail. European Plan, \$1 per day and up.

HENRY W. ROBY, M. D.
SURGEON
700 Kansas Avenue
Topeka, Kansas

Agriculture

Alfalfa Hay.

Will you kindly give me all the information you can about putting up alfalfa hay in barn? Is it more liable to heat than other tame hay? Is there danger of spontaneous combustion? How long after hay is put into the mow is this liable to occur? Is hay more likely to heat in the barn than in the stack? This question is much discussed among farmers here, and any information you can give will be greatly appreciated.

Y. A. HARRISON.

Franklin County, Nebr.

Many cases of fire supposed to have been caused from spontaneous combustion of clover or alfalfa hay are reported each year. There is more danger of clover and alfalfa hay heating in the mow or stack than timothy, Bromus inermis or the prairie grasses. Due to the fact that clover or alfalfa cure more slowly in the field and are more often put up in an uncured condition. When spontaneous combustion takes place it most frequently occurs within a week or ten days after stacking, and usually in less time than this. I would say there would be absolutely no danger after ten days, and most cases occur within two or three days after the hay is put into the stack.

Spontaneous combustion takes place more often in barns than where the hay is placed in stacks. Due to the fact that hay is frequently placed in the barn in a greener condition than it is stacked. The mows are often larger, the hay is more tightly packed and there is not as free access of air in the mow as in the stack. Where hay is piled loose in not too large quantities and there is free access of air there is no danger of spontaneous combustion, in fact green alfalfa is often placed in sheds and completely cured in this manner, not only without danger of spontaneous combustion but without injury to the hay. Only where alfalfa is not sufficiently cured in the field is there danger of spontaneous combustion, and the proper time to prevent loss from this cause is before the hay is stacked.

On proper curing of alfalfa hay I quote the few sentences published in a recent article upon curing hay, by Professor TenEyck: "As soon as the dew is off in the morning start the mowing. When the hay is wilted somewhat run over it with a tedder if the crop is heavy and needs lifting. After an interval of a few hours, before the leaves have begun to get dry and brittle, rake the hay into windrows. If the plan is to cure in the windrow allow the hay to remain this way, in good weather, for a day or two, when it may be put into the stack or mow. If the plan of curing in cocks is followed the hay should be placed in small cocks soon after raking, when it would be necessary for it to remain in the field for three or four days of drying weather before it is ready to put into the stack." If this plan of curing alfalfa hay is followed there will be no danger of spontaneous combustion either in the stack or in the mow.

G. E. CALL.

How Do Farmers Like Kharkof Wheat?

EDITOR KANSAS FARMER:—I would like to hear from some of your subscribers in regard to the seed wheat recommended so highly by Professor TenEyck, the Kharkof. The price at Manhattan is \$1.60 per bushel, at the station this wheat yields slightly better than other varieties. It has now been two or three years since the Manhattan Station has ascertained its superior qualities. Now if this wheat is really superior to the ordinary hard Red Turkey, which has been raised here some twenty years, there should be farmers who have tested it by this time.

As many of our subscribers are in the wheat belt would it not be a good idea for THE KANSAS FARMER to invite suggestions in regard to the new varieties of wheat tested at the sta-

tions? There is no use in paying double prices, beside freight, if the seed is no better than the kind we have so long raised; and on the other hand if these new wheats will average five or more bushels to the acre above the Red Turkey, then the wheat-growers should be apprised of the fact. Conditions at the station are so different than those obtaining on the average farm, that I do not place very much reliance upon them. Of course they can by experimentation find the kinds that are no good here and by eliminating them the farmers are saved much expense and trouble.

Reno County. W. B. EASTMAN.

Where Will Alfalfa Grow?

Alfalfa has now been experimented with for a century or more. It has often resulted in failure over much of the eastern end of the United States. And yet, during recent years it has been grown successfully in nearly every State and in some part of nearly every country in every State. Alfalfa is an easy crop to grow. No one ought to fail in growing it. No one need fail. It is as easy to grow alfalfa as it is to keep a sweetheart or a wife in love with you, and it depends upon much the same principle. The sweetheart is won and kept, by attention to certain little things that must be done at the right time and in the right way. Alfalfa is won, and kept, by remembering certain little things, and doing them at the right time and in the right way. I know that I could grow alfalfa upon ninety-nine farms out of a hundred in the United States, but upon some of them I would have to work quite a little at first to prepare the soil. What then, is it that alfalfa demands?

Only three things does alfalfa stand for, and insist upon, they are fortunately easy to give it. First comes drainage. The land must be dry in a wet time. It must be deeply drained, either artificially with tiles or naturally by having a porous subsoil. If it is drained with tiles they should be laid at least three feet deep, and if they are laid deeper it is all the better, so the soil is of a character that will draw to a greater depth. Alfalfa will never thrive nor long live where the subsoil is water-logged. Its roots penetrate to a great depth. They have been found down twelve or even twenty feet in the soil where it is very loose and permeable.

However, in the eastern States alfalfa roots will seldom go deeper than about five to seven feet. Then select your driest, that is best drained, piece of land on which to sow your piece of alfalfa field.

Next, that soil must be sweet. It is a new thought that soils grow sour, but it is true that they do. We need not consider now what causes acidity, it may come from a variety of reasons. Old soils are apt to be sour and poor soils also, and soils may even be sour right above hard limestone rock. More failures result from sowing on sour land than from any other cause unless it be a lack of fertility. Soils will not be sour when there are many small fragments of lime within them, such as the glacial soils of parts of Ohio, Indiana, Illinois, Wisconsin, and adjoining States, nor will they be sour in regions of loose limestone rock when fragments of it are mixed through the soil.

What are the indications of sour land? First, that clovers do not thrive thereon very well. Next, there may be moss or sorrel growing upon it. If clovers do not thrive it will be wise to submit samples of the soil to your experiment station and have them test it for acidity. They will then prescribe for you the amount of lime that is needed to make the land sweet.

The best form of lime to use, perhaps, certainly the safest form, is the ground unburned limestone, and this may be applied in generous amounts, as much as eight tons to the acre will do no injury and will effectually correct the acidity. This lime should be well mixed through the soil. Burned lime may be used, if caustic very much less can be safely used, a ton, or a ton and a half, to the acre, and

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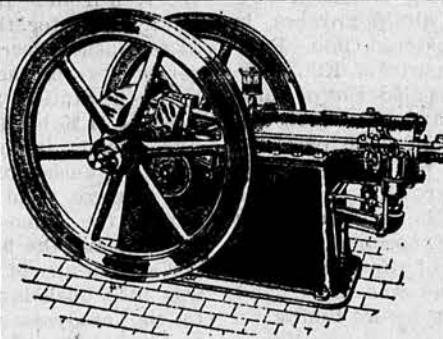
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SO EASY to Start and Stops Only When YOU Stop It.

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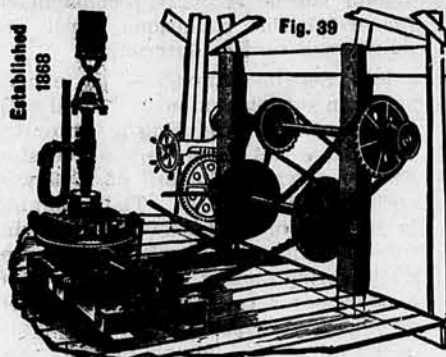
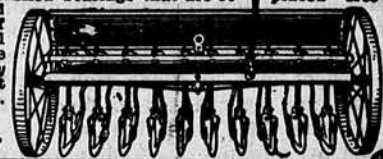
DO YOU Want \$ Wheat

The better your wheat the bigger price you'll get for it. To insure a good stool of the grain, it must be properly deposited in the furrow and well covered. You cannot raise a "bumper" crop with a machine that won't plant the seed right. Buy the

PEORIA DRILL

It will plant so that you will be sure to increase your crops. It won't crack other grass to operate. It sows beans, peas, wheat, oats, barley and flax and it or grind the seed. Will drill or broadcast Alfalfa and seeds. Works in all soils; draws lightly and is easy. Discs have self-oiling chilled bearings that are re- if they wear out. Fitted with Press attachment if desired. No better drill made at any price. Made by an independent factory and sold at anti-trust prices. Circulars free.

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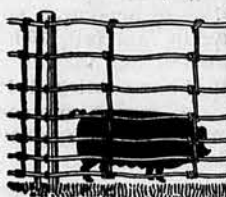
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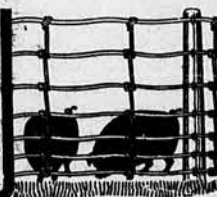
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Stability of Page Fence

Every Page Fence is woven of large, strong, high-carbon spring-steel wire of our own manufacture. Its power of resistance is greater than any other fence, because every horizontal strand is coiled spring and acts accordingly under strain. This Spring keeps Page Fence always rigid at top and bottom. There are other features you should know about Page Fence—write for catalog and folder.

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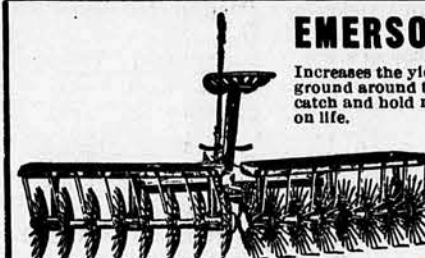
meet all demands in Hay Baling. Used over 20 years

SIMPLE, STRONG, DURABLE, RAPID

The Best is most Profitable.

Send for catalogue showing all styles. Horse Power and Belt Power.

Kansas City Hay Press Co., 129 Mth Street, Kansas City, Mo.



EMERSON'S ALFALFA RENOVATOR

Increases the yield of alfalfa, kills weeds and crab grass, cultivates the ground around the plant without injuring it, puts soil in condition to catch and hold moisture. Gives an old alfalfa meadow a new lease on life.

Will pay for itself twice over on ten acres in one season. No man with alfalfa on his farm can afford to be without one. Use it after each cutting if desired. Write us for further information and testimonials from users.

Address EMERSON-NEWTON CO.,

1318 West 11th,

Kansas City, Mo.

STRICTLY KANSAS GROWN ALFALFA SEED

FOR FALL SEEDING. SAMPLES AND PRICES ON APPLICATION

McBETH & KINNISON,

Garden City, Kans.

of air-slaked lime, which is safe, within limits, twice as much. The unburned ground limestone will not burn out the humus in the soil, the burned lime must be used with more caution. Ground limestone is usually sold for a dollar a ton and is made in many places. It is an interesting thought that a good soil that happens to be acid may by the use of this ground limestone be made the equal of the best natural alfalfa soils, and thus be made to produce crops that practically double or treble its value. Thus land that may be worth in its natural condition \$50 per acre may easily when set in alfalfa be worth as an investment at least \$200 per acre.

I have said this much about acidity not because it is present upon a large proportion of soils, but because it has been a most puzzling condition confronting would-be alfalfa-growers in Northern Ohio, Eastern Ohio, Eastern Pennsylvania, parts of Kentucky, and Tennessee. It is also true of some regions in Georgia and New York and parts of New England. No one having acid land need feel the least discouraged about growing good alfalfa upon it after he has limed the soil. At the Ohio Experiment Station six tons to the acre of alfalfa has been grown after the land was limed, and none could be grown before liming.

Now we have sweetened and drained the land, what else is needed? Next, and let us impress this upon you, the land must be rich. Alfalfa revels in rich land. It revels in soil filled with phosphorus, potash, and with at least a fair supply of nitrogen. It must have rich land. And yet alfalfa is the greatest soil-enricher among the clovers, it mightily builds soils upon which it grows. But it will not build a poor soil, because it will not grow upon it. Alfalfa will build up a poor farm, as it built up Woodland Farm, but it must be done by first enriching one spot, setting that one to alfalfa, then by feeding the hay grown upon that spot and saving the manure another spot may be made rich, set to alfalfa, and then the two fields will enrich the third, and thus with ever-increasing rapidity the redemption of the land goes on. For once set in alfalfa the land will not need constant manuring, on many soils it will take care of itself for many years with no additional manuring, meanwhile each year shedding off its store of riches to more needy soils, and in case it needs feeding it may be conveniently and cheaply fed by the addition of phosphorus and maybe potash to the soil.

What is "rich" land? Land rich enough to grow 50- or more bushels of corn to the acre. Land well stored with vegetable matter. Land on which stable manure has been showered. There is something wonderfully fitting about stable manure in starting alfalfa. It revels in a manured soil. Manure does three essential things to the land, it furnishes available plant food, that is important, then it adds "life" to the soil. Upon the decaying vegetable matter of the manure live myriads of bacteria, these all aid processes of soil enrichment and promote plant growth. The decaying manure also attacks the mineral elements of the soil and unlocks inert unavailable plant food and makes it available. More than this, the decaying vegetable matter causes the growth of myriads of earth worms in the soil. These earth worms burrow and work over the soil, they let in and let out water.

I have often thought that the surest way to tell whether a field would grow good alfalfa or not was to plow it in the early spring and watch to see whether the blackbirds followed me in the furrow. If plenty of blackbirds hopped behind me I knew that alfalfa would grow. If no birds I felt doubtful, and showered on more manure. Blackbirds follow where manure has been used, they seek the earth worms.

Now, alfalfa thrives especially well in tough, strong, clay soils, enlivened with manure. It thrives in gravelly soils, made rich. It thrives in sandy soils, made rich. But especially it thrives in the heavy clays if there be

limestone pebbles mixed naturally through them.

So select your soil, drain it, sweeten it if it is sour, make it rich, and next time it will tell you how to get a stand without fail.—Chas. B. Wing, Woodland Farm, Mechanicsburg, O., in Blooded Stock.

Small Grain Crops.

BY A. M. TENEYCK AND V. M. SHOESMITH
IN KANSAS EXPERIMENT STATION
BULLETIN 144.

(Continued from last week.)

EMMER AND SPELTZ.

Varieties of Emmer.—During the past three years two varieties of spring emmer, *Triticum dicoccum* (sometimes erroneously called speltz), have been tested at this station. No. 1, received from F. Barteldes & Co., made an average for the three seasons of 28.46 bushels per acre, while No. 2, received from the North Dakota Experiment Station, produced an average yield of 31.25 bushels per acre. Forty-five pounds is usually considered a standard bushel of emmer. The highest average yield per acre of barley during the same period was 29.95 bushels, and the highest average yield per acre of any of the varieties of oats was 40.58 bushels per acre. According to the analyses made by Shepard, Ladd, and Snyder, as reported in the United States Department of Agriculture, farmer's bulletin, No. 139, it would seem that the total amount of protein, carbohydrates and fat in the yields of the three crops, as mentioned above, would be approximately equal. On account of the large percentage of hulls, however, the emmer contains less digestible nutrients than either the oats or barley, and the above-mentioned crops of oats or barley would doubtless be more profitable than emmer yielding at the rate of 31.55 bushels per acre. Reports from the North Dakota and other experiment stations, and from farmers in the Great Plains region, indicate that emmer resists drought fairly well, but at the Ft. Hays Branch Station, in Ellis County, emmer has not proved more drought resistant than barley or oats, and it is probable that this crop should not be strongly recommended for semi-arid conditions until its merits are further determined.

Fall Seeding Emmer.—The experiments in sowing emmer in the fall with the purpose of producing a winter variety have not been very successful. Emmer sown in the fall of 1903 was entirely winter-killed. That planted in the fall of 1904 survived the winter, yielding 43.85 bushels per acre, while spring emmer yielded only 31.06 bushels per acre. However, the seed of this fall seeded crop, sown again in the fall of 1905, almost entirely winter-killed; only a few plants survived and a small quantity of seed was secured and sown again last fall, 1906. There is little question but that if a winter variety can be established it will far out-yield the spring emmer and perhaps produce a better quality of grain.

Date to Sow Emmer.—In 1904 an experiment was made to determine how much emmer seed should be sown per acre. The plot of ground used had previously been in grass (*Bromus inermis*) and was broken in the fall of 1903. The sod was well disked in the fall and again in the spring. Emmer No. 1, referred to in the discussion of the test of varieties, was seeded with the Dowagiac double-disk drill. The rates of seeding and resulting yields are given as follows:

Drill set to sow barley per acre, bus.	Actual amt. of emmer seeded per acre, lbs.	Yield per acre, bus.
3.	89	31.82
2½.	84	33.40
2¼.	75	33.06
2.	70	32.04
1½.	56	32.72

From these tests we may conclude that the ordinary grain drill should be set to sow nine or ten pecks of barley per acre in order to seed the right amount of emmer, since the seeding at the rate of 2½ bushels of barley per acre, which actually seeded 1.87 bushels of emmer, gave the largest yield, 33.40 bushels per acre, while

the plot which received a peck less seed per acre gave nearly as large a yield. It would appear from this trial that six to eight pecks of emmer seed per acre is the proper amount to sow at this station.

Varieties of Speltz.—Two varieties of the true speltz, *Triticum sativum* Spelta, which differ in appearance from the emmer in having the spikelets of the head placed farther apart and in having shorter beards or no beards at all, were seeded in the fall of 1905. These varieties did not prove to be as hardy as the winter wheats, about 20 per cent more of the plants being winter-killed. The speltz, however, stood more than the wheat and made a fairly good stand before the grain was headed. It was very free from rust and smut and made a vigorous growth, attaining a height of 3 feet and 5 inches. It was headed by May 26 and matured by June 24. The better of the two varieties, which was received from the McPherson Branch Station, made a yield of 2,571 pounds per acre. No date is at present available to the writer on the feeding value of this grain. Speltz is a very ancient grain and is still cultivated in certain parts of the old continent, but aside from the tests made at several experiment stations it is little grown in this country. It is perhaps best adapted to semi-arid conditions or poor soils.

