

KANSAS FARMER

Volume XLV. Number 24

TOPEKA, KANSAS, JUNE 13, 1907

Established 1863. \$1 a Year

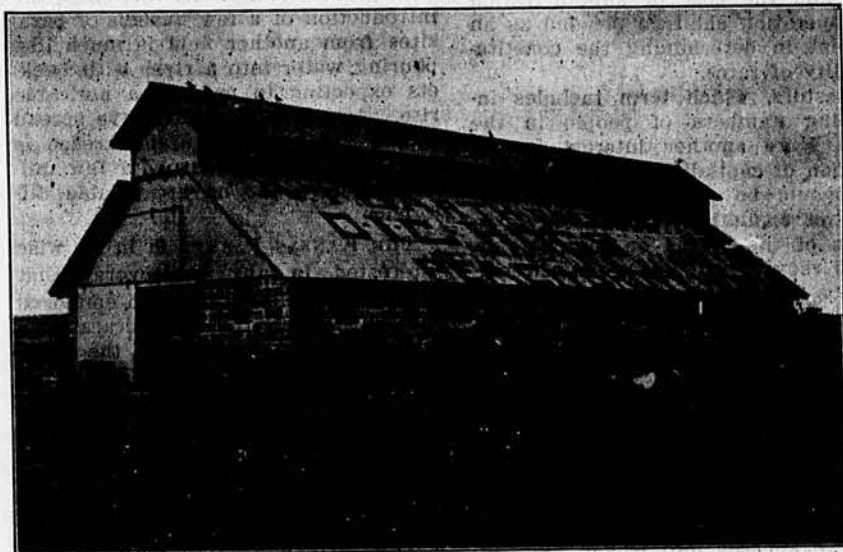
CAPITALIZATION AND VALUATION OF RAILROADS.

The question of 2-cent fares on railroad trains has been in politics for a considerable time and is now likely to get into court in the neighboring State of Missouri. In the consideration of this question the value and capitalization of railroad properties will probably occupy a prominent place.

In the matter of a farm, a mill, or a store, the owner may place his own estimate on its worth regardless of what it cost to produce the property. He may consider a 160-acre farm worth \$16,000 or \$24,000 even though it may have cost no more than \$4,000 or even \$400. If he can make

court the attorneys for the corporation insist that rates must be such as to pay fixed charges, operating expenses, and a fair return on the investment. Under the first and third of these the public has been prone to think is included whatever of over-capitalization may be represented by the stocks and bonds issued. If this be true, the public has a vital interest in the question of capitalization.

When a railroad is to be built the selection of the route is the first matter of importance. To gather, compile, and consider the necessary information on which to make a judicious location for so large an investment requires expensive



Cement-Block Swine House. Built and owned by A. T. Garth, breeder of O. I. C. swine, Larned Kans. See article on page 702.
(Photo by KANSAS FARMER Man.)

it earn a fair return for the larger investment, nobody has any right to complain. Indeed, the man is considered, and is in fact, a benefactor on account of his ability to efficiently and profitably use the means in his possession.

That the same immunity from interference with its capitalization of assets ought to pertain to a railroad corporation is a claim that would be readily admitted by manipulators of railroad properties. But when the question of rates comes into

work. Procuring right of way follows selection of route and may even modify such selection. Leaving out the matter of local aid which usually yields somewhat more than it costs to get it, we reach the third item which is the grading. Then come bridges and ties, steel rails and rolling stock, depots and terminals. Finally there is in some cases a temporary excess of operating expenses over earnings which excess may be a charge against the capital. To provide for

Principal Contents of This Week's Paper

Bed in summer (poem).....	710	Forest policy supported.....	714
Boil it down (poem).....	708	Grasses for clay sub-soil.....	705
Brother, little.....	710	Green-bug problem in Texas, the.....	707
Butter, the cause and remedy for defects in.....	711	Green bugs, the question of fighting the.....	698
Campbell's new book.....	698	Heads of families at the first census.....	699
Cattle symposium.....	700	Hubbard's bee story, Elbert.....	709
Club, a new.....	708	Irrigation Congress, preparing for the.....	704
Coburn on the wheat crop.....	699	Life, the rewards of.....	708
Corn, insects injurious to.....	705	Poultry notes.....	713
Cow-peas and corn.....	705	Railroads, capitalization and valuation of.....	697
Cow-peas, harvesting.....	705	Recipes.....	709
Crop report, Government.....	698	Refrigerator, the Boer's.....	709
Dairy notes.....	711	Rest and recreation.....	708
Dairy rules, some.....	711	Skipper, the sorrows of a (poem).....	709
Dry farming in New Mexico.....	704	Strawberry beds, renewing old.....	714
Eggs, preserving.....	713	Twentieth century homes.....	704
Farming, delights of.....	703	Weather report.....	715
Farm values show vast increase.....	699	Young man, advice to a.....	710

KANSAS FARMER.

Established in 1868.

Published every Thursday by
THE KANSAS FARMER COMPANY
 (Incorporated, January 1906).
 Topeka, Kansas

SUBSCRIPTION PRICE: \$1.00 A YEAR

Entered at the Topeka, Kansas, postoffice as second-class matter.

OFFICERS.

President.....E. B. COWGILL
 Vice President and General Agent.....I. D. GRAHAM
 Secretary and Manager.....H. A. HEATE
 Treasurer.....JOHN R. MULVANE

E. B. COWGILL.....Managing Editor
 I. D. GRAHAM.....Live Stock Editor
 DR. C. L. BARNES.....Veterinary Editor
 THOS. OWEN.....Poultry Editor
 RUTH COWGILL.....Home Departments Editor

LIVE STOCK REPRESENTATIVES.

C. E. SHAFER, Eastern Kansas, Missouri and Iowa
 L. E. LEWIS.....Kansas, Nebraska and Oklahoma

SPECIAL AGENTS.

New York.

J. C. Bush.....1110 Potter Building
 Boston.

W. H. Daggett.....1006 Paddock Building
 Chicago.

Edwell Special Agency.....801-804 Unity Building
 St. Louis.

R. A. Tharp.....710 Missouri Trust Building
 Pacific Coast.

David R. McGinnis, 21 Peoples Savings
 Bank Building, Seattle, Washington

ADVERTISING RATES.

Display advertising, 20 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.50 per inch per week.

Special reading notices, 20 cents per line.
 Special rates for breeders of pure-bred stock.

Special Want Column advertisements, 10 cents per line of seven words, per week. Cash with the order.

Electrons must have metal base.
 Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

All new advertising orders intended for the current week should reach this office not later than Monday.

Change of copy for regular advertisement should reach this office not later than Saturday previous to publication.

Every advertiser will receive a copy of the paper free, during the publication of the advertisement.

Address all communications to
THE KANSAS FARMER CO.,
 625 Jackson St., Topeka, Kansas



all this requires high-priced ability in "financing the road."

There are expected to be profits on each of the above-enumerated steps in the enterprise, and especially liberal profits are expected by those who finance it.

That all of these items shall be included in the capitalization on which a fair return must be allowed to be earned under the law in order that it—the law—may escape the condemnation of the courts as being confiscatory is well established in the decisions of the highest tribunals.

But most of the railroads originally built and capitalized according to these admittedly just schedules have not remained to the present day without consolidation with other similar properties. That such consolidations have generally resulted in better service and to the advantage of the public is a fact not to be overlooked. But in making these consolidations it was early found that some of the properties were yielding far better returns than others upon the investment. This fact presented a situation of some difficulty for the managers. Certain it was that the owners of shares in the less remunerative properties would not be satisfied to receive a less number of shares in the consolidated property than they owned in their original company. It was very soon discovered that the easiest way was to exchange shares of the consolidated stock for an equal number of the shares of the poorest paying constituent of the consolidation and to make good to the holders of the more valuable stocks by issuing to them additional consolidated shares in proportion to the greater value of the shares of their constituent company.

These consolidated properties should be and were generally able to earn better net returns than had been earned by the several constituents. In view of the expectation of increased earnings it very soon became customary on making consolidations to give a pleasant surprise to all holders of stocks in constituent companies by issuing to them more shares in the consolidated company than they had owned in the constituents. This issue was accompanied by a nice congratulatory note of explanation, etc.

This increase in nominal capitaliza-

tion was presently made on other pretexts than that of consolidation. One of these was the earning power of the property. Given a developing country traversed by a good railroad on which remunerative charges prevailed and the stock might become valuable. For purposes of needed betterments, and repairs "to the end that the road might be in position to discharge its full obligations to the public," etc., the directors determined upon an addition to the capital stock. Whether more of this additional stock was issued than went into betterments depended largely on the views of the financiers of the enterprise. But the public has the view that in very many cases much of such stock was issued merely because it would sell and because the earnings of the property and its prospects were such as to justify a larger capitalization.

For building and improving railroads the necessary money—and sometimes more—is generally raised not so much from the sale of stocks as from the sale of mortgage bonds. This is another form of capitalization. Whether the interest on these bonds be classed as "fixed charges" or otherwise, they become, after the payment of operating expenses, rentals, and taxes, the first claim against the earnings.

The fact that all of this capitalization, whether it represents substantial investment in the property or to some extent consists of paper obligations for which no investment was made in the property, has in times past been made a basis for pleas against rates proposed by law, gives the patrons of these enterprises an interest in the subject of capitalization which can not be eliminated as long as anything aside from the real value of the property and the cost of administration and operation shall be pleaded as an element in determining the constitutionality of rates.

Investors, which term includes increasing numbers of people in the West, have another interest in the question of capitalization. These people should be protected against liability of spoliation through excessive issues of the stocks or securities in which they invest, under any circumstances or pretext. This is, however, another branch of the subject upon which the editor will not enter at length at this time.

THE QUESTION OF FIGHTING THE GREEN BUGS.

Nothing is more surprising to the reader of the history of the development of modern science than the human weaknesses into which many of the men engaged in the great work have been betrayed—men whose devotion to science and whose keenness of insight have given them exalted places in the estimation of mankind. A notable case of this weakness was displayed as to the electrical discoveries of three-quarters of a century ago. Michael Faraday had published an account of his discovery of certain electrical phenomena produced by moving a closed wire circuit in the vicinity of the poles of a magnet. The announcement so startled other investigators that the great electrical discoverer of England was denounced as a falsifier and was challenged to submit his claims to the test of the galvanometer. Faraday replied, "To the galvanometer we will go." If his claims had not then been substantiated by the delicate test of the galvanometer the present use of the method in dispute for the production of the electrical energy now used to propel street cars, and heavy railroad trains, and for all of the various industrial purposes to which electrical energy is applied would long ere this have vindicated Faraday's claim.

The moral of this is that the men engaged in scientific pursuits are as human as the rest of us.

A present day instance not unlike that of the early part of the last century is afforded by the attention recently given by certain professional men to the strenuous efforts put forth by Prof. S. J. Hunter, of the Kansas State University in trying to reduce the damage to Kansas wheat and oats by

the green bugs. THE KANSAS FARMER has taken a great interest in this work realizing that after the disastrous results of the green bugs in Texas and Oklahoma every intelligent effort to prevent or reduce losses in Kansas should be encouraged.

The entomologist of the Oklahoma Experiment Station has published two leaflets giving accounts of his attempts to fight the green bugs by spraying. The second leaflet is given chiefly to showing that spraying is entirely inefficient as a remedy. Later he has gone rather extensively into print to show that the efforts of Professor Hunter, of the Kansas State University, were undertaken for the purpose of advertising himself and the University. He seems to reach the conclusion that since his efforts at spraying did not succeed the case is hopeless and it is no use to try any more.

Kansans were much interested last Sunday when the professor of entomology at the Kansas State Agricultural College gave out a prepared interview in which he reports that he went into a field that was badly infested with the pest and found the parasite present also in great numbers. He then introduced on the windward side of this field a considerable amount of wheat infested with parasitized green bugs. After waiting a suitable time he examined the field and found a large increase in the number of parasites as compared with the green bugs. But in a check field in which no parasites had been introduced from abroad he found substantially the same ratio of increase of parasites.

After a field has become fully infested with *Toxoptera graminum* the parasite is very apt to appear. In favorable weather the parasite increases with great rapidity. At this stage the introduction of a few bushels of parasites from another field is much like pouring water into a river with buckets expecting to produce a noticeable rise. After the parasites have spread over a field their natural increase is so rapid that additions of a few millions more make no appreciable difference.

THE KANSAS FARMER is in no wise interested in any controversy that may be precipitated between employees of the State in the Agricultural College and other employees of the State in the State University. But the editor has observed with much interest the strenuous effort of Professor Hunter to assist the natural enemy of the green bug to reach infested fields in time to save the crop. It is the question of the utility of methods and not any personal matter between men that we desire to examine.

The inquiries of THE KANSAS FARMER have brought out the fact that the point of time when the artificial introduction of parasites counts is found during the interval between the arrival of the *Toxoptera* and the arrival of the parasites. Some have thought that they come together, but persons who have watched the movements very closely in the fields have informed the editor that there was during the early portion of the present season in Kansas an average interval of 50 to 60 miles between the front of the army of green bugs and the front of the following army of parasites. Doubtless this interval will be greatly reduced as the weather becomes more favorable for the activities of the parasite, and will probably disappear before the season closes. The liberation of thousands of parasites in a field immediately after the appearance of the first green bugs, transporting them over the fifty miles, more or less, between their field of mastery in the South and the field in which the green bugs have just arrived in the north, gives the parasites sufficient help to make the difference between saving and losing a crop in the estimation of many farmers who have tried it.

It is thought by some that the green bug hatches in Kansas on the approach of warm weather, from eggs laid during the previous fall. This is true of some kinds of green bugs, but is probably not true of *Toxoptera graminum*, the bug that does so much harm. If any entomologist has ever

seen a male *Toxoptera graminum* or an egg outside of the body of its mother he has not mentioned either of these important facts so that THE KANSAS FARMER could hear. There are probably males at some periods and there are probably eggs. But these conclusions are assumed from the fact that males and eggs are produced under certain conditions by other aphids and not on observation, so far as we have heard. The occurrence of *Toxoptera graminum* in Kansas has almost certainly been by invasion from the South by migratory females which produce living young with great rapidity on reaching a field of young oats or wheat.

It is believed that such invasions can be prevented by assisting the parasite to pass quickly from the southern field where its work is done to northern fields where its services are needed and where if it begins in time it can kill all green bugs before they have sucked the life out of the crops.

The official reports of those who have been engaged in the work will be read with great interest.

CAMPBELL'S NEW BOOK.

Campbell's Soil Culture Manual for 1907 is a much improved edition of the sensible book that has made its author famous, and has helped to increase both the average yield and the certainty of crops over a vast region of the Transmissouri country. The methods expounded may be applied with great advantage wherever farming is done. They are essential to success in the sub-humid regions. Mr. Campbell is a practical man and a clear thinker. His writing is easily understood. His subjects are so systematized as to be readily referred to. The book contains 320 pages. The only objection we make is to the price, which is marked at \$2.50. If it can not be had for less it is better to pay this price than to do without it. True, most of the subjects discussed have been treated in experiment station bulletins, but these are usually lost or at least so hard to find that the farmer gives it up. Doubtless there will be a paper-covered edition of Campbell's book which will be sold for less than \$2.50, but THE KANSAS FARMER has received no notice of such cheaper form of the new edition. This book may be obtained postpaid at publisher's price by ordering through THE KANSAS FARMER.

GOVERNMENT CROP REPORT.

The June crop report of the Department of Agriculture has just appeared. The winter wheat condition is found to be less than 4 per cent below a ten-year average, the spring wheat condition less than 5 per cent below the average, and the oats prospect 8 per cent below the average in June. The present prospect is thought to be for a total wheat crop only slightly below the average of the past five years, though it seems likely to fall 100 million bushels below the crop of 1906. The crop of oats, judging from the report of the Department, can be about equal to that of last year.

The abundant rains that have fallen in the past two weeks insure ample moisture and favorable weather should result in rapid improvement in the condition of all crops—even cotton, for which there is a poorer prospect than for any other staple crop.

The reports from Europe indicate an important deficiency in the wheat crop there, so that a good export demand, at relatively high prices, seems assured for the American surplus.

SPRING WHEAT AREA AND CONDITION.

Preliminary returns on the acreage of spring wheat sown indicate an area of about 16,464,000 acres, a decrease of 1,242,000 acres, or 7.0 per cent, as compared with the final estimate of the acreage sown last year, 17,706,000 acres.

The average condition of spring wheat on June 1 was 88.7, as compared with 93.4 at the corresponding date last year, 93.7 on June 1, 1905, and a ten-year average of 93.3.

The following shows for the five principal spring wheat States the acreage, compared with last year on a percentage basis, and the condition on

JUNE 13, 1907.