FLAX—TRIAL OF VARIETIES.

The Agronomy Department of this station has carried on experiments with flax during the past four seasons. In 1903 several varieties of flax were sown in small plots, on April 17. The seed was sown with a disk drill, in drill rows eight inches apart, at the rate of three pecks per acre. The flax came up nicely and made a very satisfactory growth, blooming freely and producing many bolls, which, however, failed to produce perfect seed. The largest yield was only 4.7 bushels per acre in the variety trial, but in another field a half-acre of flax which was protected by timber on the south and east sides yielded 10.3 bushels of flax seed per acre. This flax was planted on alfalfa ground, which was plowed early in the spring. It was evident that the crop was injured by hot, dry weather early in July, and largely because of the protection afforded by the timber the plot on the alfalfa ground gave a larger yield than the flax sown in the open field in the variety trial.

In the trial of varieties in 1904, the common flax, Kansas grown seed, yielded best, i. e., 9.3 bushels per acre. This flax was seeded on March 28 on new land, prairie sod, plowed in the fall of 1903.

On May 3, twenty-four varieties of flax, received from the United States Department of Agriculture, were seeded on old land which had produced corn the previous season and which had been well manured in the winter of 1902-'03. None of these varieties yielded sufficient seed to pay for the thrashing. Most of the varieties started well and made a vigorous growth until about the middle of July, when the flax lodged badly and failed to produce much seed. Several of the varieties were discarded, and those that were harvested produced such small yields of light-weight seed that the test was considered entirely unreliable and has not been reported in tabular form.

The seed of these varieties of flax was secured from Russia, and perhaps the poor yield was largely due to the imported seed, since Kansas-grown flax sown on May 7 yielded 8.3 bushels of good seed per acre. The last-named variety was seeded on sod land, which may account somewhat for its better yield, since it appears that the manured corn land was too fertile to produce the best flax, causing a large growth of straw, which lodged, resulting in light bolls and light seed.

In 1905 the varieties of flax were planted April 29 on a piece of new breaking, prairie sod broken in the fall of 1904. The sod was disked March 28, Acme harrowed April 22, and harrowed with the smoothing harrow just previous to seeding. The flax was sown at the rate of three pecks per acre with the Dowagiac disk drill. All va-

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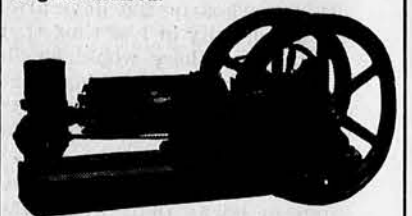
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varieties of flax made a good stand and a fair growth, averaging 16 to 24 inches in height at maturity. Most of the flax was harvested August 8, upon which date it was noted that some of the flax was "over ripe."

The test of varieties of flax was made on old land in 1906, a field which has been farmed many years, and which had been planted to forage crops (sorghum, cow-peas, corn, etc.) in 1905. Part of the land was fall plowed and part of it was spring plowed, the plots crossing the strips of plowing, as well as the plots of the previous season. This land was put into good condition and the flax was sown April 17, at the rate of two pecks per acre. The season of 1906 was quite favorable for flax. A good stand and growth was secured on all plots. The descriptive data given in table XVIII is for the 1906 crop.

Table XVIII.—Varieties of Flax, Crops of 1905 and 1906.

Bulletin No.	Name of variety.	Where from	Height at maturity, inches.	Days to mature.	Yield seed per acre, '06, bushels	Yield seed per acre, '05, bushels	Av. yield of seed per acre, '05-'06, bushels.
1.	Common	Kansas Exp. Sta.	23	105	7.98	7.36	7.67
4.	N. D. No. 155	N. Dakota Exp. Sta.	20	105	10.60	8.96	9.78
5.	N. D. No. 709	N. Dakota Exp. Sta.	20	105	9.14	9.16	9.15
6.	N. D. No. 969	N. Dakota Exp. Sta.	30	105	5.36	4.23	4.80
7.	U. S. No. 9950	U. S. Dept. of Agriculture	21	105	9.29	4.89	7.09
8.	U. S. No. 9981	U. S. Dept. of Agriculture	30	105	4.80	2.26	3.52
9.	U. S. No. 9982	U. S. Dept. of Agriculture	22	105	10.72	10.92	10.82
10.	U. S. No. 9967	U. S. Dept. of Agriculture	24	105	9.43	6.61	8.02
11.	U. S. No. 10017	U. S. Dept. of Agriculture	22	105	9.00	6.14	7.57
12.	Stavropol	Stavropol Exp. Sta., Russia	20	105	8.86	7.56	8.21
13.	Cicilian	Stavropol Exp. Sta., Russia	21	105	7.55	...	...
14.	Common	Northrup, Kling & Co.	22	105	12.05	10.11	11.58

The varieties producing the largest average yields in 1905 and 1906 were the Common flax, No. 14, 11.58 bushels per acre; United States Department of Agriculture No. 9982, 10.82 bushels per acre; North Dakota No. 155, 9.78 bushels per acre; and North Dakota No. 709, 9.15 bushels per acre. The United States No. 9981 is a fiber flax, which probably accounts for its low yield of seed.

RATE TO SOW AND DATE TO SOW FLAX.

In 1904 these tests were begun and were conducted on native sod land. The seed-bed was prepared by fall plowing and by the use of the disk and Acme harrows in the spring. In 1905 the flax was sown on old land (fall plowed), which had grown a large crop of ensilage corn in 1904, and had previously been in alfalfa, and in 1906, in a field which had grown soy-beans in 1905, but which had been cropped continuously for many years largely with small grains. Dates of seeding the rate tests were: April 12, 1904, March 30, 1905, and April 17, 1906.

In 1904 the flax plots crossed a piece of land which had previously grown alfalfa. On this land the flax made a very rank growth of straw, lodging badly, and did not yield so well or produce so good a quality of seed as on the sod land. The yields given in table VI were made on the sod land.

The early sown flax was not injured apparently by hot winds or unfavorable weather in the season of 1904, but the later seedings in the latter part of May and the first of June gave relatively low yields compared with the flax sown early. In 1905 the early seeded flax matured in 102 days, the flax sown April 12 matured in 96 days, while that sown May 6 was mature August 10, 95 days after planting.

Table XIX.—Rate to sow Flax.

Pecks per acre.	Yield per acre, bushels	Yield per acre, bushels	Yield per acre, bushels	Ave. yield per acre, 1904-'05-'06, bushels
3.72	11.83	12.34	10.63	
4.14	13.32	12.05	11.71	
4.98	12.87	12.05	11.30	
7.92	12.28	11.91	10.70	
12.73	10.01	...	...

Table XX.—Date to sow Flax.

Date	Yield per acre, bushels	Yield per acre, bushels	Yield per acre, bushels	Ave. yield per acre, 1904-'05-'06, bushels
Mar. 28	8.98	14.35	12.05	11.25
Apr. 16	8.84	12.87	12.77	11.36
Apr. 27	8.44	12.28	...	...
May 6	8.31	10.08	...	...
May 19	...	8.66	13.93	...
May 26	6.99	5.10	10.45	7.51
June 6	2.11	0.66	11.60	...
		6.09	...	...

In the 1905 trial the yield of straw was determined for the flax which was seeded at different rates. The thickest sown flax, seeded at the rate of five pecks of seed per acre, produced

4723 pounds of straw per acre; the next largest yield was 4633 pounds, secured from the plots seeded at the rate of three pecks per acre.

The highest average yield of flax in the rate test, 11.30 bushels per acre, was secured by seeding three pecks per acre, although the plots seeded at the rate of two pecks per acre have produced nearly as large an average yield. The seeding of more than three pecks of flax seed per acre appears to give too thick a stand, which has resulted in a reduced yield.

The results secured in the date test for seeding flax indicate that fairly early seeding is to be preferred to the later seeding. In 1904 and 1905 the largest yields were secured from seeding March 29, and a careful study of the yields reported in table XX, and of yields from other early seedings not here reported, would indicate that the

most favorable time for sowing flax in this section of the State is during the last few days of March or the first week in April, or about as early as a proper seed-bed can be prepared.

FLAX CULTURE IN KANSAS.

Flax should not be grown continuously on the same land, since by the continuous growing of flax the land may become infected with the "flax-wilt" disease, which will injure or destroy the crop. Flax follows corn very successfully. The writer recommends not to plow land for flax, but to cut the stalks with a stalk cutter, if the stalks have not been removed from the ground, and disk and harrow thoroughly to prepare a seed-bed.

As shown by the results of the trials at this station, early seeding is desirable. Sow two to three pecks of good seed per acre. Any ordinary drill may be used, care being taken not to plant the flax too deep. In a good seed-bed with favorably moist weather, if the seed is barely covered it will start best; in a drier seed-bed it is best to cover the seed with an inch or two of mellow soil. A proper seed-bed may also be prepared by plowing grain stubble land either in the fall or early in the spring, cultivating the soil sufficiently to pulverize and firm it previous to seeding the flax.

Flax is grown quite extensively and successfully in southeastern Kansas. The writer is interested in introducing flax as a more general crop throughout this State, and sees no reason why flax should not be a profitable crop to grow throughout central and western Kansas, as well as in the southeastern portion of the State. Experiments in the growing of flax have been undertaken at the Ft. Hays Branch Experiment Station, in Ellis County, and the Agronomy Department is cooperating with farmers in different sections of the State in carrying on experiments with flax and other grains.

The crop is one which is worthy of general trial and more extensive growing throughout the State. The yields of flax secured at this station are not so large as the crops grown in the Northwestern States; perhaps we have not yet learned the best methods of culture, and it is possible that varieties may be introduced or bred which may be better adapted for growing in this State than those which are at present being grown. The Agronomy Department has for sale and distribution a limited supply of seed of several of the best producing varieties. Some breeding experiments with flax are also being undertaken.

BREEDING AND DISTRIBUTING SEED GRAIN.

The results of the variety tests in-

dicate that all varieties are not equally adapted for growing in our soil and climate. Some varieties are certainly harder and more productive than other varieties, and in a series of years it will make considerable difference in the income of a farmer whether he is growing a large yielding variety or a variety which is only capable of producing medium or relatively low yields. For instance, with oats, the Early Champion oats, which is a standard variety in Iowa and Illinois, has yielded nearly 50 bushels less grain per acre in four years than the Sixty-day oats, which at thirty cents per bushel (allowing for extra threshing) would mean an actual net loss in profit of \$15 per acre to the farmer who grew the low-yielding variety. Again, with wheat, the variety known as Bearded Flax has produced a little over 38 bushels more grain in three years than the Ulta Variety, notwithstanding that both of these varieties are the hard, red type of winter wheat. At 60 cents per bushel the farmer who grew the high-yielding wheat, compared with the farmer who grew the low-yielding variety, would have made a clear profit, after deducting the extra cost of threshing, of over \$20 per acre in three years. The variety tests with barley and corn have shown similar results.

There is little to be gained in simply testing varieties to prove their hardness and productiveness unless the better producing varieties are introduced for general culture in the regions where they are adapted for growing. Following this plan, a considerable part of the work of this department consists in selecting and propagating, for seed production, the best producing varieties of the several standard grains. Similar and more extensive work is also being carried on with corn, Kafir-corn, sorghum, and other crops, and this work is rapidly increasing in amount and importance.)

Thus far the work with small grains has included little more than variety testing and the planting of some varieties in larger areas to secure seed of the best producing sorts for distribution. During the past two years the department has sold and distributed to the farmers of Kansas some 1,500 bushels of good seed-wheat of the best producing varieties, and several hundred bushels of seed-oats, barley, flax, rye, and emmer. Our work in breeding, growing, and distributing well-bred seed-corn has been even greater, and there is little question but that the growing, breeding, and distributing of well-bred seed of the best producing varieties of wheat and corn has had a marked effect toward increasing the average yields per acre and total production of these crops in this State. It is not only possible but probable that several million bushels was added to both the wheat and the corn crops of the State in 1906 by the factor of better seed alone.

The work in grain breeding and seed distribution is being enlarged and perfected. In 1905 the seed from selected heads of the better producing varieties was planted in separate plots in order to secure a purer type and perhaps a better producing strain of the variety. In 1906 the department began breeding small grains by the "head-row" method, similar to the "ear-row" method of breeding corn. In this way we shall not only secure a purer type of the variety but hope to secure harder and better producing strains by discovering the great individuals which may be made the foundation stock for an improved pedigreed variety. (This breeding work with grains is independent of the work of the Botanical Department of this station, which is carrying on extensive plant-breeding experiments with the purpose of improving the quality and yield in wheat and corn by originating and establishing new varieties, through crossing and selection.)

NOTE.—We wish to acknowledge the faithful work of Mr. D. H. Zuck, farm foreman, who has had charge of much of the field work discussed in this bulletin.



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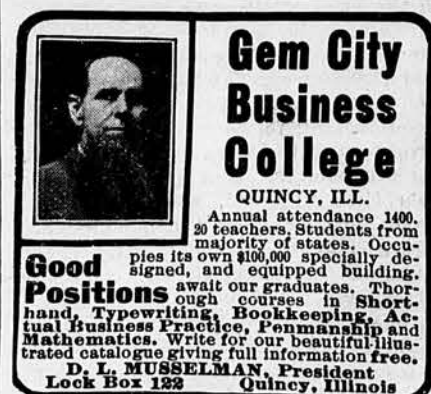
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branches for twenty feet she was obliged to give it up. The fish is up there yet for all I know. It was plainly a race between us which would get the booby prize.

It was evident from the first that Verna was the fisherman. It doesn't sound reasonable I know, but there must be something in "luck" in fishing. We girls would drop our hooks right down beside Verna's and the horrid things wouldn't look at our nice bait, but would go and get on Verna's hook. Once actually she forgot to bait her hook and she caught a fish! Its as true as I live!

Elsie didn't fish, but was kept busy baiting hooks and keeping tally.

We lost considerable time when I fell in. I was on a rather steep bank and thinking perhaps there were more fish out in mid-stream, I gave my line a tremendous fling and flung myself as well as my line. Down the steep bank I rolled but like a cat I somehow managed to light feet first at the bottom, and slid in with a splash and a shriek to the accompaniment of a chorus of shrieks from the bank.

The girls stood helplessly on the bank, wringing their hands. All but Elsie. She laid down flat and reached her arms down toward me. The most vivid recollection I have of the whole incident is of Elsie with her short fat arms stretched down and her face red and eyes bulging. I remember I wanted to laugh. As I came spluttering up the first time, Mae, with her splendid presence of mind, laid down flat also and reached down her pole to me, which I managed to grasp. By it I pulled myself up until I stood about knee deep in mud and water. I still had to hold desperately to the pole to keep from slipping back into deep water. I was in danger of pulling Mae in also, until Elsie putting her arms about Mae threw her bulk against me. I was out of immediate danger of drowning now; but our positions were such that there was a terrible strain upon all three of us, which was rapidly taking all our strength. I was obliged to be constantly standing upon one foot while I pulled the other out of the mud in which I was miring. The bank where I was, was clearly too steep for me to climb up. We discussed the subject at length but had found no solution when Verna who had gone back to fishing said that if I would come over where she was she thought I could climb up. "But please don't fall in any more and scare the fish," she added. "Why Verna! How do you suppose I'm going to get over there? Fly?" I asked.

"O, I don't know," returned Verna, "Hush! I've got a fish."

After disposing of her fish she came over and looked on. But as she offered no further suggestions, I presume she had reached the end of her resources.

"O, say," suddenly volunteered Della gazing hopefully at the opposite bank.

"Well, what?" I asked brightening.

"You can't swim though, can you Minnie?" she said, her voice losing its hopeful ring.

"Of course not," I returned exasperated. "Do you suppose I'd be standing here like a one legged idiot if I could?"

"A one legged idiot" appealed to Della and Verna and they giggled irrepressibly.

"I was going to say," continued Della, "that if you only could swim, there's such a nice dry place to get out just across the creek."

It was Mattie who finally offered the suggestion that saved my life.

"Couldn't you hold to the pole while we girls walked along the bank and pulled you along to where the bank isn't so steep?" she said.

"I can try," I answered.

And so the procession started. I sort of half crept, half floundered and was half dragged along through the mud and water. There was one terrible moment when I thought I was lost. The girls had to half let go the pole to reach around a tree that was in the way, and just at that moment I slipped down and all but tore the pole from their grasp. It was horrifying, when I remembered it that night after I had gone to bed, I got up and

lit the lamp and looked carefully for gray hairs, but I couldn't find any. Finally we reached the lower bank, and the girls hauled me up, hand over hand. I was plastered with mud. We went to the house and Elsie took me to the bath-room and went in search of some of her clothes. I was certainly a curiosity in Elsie's clothes. I stood out and danced them, what I purported to be the highland fling, though I'd never seen one, and the girls had a good laugh.

When we went back to our fishing, Elsie suddenly burst into laughter.

"O, girls, you know what a time we had saving Minnie? Well there was my boat not ten feet away." Then we had another good laugh.

"Just think," said Elsie after the laugh had subsided, "how terrible it would have been if you had been drowned," and tears rose to her eyes.

"It would have been awfully exciting though, don't you think to have a funeral, and we six girls would be pall bearers," said Verna.

"But Verna," said Della, "there'd only be five of us if it was Minnie's funeral; she couldn't be one of the pall bearers."

"That's so," said Verna. "Well" with a sigh, "I suppose if we couldn't all be there its just as well as it is."

"I think so myself," I agreed with emphasis. "Why Minnie," said Della in surprise, "you'd be the heroine of the whole thing. Everybody crying and saying what a good girl you were and how beau—only—" breaking off to turn and stare at me critically, "you aren't beautiful though. Now if it were Verna here, wouldn't she look lovely with the flowers and her hair all—"

"I'd be very happy to have Verna for a substitute," I interrupted.