June 1, 1907 and 1906, with a ten-year average:

States	Condition June 1			
	Acreage	1907	1906	10 yr. av.
Minnesota	90	86	91	93
North Dakota	92	90	95	94
South Dakota	92	90	95	94
Iowa	97	87	95	94
Nebraska	102	96	92	95
Washington	93.0	88.7	93.4	93.3
United States				

The average condition of winter wheat on June 1 was 77.4 as compared with 82.9 a month ago, 82.7 a year ago, 85.5 on June 1, 1905, and a ten-year average of 81.1.

The following table shows for each of the principal winter wheat States the condition on June 1 a month ago, a year ago, and the ten-year June averages:

States	Condition			
	June 1907	May 1907	June 1906	10 year ave.
Kansas	60	82	74	81
Nebraska	78	74	80	72
Missouri	84	84	78	79
Ohio	80	77	86	77
Illinois	80	91	86	77
Nebraska	79	88	78	71
Indiana	92	92	91	87
Pennsylvania	75	79	85	77
California	60	72	90	89
Oklahoma	44	43	77	81
Texas	75	75	75	73
Michigan	77.4	82.9	82.7	81.1
United States				

INCREASED OATS AREA.

The total area reported in oats is about 31,491,000 acres, an increase of 532,000 acres, or 1.7 per cent, as compared with the final estimate of the area sown last year. The following table shows for the thirteen principal oat States and the United States the acreage compared with last year on a percentage basis, and the condition on June 1 in each of the last two years, with the ten-year average for June:

States	Condition			
	Acreage	1907	1906	10 yr. av.
Iowa	109	85	94	94
Illinois	100	86	75	88
Wisconsin	104	87	95	94
Nebraska	103	85	87	92
Minnesota	104	89	93	93
Indiana	102	85	60	87
Ohio	102	83	76	84
Michigan	103	75	92	90
South Dakota	103	89	96	93
North Dakota	106	89	95	93
New York	97	87	94	91
Pennsylvania	95	82	82	87
Kansas	104	80	65	83
United States	101.7	81.6	85.9	89.7

The acreage reported as under barley is less than that finally estimated as sown last year by about 171,000 acres, or 2.7 per cent. The average condition of barley is 84.9 against 93.5 on June 1, 1906, 93.7 on June 1, 1905, and a ten-year average of 89.8.

The average condition of rye is 88.1 against 89.9 on June 1, 1906, 93.6 on June 1, 1905, and 90.2, the mean of the corresponding averages of the last ten years.

President Nichols of the Agricultural College has received notice from the Western Passenger Association that a rate of one and one-third fare for the round trip on certificate plan has been authorized for the College Commencement week. Tickets will be on sale June 14, 15, 16, 17, good returning June 20, 21, 22, 23. Every year hundreds of old graduates of the college, parents and friends of the graduating class and of the institution come to spend a few days during Commencement week. It is expected that the attendance will be very much larger this year than ever before. Those who wish to avail themselves of this rate must take a receipt when they buy their ticket from the starting point.

It is estimated that the exports of wheat from the United States for the year ending June 3, 1907 will amount to 75 millions of bushels, or 19 per cent of the previous season's crop. For the year ending June 30, 1898 the exports amounted to 148 millions of bushels, or 40.91 per cent of the previous season's crop. Crop prospects this season are such that there is likely to be little to export during the next year. But the world seems to refuse to get excited about this situation but remembers that the shortage of exports from this country during the last three years was more than made up by increased exports from Russia, British India, and Argentina.

Friday, June 14, will be the 130th anniversary of the adoption of the stars and stripes as the flag of the United States. The American Flag Association has issued circulars as a reminder of the date, and urges ob-

servance of the day as a national anniversary. The association was formed in 1897 to promote reverence for and prevent desecration of the flag.

Recent reports about grapes and blackberries indicate that Kansas will not be entirely destitute of fruit this season.

Corn is backward, but there is time for much growing weather before the season of frost in the fall.

In addition to the rains in Kansas shown on this week's official weather map, the generous rains of Sunday—not shown on the map—supplemented the precipitation of last week in a way to make the rejoicing almost universal.

THE KANSAS FARMER is in receipt of a letter from C. K. Dunkerley, but as he failed to give his address we are unable to give proper credit. Will Mr. Dunkerley kindly advise us of his postoffice address and oblige?

Miscellany

Coburn on the Wheat Crop.

The Kansas Board of Agriculture last Saturday issued a report bearing especially on the State's winter wheat situation, and which reflects conditions as found June 4. The report says: "While all portions of the State have been covered by the investigations, the canvass of those counties having the greatest wheat acreages was particularly exhaustive and thorough. It now seems evident that of the State's total area sown to winter wheat last fall about 21 per cent, or 1,410,000 acres, has been plowed up or is worthless, as against the 4 or 5 per cent reported by the same correspondents April 24. The condition, June 4, on the 5,305,000 acres which now seems likely to be harvested, averages for the State 56.7, or 27.3 points less than the general average of the growing winter wheat (about 6,300,000 acres, net) six weeks ago. The causes of the increased areas plowed up and decrease in condition are throughout chiefly ascribed to the frequently recurring if not continuous low temperatures, and general lack of timely and sufficient May rainfall. The most notable damage of all, however, appears to have been done by the widespread freeze occurring in the last week of May, and this was nowhere more severe than in Barton and the similar great wheat counties in that portion of the State, where the grain was heading or headed, and where prior to this freeze there had been fair promise of a satisfactory crop. With the exception of six or seven in the eastern part of the State, prospects have diminished in every county, and markedly in the majority of the foremost wheat-producers. The lowest condition for any one county, 35, is reported for Sumner, the county of largest wheat acreage, and the highest, 95, for Atchison. In many counties the grain has not attained a normal growth, and considerable is likely to be too short for the binder. Harvest will be ten to fifteen days later than usual.

"One pleasing feature of the present investigation is brought out by the question, 'Are green lice or other insects doing considerable damage at this time?' to which responses are quite unanimously, 'No!' The information was often volunteered that the green bugs had entirely disappeared. While more or less damage was done by green lice in the southern central counties—and in some of them it was serious—the 'green bug scare' of 1907, one of a type annually exploited with Kansas as its stage, is a closed incident.

"Nearly every portion of the State has been visited by recent rains, and the weather at this date is more favorable for plant growth than at any previous time in the year.

"The 1907 assessors' returns received for 33 counties, which includes several of the more prominent in

wheat production, show an area sown aggregating 164,000 acres more than the correspondents' estimate of last fall. This would seem to indicate that the State's actual wheat acreage was larger even than the increased area earlier reported.

"The table below shows by counties the probable area of winter wheat sown in each last fall, the per cent estimated June 4 as plowed up or worthless, and the per cent of present condition or what will likely be harvested, together with the condition as it appeared April 24:

Counties	Probable acreage	Plowed up, p. ct.		Condition June 4, p. ct.	
		up, p. ct.	p. ct.	June 4, p. ct.	p. ct.
Allen	27,037	7	70	80	
Anderson	13,980	10	68	90	
Atchison	31,065	1	95	95	
Barber	68,666	26	70	84	
Barton	274,832	36	47	89	
Bourbon	11,433	20	80	75	
Brown	33,854	3	84	94	
Butler	19,246	28	40	66	
Chase	5,969	35	65	67	
Chautauqua	5,734	33	42	60	
Cherokee	31,472	13	53	61	
Cheyenne	24,501	10	70	90	
Clark	30,407	10	60	95	
Clay	76,824	7	50	83	
Cloud	82,144	13	46	88	
Coffey	34,642	15	75	64	
Comanche	28,473	15	60	89	
Cowley	72,725	23	55	65	
Crawford	26,135	8	63	80	
Decatur	78,706	8	55	95	
Dickinson	102,466	7	64	80	
Doniphan	27,347	0	80	88	
Douglas	29,961	10	72	80	
Edwards	139,565	44	45	85	
Elk	8,020	28	45	71	
Ellis	176,158	11	53	88	
Ellsworth	130,374	16	55	79	
Finnney	12,294	10	60	100	
Ford	122,789	20	60	90	
Franklin	10,174	10	80	74	
Geary	21,708	11	60	85	
Gove	94,043	22	42	86	
Graham	85,125	15	50	97	
Grant	540	10	70	85	
Gray	40,143	25	65	95	
Greeley	2,573	10	60	86	
Greenwood	6,907	20	75	80	
Hamilton	1,690	15	65	91	
Harper	164,941	30	70	82	
Harvey	87,670	11	64	73	
Haskell	12,535	15	65	90	
Hodgeman	85,537	35	60	83	
Jackson	9,793	8	75	94	
Jefferson	25,207	8	80	90	
Jewell	47,383	13	48	88	
Johnson	37,670	3	87	86	
Kearny	4,420	13	65	90	
Kingman	124,278	24	59	79	
Kiowa	84,143	27	64	88	
Labette	37,420	10	67	64	
Lane	80,225	30	40	90	
Leavenworth	35,963	3	78	88	
Lincoln	100,834	35	48	83	
Linn	11,065	7	78	80	
Logan	32,849	5	65	92	
Lyon	19,057	18	70	61	
Marion	83,246	22	61	71	
Marshall	45,786	5	68	90	
McPherson	176,506	17	58	76	
Meade	35,166	9	60	90	
Miami	30,151	6	80	84	
Mitchell	111,167	15	38	84	
Montgomery	38,197	48	40	61	
Morris	13,223	10	55	74	
Morton	1,004	10	68	85	
Nemaha	9,223	5	80	91	
Neosho	25,938	15	57	77	
Ness	124,536	30	45	90	
Norton	54,689	15	61	91	
Osage	20,645	13	77	73	
Osborne	104,899	30	41	89	
Ottawa	102,019	8	45	84	
Pawnee	210,315	38	54	93	
Phillips	87,167	9	70	90	
Pottawatomie	12,251	8	68	87	
Pratt	176,383	15	65	83	
Rawlins	89,871	10	80	95	
Reno	227,185	13	50	79	
Republic	34,263	20	43	87	
Rice	164,712	18	59	85	
Riley	13,619	13	52	77	
Rooks	124,742	18	52	97	
Rush	183,254	36	42	98	
Russell	148,529	14	50	90	
Saline	111,453	19	53	79	
Scott	41,410	30	50	80	
Sedgewick	154,956	25	60	69	
Seward	13,394	10	65	100	
Shawnee	8,589	5	71	90	
Sheridan	94,185	10	50	92	
Sherman	14,244	5	50	90	
Smith	71,022	13	58	95	
Stafford	210,299	24	58	78	
Stanton	743	10	65	80	
Stevens	2,959	5	70	100	
Sumner	268,259	51	35	58	
Thomas	75,783	22	40	92	
Trego	72,754	15	40	90	
Wabaunsee	14,872	10	67	77	
Wallace	2,436	15	60	98	
Washington	58,014	1	78	89	
Wichita	23,051	20	60	80	
Wilson	18,300	13	53	66	
Woodson	8,047	15	75	72	
Wyandotte	11,448	0	85	91	

"At no time has oats promised, and the outlook for anything like a normal yield is far from encouraging.

"Up to within a recent time there has been no corn-growing weather, but the late rains and increasing warmth are greatly beneficial, and the fields are unusually free from weeds."

Western Farm Values Show Vast Increase.

Two and a half billion dollars is the increase in the value of farm lands that has taken place within five years in States on or tributary to the Union Pacific Railroad. Seventeen States so grouped showed farm values, including buildings, of \$5,692,230,872 in 1900. Five years later, according to statistics gathered by the United States Census, values of farm properties had increased to \$8,241,782,864, an

advance of nearly 45 per cent. The individual percentages of increase vary from 119 per cent for Wyoming to 24 per cent for California, the higher records being held by Washington 68 per cent, Nebraska 57 per cent, Idaho 58 per cent, Texas 61 per cent, and New Mexico 65 per cent.

In a bulletin just issued by the Union Pacific Railroad, in which these statistics are presented, it is shown that hay and grain farms have increased in value in the five-year period, \$785,500,000. Live stock farms show an increase of over a billion dollars, fruit farms, \$51,000,000; vegetable farms, \$32,000,000; general farming lands, \$165,000,000.

Further analysis of the census figures shows the ratio of increase in value of land to various branches of farming. In Colorado, for example, land, two-fifths of the income of which is derived from sugar-beet raising, has increased \$22 per acre in value, or 112 per cent. Farm lands in Montana, two-fifths of the income from which represented vegetable growing, have increased 58 per cent in value. In Oregon the largest percentage of increase (58 per cent) is from sugar-beet lands. In the State of Washington the largest percentage of increase (75 per cent) is from land, two-fifths of the income from which is represented by fruit.

For each State statistics are given which indicate the kind of farming that has produced the greatest increase of values, sugar, hay and grain, live stock, dairying, fruit, vegetables, and general farming.

Under the same headings, separate figures are given showing the increase in value of irrigated and improved lands, percentages in Wyoming varying from 31 to 100 per cent, in Colorado from 47 to 118 per cent, in Idaho from 63 to 80 per cent, and in Oregon from 31 per cent for live stock farms to 56 per cent for sugar-beet farms.

Heads of Families at the First Census, 1790.

Congress recently authorized the Director of the Census to publish during the present fiscal year the names of heads of families and accompanying information, shown on such schedules of the Census of 1790 as are in existence. Unfortunately the appropriation for the Bureau does not permit the publication of this information for all the States the schedules for which are still in existence, but the returns for the States of New Hampshire, Vermont, and Maryland are now in press and will be issued as parts, or pamphlets. Each of these parts will form an attractive publication consisting of about 150 pages, fully indexed, printed upon laid antique paper, sewed, and bound in especially handsome and durable semipamphlet binding. Each part will contain as a frontispiece a map of the State represented, 11 by 17 inches in size, reproduced by lithography from an atlas published in 1796.

In accordance with the law these pamphlets are offered for sale by the Director of the Census, and the price has been set at \$1 each.

TIMELY NEW BOOKS.

Bean Culture.

By Glenn C. Severy, B. S. A practical treatise on the production and marketing of beans. It includes the manner of growth, fertilizers, best varieties, planting, harvesting, insects and fungous pests. A practical book. Illustrated; 144 pages, 5x7 inches. Cloth, 50 cents. Orange Judd Company, New York.

Celery Culture.

By W. R. Beattie. A practical guide for beginners and a standard reference for experienced celery-growers. The work is complete. It treats of planting, cultivating, fertilizing, pests and marketing. Fully illustrated; 150 pages, 5x7 inches. Cloth, 50 cents. Orange Judd Company, New York.

Tomato Culture.

By Will W. Tracy. The most complete account of tomato culture that has ever been published. A complete story of the practical experiences of the best posted expert on tomatoes in the world. No gardener or farmer can afford to be without the book. Cloth, 50 cents. Orange Judd Company, New York.

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

Stock Interests

LIVE STOCK REPRESENTATIVES.

C. E. SHAFER, Eastern Kansas, Missouri and Iowa
L. K. LEWIS, Kansas, Nebraska and Oklahoma

PURE-BRED STOCK SALES.

Shorthorns.

June 14—T. J. Wornall & Sons, Liberty, Mo.
June 14—J. W. Leeper, Auburn, Neb.
June 21—Jos. Duncan, Osborn, Mo.
Oct. 23—A. C. Shallenberger and Thos. Andrews, Alma, Neb.
Nov. 5—E. D. Ludwig, Sabetha, Kans.
November 6 and 7—Purdy Bros., Kansas City.

Herefords.

February 25, 26, 27—C. A. Stannard, Emporia, Kas.
February 25-28—C. A. Stannard and others, Kansas City, Mo.

Aberdeen-Angus.

July 10.—Thos. J. Anderson, Gas City, Kans.

Poland-Chinas.

June 12—J. Walter Garvey, Thayer, Ill.
September 19—J. T. Hamilton, So. Haven, Kans.
October 8—M. Bradford & Son, Rosendale, Mo.
October 7—T. S. Wilson, Hume, Mo.
October 12—D. O. Staylor, Independence, Mo.
October 12—Sam Rice, Independence, Mo.
October 14—E. E. Axline, Oak Grove, Mo.
Oct. 15—John Blain, Pawnee City, Neb.
Oct. 15—Geo. Hull, Burchard, Neb.
October 17—Charles 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. Messick & Son, Piedmont, Kas.
October 23—A. P. Wright, Valley Center, Kans.
October 24—G. M. Hebbard, Peck, Kans.
October 24—J. R. Eggs, Dawson, Neb.
October 25—W. J. Honeyman, Madison, Kans.
Oct. 25—H. G. Chapman, Dubois, Neb.
October 26—Martin Lenta, Atherton, Mo.
October 26—A. B. Hoffman, Reese, 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.
November 1—Harry E. Lunt, Burd, Kans.
November 2—C. E. Shaffer & Co., Erie, Kans.
November 2—Thos. F. Walker, Alexandria, Neb.
November 2—Dietrich & Spaulding, Richmond, Kans.
November 4—C. S. Nevius, Chiles, Kans.
November 5—Lemon Ford, Minneapolis, Kans.
November 5—E. L. Calvin, Boicourt, Kans.
November 6—W. R. Crowther, Golden City, Mo.
November 7—T. P. Sheehy, Hume, Mo.
November 8—D. E. Grutcher, Drexel, Mo.
November 8—U. S. Ison, Butler, Mo.
November 9—H. E. Harshaw, Butler, Mo.
November 11—A. J. Lams & Lorraine, Moline, Kans.
November 12—W. N. Messick & Son, Piedmont, Kans.
November 12—I. E. Knox and Wm. Knox, Blackwell, Okla.
November 12—J. C. Larrimer, Wichita, Kans.
Nov. 13—W. H. Bullen, Bellville, Kans.
November 14—C. W. Dingman, Clay Center, Kas.
November 16—O. 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, Brimson, Mo.
November 21—Everett Hayes, Hiawatha, Kans.
November 22—C. E. Hedges, Garden City, Mo.
November 23—F. F. Orelly, Oregon, Mo.
October 7—T. S. Wilson, Hume, Mo.
October 15—Bernham & Blackwell, Fayette, Mo.
October 22—Jas. Mains, Oskaloosa, Kans.
October 23—John M. Coats, Liberty, Mo.
January 30—H. E. Walters, Wayne, Kans.
February 5—C. E. Tennant, New Hampton, Mo.
February 6—R. E. Maupin, Pattonburg, Mo.
February 7—F. D. Fulkerson, Brimson, Mo.
February 8—Wm. Wingate, Trenton, Mo.
February 8—Thos. F. Walker, Alexandria, Neb.
Feb. 26—W. H. Bullen, Bellville, Kans.

Duroc-Jerseys.

Oct. 15—Jno. W. Jones, Concordia, Kans.
October 16, 1907—Ford Sken, 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 23—Geo. Hannon, Olathe, Kans.
November 25—Marshall Bros. & Stodder, Burden, Kans.
January 21—Jas. L. Cook, Marysville, 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. 18—John W. Jones, Concordia, Kans.
Feb. 19—T. F. Teagarden, Wayne, Kans.
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.

Percherons.

Feb. 22—D. E. Reber, Morrill, Kans.

Combination-Sale.

February 18, 19, 20, 21.—Percheron, Shorthorns; Herefords, Poland-Chinas at Wichita. J. C. Robinson, Towanda, Kans.

Cattle Symposium.

DISCUSSION BEFORE THE IMPROVED STOCK BREEDERS' ASSOCIATION.

(Continued from last week.)

Mr. Robison: What is the quality of our cattle in general over the country? Is it improved or is it not? Why, the progeny of nearly every one of the pure-bred bloods is used for breeding purposes; males and females. The males go out on the range and they have brought up the general character of the cattle on those ranges until they ask and receive about twice the price they received before that improvement took place. The old quality of cattle on the ranges would not sell for corn-feeding purposes at all. They were only fit for grazing. They do not bring high enough prices nor they do not pay to

put corn into them. We can fatten them on grass. The general quality has improved very greatly, both on the range and at home. No doubt there were some as good cattle twenty or thirty years ago as there are to-day, but not the number of good cattle. I have no trouble in going out onto the ranges and making some inquiry and getting cattle there that show every indication of some of the pure-bloods and buying them up 100 at a sale, and we could not do that a few years ago, only out of very few herds. Now, there has been considerable said on inbreeding. As I said last night, it is agreed among all breeders that there is a limit to that, but it is a question that many people are not skilled enough to know where the danger line is, and to stop when they reach it, or a little before. Take the Cruickshank, Booth and Bates. Those Shorthorn cattle trace back to very few generations. The Percheron horses, or 40 per cent of them, trace back to one single horse, and that inside of the last fifty years. Only a few years ago I was on the farm where that horse was raised and died, and was slaughtered for beef purposes in the Paris market. The quality of that line has been improved and increased. The Percheron horse to-day is not what he was fifty years ago, even in color, although the color has never been a distinctive mark, having been all colors. Now, when we come to ask whether we shall have it red or some other color, why the market fixes that. If I am running a country store in the Indian Territory, or where there is a colored population, I will get a great deal of red, yellow and green goods. The market calls for that. Just the same with cattle and horses. I get a great many letters inquiring about horses, but the first condition is that it must be a black one; very often they put that before "a good one," and before the price. I believe we can raise just as good Shorthorns as grow in any country. I do not believe the color designates the quality of the animal. I do not believe the hair is any longer or softer or better skin. They are all equally good if they are well bred and well cared for. What is the general tendency of any breed? It is to revert to the ordinary standard. You take a herd and choose your best, and not only the best out of your own herd, but the best out of this country, and after that the best out of any country, and give them the best care and with judicious use you ought to improve that animal. But you take the very best again and give them imperfect care and lack of judgment in mating—the rule is, it must deteriorate. Were I to breed Percherons in the East I would breed gray. Were I to breed them west of the Missouri River I would breed them black just as far as possible. When I have a very handsome gray of quality I do not try to sell him. I send him back into Illinois. There is a demand for grays there and they sell just as well as black. Now, this is the condition: We want to put in the pure blood.

Mr. Hanna: There was a little bit of doctrine included in the last remarks that was rank heresy. The gentleman who breeds red cattle because his buyers want red cattle; if he can breed better red cattle than any other that is the thing for him to do; and I may say the same in regard to the Percheron. If you are in the business strictly for Percheron horses that is the thing to do. For the purpose of improving the breed and benefiting the men who purchase of you and the men who will follow you, you can not follow those rules of breeding. You must be inspired by the true spirit.

Mr. Robison: I thought I made myself clear on that question. I did not mean to breed a poorer animal. It is not breeding a less meritorious animal, but only selecting out of the good and breeding the kind that fits our market, and that is the only thing, I wish to be understood. I am not claiming that the black is any better quality, but I do claim it is equally good. Why, some of the best herds here in the West are red.

Mr. Mains: I believe that some of these fads are dangerous. Enterprising people take part with them. They

reject good animals because they do not happen to be all red or black. I think in that there is a great deal of danger. The Shorthorn business I believe has suffered from the fad "all red." Enterprising men will buy a red animal because he is red and has the proper color, and reject one that is much better because he may be roan or have some white. But experienced men who go there and see and examine, and come to meetings like this and get the different opinions, they know that these fads are not altogether the best.

Mr. Robison: The general breed will not be affected at all in many of the lines in the best quality by color for the reason that all the males and females of the best quality of Shorthorns are used for breeding. It is only a question of whether a man in Illinois will pick one color and a man in Kansas another color. In breeding Percheron horses it is the same way. We are not depreciating the general breed by selecting the kind that suits our market, because they are all used for that purpose. There has not been a good Percheron horse eliminated in this State in eight or ten years out of nearly two thousand that I have bred and handled, and I have not made one gelding in that time out of the pure-bred, not one.

Mr. Sponsler: The cattle business has two phases, one producing and the other marketing. The president in some remarks a bit ago spoke of the tendency of men these times to buy steers rather than breed them. This is the matter I allude to. Also the tendency to quit raising cattle on farms. There is a tendency in that direction, as the president remarked. There must be a reason for that. I was wondering if it was not on account of our circumscribed general market for cattle. In producing cattle in this State, while we purchase and feed three million, at least three, they go to market at reduced price. There is a large percentage of cattle go to market at less than cost. That is the reason why the tendency is to quit the cattle business because of this large amount of product that must go at a price below cost, and I was wondering if it was not on account of our circumscribed general market. In other words, we do not have the market of the world to sell our cattle in.

Mr. Hanna: I think undoubtedly there is a tendency to quit raising on account of the low prices for ordinary grades of cattle. I suggested that this condition was almost past in view of the present beef market, but there are other causes for that condition existing, and I expect the gentlemen could suggest some of the causes, or someone else here could. It was undoubtedly, I presume, the lack of an outlet.