"Yes'n we could—"

"Della, hush this instant! Why you positively make me shudder," commanded Mae.

There was no more time for fishing. Mrs. Jones and Elsie had been busy and soon we sat down to a great platter of delicious fried fish. I certainly never tasted anything half so good. How we ate! We had the grace to tell Elsie's mama that we were ashamed of ourselves. But she only laughed and urged more upon us.

Just before we went home Elsie awarded the prizes. Mae got the prize for the largest fish, a fish platter. Verna of course for the largest number, a lovely rod and line. Mattie and Della tied for the smallest and received each a print of a fishing scene while I of course got the prize for the smallest number, a candy fish.

When we kissed Elsie goodbye at the gate we told her we had the splended time! And we had too.

(To be continued.)

The Sea Hedgehog.

In an article entitled "Nature's Touch-me-Nots," appearing in The Scientific American, Percy Collias speaks of the thorny protection which has been accorded to various animals, fishes, and plants. He thus refers to the globe fishes of the Atlantic and Indo-Pacific Oceans, which are sometimes termed "Sea hedgehogs."

The extreme length of the globe fish is something less than two feet. It has thick lips and goggle eyes which give it the appearance of a good-natured countryman. Courage it seems to lack, and one might suppose that such a simpleton would fall an easy prey to the first shark or dogfish it encountered. Yet the globe fish is able to take care of itself. It never, under any circumstances, attacks the enemy, yet is always ready to receive him in a suitable manner should he provoke hostilities. Let us suppose that a shoal of globe fishes are swimming tranquilly in the clear waters when they are suddenly surprised by a hungry shark. Of course the little fellows scuttle hither and thither in uncontrollable alarm. But the shark, poising himself upon his powerful tail, leisurely singles out one of the fleeing globe fishes, and sets out in pursuit. Now although the globe fish is a good swimmer, it is no match for the shark. The chase is in every way unequal and can have but one ending. Within a few minutes the shark



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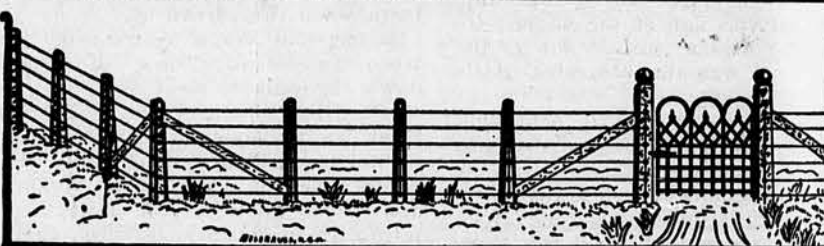


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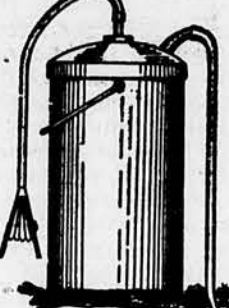
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Topeka, Kansas

O. K. Lard

must overtake the globe fish. But the quarry is well aware of its danger. It makes a bee-line for the surface, and as soon as it gets there begins to take in great gulps of air. Then a strange thing happens. The fish that only a moment before was thin and small begins to grow stouter and stouter until, like the frog in the fable it seems in danger of bursting. It stops inflating itself, however, just in time to avert this catastrophe. But its skin has become as taut as a drum-head, and the whole of its body is covered with sharp, erect prickles. It has become a sea hedgehog, and the hungry shark which comes surging through the water dares not touch it, but turns tall in search of something more eatable. Of course the globe fish was covered with prickles all the time, but in periods of tranquillity these lie comfortably along its sides, just as do those of the hedgehogs. Unlike its land prototype, however, the sea hedgehog is unprovided with a special muscle for erecting its prickles, so when danger threatens, it has recourse to the mechanical method of inflating the whole body with air, or with water, if it cannot reach the surface quickly.

Mr. Gladstone, When a Boy.

It is not always safe to follow the example of good and great men, even when advised to do so. The following personal incident once related by the famous English statesman, Gladstone, to a small visitor, is a case in point. He said:

"When I was a little chap, just leaving off my kilts, my father sent me to dine with Beaconsfield, who, having taken a fancy to me while visiting in Norfolkshire, wanted to have me as his guest.

"My good father, as he parted with me on my way to his Lordship's, said, 'Now, William, when at his Lordship's board be sure you do exactly as he does.' Well, I went to the good man's house, and sat down at the table and anxiously watched my host while he served the guests, bent of course on following my father's orders to do exactly as his Lordship. When the guests had been served, his Lordship looked up from his place and soon sneezed several times. I watched him, and soon I sneezed the same number of times I had noted he had done. Nothing was said, the meal continued without interruption for a few more minutes, then his Lordship exclaimed:

"A beastly draught," and, wheeling around in his chair, called to his valet to close a door that had been left open near his Lordship's seat.

"Again I watched him; then, repeating the exclamation he had uttered, I wheeled around in my chair and gave a similar command to the valet.

"There was a silence; his Lordship's brow knitted, his lips closed, and he gave me such a hard and inquiring look that I trembled from head to foot.

"At last he spoke; his voice not harsh, but determined.

"See here, William, are you imitating me?" he asked.

"Oh, no, your Lordship," I stammered out.

"Well, what does this mean?"

"Only, your Lordship, that I am doing what father told me. He said I was to watch you at the table and do exactly as you did."

"His Lordship laughed merrily, then turning to his guests, said:

"I am taught a lesson. I must not do that which I would not have others do."

Then, closing the story with his little visitor, Mr. Gladstone said:

"Little man, always be careful; never do anything because other people do it, unless you are certain it is good and pleasing unto God."—Exchange.

There are still several localities in Kansas and Oklahoma where THE KANSAS FARMER does not have regular resident representatives. The pay is good and sure. The work is pleasant and profitable. Write us about it.

When writing our advertisers please mention The Kansas Farmer.

The Little Ones

A Little Lover.

I've been so happy, happy all to-day;
I lay upon the ground, I kissed the grass;
I kissed the little stones all brown and gray;
I watched the snow-white clouds that pass and pass.

I saw a little bird go 'cross the sky.
And when I listened I could hear it sing—
A little, little dot, up there so high,
I think it knew that I was listening.

I put my ear close to the big, warm ground,
I shut my eyes and held my breath, and oh!
I heard a little running sound,
Like music, very far and soft and slow.

And then I stretched my arms away,
'way out,
And looked at everything for far-and-wide.

And loved, and loved for miles and miles about.

I loved things so I think I almost cried.

—Laura Campbell, in The Craftsman.

Who Ate the Ring?

Harold was having a birthday party because he was six years old, and Aunt Helen, and Grandma, and Miss Nellie, and ever so many big people were there helping all the little people to have a splendid time. They played games and sat in the darkened parlor to look at the magic lantern pictures till the clock struck five, and then Harold knew what was coming.

Out in the dining-room the table was set with mama's prettiest china, and there were candles, and flowers, and bon-bons just like a grown up party.

Harold was very anxious to have all the children see the table, so he was glad when Aunt Helen said, "Now we are going to march to the dining-room."

Miss Nellie played a bright little march, and the boys and girls formed a long line through the parlor and out on the piazza. "Just like a long white ribbon," said Grandma, for most of the girls wore white dresses and the boys white waists.

The tiny sandwiches and wee pickles vanished like magic and all the grown up people were kept busy waiting on the little folks. Playing games makes one very hungry, you know, and most of the guests had been too excited to eat much dinner that day. Altogether it was a very jolly supper, and when mama wanted to make a little speech she had to ring the tea bell several times.

"Now children," she said, "I am going to pass some little cakes and one of them has a ring baked in it. You must eat them very slowly and carefully, so some one does not swallow it. You must not break up the cakes to find the ring but just nibble away till some little boy or girl says 'I've got the ring.'"

Aunt Helen brought in ice cream and the children ate the cakes and the cream very slowly. At last all had been eaten and still no one had said, "I've got the ring."

"That is very strange," said mama. "I will ask Mary if any one took one of the cakes."

"No ma'am," said the maid positively. "There has been no one but me in the dining-room since I put the cakes on the table."

"I just know I swallowed it," sobbed a little girl. "I felt it going 'down.'"

"So did I," said a tiny boy, and he had to cry too.

"There! There!" said Mrs. Clifford much perplexed. "Two of you could not have eaten it, so don't cry."

"I feel bad, too," said another little girl. "It must have been in my cake."

I really don't know what would have happened just then if papa hadn't come in. He was so surprised to see tears at a birthday party that he had to inquire the cause, though he was in a big hurry.

"Well, well," he laughed. "I didn't know what a commotion I would cause by taking one cake. I was on my way to see a little patient who has been in bed a long time with a lame limb and I wanted to take her some of the goodies. I slipped softly in here a

MOTHERHOOD

The first requisite of a good mother is good health, and the experience of maternity should not be approached without careful physical preparation, as a woman who is in good physical condition transmits to her children the blessings of a good constitution.

Preparation for healthy maternity is accomplished by Lydia E. Pinkham's Vegetable Compound, which is made from native roots and herbs, more successfully than by any other medicine because it gives tone and strength to the entire feminine organism, curing displacements, ulceration and inflammation, and the result is less suffering and more children healthy at birth. For more than thirty years



Lydia E. Pinkham's Vegetable Compound

has been the standby of American mothers in preparing for childbirth. Notewhats Mrs. James Chester, of 427 W. 35th St., New York says in this letter:—Dear Mrs. Pinkham:—"I wish every expectant mother knew about Lydia E. Pinkham's Vegetable Compound. A neighbor who had learned of its great value at this trying period of a woman's life urged me to try it and I did so, and I cannot say enough in regard to the good it did me. I recovered quickly and am in the best of health now."

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It has cured almost every form of Female Complaints, Dragging Sensations, Weak Back, Falling and Displacements, Inflammation, Ulcerations and Organic Diseases of Women and is invaluable in preparing for Childbirth and during the Change of Life.

Mrs. Pinkham's Standing Invitation to Women

Women suffering from any form of female weakness are invited to write Mrs. Pinkham, at Lynn, Mass. Her advice is free.



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Complete Wardrobe Outfits \$5 to \$50
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Set of 30 patterns for baby's first dresses with full directions for making, "Nurse's Confidential Talk to Mothers" and my new illustrated catalogue of everything for the baby, for 25c. stamps or coin.

MRS. MARY POTTER, Fayetteville N.Y.

little while ago and took some of the nice things without disturbing the party a bit. Even Mary didn't see me. Now, I just wonder if little Bess Ryan isn't wearing that ring this minute?"

"O, papa, won't you go right over and see?" begged Harold.

"I hope she did get it," cried all the children and sure enough, in a few minutes Doctor Clifford came back to tell how happy the little girl was with her treasure.—Scattered Seeds.



ON WASH DAY

IF YOU USE A CROWN CLOTHES LINE PROP.

FITTED WITH METAL TOP, WHICH PREVENTS SLIPPING OR COMING DETACHED FROM THE LINE; ALSO CREATES A GRAVITY WEIGHT AT THE BOTTOM OF THE POLE. NEVER SLIPS. NO MORE CLOTHES SOILED IF THIS PROP IS USED. ASK YOUR DEALER FOR IT IF HE CANT SUPPLY YOU, ADDRESS WHITE & BOHRER MFGS., 316 MAIN ST., KANSAS CITY, MO. HOME PHONE MAIN 8029. \$7.20 PER DOZ. A DISCOUNT TO DEALERS

Dairy Interests

Cooperative Plan for Increasing Dairy Profits.

The following plan for the organization of a cooperative cow testing association was submitted to the patrons of the Oklahoma Agricultural and Mechanical College Creamery sometime ago, the object being the furtherance of the interests of dairying in this section, and the general improvement of the quality of the cows kept by the various members of the association. The plan was approved and the organization of the association, to be composed of twenty-five members, is now under way.

Each member will purchase at a total cost of \$3.50 an outfit of one dozen one-pint tin-top sample bottles, one sampler, and one pair thirty-pound scales. Record sheets and preservative tablets will be furnished free by the station. Two patrons may purchase jointly, thus reducing the cost by one-half.

Each member is to keep a record of the pounds of milk given by each cow for one week in each month and at the same time, to take a complete sample from all the milkings from each cow during that week. These samples are to be tested at the creamery and the amount of butter fat calculated for each cow. This record multiplied by four gives the record for the month. By adding the record for the several months of lactation together the yearly record of production is obtained for each cow.

The benefit to the members are classified as follows:

1. Each member will secure a record of production (milk and butter fat) of each individual cow. The record of production is the greatest pedigree of the dairy cow.
2. Members knowing their best cows can breed them to the best dairy sire in the vicinity, and raising the heifer calves, drop off their poorer cows, and thus secure a herd with a good record of known performance. Weeding out the poor cows and keeping the good ones will soon build up a herd of money-makers.

3. Better care can be given the more profitable cows and less feed and time wasted in feeding and caring for the poorer ones. Know your cows and you will know better how to make dairying pay.

4. An increased interest in the dairy herd will follow, and with this, better cows, larger profits, more productive farms, and a system of farming be encouraged which will make happier, wealthier, and better satisfied people.

The following plan is suggested for weighing and sampling:

Have the scales hanging close by the milk can and strainer and have the weigh sheet tacked on a board by the side of the scales.

When you have finished milking a cow empty the milk into the weigh pail hanging on the scales. The scales should be set so that when the weigh pail is hanging the red arrow reads zero. Pouring the milk into the pail mixes it up ready for sampling which is done by taking two dips and putting into the sample bottle. The weight is read and recorded and pail emptied, the whole process taking less than one minute.

In sections where co-operative creameries are operating test associations can be organized, the testing being done by the creamery and paid for either by the members directly or indirectly from the sinking fund of the creamery. Where an organization can not be formed, or a creamery is not near to do the testing, the farmer can purchase an outfit for from four to nine dollars and do his own testing. The agents of creameries at stations where cream is shipped would undoubtedly do the testing for a small sum and thus every owner of a cream separator could avail himself of an opportunity to find out his best cows.

These records would be of untold value to the dairyman of Oklahoma if they were kept sys-

tematically and the dairyman applied himself to a study of his herd, culling out the poorer cows and keeping only those that would make a good profit over and above the cost of feed and keep. The Illinois Station has investigated the problem in that State and estimates that fully one-third to the cows there are kept at a loss to their owners. If this is true in Illinois, then it is all the more true in Oklahoma where less attention has been given to grading up the dairy herd. Often one finds that what he believes to be his best cow was really the poorest when the scales and Babcock test are applied.

General appearance and type are often deceiving and the best and safest way to cull out the poor cows in the herd is to use the milk scales and the Babcock test.

While the station is doing this work for the patrons of the college creamery, it does not mean to confine its usefulness in this line to them alone. It is ready and willing to help persons in any part of the State to test out their dairy herds, and will send them the outfit for weighing and sampling the milk at the price offered to patrons of the college creamery (\$3.50), express to be paid by the person ordering, and money order for same to accompany the order.

To such as cannot get their milk tested at the creamery or receiving station and desire to purchase tester and testing outfit, the station would be willing to recommend the names of various companies supplying same and from whom catalogues of the machines may be obtained. The weighing and sampling outfit is usually all that is needed and if a tester is desired, \$4.00 to \$8.00 will supply it. If your returns per cow do not average \$1.00 per week for 40 weeks in the year with good care and feed, then a test of the herd would undoubtedly reveal a few "star boarders" who are not paying for their keep. It is not meant by this that \$40.00 per cow per year should be the standard for the herd, in a year like the present one when prices for butter fat range high, \$50.00 is low enough and \$60.00 would be better.

The station is prepared to supply outfits to a limited number and any one wishing to keep a record of his herd may write to the Oklahoma Agricultural Experiment Station, Stillwater, Oklahoma, and he will receive all assistance that may be given.

Effect of the Milking Machine on Bacterial Content.

The question whether milking machines, as put on the market today, are practicable for farmers, has been a much discussed one. Some light has been thrown on the subject by Prof. Edwards, of the Ontario Agricultural College, Canada, who has made some interesting tests along that line. The object of the test was only to determine whether pure milk could be obtained with the machine milker under conditions that would make its use practicable on the farm.

No attempt was made to determine the species of bacteria present in the samples beyond the detection of acid producers and those which liquify gelatine. Organisms which can liquify gelatine can cause a chemical disintegration of the nitrogenous constituents of milk. During this process products may be formed which are poisonous to the body, causing gastrointestinal disturbances.

As bacteria is always associated with dirt and filth, the bacterial flora of milk, either machine or hand-drawn, will depend on the cleanliness of the surroundings where the milk is secured. In this connection the conditions existing in the college dairy barn were far better than those which prevail on most farms. From the time the milker was installed until after the test began (a period of about seven months) the machine was cleaned according to the directions issued by the manufacturers. The first samples were taken as the milker was ordinarily operated, the cows being milked by machine and by hand on alternate days.

Of the machine-drawn samples in

this first series the highest number of bacteria in any one was 1,208,000 per c. cm. (about 20 drops); the lowest was 203,000 per c. cm., with an average of 500,328 per c. cm. Of the hand-drawn samples in the same series, the highest number was 68,900 per c. cm.; the lowest was 3,200 per c. cm., with an average of 23,583 per c. cm. The relative proportion of acid producers and liquifiers, to the total number, was approximately the same in the hand-drawn and machine-drawn samples. Every sample of machine-drawn milk, Prof. Edwards' report tells us, showed a very high bacterial content, while all but one of the hand-drawn samples showed a bacterial content comparatively low.