Mr. Sponsler: I have an idea that every gentleman in this association reads the Breeders Gazette and that class of live-stock papers, and is well posted on this reciprocal market that we speak of, and that I referred to, of course. But I was wondering what we might say here to each other in this heart to heart talk. I think every gentleman understands the necessity of opening the German market, the second market of the world, to American beef products. Of course we understand that we have a respite. We are granted till the first of July to continue shipping some stuff abroad, but after July every German port will be closed to the American product. I would like to hear what others have thought of this question, in addition to what they have read. We are on the threshold of electing a United States Senator. We don't know how he stands on that, and it is a matter of vital importance to us. Why don't we adjourn and look after our business, and be more practical. Ought we not ascertain how the candidates for United States Senator are going to stand on reciprocity with Germany for American meat products. The politician class of men as a usual thing are in another lobby in another place talking about politics and talking about getting there and which one will get there. Now, we are not so much interested in that as what he is going to do after he gets there. But the question I was wanting to hear discussed

HORSE OWNERS! USE



CAUSTIC BALSAM.

A safe, speedy and positive cure for the most obstinate BLISTER ever used. Removes all lumps from horses. Impossible to produce scar or blemish. Send for descriptive circulars.

THE LAWRENCE-WILLIAMS CO., Cleveland, O.



NEWTON'S HEAVE AND COUGH CURE

A VETERINARY SPECIFIC. 15 years sale. One to two cans will cure Heaves. \$1.00 per can. Of dealers, or express prepaid. Send for booklet.

The Newton Remedy Co., Toledo, O.

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 Manufacturing Company, St. Mary, Kans.



KRESO-DIP

FOR SPRING DIPPING AND Hand Dressing All Stock. PUTS AN END TO LICE, TICKS, MITES, FLEAS, MANGE, SCAB, RINGWORM, ALL SKIN DISEASES.

Don't waste time and money on inferior dips.

KRESODIP

NON-CARCINOGENIC. STANDARDIZED. Prepared in our own laboratories. Ask your druggist for Kresodip. Write us for free booklets telling how to use on all live stock.

PARKE, DAVIS & CO.

DETROIT, MICHIGAN. Branches: New York, Chicago, St. Louis, Boston, Baltimore, New Orleans, Kansas City, Indianapolis, Minneapolis, Omaha, St. Paul, St. Petersburg, Russia; Bombay, India; Tokyo, Japan; Buenos Aires, Argentina.



Worms all Over the Ground

Drexel, Mo., R. D. 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 feedlot. 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, blackleg 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 today and send it to us. F. J. TAYLOR CO., 361 Live Stock Ex., Kansas City, Mo.

White Parasols \$1 and \$1.48

White Linen Parasols of dainty fashion with embroidery insertion. Also plain hemstitched with embroidered edge. Very special values at \$1.00. With embroidered edges, insertion and tucks in new designs—special \$1.48.

KANSAS MAIL ORDER SERVICE
Mills Dry Goods Co., Topeka, Kans.

was the general broadening of our market.

Mr. Melville: From the tendency or drift of Mr. Sponsler's remark, he means in the sense of broadening your market outside of this country. Unless we can broaden the market at home is there any direct benefit to us in broadening it outside. Now, there are very few of us that would feed off these cattle and feed them for this market that would ever reach the final place of consumption. We have got to sell them here. We say beef cattle are down; dairy cattle are up. The beef cattle are all sold in one place; the price is controlled by one set of men. The dairy products are sold in fifty places over the United States. There is not a man in Kansas to-day but what can have his choice of ten or a dozen markets in which to sell his dairy products, but if he sells his beef products I do not care whether it is consumed in Germany or whether it is consumed here. That beef animal goes to just one place, and then one set of men sets the value on it. If they go to market outside are they going to set any more value on it than they are now? Isn't the real point that we should aim at the privilege of selling to more than one class of men, or in other words try and find some way so that one class of men can not control all the products in that line?

Mr. Heath: On that line, I think that one thing we should do is to do everything to encourage that foreign demand so as to lessen the amount of beef sold here, and to that extent, anyway, we will get the benefit. While it is true, as Mr. Melville has said, that prices are largely dictated, if we can have restrictions removed by foreign countries, of course we can command a little better price than to have it all left for home consumption.

Mr. Peck: I think we will all have to admit that politics is a science to some extent. The fellow that is a natural politician can go into that legislative body and get things.

Mr. Alberts: I venture to offer a few suggestions about bringing pressure to bear on Washington because I used to be private secretary at Washington, and I learned there the methods that move those men, the main spring that lies behind their action (and I was there and a clerk for one of the members when the Grout bill went through). They do, as a rule, with very few exceptions, what they think will strengthen them politically in their State. There are men who are contemptuous of their constituents. The trouble is the majority of farmers have pronounced opinion, but they have never let the Congressman or Senator find it out. Now, on this subject of foreign markets, I do not believe there is a farmer or stockman in Reno County who has ever written their Senator or Congressman.

The Grout bill was put through by the dairymen. The politicians were against it, the packers were against it, almost every interest that controls Congress was against it, but it was put through by the men who are milking cows. I don't suppose there are fifty beef-raisers in this State who have brought any pressure to bear on those men down there; yet on the first of July we are going to be shut out, and it is going to depress the value of live stock in this State. As far as those men down there are concerned they seem indifferent, the newspapers are indifferent,—don't care; and the politicians believe that we don't care. Everybody in Washington is afraid. He obeys the fellow he is most afraid

of. If he is more afraid of you and I than he is of the sugar interests we will get reciprocity. I think very few live-stock raisers make their wants known, because I think my county is representative and I do not know of anybody in that county but Mr. Sponsler and myself, and yet the first of July we are going to be shut out of the German market.

Standard of Excellence for Mules.

EDITOR KANSAS FARMER:—I am a reader of your valuable paper. Some time ago I wrote you for statement of the standard colt, mule or horse. You referred the matter to the Agricultural College from which I received the reply that there was no standard.

We have only been in the breeding business a short time, but by this time another year we will have an average of two jacks and one horse at least. We propose to put the mare under the standard at the time of breeding and the foal at nine days old. Then get the average of all the mares and an average of all the foals. This is our plan. Is it correct? Will you suggest to me the points in judging a good colt? Could I take a scale for a horse and reduce it to a minimum for a colt? I have young mules that stand thirty-six to forty-seven inches in height. Are they large or ordinary? Horse colts forty to forty-six inches.

W. A. TANKSLEY.

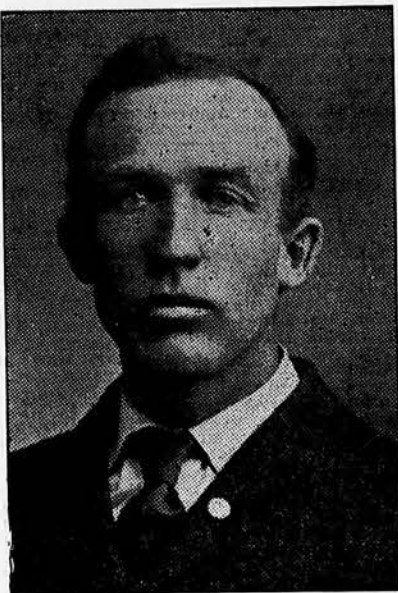
Chautauqua County.

A standard or good mule colt should be when foaled and straightened up thirty-nine to forty-two inches tall, with a good bone and body, a good long neck, with a good long head and ear. A mule colt is judged as to what size mule he will make largely by the length of bone from the knee to the elbow, also from the length of the head. No little, short-headed, short-boned colt will ever make a big mule. No difference if he is thirty-nine or forty-two inches when he is foaled. A good growthy mule colt will grow from ten to twelve inches the first six months of his life. In other words, a mule colt that is thirty-nine inches when foaled ought to be, if he does well, forty-nine to fifty-two inches at weaning time, or at 5½ to 7 months old.

We have seen a number of mule colts forty-three to forty-five inches when foaled and fifty-three to fifty-six inches at six months old, but these are above the standard or average mule colt.

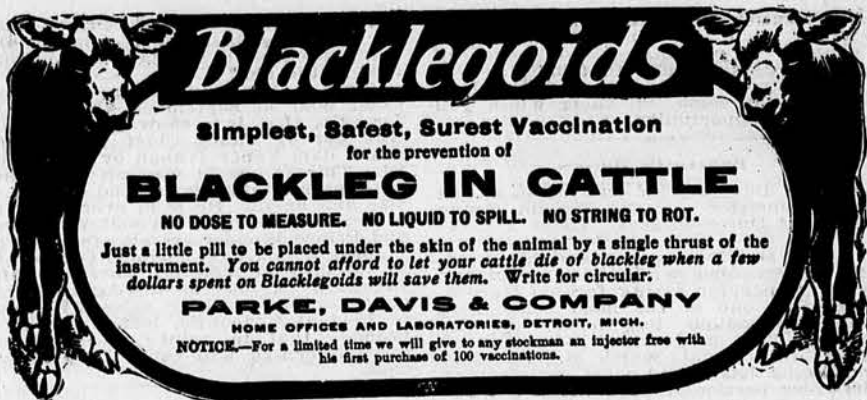
L. M. MONSEES.

Pettis County, Mo.



Murray Putman.

Murray Putman, of Tecumseh, Neb., whose picture we present to our readers, is one of Nebraska's most popular Duroc-Jersey breeders. While he has only been in the thoroughbred business for a few years he has rapidly forged to the front, and is now recognized as one of the fellows who keeps his herd up to the highest point of excellence in breeding and individuality. Mr. Putman has a very fancy litter out of Lady K. 4th by Buddy K. 4th and sired by Lincoln Top. Ohio Lady by Ohio Chief has a fine litter by Young Hanley, Model Bell by Bells Chief has 5 fine fellows by Hogate's Model, Russell's Top has a litter of 8 by Royal Ohio Chief, Tansie Bateman has a fine litter by Crimson Jim, Model Girl by Malcolm's Model 2d, a nice litter by Beauty Wilkes and a score of other good ones are in this herd. Mr. Putman has a few good sows sired by Crimson Jim that are bred to Lincoln Top that he will price with the money, and if you need one of them write him and mention THE



Blacklegoids

Simplest, Safest, Surest Vaccination
for the prevention of

BLACKLEG IN CATTLE

NO DOSE TO MEASURE. NO LIQUID TO SPILL. NO STRING TO ROT.

Just a little pill to be placed under the skin of the animal by a single thrust of the instrument. You cannot afford to let your cattle die of blackleg when a few dollars spent on Blacklegoids will save them. Write for circular.

PARKE, DAVIS & COMPANY
HOME OFFICES AND LABORATORIES, DETROIT, MICH.
NOTICE.—For a limited time we will give to any stockman an injector free with his first purchase of 100 vaccinations.



Order Your Stock Food Direct

Stong's Stock Feed 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.

OAT NUTRIMENT

An invaluable feed in the developing of young stock.

A Bone Maker, A Muscle Developer, A Flesh Producer, Prevents Scouring in All Kinds of Young Stock.

Oat Nutriment is a cooked product of our cereal mill and is guaranteed to contain no drugs. It contains 20 per cent of Protein and 8 per cent of Fat. Stock breeders will find its use invaluable in fitting their show herds. Price \$2 per hundred, F. O. B. Atchison. Special prices on car lots.

Atchison Oat Meal & Cereal Co.,

ATCHISON, KANSAS.

Government Irrigated Land Open for Settlement

Dates for Registration June 18 to 25

An opportunity to secure a farm of the finest irrigated land in America. Magnificent water supply. Ideal climate. Crops large and certain. Splendid shipping facilities. Terms of payment easier than paying rent.

This land is located in the Yellowstone Valley near Huntley and Billings, Montana. 33,000 acres will be open for settlement June 26. Only those registering at the Land Office at Billings between June 18 and 25 in manner prescribed by the government will be eligible. This is one of the first tracts of irrigated land, upon which the government is spending about \$50,000,000, to be opened for settlement.

Very Low Round-Trip Rates via Burlington Route on June 18

Write me to-day for folder telling about the opening, cost of land, cost of tickets, trains, etc.

H. S. JONES, Southwestern Passenger Agent,
C., B. & Q. Ry.
827 Main St., Kansas City, Mo.



LAKE BREEZES MANITOU

Can be enjoyed in safe delight on the STEEL STEAMSHIP

FOR COMFORT, REST AND PLEASURE

It offers an unequalled opportunity First Class Only—Passenger Service Exclusively

Modern comforts, electric lighting, an elegant boat equipped for people who travel right. Three sailings weekly between Chicago, Frankfort, Charlevoix, Petoskey, Harbor Springs and Mackinac Island connecting for Detroit, Buffalo, Duluth and all Eastern and Canadian Ports. Ask about our Week-end Trips for Business Men. For Terms, Booklets and Reservations, address, J. S. BEROLZHEIM, G. P. A. Manitou Steamship Co., Chicago.

Banquet Hams

Banquet Breakfast Bacon

O. K. Lard

Full Line High Grade Sausages and Fresh Meats

CHAS. WOLFF PACKING CO.,

Topeka, Kansas

SAS FARMER. It is the opinion of the writer that Lincoln Top has good chances of winning a good bunch of ribbons this fall and that his pigs will be in great demand among breeders. Better get some of them while you have the opportunity.

Bancroft's Durocs.

D. O. Bancroft, of Downs, Kans., is the proprietor of the Walnut Grove Herd of Duroc-Jerseys. He is a careful and up-to-date breeder and is constantly striving to improve his herd. He is provided with every necessary convenience for caring for his Durocs, including one of the most convenient and commodious hog houses in the State. This is provided with cement floors throughout, which Mr. Bancroft states he has found most satisfactory in every particular. His stock has access to free range, alfalfa pasture, pure water, and shade, at all times, and are handled and fed to produce the best results. As a breeder Mr. Bancroft has shown excellent judgment in mating, and as a result, a uniform type, combining the strong features of the breed can be found in his herd.

Neither is he satisfied without improvement, consequently last winter he visited the celebrated herd of McFarland Brothers at Sedalia, Mo., and brought home with him some of their choicest brood-sows. One of these was Nelly's Climax 155266, got by 2d Climax 23361, he by Climax D., dam Nelly Wonder 2d by Oom Paul 2d. This is a show sow, and money could not have been going for if McFarland Brothers had been going to show this fall. She has a fine litter of 3 pigs by the prize-winning boar, Missouri Gold Finch 39499. Another that he bought was Mc's Jewell 156790 by Joe 29271, he by Oom Paul 2d, dam Jewell Surprise by 2d Surprise. This is also a show sow and she has a great litter by O. K., he by Buddy K. 4th. Another that he brought home with him was My Pet's Climax 155268, got by 2d Climax, dam My Pet by Ingomar. She has a nice litter by son of the champions. Another good one that has done much for Mr. Bancroft's herd is Bancroft's Bird 116554 got by Athol Improver, he by Improver 2d.

There are many more good ones that are noted for their producing qualities and individual merit.

Bancroft's Model 46589 heads the herd. He was got by Auction Boy 3, dam Lady Mendenhall. He is of great individual merit and a remarkable breeder. He is one of those smooth, mellow fellows, with natural fleshing qualities, fancy head and ears, and lots of vigor. He is assisted by Orion Improver 55389, he by Chief Orion, dam Bancroft's Bird. This fellow is very fancy, with both size and quality, and is doing good work as a sire in the herd.

There are 100 pigs of early farrow from these matings that are remarkable for their fancy head and ears, good feet, strong backs, and natural fleshing qualities. Mr. Bancroft is an excellent feeder and you can nearly see them grow.

Mr. Bancroft has claimed October 31, 1907, and February 27, 1908, as his sale dates. Remember these dates and watch for his sale announcement in THE KANSAS FARMER for this will be the place to buy tops.

The Famous Fancy Herd of Durocs.

We recently had the pleasure of visiting the Famous Fancy Herd of Duroc-Jerseys owned by John W. Jones & Son, of Concordia, Kans., and after carefully inspecting this great herd we decided that it was justly entitled to its name. Jones & Son's Durocs are so well known throughout the country that a description of them is not necessary; but any one can not help but be impressed with the breeding and individuality of the animals found there. The very best blood lines known to the Duroc-Jersey world are represented, and these have been blended through proper matings to produce the greatest degree of excellence.

The herd-sows with few exceptions are sired by champion and prize-winning boars such as Orion 5293, Top Notcher 8803, Proud Advance, Improver 2d 13365, Ohio Chief 2d 10721, Fancy Chief, Fancy Top Notcher, Orion 2d, and Chief of Ohio, and they are as good individually as they are well bred. The spring farrow from these sows numbers 135 pigs that are way up in quality. They nearly all came early and show a remarkable development. They are sired by Mr. Jones' good herd-boars, Fancy Chief, Shorty Orion, Fancy Top Notcher, Prince Wonder, and Woodlawn Prince.