A series of samples was next secured with the object of determining the effect of boiling the rubber parts and cover of the milker once a week. The average number of bacteria per c. cm. in the samples taken on days when the parts were boiled for two or three minutes was 37,962, two of the samples being below 16,000. On the other hand, samples taken six days after boiling the parts, ordinary cleaning being practised meanwhile, showed a bacterial content of nearly 150,000 per c. cm. (the bacteria count in "sanitary" or "certified" milk varies from 10,000 to 50,000 bacteria per c. cm.) The results of these tests show that extra precaution is necessary where machines are used, also the futility of attempting to produce even "certified" milk by relying on a sanitary cleaning of the machine only once a week.

For the next sample an expert representing the manufacturers prepared the milk, taking plenty of time to wash, boil, and steam every part carefully. Two samples were taken; one showed 1,407 bacteria per c. cm., the other, 1,776 bacteria per c. cm. These results showed that it is possible to secure milk of a low bacterial content with the milking-machine, but would seem to be impracticable for any but large dairies.

Keeping Ice Without an Ice House.

DR. GEORGE G. GROFF IN COUNTRY GENTLEMAN.

In this neighborhood (Union County, Pa.), for ten or more years, ice has been preserved in a most convenient and inexpensive manner. The

Clean Skimming Means Good Living

The hog trough is no place to put butter.

Wide awake farmers want the cream separator that skims the cleanest. It means more profit—better living. That separator is the Sharples Dairy Tubular—the separator that's different.

Sharples Dairy Tubulars have twice the skimming force of any other.



separators—skim twice as clean.

Prof. J. L. Thomas, instructor in dairying at the agricultural college of one of the great states in the Union, says: "I have just completed a test of your separator. The skimming is the closest I have ever seen—just a trace of fat. I believe the loss to be no greater than one thousandth of one percent."

"That is one reason why you should insist upon having the Tubular. Tubulars are different, in every way, from other separators, and every difference is to your advantage. Write for catalog S-16 and valuable free book, 'Business Dairying.'"

The Sharples Separator Co.,
West Chester, Pa.
Toronto, Can. Chicago, Ill.

contrivances do not deserve the name of houses, though I believe they are called "ice houses."

On a convenient site, telegraph, telephone or other round poles are planted so as to make a square or oblong pen of the desired size. Rough boards are nailed on the inside of the posts so as to form the walls, leaving a place for doors, as is usual in ice houses. A floor is made of coal ashes one foot or less thick, so as to afford complete drainage. No roof whatever is provided, indeed, most of those who keep ice in this manner say that roofs are entirely unnecessary, and that the ice keeps even better without a roof over it, than with one.

The ice is cut and packed in the usu-

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We Inaugurated the Individual Direct Cream Shipper's System.

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YOU get all the Profits instead of dividing with the middlemen. Our booklet explains the system fully. Write for it. "KEY TO SUCCESS, or Full Information of the Individual Direct Shipper's System."

BLUE VALLEY CREAMERY CO., ST. JOSEPH, MO.

el manner and then is covered with sawdust one foot deep. I do not know of any one covering it with straw, but should think if that were used, it should be cut first. Our dealers here pack the ice with a space of six inches left next the walls and afterwards filled with saw dust, and this space is kept filled as the ice melts. The floor is made of anthracite coal six inches to one foot deep. The posts forming the house are tied with telegraph wire, or with braces placed on the outside. All other plans of keeping ice are here abandoned.

The Same Old Fake.

A correspondent sends us a newspaper clipping of a column describing, with much enthusiasm, a new churn that as usual will "revolutionize one branch of the dairy industry." The seasons come and go, and it is an unusual one that does not produce a "revolutionizing" churn that will make more butter, better butter, and quicker butter than any other churn on the market.

The great point on this churn is forcing air through the cream which "produces a chemical change, uniting the casein with the fat and leaving only whey as a waste product."

And then again comes the same old story of putting one pound of butter and a quart of milk in the churn and taking out three pounds of fine butter. How familiar that all sounds. There has not been a year since the Chicago fire when that old fairy tale of oxidizing casein into butter and making three pounds of butter where only one existed before, has not been used as a bait to catch suckers, and although the bait is somewhat stale, it still seems to have its old attractiveness. Not long ago it pulled out \$4,000 in Michigan and this time \$5,000 from the middle of a dairy district in Wisconsin.

Knowledge is always expensive, but then paying \$9,000 to educate a few men in the mysteries of churning cream, seems to us expensive. They could have obtained all the necessary information for a two-cent stamp and been just as wise as when, in the future, the other man will have the money and they will have the experience.

The Poultry Yard

CONDUCTED BY THOMAS OWEN.

Poultry Notes.

It is now molting time for old fowls and it is a great strain on their constitutions. They, therefore, should have the best of care and attention during this trying season. Feed plenty of good, nourishing food so that they may get their new coat of feathers before the cold season sets in. If they don't, they are liable to catch cold, which may turn into a more serious disease, and eventually cause their death.

It becomes necessary at times to prepare a lotion to bathe wounds and sore places on poultry. There is nothing better than a few drops of laudanum in a teacup of water. This being both cooling and healing. Tincture of myrrh is also recommended, about a teaspoonful to half a pint of water. If proud flesh shows itself around any wound, apply a little burnt alum, or if burnt alum is not handy, a little white or powdered lump sugar is a good substitute.

A small flock of fowls which receives the scraps from the table produces eggs when larger flocks are unprofitable. Table scraps are not grains, and therefore contain a variety of food elements not found in the rations of a large flock. Bread, meat, potatoes, and cooked vegetables of various kinds, as well as the sour milk and even pie and cake are included, to say nothing of peas and beans, which are the best of all egg-producing foods. This variety not only provides the hens with the elements needed for egg-production, but it promotes digestion and prevents disease. This kind of food would be

costly, if it were not the waste of the table, for it requires labor to produce it. We are often asked why a large flock, say a thousand fowls, cannot be made to lay and therefore pay, as well as a small flock fed on kitchen scraps. We answer they can, provided you feed them on the same kind of food that you give to your small flocks. But as we said before, to feed them such stuff would be too expensive, and only as it is a waste product it is profitable for hens. But every place where table scraps are available there ought to be a flock of fowls whereby the scraps can be utilized, for a more profitable way to dispose of them can not be found than feeding them to hens.

There are a great many causes for not getting eggs in summer, one of them being that the hens are usually molting. If the hens have a grass plot and good forage, they usually lay well at this season, if they are not molting, but where they are confined it frequently occurs that there are fewer eggs in the summer than in the winter. This is not difficult to explain. In winter the food may consist largely of grain and other concentrated foods, as the cold renders the fowl liable to loss of heat and fat, but in summer the bodily wants of the hen are lessened. Many persons do not give the difference in the seasons any consideration at all. In summer, the more bulky food, such as cut grass, that is fed, should be augmented with a proportion of chopped meat and ground bone. Only a small amount of grain should be allowed, which should be scattered in litter, so as to compel the hens to scratch for it. If grass is fed in the morning, with mashed potatoes and meat at night, the hens will need no grain at all.

Many fine chicks are materially injured by crowding. They are growing and are greedy, caring more to get all they can for themselves, regardless of the feelings of others. They crowd, they tread on, and pick each other, till one finds that his once-promising flock is looking decidedly ragged. Separate them, assort them according to sizes, give the weaker ones a chance, for we may find our best birds among them.

THE KANSAS FARMER JOB DEPARTMENT.

The Job Department of the The Kansas Farmer has recently added new equipment, necessitating larger quarters, and this department is now located on the second floor of our building.

We are now prepared to do a general job printing business, such as commercial printing, folders, pamphlets, briefs, blanks, circulars, visiting cards, wedding invitations, etc.

We make a specialty of fine stock printing—catalogues, stationery, cards, sale bills, etc., and have on hand an assortment of cuts representative of the breeds.

Here is a good assortment every stockman should have on hand, printed: 250 bill heads, 500 business cards, 1,000 envelopes, 1,000 letter heads, 1 stationery case, The Kansas Farmer one year; shipment free to your express office; all complete for \$10. Good quality of paper and work guaranteed.

Every farmer should have his name, postoffice, and rural route printed on his envelopes, with printed paper to match. How is this for a combination: 250 envelopes, 250 note heads, 50 visiting cards for the wife or daughter, The Kansas Farmer one year. All postpaid to your address for \$3.00.

Address The Kansas Farmer Job Printing Office, B. A. Wagner, Mgr., Topeka, Kans., Telephone, Ind. 1737.

The Separators News

for autumn will be ready for distribution September 15th.

About farm separating, and especially about the Tubular separator; illustrated in colors; offers catalogues, "Business Dairying," matchholders, mirrors, pictures.

The News also tells about the piano competition open to buyers of Tubulars during 1907.

The Separator News is free to those asking for it. Three illuminated postcards, will be sent to those who send the names of two other persons, interested in dairying, who do not own Tubular separators.

THE SHARPLES SEPARATOR COMPANY, West Chester, Pa.

THE HARVEST THAT NEVER ENDS



DE LAVAL CREAM SEPARATOR

is used, to say nothing of the time and labor saved. Isn't it worth your while to investigate such a saving? If you own two or more cows the practice of economy and good business methods in the care of their products demands a DE LAVAL machine. Remember that one will last from fifteen to twenty-five years, and that it will more than earn its cost the first year of use. Write today for new catalogue.

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S. C. BROWN LEGHORNS—Some fine early hatched cockerels for sale cheap. We handle two best strains of Leghorns. Come early if you want the best. Write for prices. L. H. Hastings, Quincy, Kans.

PURE SINGLE COMB BROWN LEGHORN eggs, 30 for \$1; 100 for \$3. Jos Caudwell, Wakefield, Kans., successor to F. F. Flower.

NOT TOO LATE to get a start of Hastings' Heavy Laying Strain of S. C. Brown Leghorns. Rest of season, eggs 75c per 15; 2 sittings \$1.25; or \$3 for 100. L. H. Hastings, Quincy, Kans.

STANDARD-BRED SINGLE COMB BUFF LEGHORNS—Headed by first prize pen, Chicago show 1903 and took six first prizes and first pen of Newton, 1904. Eggs, \$3 for 15. S. Perkins, 801 East First Street, Newton, Kans.

RHODE ISLAND REDS.

LAYING STRAIN S. C. REDS—Old and young stock for sale. Eggs, one-half price after June 15. R. B. Steele, Sta. B., Topeka, Kans.

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

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

PLYMOUTH ROCKS.

BARRED AND W. P. ROCK EGGS—Hawkins and Bradley strains; 15 for \$2.45 for \$5. Chris Bearman, Route 9, Ottawa, Kans.

White Plymouth Rocks EXCLUSIVELY

Good for Eggs. Good to Eat. Good to Look At

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BUFF, BLACK AND WHITE LANGSHANS, SILVER SPANGLED HAMBURG, SILVER LACED, BUFF AND WHITE WYANDOTTES, SINGLE COMB, ROSE COMB AND BUFF LEGHORNS, BLACK MINORCAS, BUFF AND WHITE ROCKS, S. C. RHODE ISLAND REDS, BARRED ROCKS, BUFF ORPINGTONS AND LIGHT BRAHMAS.

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FANCY BUFF ORPINGTON, White Plymouth Rock and White and Black Langshan cockerels at \$1 and \$1.50 each. Mrs. Lizzie B. Griffith, Route 3, Emporia, Kans.

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W. R. TALBOTT, Prop.

Hebron, Nebr.

Horticulture

Hardy Catalpa (*Catalpa speciosa*)
GEO. L. CLOTHIER.

This tree is a native of the deep, fertile soils of the valleys of southern Indiana and Illinois, western Kentucky and Tennessee, southeastern Missouri, and northeastern Arkansas. It is cultivated over extensive areas outside of this region and, where cultivated, occasional trees are found springing up where the seeds have been distributed by natural means. The demand for catalpa wood has been so great that but a few native trees of marketable size remain. In its most favorable location the tree reaches the heights of 60, 80, and rarely 100 feet, and attains a diameter growth of 2 to 4 feet.

No other tree can be named which is more strongly influenced by the soil upon which it grows than the catalpa. It is best adapted to deep, fertile, porous soils and thrives especially well where there is an underflow of water within 10 or 12 feet of the surface. These conditions are obtained in the valleys of the Wabash in Indiana, and Illinois, the Arkansas in Kansas, and many other streams of the Middle West. It is not well adapted to stiff clay soils or to soils having a tenacious gumbo subsoil, such as are often found upon the uplands. A rainfall of 25 inches per year is essential to the best growth of the catalpa unless it can root down to the water-table.

The Hardy Catalpa is one of the most rapidly-growing trees planted in the West. A height growth of two and a half feet and a diameter growth of one-half inch annually for the first twenty-five or thirty years is not unusual. If cut in the fall or winter, the catalpa ranks with the Osage Orange in durability in the soil.

When used for fence posts the wood often remains perfectly sound for thirty or forty years. Its rapid growth, durability in contact with the soil, good form, lightness, elasticity, and immunity from checking gives it a prominent place among the trees in the Middle West for economic planting. In Kansas there are three plantations of this species of over 400 acres each, besides many smaller ones which are being grown to produce fence posts and telegraph posts. Returns from these plantations show that they have yielded greater profits per acre than could have been derived from ordinary farm crops on the same land, in the same length of time. It requires less labor to produce the timber than other common crops. The plantation of C. W. Yaggy, near Hutchinson, Kansas, showed a net value when ten years old of about \$200 per acre, or a profit of \$20 per year.

The catalpa has commonly been planted four by four feet, and experience seems to show that the trees do not crowd at this distance for the first eight or ten years, after which time they need thinning. Many of the trees are then of suitable size to make excellent posts, and will yield good returns. In from four to six years more all the trees should be of marketable size. The plantation may then be harvested entire and a new forest started from the stump sprouts, or it can be again thinned and the best trees left standing to produce telegraph poles or railroad ties. Good telegraph poles are often produced in twenty to twenty-five years.

Close planting is desirable to obtain the greatest possible yield from the plantation for the first few years, and is necessary to crowd the tenacious side branches from the trunk and to give the tree the tall, straight form necessary for posts and poles.

It also much improves the form of the catalpa and hastens its upward growth to cut the trees back to the ground in the fall of the second year after planting. Thrifty sprouts will spring up from the stump of each tree so cut back. The following mid-summer all of these sprouts, except the most thrifty one at each stump, should be removed. The sprout left will grow very rapidly, often reaching a height

of 10 to 12 feet the first season. It will also be straight and free from side limbs to this height.

The planter can secure seedling trees from nurseries at very reasonable prices or he can grow the trees easily himself. Seed can be purchased for 35 to 60 cents per pound. It ripens in October and can safely be kept through the winter in a cool, dry place.

Germination may be hastened by immersing the seed before planting in warm water and allowing it to soak for 24 hours. The seed should be thickly sown in rows in well-prepared mellow soil, far enough apart to allow thorough cultivation. In good locations the seedlings grow eighteen inches high and over in the nursery rows the first year.

National Corn Exposition.

The National Corn Exposition will be held at Chicago at the same time the National Dairy Show is in progress, thus making it possible for those interested in dairying to see two splendid shows by making only one trip to Chicago. Corn is the necessary adjunct to dairying and the two fit nicely together.

Besides the wonderful exhibits of corn, there will be prepared daily innumerable varieties of food made from corn. No one but an expert can realize the numerous and delicious dishes that can be prepared from corn products.

Full information in regard to the Corn Exposition can be had by addressing C. A. Shamel, General Manager, Chicago, Ill.

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His Ability Due Largely to the Possession of Proper Tools.

Every one knows the handy man and envies his ability to do any kind of work. If he wants some improvements made in his home or farm, he does the work himself and while most people would be waiting for a carpenter or a mason, a plumber or a gas fitter, he has the job done and done to suit him exactly.

If you investigate, you will find that he has a very complete outfit of tools, that whatever he undertakes he has just the proper tools for the job.

Look over your own tool-kit. Could your handy man make it with them? In nine cases out of ten it is the tool not the man, or rather, the handy tools make the handy man.

It is the simplest thing in the world to supply yourself with a complete set of fine tools, each the very best of its kind. Just buy one of the Keen Kutter Tool Cabinets.

Every tool in these cabinets belongs to the famous guaranteed brand of Keen Kutter Tools. No other cabinets offered for sale contains a complete set of high-grade tools, all under the same name, trade-mark and guarantee. No expert could buy a better set of tools, for better tools are not made. The trademark on each tool protects you against bad luck, for if anything should go wrong, you can have your money back or another tool to replace the one returned.

Keen Kutter Tool Cabinets contain large and small assortments of tools to suit different needs, and range in price from \$8.50 to \$85.00. Each tool in the cabinets has a special rack or hook of its own which keeps it from being damaged by contact with the others. Drawers are well supplied with little helps and essentials that are apt to be overlooked until you are in the midst of your work—glue, sand-paper, tacks, nails, screws, wire, clamps.

Keen Kutter Tool Cabinets contain Saws, Braces, Bits, Chisels, Gimlets, Awls, Planes, Hammers, Files, Pliers, Screw-drivers, Wrenches, Nail Sets, Reamers, Rules, Squares—in fact, everything necessary for good work.

For sale at the leading hardware stores. If not at your dealer's, write to Simmon's Hardware Company (Inc.), St. Louis and New York, U. S. A.

How to Select a Stove or Range.

To select a perfect stove or range: First—Examine carefully a large assortment of styles until you find one that pleases you. Second—Remember that all stoves and ranges may look very much alike, but there is a vast difference in their wearing and service qualities. Third—To make sure that the stove and range you do purchase is one that will wear for years and give absolutely satisfactory service, buy direct from the manufacturer and have it shipped direct from his factory. Fourth—Don't pay two prices for a stove or range. Buy direct from the factory of a reliable firm, a factory with millions behind it, and then their guarantee means something. Fifth—if any of our readers want to purchase a stove or range during the coming season, a word of suggestion will be sufficient. Write direct to the Hoosier Stove Company Factory, 209 State St., Marion, Indiana.

The Hoosier Stove Company makes a very high-grade line of stoves and sells them direct to the user at a big saving to you, saving all dealers' and jobbers' big profits. We take pleasure in recommending the Hoosier Stove Company, their stoves and ranges, and their methods. They will send you without a cent's expense to you a stove or range for you to try thirty days. They will send you a stove or range backed by a million dollar guarantee, and you will be the judge, for you are in no way obligated to keep any stove or range they send you. Write the Hoosier Stove Company for their special free trial offer. The most liberal offer ever made by a manufacturer.

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Kansas State Exposition

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September 10, 11, 12, 13, 1907

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\$11,000 in Stakes and Purses.

Splendid Attractions. Grand Music.

Western Association Base Ball Games

M. A. LOW, Pres. R. T. KREIPE, Sec'y

Kansas State Fair

HUTCHINSON,
SEPTEMBER 16-21, 1907

The success of this Fair is based upon years of experience. It is operated for the exhibitors and the visitors. It is general in scope and educational in results. It is the natural meeting place for the breeder and his buyer. The grounds right in town with acres of trees and plenty of good wells of water. More than 80,000 square feet of floor space under roof for live stock and other exhibits.

\$25,000 in Premiums Offered in the Scope of the Usual State Fair.

The American Hereford Breeders Association, The American Shorthorn Breeders Association, The American Angus Breeders Association, The Red Polled Cattle Club of America, The Percheron Society of America, The American Oxford Down Record Association and other associations have each appropriated funds and participate in the payment of premiums, making it an event of national importance.

Sole expert judges pass upon exhibits.

The Speed Department is unexcelled in the West. Over \$12,000 offered in stakes and purses. The six stakes have already filled with 172 horses entered. The nine purse races will fill as well. These \$1,000 stakes have brought out horses bred in the purple from twenty different states. DERBY DAY will be Tuesday—Mile dash \$500.00 to open the races of the week. Three harness races will occur every day.

There will be Carnival Companies, amusements and attractions of all kinds. No liquor, no gambling, no bawdy shows.

Excursion rates and excursion trains daily, 36 regular trains. Double track electric railway to the grounds. Send for catalogue or information.

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30 Head of Duroc-Jersey Swine

SEPTEMBER 7, 1907

Combination sale from the OTATOP and SPRING LAKE HERDS.

Two spring boars by Ohio Chief 41419, N. Two gilts by Otatop Notcher, bred to Proutest Advance. The great herd boar, Kaw Chief. 13 yearling boars and open gilts by Otatop Notcher 48305. 11 spring boars and gilts by Tip Top Money-maker. 1 sow by Otatop Notcher, bred to Hamlet 61033.

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L. R. Brady, Auctioneer.

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Stong's Stock Food promotes health and vigor, and will cure mange, scurf and worms in hogs, cattle and sheep. Is being used by some of the largest stock raisers in the country. Three days' feed for one cent. 33 lbs. \$5.00, 50 lbs. \$7.50, 100 lbs. \$15.00, f. o. b. St. Joseph, Mo.

Stong-Roats Mfg. Co., 201 N. 2d St., St. Joseph, Mo.

Weather Bulletin

Following is the weekly weather bulletin for the Kansas Weather Service for the week ending August 27, 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.						
Ashland.	99	58	76	2.26	71	
Colby.	99	54	72	0.22	50	
Coolidge.	101	55	75	0.50	50	
Dodge City.	97	55	72	0.50	50	
Dresden.	97	54	72	0.09	43	
Farmersburg.	98	55	72	0.09	43	
Hoxie.	100	56	72	0.09	43	
Lakin.	100	55	70	0.32	47	
Liberal.	96	56	75	1.31	54	
Norton.	100	50	72	0.04	45	
Scott.	97	56	72	0.05	51	
Wakeeney.	97	55	72	0.05	51	
Wallace.	102	51	72	0.37	51	
Division.	102	50	73	0.37	51	

MIDDLE DIVISION.						
Anthony.	100	60	76	2.09	71	
Clay Center.	100	53	75	0.13	49	
Concordia.	99	54	74	0.06	49	
Cunningham.	105	56	73	2.23	56	
Eldorado.	94	59	75	1.37	43	
Ellinwood.	94	58	72	0.35	56	
Ellsworth.	96	57	72	0.35	56	
Greensburg.	92	56	73	2.65	56	
Hanover.	92	52	75	0.10	59	
Harrison.	100	53	75	0.10	59	
Hays.	96	56	74	2.06	48	
Hutchinson.	105	56	74	0.02	64	
Jewell.	93	54	72	1.38	43	
Macksville.	96	56	74	1.52	54	
McPherson.	98	59	76	0.74	56	
Norwich.	103	56	76	0.74	56	
Phillipsburg.	95	56	75	1.74	53	
Pratt.	97	57	74	0.03	79	
Republic.	98	60	76	2.99	53	
Rome.	101	53	76	0.03	47	
Russell.	97	57	74	0.33	47	
Salina.	98	53	74	2.01	57	
Wichita.	99	62	77	0.96	58	
Winfield.	105	45	74	0.96	58	
Division.	105	45	74	0.96	58	

EASTERN DIVISION.						
Atchison.	95	54	73	0.55	67	
Burlington.	99	59	76	1.83	47	
Columbus.	100	61	76	2.15	57	
Emporia.	95	57	74	3.92	57	
Fall River.	100	60	76	2.51	54	
Fort Scott.	101	60	73	2.51	54	
Frankfort.	99	48	73	1.22	57	
Garnett.	95	57	74	1.84	46	
Grenola.	97	59	74	0.04	65	
Horton.	94	52	72	2.38	41	
Independence.	100	61	77	1.87	53	
Iola.	98	60	75	0.91	64	
Kansas City.	93	58	72	0.99	50	
Lawrence.	91	57	72	1.43	50	
Lebo.	96	58	74	1.93	50	
Madison.	94	59	73	1.03	65	
Manhattan.	97	55	74	1.04	60	
Olathe.	92	55	72	1.61	42	
Osage City.	94	54	72	2.73	56	
Oswego.	101	61	73	1.64	46	
Ottawa.	96	54	72	2.63	63	
Paola.	97	56	74	1.50	49	
Pleasanton.	96	59	76	0.34	53	
Sedan.	97	62	76	0.37	45	
Topeka.	94	56	74	1.58	54	
Valley Falls.	90	54	70	1.09	54	
Division.	101	48	74	1.09	54	
State.	105	45	73	1.09	54	

DATA FOR STATE BY WEEKS.

Week ending	67	18	54	0.12	..
April 6.	93	15	49	0.06	..
April 13.	80	12	44	0.15	..
April 20.	89	16	61	0.27	..
April 27.	88	5	44	1.42	..
May 4.	90	30	54	0.65	54
May 11.	95	17	62	0.46	76
May 18.	97	37	70	0.13	79
May 25.	83	20	65	0.68	33
June 1.	101	38	67	0.56	71
June 8.	103	41	75	1.02	81
June 15.	98	39	73	1.51	62
June 22.	100	40	73	1.69	64
June 29.	103	52	78	0.36	92
July 6.	104	53	77	0.70	79
July 13.	102	50	79	1.34	69
July 20.	106	57	81	0.82	73
July 27.	100	51	73	1.10	71
August 3.	109	52	82	0.62	79
August 10.	105	45	78	1.27	73
August 17.	105	45	73	1.09	54
August 24.	..	..	..	..	..

*Too late to use in means.

GENERAL SUMMARY.

The week as a whole was pleasantly cool with much cloudiness. The temperature was below normal. The rainfall was deficient in the northern counties but above normal in the southern. The mean temperature ranged from 74° to 78° in the central northern counties, and from 74° to 78° in the southern and southeastern counties, while in the northeastern counties it ranged from 70° to 73°. In the northwestern counties from 70° to 72°. The maximum temperatures were highest in the northwestern counties where they ranged from 100° to 105° and occurred on the 23rd. The minimum temperatures occurred on the 20th in the southwestern counties and generally on the 22nd over the rest of the State, and were lowest at Hays in the western and at Frankfort in the eastern part of the State. Only light showers occurred in the northern and western counties while the rainfall was ample in the southern and eastern counties.

EASTERN DIVISION.

Allen.—The middle of the week was unseasonably cool, but the temperature averaged only 1° below

normal. There were showers on all but the first and last days and 1.56 inches of rain fell. The sunshine was deficient.

Anderson.—The week began and ended with temperatures above the average, but the middle part was quite cool. Rains, aggregating 1.22 inches, fell on the 20th, 22d, and 24th.

Atchison.—There were several cool nights during the week, and three cool days, the temperature not rising above 72° on Thursday, the 22d. Fog occurred on two mornings, and heavy dews were common. A fine rain fell on the 19th.

Bourbon.—The first two days were very hot, a temperature of 101° occurring on the 19th. A heavy rain of 2.22 inches fell on the 19th, and was followed by much cooler weather till the week closed.

Brown.—The weather was unseasonably cool from the 20th to the 22d, inclusive, otherwise conditions were favorable, although more moisture would be beneficial.

Chautauqua.—The week, especially the middle part, was unseasonably cool. Heavy rains on the 20th, 21st, 22d, and 23d, amounted to 4.36 inches.

Cherokee.—The dry weather of the preceding week was broken by fine rains on the 20th, 21st, 22d, and 23d, amounting to 2.15 inches.

Coffey.—The week was favorable. Fine rains fell, amounting to 1.83 inches at Burlington and 1.43 inches at Lebo.

Douglas.—The mean temperature of the week, 72°, was 1° below normal and the rainfall was 0.15 of an inch above normal. The sunshine was 44 per cent of the possible amount.

Elk.—Rains on four days amounted to 1.84 inches, and were very beneficial. The sunshine was deficient.

Franklin.—Cool weather prevailed, except on the first two days. Plenty of rain fell.

Greenwood.—Copious showers fell on the 20th, 21st, 22d and 23d, amounting to 3.92 inches at Fall River and 1.93 inches at Madison.

Jefferson.—Temperatures were unseasonably low and the rainfall, 0.37 of an inch, was deficient.

Johnson.—The weather was almost ideal, tho the middle of the week was somewhat cool. Fine rains fell on the 19th, 20th, and 22d.

Labette.—The first two days were very hot, the

Harper.—The rainfall, 2.09 inches, was excessive, and clear, sunny weather would now be beneficial.

Jewell.—The week opened and closed very hot, a maximum temperature of 105° occurring at Jewell on the 23d. The drouth is becoming very severe. No good soaking rain has fallen at Harrison since June 18th, tho a few moderate rains have fallen from time to time. Conditions at Jewell are somewhat better, tho rain is badly needed there also.

Kingman.—Copious rains fell over the county this week, and hot weather was experienced, tho the middle of the week was cool.

Kiowa.—Excessive rains, amounting to 2.65 inches, occurred this week.

McPherson.—Fine rains were received on the 20th, and 21st, which, with the 22d, were quite cool, but the beginning and ending of the week were clear and hot.

Phillips.—Hot, drouthy weather continues. Only 0.64 of an inch of rain has fallen at Phillipsburg during the past sixty days.

Pratt.—Conditions continue very favorable. The 18th, 19th, 23d, and 24th were clear, dry, and hot; the 20th, 21st, and 22d much cooler, cloudy and rainy. The weekly rainfall amounted to 1.74 inches.

Reno.—The rainfall was abundant for all needs. Temperatures averaged about normal.

Republic.—Every day but one was clear, and rainless. More rain would be beneficial.

Russell.—Tho the rainfall was very light, it was almost enough for present needs. Night temperatures were the coolest of the season, but three of the days, the 18th, 19th, and 24th, were hot, with a maximum temperature of 101° on the last day.

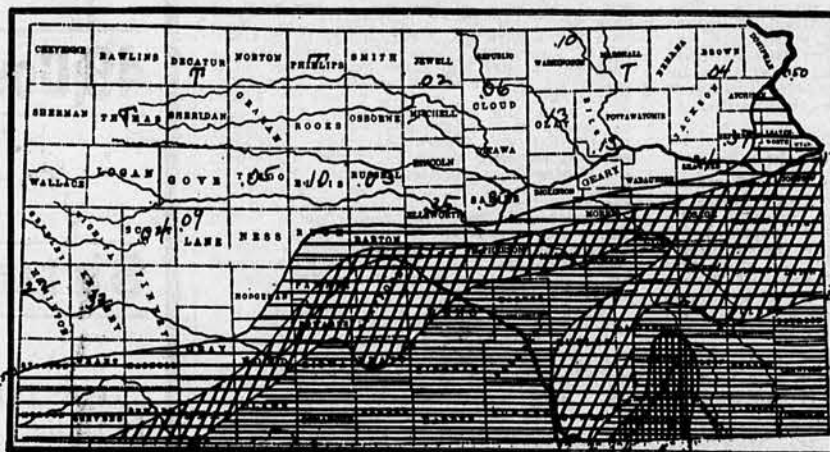
Saline.—Temperatures were about seasonable, but the rainfall was deficient.

Sedgwick.—Unseasonably cool weather prevailed on the 20th, 21st, and 22nd, temperatures aggregating 7° below normal. More than enough rain has fallen. The week closed hot and clear.

Stafford.—Copious rains fell on the 20th, 21st, and 22d. Temperatures averaged somewhat low, especially on the 21st, and 22d, when the maxima were below 70°.

Sumner.—The greater part of the week was cloudy. Rains on the last five days, amounting to 2.99 inches, were of great benefit.

RAINFALL FOR WEEK ENDING AUGUST 24, 1907.



SCALE IN INCHES:

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

maximum temperature on the 19th being 101°. The dry weather was broken by timely rains on the 20th, 21st, 22d and 23d, which amounted to 2.73 inches.

Linn.—The dry weather was relieved by welcome rains on the 20th and 22d, which amounted to 1.50 inches, the largest weekly rainfall at this place since June.

Lyon.—Good rains, and seasonable temperatures characterized the week.

Marshall.—Ideal August weather prevailed, tho the rainfall was insufficient.

Montgomery.—The highest temperature was 100° on Monday, the 19th, and was followed by cool, cloudy, and rainy weather until Friday, the week ending clear, and warm.

Osage.—Copious rains fell this week. Temperatures were moderate.

Riley.—The first three days were clear and warm, the rest generally cloudy and cooler.

Shawnee.—The week was very pleasant and favorable. The beginning was somewhat warm, but was followed by a rain on Monday night, which amounted to 0.34 of an inch, after which temperatures were below normal for three days. The temperature the last two days was again above normal. The sunshine was somewhat below normal.

Wyandotte.—Except on Sunday and Monday, when the temperature was above 90°, the week was cool and pleasant, with ample rainfall. Thunderstorms occurred on the 19th and 20th.

MIDDLE DIVISION.

Barton.—High temperatures prevailed on the 18th, 23d, and 24th, but the middle of the week was quite cool. Ample rains fell. One day was clear and six partly cloudy.

Butler.—The week began and ended clear, warm and dry, but the middle part was much cooler, cloudy, and rainy, the total rainfall being 1.37 inches.

Clay.—Maximum temperatures were above 90° on the 18th, 23d, and 24th, the highest being 100° on the 23d. Night temperatures fell below 60° on the 20th, 21st, and 22d. The rainfall, tho light, was sufficient.

Cloud.—Temperatures ranged from 3° to 9° above normal on the 12th, 23d, and 24th, and from 6° to 10° below normal on the 19th, 20th, 21st, and 22d. More rainfall would be beneficial.

Cowley.—The week was cool and rainy, but very favorable. Four days were clear, and three cloudy.

Ellis.—Cooler weather prevailed, a minimum temperature of 45° occurring on the 19th. Tho the rainfall was light, there was plenty of moisture in the ground.

Ellsworth.—The week averaged quite cool, with one rain, which was all that was needed.

Washington.—Temperatures but little below 100° occurred on the 18th, 23d, and 24th, but much cooler weather prevailed on the 20th, 21st, and 22d. The rainfall was deficient.

WESTERN DIVISION.

Clark.—The best rain in three weeks was received, the weekly total being 2.26 inches. Four days were clear, and three cloudy. Three days were unseasonably cool, and four were quite hot.

Decatur.—Temperatures averaged below normal, tho the week began and ended hot. Three days were clear, and four cloudy.

Ford.—Considerable cloudiness occurred, with light showers on the 20th, 21st, and 22d. Temperatures averaged 4° below normal, and the sunshine was also deficient. The rainfall was about normal.

Hamilton.—Somewhat cooler weather prevailed, minimum temperatures generally ranging in the fifties. Light rains fell on the 21st, and 22d. Three days were clear, one partly, and three cloudy.

Kearny.—The middle of the week was unseasonably cool, maximum temperatures below 65° occurring on the 20th and 21st. Light rains fell on the 20th, 21st, and 22d.

Lane.—The first two days, and the last one, were clear and warm, the rest cool, and cloudy, with light showers on the 19th, and 20th.

Norton.—Temperatures were very pleasant, tho unseasonably low the middle of the week, when the maxima failed to reach 80° and the minima ranged in the fifties. No rainfall was received.

Scott.—Only 0.04 of an inch of rain fell, but there was plenty of moisture from the preceding week. There was a high south wind on the 18th, and a heavy fog on the 21st.

Seward.—Very timely rains, amounting to 1.31 inches, fell on the 20th, 21st, and 22d, which were unseasonably cool, cloudy days. The beginning and ending of the week were warm and clear.

Sheridan.—Temperatures and sunshine were deficient, except on the 18th, 23d, and 24th. No rain was received.

Thomas.—Two days were cloudy and only a trace of rain fell. Maximum temperatures above 90° occurred on the 18th, 23d, and 24th, but a minimum of 54° was reached on the 20th. There was a heavy fog on the 21st.

Trego.—Maximum temperatures ranged in the seventies and minima in the fifties on the 20th, 21st, and 22d, but the other days were much warmer. The rainfall was only 0.05 of an inch, but there was plenty of moisture from the preceding week.

Wallace.—No rain fell this week and the ground is getting very dry. Temperature extremes were 102° on the 18th, and 51° on the 24th.

KANSAS FARMER CROP REPORT.

GENERAL CONDITIONS.

The week was cool in the northwest—counties, extending as far south as Lebo and Ford Counties. It was cool in the extreme northeastern counties. It was hot in the central and southern counties, and in the southern counties. A line drawn from Stanton to the State into wet and dry, the side being dry and the south side heavy rains fell in the southern counties with but little or none in the north.

EASTERN DIVISION.

Atchison.—A little over half an inch of rain followed by copious showers of dew during the nights, week for pastures.

Chautauqua.—A wet week, delaying plowing but greatly benefiting late pastures, and plowing.

Cherokee.—Drouth broken on the week.

Coffey.—Fine week for farmers.

though the ground in the bottoms is too wet to plow.

Elk.—Four days' rain this week has put the ground in good condition for plowing.

Montgomery.—Plenty of rain, delaying thrashing but greatly benefiting pastures and late crops.

Shawnee.—The cool, moist atmosphere has kept crop conditions in the first class.

MIDDLE DIVISION.

Barton.—Four days' rain, ground in fine plowing condition.

Butler.—Crops of all kinds looking well.

Cowley.—A cool, rainy week, greatly helping crops; ground in good condition for fall plowing.

Harper.—Too wet to plow or thrash.

Jewell.—Corn is badly burned by hot wind; dry and hot; need rain badly.

Some are through plowing and are harvesting.

McPherson.—Corn booming, plowing progressing, prospects encouraging.

Phillips.—Still keeps dry and hot.

Sumner.—Fine rains on five days, all the water soaked into the ground,

streams not rising any; ground too wet to plow.

WESTERN DIVISION.

Clark.—Good rains on four days; pastures and fall plowing good; plenty of roughness.

Norton.—Very pleasant week for field work; wild hay about all in stack.

the fly wheel a revolution or two by hand, and is then free to attend to other work; the motor will run itself till he closes the valve again.

This is shown in this exhibit a vertical motor, mounted on a substantial truck, adapted to use on rough roads, that may be drawn by hand or by horse to any part of the fields or wood lot. To it is belted a circular saw, whereby limbs and trunks of trees can be readily converted into firewood on the spot where the tree is felled. By a simple appliance the saw may be made to do the work of felling the tree. This motor can also be attached to a thrasher in the field or made to cut and then haul ice from the river or pond for storage against the summer. It can be wheeled to the dairy and made to operate the churn or separator. Its uses are manifold and obvious. Its first cost is small, and its operation inexpensive. The average running expense may be figured close to one cent per hour per horse power.

So with the stationary motors. By it can heavy thrashing or pumping machinery be run as though by the strength of a child. A two-horsepower motor will operate a dynamo that will supply current for 20 electric lights of 15 candle power each—more than are ordinarily needed at one time in any farmer's house.

And there is no danger connected with these motors in themselves. The fuel is ordinary stove gasoline, which only becomes dangerous when used in an enclosed room where there is an open light flame. It is never necessary to use a flame about a Harvester Company's motor, as ignition is produced by an electric spark. The gasoline supply should be stored in a tank out of doors, in which case every element of danger is removed. In use the motor emits no smoke, scatters no sparks. The technical knowledge required to operate the motor can be very quickly acquired by any man or intelligent boy. In case of breakage, any part can be promptly supplied by the nearest dealer. In construction the motor is simplicity itself.

Fertilizer for Wheat.

In some parts of the East farmers are giving up wheat growing. Many of them think it useless to try and compete with the newer and richer soils of the West. Many argue that wheat-growing is profitable only on new and rich soil. Mr. C. R. McKenzie, of Westfield, New Brunswick, undertook to see if by the use of chemical fertilizers on poor soil he could not compete with Western grain fields.

He selected a piece of dark loam, slightly gravelly soil which had had no fertilizer for ten years. It had been in grass, and farmers can readily understand its poor condition for grain. In order to test the soil, Mr. McKenzie used nothing on one part of the field. On another part he used Thomas Phosphate to supply phosphoric acid and nitrate of soda to supply nitrogen. An another part he used the phosphate and the nitrate and in addition, muriate of potash. The object of this was to see which element was the key to a wheat crop on that soil.

Potash gave the yield. The answer was clear, as the following figures show:

Plot	Yield of grain per acre	Increase over no fertilizer
1 No fertilizer.....	10 bu.	
2 600 lbs. Thomas Phosphate	25 bu.	15 bu.
3 600 lbs. Nitrate of Soda	40 bu.	30 bu.
4 600 lbs. Muriate of Potash	40 bu.	30 bu.

The natural soil gave only ten bushels. The phosphate and the nitrate brought the yield to twenty-five bushels, but when the potash was added there was an increased yield of sixteen bushels per acre. It is evident that this increase was directly due to the potash, and when we compare the cost of the potash with the price received for sixteen bushels of wheat we see that few other farm investments could have paid so well. Consider the price of wheat and straw on an eastern farm, and it is plain that no western wheat field can compare acre for acre with such a yield as forty bushels. The main reason why some eastern farmers say that wheat will not pay is because they use the wrong kind of fertilizer. They use a small of nitrogen, a peck of phosphoric acid and a pinch of potash. No wonder their yield is poor. Mr. McKenzie's experiment shows why. The wheat crop demands potash. If the soil will not supply it, the fertilizer must do so.

THE GREAT NATIONAL DAIRY SHOW.

Offers Large Cash Prizes to Breeders of Dairy Stock and a Splendid Place for Exhibiting Their Cattle.

The live stock premium list for the Second National Dairy Show, which will be held October 10th to 19th, 1907, at the Amphitheatre, Union Stock Yards, Chicago, is now ready for distribution. There is over \$7,000 to be distributed, in cash prizes, besides medals, cups, and diplomas.

The National Dairy Show offers one of the best places in the world for exhibiting dairy stock, and breeders who are anxious to make known the merits of their herds should not fail to be present. No State Fair gives the opportunity for meeting breeders, dairymen and purchasers of dairy cattle that is offered by the Second National Dairy Show. It is a place where practical, up-to-date dairymen gather from all parts of the country to study modern methods of dairying and to select cattle for the improvement of their herds. Those who exhibited at the first National Dairy Show could not begin to supply their customers with cattle. This year the Show will be much larger and better, and great opportunity will be given to breeders for making known the merits of their cattle and to meet men who are anxious to purchase a high-grade of stock.

Men who want to get in touch with the best purchasers of the country cannot afford to let this Show go by without making a good exhibit. There

will be an opportunity for disposing of cattle at public sale, for there will be held on October 14th, 15th, 16th, and 17th, auction sales of registered cattle. Never before in the history of dairy cattle has there been offered a better or more prominent way of bringing pure-bred stock before the American farmer and dairymen.

For further particulars and premium list write to Mr. E. Sudendorf, Room 307, 154 Washington St., Chicago, Ill.

Duroc-Jerseys at the American Royal.

We are in receipt of a letter from Geo. W. Kerr of Sabetha, Kans., chairman of the Duroc-Jersey breeders of Kansas, informing us that the Duroc-Jersey breeding fraternity desires to eclipse all former efforts at the American Royal show this fall and he desires that THE KANSAS FARMER shall render assistance in the matter.

The Kansas City Stock Yards Company will appropriate \$150 for prize money and the breeders of Kansas are requested to subscribe a similar amount. Any enterprising breeder who wishes to subscribe any amount will please send the same to THE KANSAS FARMER who will forward it to Mr. Kerr, and announce the subscription. THE KANSAS FARMER COMPANY will guarantee \$25 of this amount and will be glad to hear from the breeders for the balance.

It is important that this fund be raised promptly so that the classification may be announced early in September.

Kansas City Grain Market.

Receipts of wheat in Kansas City today were 346 cars; Saturday's inspections were 206 cars. Shipments, 178 cars; a year ago, 48 cars. Prices were 1c to 1½c higher. The sales were: Hard wheat—No. 1, 1 car 87½c; No. 2, 5 cars 90½, 1 car 90½, 19 cars 90c, 11 cars 89½, 10 cars 89c, 1 car 88½, 9 cars 88c, 1 car 87½, 5 cars 87c, 3 cars 86c, 3 cars 85½, 12 cars 85c; No. 3, 2 cars 89c, 1 car 88½, 2 cars 88½, 5 cars 88c, 2 cars 87c, 1 car 86c, 7 cars 85c, 3 cars 84½, 10 cars 84c, 6 cars 83½, 5 cars 83c, 2 cars 82c; No. 4, 1 car 87c, 2 cars 85c, 3 cars 84½, 1 car 84c, 2 cars 83c, 1 car 82½, 5 cars 82c, 1 car 81½, 4 cars 80½, 4 cars 80c, 1 car 79½, 4 cars 79c, 2 cars 78½, 1 car like sample 77c; rejected, 1 car 82c, 1 car 81c, 4 cars 80c, 2 cars 78c, 1 car 76c; no grade, 2 cars 75c, 2 cars 74c, 1 car 73c, 3 cars 70c, live weevil, 1 car 81c.

Soft Wheat—No. 2 red, nominally 88c to 89c; No. 3 red, 2 cars 87c, 3 cars 86½, 1 car 86c, 2 cars 85½, 3 cars 85c, 3 cars 84½; No. 4 red, 2 cars 83c, 2 cars 82c, 1 car 81½, 2 cars 81c, 8 cars 80c, 7 cars 79c, 3 cars 78c; rejected 1 car 78c, 1 car 76c.

Mixed Wheat—No. 3, 1 car 83½c; No. 4, 1 car 82½, 1 car 80c; rejected, 1 car 75c.

Durum Wheat—No. 2 mixed, 1 car 75c; No. 3 mixed, 1 car 75c. Receipts on corn were 82 cars; Saturday's inspections were 64 cars. Shipments, 99 cars. The sales were: No. 2 white, 1 car 53½, 4 cars 53½, 8 cars 53c; No. 3 white, 4 cars 53c, 2 cars 52½; No. 2 mixed, 2 cars 53c, 35 cars 52½; No. 3 mixed, 1 car 52½, 8 cars 52½; No. 4 mixed, 1 car 51½, 2 cars 50½, 1 car 50c, 1 car 49c, 2 cars 48c; no grade mixed, 1 car 49½, 1 car 47c; No. 2 yellow, 1 car 53½, 8 cars 53½, 7 cars 53c.

Receipts of oats were 71 cars; Saturday's inspection were 29 cars. Shipments, 29 cars; a year ago, 19 cars. Prices were in the main unchanged. The sales were: No. 2 white, 3 cars 49½, 4 cars 49½, 3 cars 49c, 1 car 48½, No. 3 white, 5 cars 49c, 1 car 48½, 1 car 48c, 13 cars 48c, 1 car color 48½, 5 cars color 48½, 10 cars color 48c; No. 2 mixed, 1 car 48c, 1 car 47½; No. 3 mixed, 1 car 47c, 1 car 46½, 1 car 46c, 1 car red 52c, 1 car red 50½, 1 car red 50c, 1 car red 49½, 1 car red 49c; No. 4 mixed, 1 car 45½, 2 cars 45c, 1 car red 50c, 2 cars red 49½.

Barley was quoted at 62c to 65c; rye, 78 to 81c; flaxseed, 99c to \$1; Kafir-corn, 90c to 92c per cwt; bran, 91c to 92c per cwt; shorts, \$1.02 to \$1.06 per cwt; corn chop, \$1 to \$1.03 per cwt; millet seed, \$1.00 to \$1.25 per cwt; clover seed, \$7.50 to \$1.50 per cwt.

The range of prices for grain in Kansas City for future delivery and the close today, together with the close Saturday, were as follows:

	Open.	High.	Low.	to-day.	Sat'day
Sept.	83½-84½	84½	83½	84½	82½-83
Dec.	88½	89½	88½-89	89½	87½
May.	94½	95½	94	95½	93½-94
Sept.	51½	52½	51½	52	51½
Dec.	49½-50	51	49½	50½	48½-49
May.	52½	53½	52½	53½	51½-52

Kansas City Live Stock Market.

Kansas City Stock Yards, August 26, 1907. Cattle receipts showed a decline last week as compared with the previous week, but a gain over same week a year ago. The market opened the week strong and active on beef steers, cows and heifers 10 to 15 higher, and about the same on stockers and feeders; on calves a quarter higher. After Tuesday the market had a downward tendency, and all classes except beef steers lost the gain of Monday. Top steers sold at \$7.20, bulk at \$5.50 to \$6.90, yearling steers at \$6.25. The market closed the week about 20c lower on grass steers, cows and heifers about steady, and feeders a shade under previous week's close. Run today is 15,000, market 10 higher. Top steers sold at \$6.65, nothing topmy included. Bulk ranged from \$5.50 to \$6.60, although good ones would sell up to \$7.25. Western steers are active and firm, and sell at \$4.60 to \$5.75, cows steady and active at \$2.75 to \$4.75, heifers up to \$6.00, calves up to \$7.00, bulk at \$4.00 to \$6.50, all weight included; stockers and feeders steady to strong, stockers at \$3.50 to \$4.60, feeders \$4.75 to \$5.75. Moderate receipts of cattle are looked for balance of this week in which event a strong healthy market is inevitable.

Receipts of hogs last week totaled 26,000 head, a falling off of about 5,000 from previous week. The market declined from day to day until Friday when there was a reaction and the week close showing an advance of 5 cents over the low time. Run today is 6,000, market 10 higher, top \$6.22½, bulk of hogs at \$5.95 to \$6.20, against a top of \$6.07½ last Monday.

Supply of sheep and lambs is comprised of range stuff mostly, but in spite of the light marketing did no better than remain steady throughout the week. Run today is 5,000, market strong and active. Lambs are worth \$6.50 to \$7.25, yearlings up to \$6.00, wethers today at \$5.75, ewes \$5.35. Included in the receipts are good many feeding sheep which find a ready sale. J. A. RICKART.

South St. Joseph Live Stock Market.

South St. Joseph, Mo., Aug. 26, 1907. Cattle receipts for the opening day of the week were liberal for this point, but in the total at five markets there was an apparent falling off of 10,000 compared with a week ago. This falling off was suggestive of good strong advance in prices for all classes of cattle, but in the dressed beef trade the only steers selling firm were the best kinds of handy weights while all medium qualities were in-



I Want A Scale on Every Farm!

Why not buy mine? I am the plan of selling scales DIRECTLY to the farmer at a RELIABLE price. I have made and sold scales for 42 years, and while to-day there are hundreds of other scales made and sold EACH AMERICAN FARMER who buys a scale is under OBLIGATION to me for having made the FIGHT against the old monopolists and having put the price within reach of all. I am now fighting the ENTIRE SCALE TRUST AND COMBINATION to keep the price down. I have a history of the scale business, called the "Reason why you should buy a Scale", which I will send FREE to anyone asking for it, together with a full line of prices on all kinds of FARM SCALES. Address "JONES, He Pays The Freight". Binghamton, N. Y. Lock Box N

One of the Most Important Sales of the Season is the Public Sale of

HEREFORD CATTLE

49 Cows and Heifers . . . 14 Bulls

THE PROPERTY OF JAMES A. CARPENTER.

To Be Held at the Carpenter Farm
4½ miles from Carbondale, Kans.

Saturday, Sept. 28, 1907

COMMENCING AT 10 O'CLOCK A. M.

This offering consists of 49 cows and heifers and 14 bulls. About 35 head of the cows will have calves at foot. All will be in the best possible condition to insure good results for their purchasers. Big prices are not expected, but every animal goes at whatever price you see proper to give for same. MANY BARGAINS ARE IN STORE FOR THOSE WHO ATTEND. The sale will be under cover and a free lunch will be served at the noon hour. You are cordially invited to attend this sale, whether you wish to purchase or not, and if you desire any further information relative to same, write to the owner,

James A. Carpenter, . . . Carbondale, Kans.

Col. R. E. Edmonson, W. G. Hyatt and Col. Pollard, Auctioneers. Catalogs now ready.

THE MORTGAGE LIFTER IS LIVE STOCK

Then why not give it every opportunity to make the greatest growth. Iowa Hog and Cattle Powder makes Stock thrive. It is not a Stock Food, but a conditioner that puts the animal's system in the best possible condition to digest and assimilate its food. Farmer's wanted in every county to act as our agents. Many of our men are making from \$2,000 to \$5,000 a year selling our goods. If you want an agency write us and mention the Kansas Farmer.

Iowa Hog & Cattle Powder Co.
SOUTH OMAHA, NEBRASKA

UNGLE'S HOGGETTE

The Great Preventive and Cure for HOG CHOLERA.

Indorsed by more breeders. Has saved more hogs than any remedy on the market.

Ungle's Dip \$1 per gallon in 5 or 10 gallon cans.

Ungle's Flake for lice on hogs 4½c per pound by the barrel.

NOTE LETTER.

I have a world of faith in your Hoggette and gladly recommend it.—J. E. JOHNS.

Address, UNGLES HOGGETTE CO.,
Box 749. Lincoln, Nebraska.

Write for printed matter.

POLLED DURHAMS FOR SALE.

Two Double Standard bulls, sired by Duke Rose of Pomona 3rd 1479, winner of two first prizes and one second prize at Kansas State Fair. Dam also first prize winner. Write or come and see stock. C. M. ALBRIGHT, Route 2, Overbrook, Kans.

Special Want Column

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

CATTLE.

FOR SALE—Richly bred Holstein-Friesian cattle. State your wants. Walter Pleasant, Ottawa, Kans.

Twenty-five high-grade Polled Durham cows and heifers, nearly all bred. They are good milkers, good colors and good milkers. Just what you want for a small ranch. All polled. Also Poland-China boar. Proud Perfection 12 lb. 110655; a good one. C. M. Albright, R. 2, Overbrook, Kans.

FOR SALE—Good milch cow. E. B. Cowgill, 25 Clay St., Topeka, Kans.

FOR SALE—Polled bulls or heifers, write to Otto Young, Utica, Ness County, Kansas.

SPECIAL SALE—5 straight Cruickshank northern bulls for sale at bargain prices for quality. H. W. McAfee, Topeka, Kans.

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

SEEDS AND PLANTS.

JUST PUBLISHED—Our new catalog of Dutch Bulbs and Selected Seeds for Fall sowing. Useful for lovers of flowers, as well as practical farmers. It will be sent FREE on application. Write a postal card today. The Barteldes Seed Co., Lawrence, Kansas.

SEED WHEAT FOR SALE.

I have the following kinds of seed wheat for sale of my own raising: Kharkof hard wheat, Immersman and Fultz-Mediterranean soft wheat. Recleaned and sacked F. O. B. cars Manhattan at \$1.35 per bushel. A. F. Hughes, the Maples, Manhattan, Kans.

GRASS SEED FOR FALL SOWING. We have, or will have soon, new crops of timothy, Kentucky and English blue-grass, alfalfa, red and white clover, orchard-grass and other grass seeds. If in want of any, correspond with us. The Barteldes Seed Co., Lawrence, Kans.

WANTED—New crop alfalfa seed. Send sample and state the amount offered with price. Lee Adams, 417 Walnut St., Kansas City, Mo.

Seed Wheat for Sale.

We have the following varieties of extra selected wheat, recleaned under our personal supervision. Any one desiring to change stocks ought to get the new stock seed from us.

NEW VARIETIES—Kharkof, hard; Indiana Diamond, soft. Standard sorts:—Red Turkey, Red Russian, Fultz, Harvest Queen, Harvest King, Pearl's Prolific and Early May. Write for special circular before ordering elsewhere. The Barteldes Seed Co., Lawrence, Kans.

SWINE.

FOR SALE—Large boned, extra size thorough-bred Poland-China boar, 2 years old, best of breeding.—J. W. Cunningham, Route 2, Meriden, Kans.

FOR SALE—Thoroughbred Duroc Jersey boars, large enough for service; also my herd of sows. Prices right. Address I. W. Poulton, Sedora, Reno Co., Kans.

FOR SALE—Forty registered Duroc sows and hogs bred for August and September farrow. Also a few unpedigreed sows, bred to fine boars. R. O. Stewart, Alden, Kans.

HORSES AND MULES.

FOR SALE—30 head of coming 3-year-old mules from the best mares and jacks. Will price them so they will sell. T. E. Whitlow, Moran, Kans.

PERCHERON STALLION FOR SALE—Owing to circumstances I am forced to sell my year-old registered Percheron stallion. He is sound, kind, big; has fine action and is a perfect show horse. Will fully guarantee him. Terms: Cash, approved notes, or will trade for cattle. J. B. Weldon, Eureka, Kans.

TWO JACKS FOR SALE—3 and 4 years old, Missouri bred. Address S. C. Hedrick, Tecumseh, Kans.

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

IDAHO VIEWS FREE
Boise, gem of Idaho. Tourist's paradise. Abundant sunshine, flowers, hospitality. Largest hot springs resort in the world, outlet of whole Boise Basin. Abundant in minerals and agriculture. Write today to Boise Commercial Club, Boise, Idaho

elined to be a little easier. The best steers were sold at \$6.35 and they were just a fairly good class, the price indicating a little strength compared with late last week. Bulk of all steers sold within a range of \$5.00 to \$5.75 for natives, around \$4.30 for the westerns, the latter being considered a little lower. All good kinds of fat cows and heifers sold at the current order, met rather slower sale and prices were considered a little easier. Bulls were quite liberal and while the trade picks up all the light weights of decent quality at all steady prices, they were inclined to buy all heavy weights at a shade under last week. A fair run of Texas sold steady to easy in sympathy with the native western market. The trade was generally disappointed in the number of hogs arriving at leading markets, arrived at five points, and this is never considered a liberal run for Monday for Chicago alone. Demand was very active, and sellers were able to secure a big advance of 10c for long 150 lbs. over Saturday prices. The bulk sold at \$3.95 to \$4.15, with tops making \$6.22 1/2. The spread in prices is rather wide, but is liable to get still wider with prime light hogs and butchers commanding top figures. Liberal run of sheep and lambs came mostly from the western ranges, and was about equally divided between sheep and lambs. The market for sheep was active, and steady, fat grades were strong to a point higher, while above last weeks prices. About one-third of the run of lambs were of feeder grade.

WARRICK.

SCOTCH COLLIES.

A BARGAIN—Fine Collies, 4 months old. A. P. Chacey, N. Topeka, Kans.

SCOTCH COLLIES FOR SALE—Pups ready to ship, sired by a son of Champion Wellesbourne Hope.—Will Killough, R. 7, Ottawa, Kans.

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.

MISCELLANEOUS.

WANTED—Manager or partner for handling grain, beet and cattle ranch, 1,000 acres Western Kansas, partly irrigated land. Address Davis, care Kansas Farmer.

WANTED—A steady, reliable farm hand. Address Symms Bros., Troy, Kans., at once.

WANTED—By experienced agricultural college graduate, a position as manager of an up-to-date dairy farm. Preferably in Kansas or Colorado. E. E. Greenough, Manhattan, Kans.

WANTED—Men to learn barber trade. Will equip shop or furnish positions, few weeks completes, constant practice, careful instructions, tools given, wages Saturdays, diplomas granted. Write nearest Branch for free catalogue. Moler System of Colleges, St. Louis, Kansas City, Mo., or Omaha, Neb.

FOR SALE—New honey; write "the old reliable." A. S. PARSONS, 418 South Main Street, Rocky Ford, Colo.

RURAL BOOKS—Send for descriptive list of books for farmers, gardeners, florists, architects, stock raisers, fruit growers, artisans, housekeepers and sportsmen. Sent free. Address The Kansas Farmer Company, Topeka, Kans.

WANTED—A second-hand traction engine, not less than 18 horse power. Dr. W. E. Barker, Chanute, Kans.

Stray List

Week ending August 29.

Labette County—A. E. Townsend, Clerk. STEER—Taken up by M. Pennington in the city of Chetopa, July 16, 1907, one 4-year old red steer, with the following brands and marks: "4" on left shoulder, "M" on left side, "H" on left hind leg, un der slope left ear, crop off right ear; valued at \$20.

AUCTIONEERS

R. L. HARRIMAN

Live Stock Auctioneer

Bunceton, - - - Missouri

W. H. TROSPER

Frankfort, Kansas.

An Auctioneer with 108 successful sales to his credit last season.

Reference: Those for whom I have sold.

Sale tent without charge if desired.

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Rates Reasonable. Write or wire me for dates.

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Terms reasonable. Satisfaction guaranteed.

Write me before making engagements.

Also breeder of Poland China Hogs.

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Reasonable rates for competent service. Write me for dates.

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Live Stock Auctioneer

Hutchinson, Kansas

My large acquaintance with breeders of pure-bred stock, ranchmen and feeders enables me to be of value to any one making a large farm or pure-bred stock sale. My motto is honest work at honest prices and satisfaction to patrons. Phone, write or wire me for terms and dates.

Col. T. E. Gordon

Live-Stock Auctioneer

Waterville, - - - Kansas

Reference: Those for whom I have sold.

When writing to THE KANSAS FARMER always give your name and address.

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REAL ESTATE

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In closing loans. MONEY ALWAYS ON HAND.

DAVIS, WELLCOME & CO.,

Stormont Bldg., 107 West Sixth St.

TOPEKA, KANSAS

FOR SALE.

168 acres four and one-half miles from county seat, good buildings, 18 acres pasture, 6 acres alfalfa, hog-tight, balance in cultivation, one-half mile to school. Price \$6,400. Time on part. I have all kinds and sizes. A. S. Quisenberry, Marion, Kans.

FINE 80 ACRE FARM in Wabaunsee County; splendid improvements of all kinds, fine orchards, all fenced, fine springs; a bargain for quick sale. Price, \$35. Address Otto Greinke, Route 2, Paxico, Kans.

WANTED—A renter for fine dairy business and farm of 700 acres, 160 acres in cultivation, 45 milk cows, 50 stock cows. Registered bulls, calves, yearlings and 8 brood sows. Milk and cream contract for Rock Island road. Dairy now paying about \$200 per month. Applicant must furnish references. I. D. Graham, Secretary State Dairy Association, Topeka, Kans.

\$250 WILL BUY 80 acres; Christian County, Southeast Missouri. Perfect title; terms \$10 monthly. W. M. B. Williams, Mt. Vernon, Ill.

240 ACRES in the Kingdom of the Big Red Steer, 100 cultivated, 10 meadow, 130 pasture; good apple orchard and other fruit; frame 7-room house; good barn; living water; limestone soil; 1 mile to school; 5 to station; 15 to Emporia. Price \$5,200. Hurley & Jennings, Emporia, Kans.

FOR SALE OR TRADE—For live stock or Western land the furniture and fixtures of one of the best 20-room hotels in Kansas, located at Overbrook, Kans., 26 miles southeast of Topeka. Everything in fine condition and hotel doing a good business. Address, Overbrook Hotel, Overbrook, Kans.

FOR SALE—180 acres in Russell County, all fenced and cross fenced. 40 acres good bottom alfalfa land, balance good pasture. Good water, 30 feet deep. Write T. R. Wilkerson, Lucas, Kans.

FOR SALE OR TRADE—For real estate, 4-year-old black jack, white points, 15 hands high, sound, sure, a fine individual. Reason for selling, I had a partial stroke of paralysis last November, unable to care for stock. A. E. Cooper, Halstead, Kans.

WE HAVE for sale one of the best ranch and farm proposition in Kansas. Write us for particulars. We are in the big four country. Corn, cattle, hogs and alfalfa. J. C. Hoyt, Eldorado, Kans.

FOR SALE—Fruit lands, farms and timber. Stock do well in this section. German truck farmers can make big money. I can loan your money on good security. Campbell, P. O. Box 653, Van Buren, Ark.

BUY LAND OF OWNER—Save commission. Stock and poultry farm for sale on Hickory Creek, Butler County, Kans. Address Benj. Mayfield, Latham, Kans.

BRICK HOTEL—Centrally located, 28 rooms, furnished throughout, in good town in gas belt. Good opening. Price \$6,000. A. R. Ohmart, Augusta, Kans.

FOR SALE—One of the finest improved farms in Kay Co., Okla. 1 1/2 miles from county seat. Full discount. Terms given. Address, D. W. Hutton, Newkirk, Okla.

LAND FOR SALE

In western part of the great wheat state. H. V. Gilbert, Wallace, Kans.

FOR SALE—Farms—Bargains: 500 farms, stock ranches. Kansas or Missouri. Before you buy, sell or exchange, write for my free lists. F. H. Humphrey, Fort Scott, Kans.

TEXAS LAND—Secure land now. Prices advancing rapidly. Agents wanted. Sheldon Realty Co., 822 Kansas Ave., Topeka, Kans.

Marshall Co., The Home of Corn and Alfalfa.

100 acres, 4 1/2 miles out, 80 acres in cultivation, 40 acres smooth hay meadow, 40 acres in pasture, six-room house, large barn with haymow, double corn-crib, granary, chicken-house, large orchard in bearing, beautiful grove at the house, an abundance of well water, windmill and tank. This is a strictly high-grade farm. Price, \$8,500. I have a large list of all kinds of real estate; write me for list. M. J. WELSH, Frankfort, Kans.

NEW WICHITA HOMES

We offer unusual bargains in new modern cottage homes, latest designs and moderate prices. Can sell on time if desired. Let us sell you one where you can enjoy the best educational attractions, amusements or all-around healthy and desirable locations in the most progressive and prosperous city in the State. Eighteen years in building business.—HARTFORD WESTERN LAND CO., 118 E. First St., Wichita, Kans.

This tract of land contains 4,826 acres, and lays nine miles north of Dodge City, in the north part of Ford, and the south part of Hodgeman counties. It is all fenced and cross-fenced; two good sets of improvements, consisting of dwellings, horse barns, cattle-sheds, granaries, etc., etc.; 175 acres now in wheat and rye; 45 acres ready for spring crop; the remainder of the land all in natural grass. Three school houses adjacent to this land. This ranch is watered by several of the finest springs to be found in Western Kansas. Saw-log Creek runs through the land, and has in it pools of clear standing water the year round. All of this ranch is the very best of wheat land, and about 500 acres is splendid alfalfa land. We will sell this entire tract for \$10.00 per acre and carry \$4.00 per acre of the purchase price five years at 6 per cent, or will sell it in quarters, halves, or sections, at a reasonable price and on same terms. This is one of the finest tracts of land in this part of the State, being surrounded by well improved wheat and alfalfa farms. Your last chance to buy this tract of land.

FRIZELL & ELY, Larned, Kansas

Made at LOWEST RATE. Annual or Semi-annual interest. Privilege of paying part or all of the loan at any time. Interest and principal PAID AT OUR OFFICE IN TOPEKA. No delay for rate and terms.

Marshall County Land

240 acres 6 miles out; fair improvements, 200 acres in cultivation, balance pasture; close to school, 3 1/2 ml. from town on new railroad. Land from \$40 to \$75 per acre. We have good alfalfa soil. Price \$50.00 per acre. For particulars write E. J. McKee, the Land Man, Marysville, Kans.

If You Want a Farm
IN SHAWNEE COUNTY, KANS.,

—Write or call on—

H. C. Bowman, Topeka, Kans.

42 Columbian Building.

Ind. Phone 681.....Bell Phone 1886

Wanted Now!

In every county in east half of Kansas, live agents, (farmers preferred) to sell best irrigated land in the west. Don't wait. Write now for full particulars.

F. E. BALL, Gen. Agt., Topeka, Kas.

FARM BARGAINS

Good farms for sale in Wilson and Montgomery Counties, Kansas. We have some real bargains. Write for particulars.

THE SOUTH EAST REALTY CO.
Lafontaine, Kans.

A Cheap Wheat Farm
in Stanton County, Ks.

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.

Grain and Dairy Farms

Around Topeka. Also Fruit farms and Stock farms for cattle, hogs and horses. Raise corn, oats, wheat, alfalfa, tame grasses. Unreasonably cheap; too cheap to last. Write for particulars.

GEO. M. NOBLE & CO.

Real Estate and Loans.

Opposite Postoffice, - - - Topeka, Kansas

Norton County
Alfalfa and Corn Farms

We sell Norton County lands where wheat, corn and alfalfa grow in abundance. Write us for list of farms, and full particulars.

LOWE & BOWERS,

Almena, - - - - - Kansas

L. E. ANDERSON & CO.

(Over Shawnee State Bank.)

800 N. Kansas Avenue, Topeka, Kans.

320 acres, all in native grass, 1/4 mile to station, about 100 acres bottom, for only \$35 per acre. 160 acres, Kaw bottom, 6 miles from Topeka, good improvements. This can be had very cheap. 160 acres, grass quarter, very fine meadow, close to city. Price \$45 per acre. Come quick. 80 acres, close to Onaga, all in grass, for only \$2,500. 40 acres, 3 miles out, 5 room house, for only \$60 per acre. This is a snap. Terms. 18 acres, close to city, good improvements, all good truck land, above flood line. This can be had very cheap for cash.

Renters, Read This, Then Act Quick.

160 acres, in 7 miles of this city and 6 miles from Coyville, both railroad towns, in gas and oil field, is well fenced, 75 acres in cultivation, balance fine grass, 40 acres of which is used as meadow, balance pasture. Lots of living water, two room house, stables, cribs, etc. This land lays nice, is all black, rich soil which is good corn, wheat, and alfalfa land, one mile to good school. Price \$20. per acre. Will take third or half money and give all time asked for on balance at 6 per cent interest. Would take some good live stock, such as teams or cattle as part pay.

280 acres, 6 miles of this city, in one mile of the 160. About 35 acres in cultivation, balance all in grass. This lays nice, is a nice little ranch, and the making of a good home. Has some timber. \$3,250 will buy this farm. Will take half the money down, balance on time and terms to suit purchaser at 6 per cent interest. Will sell both these tracts of land together if desired. In fact, both ought to be owned by same man. W. A. NELSON, Real Estate and Merchandise Broker, Fall River, Greenwood County, Kansas.

DUROC-JERSEYS

125 Pedigreed Duroc Red Spring Pigs for sale cheap. Chas. Dorr, Osage City, Kans.

J. H. G. Hasenyager, Tecumseh, Neb.
Breeder of Duroc-Jerseys
Write me for prices.

CHOICE REGISTERED Durocs, P. C. and O. I. C. hogs; Shorthorn, Jersey, and Galloway cattle; 40 varieties poultry and pet stock at farmers' prices; stamps for cat. A. Madsen & Sons, Atwood, Kas.

DUROC-JERSEYS—Large-boned and long-bodied kind. Bred gilts and fall pigs, either sex. Prices reasonable.
E. S. COWLEY, Route 2, Scranton, Kans.

HILLSIDE DUROCS.

Seventy-five head of well-bred, well-grown March and April pigs. A few one and two year old sows.—**W. A. Wood, Elmdale, Kans.**

DEEP CREEK DUROCS

Spring boars for sale grandsons of the great Hunt's Model 20177. Others sired by Lincoln Wonder, the \$2,000 hog.
Address **C. O. Anderson, Manhattan, Kans.**

OAK GROVE HERD OF DUROCS

Herd headed by Choice Goods H. 86471 by Hunt's Model and Corroctor'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.**

Pleasant View Durocs

75 early pigs by Quality King 59851, Orion Boy 42137, and W's Top Notcher 59833. Also choice fall gilts at right prices.
THOS. WATKINSON, Blaine, Kans.

Pigs Shipped on Approval.

200 head of Durocs, all ages, representing the blood of Combination, Valley Chief, and a son of Kant-Be-Beat.
T. L. LIVINGSTON, Burdard, Neb.

ATTENTION

Hog raisers of every kind. Had you forgotten that this is just the time to buy that male pig to head your herd? Well it is a fact and you had better get in line and come to the Rosebud and get something fine. **Rosebud Stock Farm, Rathbun & Rathbun, Proprietors, Downs, Kans.**

CUMMINGS & SONS DUROCS

100 top pigs of early March farrow, by Lincoln Top Junior Jim, Tip Top Notcher Jr., Kanta Model, Beautiful Joe and our herd boar OH HOW GOOD, second prize-winner at Nebraska State Fair. Sale in October; write or visit.
W. H. Cummings & Son, Tecumseh, Neb.

Peerless Stock Farm

DUROC-JERSEY HOGS
20 bred gilts, and fall pigs of both sexes for sale.
E. G. Sellenberger, Woodston, Kansas

I Am All Sold Out

at present but will have a splendid lot of Long Wonder and Nelson's Model spring pigs later on
J. F. Staadt, Ottawa, Kans.

McFARLAND BROS.,

Breeders of Champion and Grand Champion Duroc-Jersey swine. Winners at World's Fair, American Royal and State Fairs. Stock of all ages for sale.
Route 1, Sedalia, Mo.

Mission Creek Durocs

Gilts and aged sows by or bred to A. B. Top Notcher, a grandson of Top Notcher, for September farrow; also 1 boar that is a show pig.
G. W. Colwell, Route 2, Summerfield, 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, R. S. Wichita, Kas.

Vick's DUROCS are bred for usefulness. Choice young stock for sale by such great boars as Vick's Improver 4785, Red Top 32241, Fancy Chief 24923 and other noted sires. Correspondence invited. Visitors coming to Junction City and phone me will be called for. **W. L. Vick, Junction City, Kans.**

RALPH HARRIS FARM DUROC-JERSEY HERD

For Sale—Boars ready for service sired by Wonder Lad 17289, carrying Ingomar 7897a blood. Choice boar pigs that trace to Long Wonder, to Ingomar, and to Duroc Challenger.
RALPH HARRIS, Prop. B. W. WHITE, Mgr. WILLIAMSTOWN, KANS.
Farm station, Buck Creek, on the U. P. 45 miles west of Kansas City.

K. & N. Herd of 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, '06 farrow. Write for prices and description.

R. L. WILSON, Chester, Neb.

Catop Herd Duroc-Jerseys

Hard composed of best blood in the west. Headed by Catop Notcher, out of Tip Top Notcher, who weighed 1120 pounds at 18 months, and sold for \$5,000. Fall pigs for sale at reasonable prices.

JOHN W. TAYLOR, Edwardsville, Kansas

Golden Queen Durocs

Herd headed by Crimson Jim 47995 and Lincoln Top 52287, two of the best boars in Nebraska. A number of choice gilts for sale bred to these boars for fall farrow. These gilts are all out of my best sows and will be priced right.

W. M. Putman, Tecumseh, Nebraska.

DUROC-JERSEYS**MADURA DUROCS.**

The home of Miller's Model, by Hunt's Model and Major Roosevelt a grandson of Ohio Chief; 100 fancy, growthy pigs; also bred sows and gilts for sale.
FRED J. MILLER, Wakefield, Kans.

Deer Creek Durocs

100 pigs of March and April farrow by sons of Ohio Chief, Top Notcher and Kant Be Beat. Ready for shipment after July 1.
Bert Finch, Prairie View, Kans.

Silver Lake Durocs

Fall boars, bred right and priced right; also choice gilts bred to Kansas Buddy, a son of Buddy K. 235 spring pigs ready for shipment after July 1.
W. C. Whitney, Agra, Kans.

Orchard Hill Herd Of Duroc-Jerseys

Some splendid fall gilts sired by Norton's Top Notcher by Tip Top Notcher and bred to Kansas Chief 27491, grandson of Ohio Chief. Also some fine fall boars.
R. F. NORTON, Clay Center, Kans.

DUROC-JERSEYS.

Extra fine blocky pigs for sale at reasonable prices. Also thoroughbred Percheron horses.
W. A. SCOFFIELD, Ind. Phone 6577, Station B, Topeka, Kans.

WESTLAWN DUROCS

Herd headed by Bobby S., a son of 2d Climax, 1st prize boar at Missouri State Fair 1903. Stock always for sale. Choice fall boars and gilts. Also young Shorthorn bulls from heavy milking dams. Prices reasonable. **E. B. Grant, E. Emporia, Kans.**

DUROC-JERSEYS.

A few fall pigs, especially large and fine, sired by GRANGER, one of the thriftiest representatives of the breed.
Buchanan Stock Farm, Sedalia, Mo.

Elk Valley Durocs

Herd headed by Doty Boy 22779, a son of the champion Goldfinch and Doty. My sows are by prize-winning boars. Choice pigs of both sexes for sale.
M. Wesley, Banerett, Kans.

MAPLE LAKE HERD OF DUROCS

F. C. Crocker, Proprietor, Filley, Nebraska. My pigs of March farrow are sired by the great Kant-Be-Beat by Red Knight, sweepstakes Nebraska 1906 by Hogate's Model, sweepstakes Nebraska 1904, and by "Junior Champion," who was the junior champion at New York and Ohio 1904. The blood lines of Crimson Wonder, Belle's Chief, Ohio Chief, Improver 2d, and many others of equal merit, go to make up a strong herd of individuality and breeding that can not be excelled. Fall sale October 5 at Beatrice, Neb.

ROSE LAWN Duroc-Jerseys

Headed by Tip Top Perfection 24879, by Tip Top Notcher, grand champion at world's fair. Spring pigs by this grand male and a few choice gilts bred to him at reasonable prices. Ind. Phone 6574.
L. L. Vrooman, Topeka, Kans.

Gold Dust Herd Durocs

One hundred fine spring pigs sired by boars that are bred right and out of sows purchased from the leading herds and carrying all the popular blood lines. Also a number of fall boars for sale. Write us for prices.

MINER & AITKEN, Tecumseh, Nebraska

Lamb's

HERD OF DUROCS is built along the most fashionable blood lines and is noted for the individuality of its make-up. 50 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, Nebr.

Timber City Durocs

Fall and spring boars by You Bet 31111, Doty Wonder 41889, Geneva Chief 48049, Rose Top Notcher 54059, and others. Sows bred to the above boars for sale. Over 400 head in herd, write your wants.

SAMUELSON BROS., Bala, Kans. and Cleburn, Kans.

Elk Creek Durocs

One 2-year-old boar by Improver 2d and out of Nebraska Bell. Also one yearling boar by Old Surprise, (a son of prize-winners) at living prices. 160 pigs of early spring farrow by Kant Be Beats Best, and Bell's Chief 2d, ready for shipment after July 1.

J. E. JOINES, Clyde, Kans.

Haith's DUROCS

Herd headed by Lincoln Top 52287 and Ed's Improver 43637. A fine lot of pigs for sale sired by these grand sires, Kant Be Beat, Royal Ohio Chief, Lincoln Wonder, Lincoln Top, Arion and other great boars. Also a few good sows for fall farrow bred to Lincoln Top.

W. W. HAITH, Vesta, Neb.

Chapin's

DUROCS. Home of Model, Chief Again, King of Col's II, Red Raven and C. E. Col. II; 175 early pigs; 45 fall gilts, and a lot of proven sows to select from for my

Public Sales to be held Oct. 1, '07 and Jan. 28, '08.
GRANT CHAPIN, Greene, Kans.

DUROC-JERSEYS**OSAGE VALLEY DUROCS**

150 early pigs, Ohio Chief, Orion, Crimson Wonder, Proud Advance and Brilliant strains. Toppo boars large enough for service. Prices reasonable.
A. G. DORR, Osage City, Kans.

REGISTERED SHORTHORN CATTLE AND DUROC-JERSEY HOGS.

Pure Scotch male, Lord Victoria 250619. Young stock for sale. **W. O. Rule & Sons, Ottawa, Kans.**

Walnut Lane Durocs

Headed by Neesho Chief 27161, one of the best grandsons of Ohio Chief. A fine lot of spring boars for sale reasonable.
S. A. Hands, Thayer, Kansas

Four-Mile Herd Durocs

Choice fall pigs, both sexes by Orion Jr. and Ohio Chief 2d. Also proven sows, bred to Orion Jr. and E's Kant Be Beat for fall farrow.
E. H. Erickson, Route 1, Osburg, Kansas

Fairview Herds Durocs and Red Polled

Some good young boars by Crimson Challenger 43877 for sale. No females or Red Polled cattle for sale now.
J. B. Davis, Fairview, Brown County, Kans.

CRIMSON HERD OF DUROCS.

Herd boars, Red Perfection by Kansas Chief, Allen Gold Dust and Red Pathfinder. Iowa Girl still farrowing good litters. The best blood lines of the breed, with size and quality combined. Eighty-five spring pigs for the trade at private sale. **J. W. REID, Fortia, Kans.**

PRAIRIE QUEEN DUROCS

75 early springs that are tops, by the great Kant Be Beat, Alex Heir, and Wilkes Echo, out of daughters of Ohio Chief and Village Pride, and other good ones. **G. H. RAMAKER, Prairie View, Kans.**

CRIMSON WONDER HERD.

Our herd, headed by Missouri Wonder King 52908, he by Missouri's Pride 29277, Crimson Meddler, he by Crimson Wonder 28755. Have 47 sows and gilts bred to these fine males that we offer at a bargain. We also offer Crimson Meddler for sale. He is 10 months old. Have a fine lot of March and April pigs.—**Mr. & Mrs. Henry Shrader, Wauweta, Kans.**

EUREKA MANOR HERD OF DUROC-JERSEYS.

Choice breeding stock; the best I ever raised. Fall and spring boars, fall and spring gilts, and tried sows, bred or open. Prices the lowest, quality and breeding the best. Herd headed by Eureka Tip Top 43641 sired by the great World's Fair grand champion Tip Top Notcher 20729 and Olathe Chief 61629 by Ohio Chief 2727, the world's champion. Write your wants or call and inspect my herd.
J. F. ENSOR, Olathe, Kans.

FORD SKEEN

Breeder of the Choicest and most Prolific Strains of

Duroc-Jersey Swine

Prize-winning blood, inspection invited, honest treatment insured
South Auburn, Nebraska

POLAND-CHINAS

Kansas Herd of Poland-Chinas has Kansas Perfection 40944, and W. R. C. Leghorn cockerels for sale. **P. F. Maguire, Route 4, Hutchinson, Kans.**

Weaver's Poland Chinas. Boars in service, Philanthropist, by Expansion and Compromise 2nd, a grandson of Ideal Perfection; 70 choice pigs with length and bone. Public Sale this fall.—**C. B. WEAVER & SON, Wakefield, Kans.**

Peacock's Poland Chinas. Choice fall gilts, bred or open; also early spring pigs, either sex. Mischief Maker, On and On, and Corroctor strains. Call or write.
Farm adjoins town. **W. R. PEACOCK, Sedgwick, Kas.**

Good's POLAND CHINAS: Choice fall gilts for sale; also early pigs of the best breeding ready for shipment after Aug. 1. Prices reasonable.
I. B. GOOD, Peabody, Kans.

DECATUR HERD POLAND-CHINAS

Five September boars, good ones and a choice lot of yearling bred sows, bred to Challenger, to farrow in August and September. Also booking orders for the spring crop. Write your wants. Prices right. **R. H. WHEAT, Oberlin, Kans.**

Maple Valley Herd Poland Chinas

60 fine spring pigs sired by On The Line, Col. Mills by Chief Perfection 2d, Prince Darkness, Dispatcher, Grand Perfection, On Time, and other great sires. Write me for prices and breeding. **C. F. BROWN, Whiting, Kans.**

The Useful Type of Poland-Chinas

Herd headed by Filate Chief 43565 by Johnson's Chief 38774, and Major King 43864 by Major M. 31527, a 1000-pound hog.
E. D. Morris, Bern, Kansas

CEDAR GROVE HERD

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

A. B. GARRISON BEATTIE, KANSAS.

Breeder of Poland-Chinas That Win

In the shows where size, clean bone and finish enough to insure quality, are the chief requirements. Pigs for sale.

POLAND-CHINAS**FAIR VIEW STOCK FARM**

Show yard type Poland-Chinas, headed by rector Sunshine 101838. A few choice pigs for sale.
A. K. Sell, Fredonia, Kans.

BOARS, BOARS.

Choice spring males at right prices, by Ohio Chief, Masterpiece, Nonpareil, Choice Chief, 2nd, 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 country. Prices reasonable. Write for full particulars.
O. W. Stalder, Salem, Mo.

SIGLER'S

Our Poland-Chinas are in breeding and individuality. Our prices are right. We respectfully invite correspondence with prospective buyers.
A. E. SIGLER, Pickrell, Neb.

SUNNY SLOPE POLANDS

10 heavy boned, stretchy fall boars, by Hanger Thompson's Choice; also gilts and tried sows. Impudence I know 42180, at right prices.
W. T. Hammond, Portia, Mo.

POLAND-CHINAS. SHORTHORNS

A few thrifty young bulls and boars of the breeding from champion and prize-winning herds. Prices reasonable for quick sales.
R. M. Buck, R. 2, Mckridge, Kans.

Esbon Herd of Poland

I have some tried sows bred to Special 48625 for October farrow.
W. C. TOPLIFF, Esbon, Kans.

Erie Gas Light Herd

Headed by Sunshine Chief 2d by Chief Sunshine 2d, dam Queen Perfection, Margarette C. May, deal Sunshine 2d and other great sows in stock for sale. **J. K. Mahaffey, Erie, Kans.**

Belleville Big Boned Poland

Fall boars of the best breeding; also choice pigs bred to Pan Famo for fall farrow. 100 spring pigs by Pan Famo ready for shipment in July.
W. H. Bullen & Son, Belleville, Mo.

Home of Indiana 2d.

You all know the record of this great young male and see him and the many other sons and daughters of world and State Fair champions. Place to Get Herd Headers—Try them. They have size, finish, easy feeding qualities, hot pedigree, the kind sought after by the breeder and showman. We price them right. Come or write us.
HOWARD REED, Frankfort, Kans.

East Creek Herd of Poland

Headed by STYLISH PERFECTION 40314, one of first in aged class and sweepstakes boar at Nebraska State Fair '04. Stylis Perfection is one of the greatest boars of the breed and won his upon merit alone, and his get proves him to be great sires as well as a great show animal. A good spring boars and gilts sired by him for sale.
H. B. WALTERS, Wayne, Kans.

Clover Lawn Polands.

My spring pigs are coming nicely, sired by my two herd boars, Major M 31527 and Belle Chief 42473. I will offer Bright Chief for sale as I can use him no longer. For further information write
JOHN R. TRIGGS, Dawson, Neb.

McKeever & Sons

Hubbell, Nebraska
The boys of the useful Poland-Chinas have a Hog

Litters by Expansion C, Expansion Grand Look and other big ones. Nothing but good ones sold on orders. Write us.

JOHN BOLLIN,

Route 5, Leavenworth, Kans.

Broods and Sells

Poland-Chinas
The State and World's Fair winning boars L's Duds and The Picket in service. Broods and serviceable boars for sale

WELCOME HERD

Headed by the \$1,000 TOM LIPTON, in herd—Springtime by Meddler 2d, a 1000-lb. pig bred to Perfect Challenger; Cherry by Perfection E. L., a \$100 gilt bred to a 1000-lb. pig bred to Perfect Challenger; by Corroctor, a 1000-lb. pig bred to Meddler 2d; Maxie by Meddler 2d, a \$385 gilt bred to Meddler 2d. Stock for sale at all times. Write us or visit herd. **JOSEPH M. BAUER, Kans.**

E. L. Keep On Poland-Chinas.

Pigs by the world's record breaker, E. L. Keep On, Meddler 2d, Perfect Challenger, Maxie On Time, Maximus, Highland Chief Jr., Grand Champion Meddler, Skybo, Grand Perfection by Perfection E. L., and out of sows by Meddler, Chief, Perfect U. S. by Perfect I Know, Keep On Perfection by Keep On, Sir Darknes by Chief Perfection by Cecil by Mischief Maker, Convincer by Chief Perfection 2d, Philanthropist by Expansion, Lighter, Big Boy by Perfect U. S., Peace Maker by Mischief Maker, and Sunflower Perfection. Write to Dr. B. P. Smith, Longford, Kansas.