These pigs, although they represent such a variety of blood lines, are very uniform in type, and almost without exception have heavy bone, good backs, fancy head and ears, and extra good feet.

Jones & Son's herd-boars are in every way fit to head a herd of this kind, and have been selected not only for their individuality and breeding, but on account of their fitness to mate with these great sows and produce such pigs as we found at Woodlawn. Shorty Orion 17529A is probably the greatest Duroc boar of his age living to-day. He was got by Orion Chief 28813, he by Orion 2d 28813. His dam is Floradora 5th by High Chief 10349. He is a prize-winner and the son of prize-winners. He was winner in class, and in four other classes at the Illinois State Fair 1906. His sire, Orion Chief, was first in class and winner in four other classes at the World's Fair. The dam of Shorty Orion was four times a State fair winner, and \$1,000, the amount Mr. Jones paid for him, is the highest price ever paid for a yearling boar. He is noted for his quality, finish, and size, and his wonderful merit as a sire.

Fancy Chief 24923 is another good one. He is by Ohio Chief, dam Col. M.'s Variety 2d. He has size, finish, and breeding qualities. Fancy Top Notcher 40339, by Kant Be Beat, dam Top Notcher Lass by Top Notcher, is a great sire and an outstanding individual. Woodlawn Prince by Fancy Orion, he by the great Orion 5293, is an all that his breeding would denote as an

individual and as a sire. Prince Wonder 42455 by Missouri Wonder is also being used with satisfaction and success in the herd.

Jones & Son have a line-bred Ohio Chief boar of September, 1906, farrow for sale, that is a show prospect. He was got by Fancy Chief, he by Ohio Chief, dam Fancy Ivaban by Ohio Chief 2d. This fellow is way up in quality with extra heavy bone, and plenty of size and finish. He is in every way fit to head a good herd. Woodlawn Prince and Prince Wonder are also for sale.

Jones & Son have claimed October 15 as the date of their fall boar sale, and February 18, 1908, as the date of their bred-sow sale. These sales will both be held at Concordia, Kans., and they promise that in point of excellence these offerings will excel all previous ones.

Rathbun and Rathbun's Durocs.

One of the good big herds of Durocs in Western Kansas is that of Rathbun and Rathbun, located 3 miles south of Downs. This is known as the Rosebud Herd, and numbers more than 200 head of swine of good individuality and the choicest breeding. They are cared for in a manner to insure the very best results. Rathbun and Rathbun are up-to-date breeders and are provided with every convenience for caring for their fine herd; this includes probably the largest hog-houses in the State. These are arranged in the most convenient manner, with adjustable farrowing pens, alleys, and exercise and feeding pens. These are all provided with gates, and are so connected that one person can conduct an animal to any pen in the house. The floors are all of cement, and are arranged to give perfect drainage, and insure the best sanitary conditions. These floors are giving perfect satisfaction, and in the long run will be cheap at their cost, which was \$600.

The herd has access to 160 acres of range (part of which is in alfalfa), with plenty of pure water and shade. Rosebud Herd is headed by the great young boar, Rosebud Chief 53257, a good son of the great Ohio Chief; his dam is Morrison's Peach 108352, the \$1,000 show sow. He is an outstanding individual with heavy bone, good size, lots of quality, and is proving a sire of great merit. He is assisted by Crimson Orion 53259, who was got by Crimson Wonder's Brother 41673, dam Lincoln Bell 84962, by Orion 5293. This fellow has heavy bone, size, length, and finish with great constitutional vigor which he imparts to his get. He is a great breeder, and has some remarkably fine litters to his credit.

The herd-sows number about 30 and are an outstanding lot. Among them are Loudon's Bird 2d 130486 by Parker Mc. Rathbun Queen 159400, sire Auction Boy 3d, dam Loudon's Bird; Bessie Orion 130484 by Chief Orion, and out of Bessie H.; Bessie H. again 159426 by Auction Boy 3d, dam Bessie H. These are all way up in quality and have fine litters by Rosebud Chief and Crimson Orion. The spring farrow has been a good one and numbers 160 fine pigs. These nearly all came early and are growing like weeds.

C. E. Rathbun, the junior member of the firm, is in charge of the herd. He is a young man of great enterprise, and is constantly on the watch for anything that will improve the herd and increase results. At the present time he is preparing to grind corn and alfalfa together and feed it dry to his weanlings. He has promised to let THE KANSAS FARMER know the results of this experiment.

We start the card of Rathbun and Rathbun in this issue of THE KANSAS FARMER. They have choice fall gilts either bred or open and this bumper crop of spring pigs rich in the blood of the best families of the breed. These will all be priced worth the money.

Rathbun and Rathbun sell only their best for breeding purposes. All animals that do not measure up to their required standard (which is a high one) goes to the fattening pen. Write Rathbun and Rathbun for description and prices, for they have what will please you, and their prices will be right. October 30, 1907, and February 28, 1908, will be the dates of their next sales. Remember these dates and plan to be present, for their offerings will be choice ones.

Logan's Durocs.

One of the good herds of Duroc-Jerseys in Northern Kansas is that of J. C. Logan, of Onaga. He has a fine farm 5 miles southeast of Onaga where his Durocs are kept. Mr. Logan was elected register of deeds of Pottawatomie County last fall, which necessitates his living at Westmoreland; but he was fortunate in securing the services of W. F. Randal to take charge of his herd. Mr. Randal is an experienced breeder, and the fine crop of spring pigs as well as the general condition of the herd demonstrate his fitness for this position.

In starting Mr. Logan has been careful to secure the best for his foundation stock, and has animals from the herds of such well-known breeders as Ward Brothers, John O. Hunt, Grant Chapin, John M. Morrison, Kirkpatrick & Wilson, and others. The herd-boars are Pottawatomie Wonder and King of Onaga. Pottawatomie Wonder was got by Nebraska Wonder, he by Crimson Wonder, dam To 3d by Kansas Wonder, and was bred by Chester Thomas, of Waterville, Kans. He is a strong, vigorous young fellow, with lots of quality, has heavy bone, good length, stylish head and ear, stands up well on strong legs set well apart, and is proving himself a prepotent sire.

King of Onaga is by Surprise he by Hugh Tucker, dam Jennie R. by Acme. He is a massive fellow with plenty of finish and a sure breeder.

The herd-sows are a choice lot and among them are, Logan's Pride, a granddaughter of Tip Top Notcher, and Improver 2d, her dam is Village Pride, one of John M. Morrison's most noted sows. Another good one is Fairview Pride, a granddaughter of Kant Be Beat, dam, Pansy B. by Improved Mc. Other choice ones are, Goldie K. by Jumbo Chief, Logan's Choice by Chief Orion,

he by Orion 2d, Crimson Girl by Crimson Wonder, and others of good individuality and breeding. The spring farrow from these sows numbers 80 pigs, and they are by such noted sires as, Kant Be Beat, Hunt's Improver, King of Onaga, State Limer, Wonder Mc. Orion Top Notcher, Crimson Wonder's Brother, and Crimson Model.

Mr. Logan has claimed November 5 as the date of his fall sale, which will be held at Havenaville, Kans., and at this time and place will offer a select draft of young boars and gilts. Watch for his sale announcement in THE KANSAS FARMER.

A. T. Garth's Cement-Block Hog House.

On our first page is shown a picture of a cement-block hog house that was built by Mr. A. T. Garth, of Larned, Kans., for his famous O. I. C. swine. Mr. Garth has been a breeder of O. I. C.'s for some time, and has brought together a herd of some 250 head of the choicest bred hogs in the West. At the dispersion of the World's Fair prize herd that belonged to the late Dr. O. L. Kerr, of Independence, Mo., Mr. Garth bought the cream of the herd and he now possesses what is believed to be the finest, if not the largest herd of this breed in the United States.

Having this kind of a herd it was but natural that Mr. Garth should want to see them properly housed and, after casting about for materials, he finally decided upon the cement block as best suited to his purpose as well as being the cheapest material for a permanent building. In the mild climate of this section of Kansas the mature animals do not generally need any provision for shelter more than may be afforded by a timbered lot or some straw stacks though Mr. Garth has good buildings for them all. This cement house is intended especially for the farrowing sows and the young pigs, and it serves its purpose excellently.

When permanency is considered this method of construction is believed to be far cheaper and much more satisfactory than any other. Cement for building purposes has come to stay.

Sollenbarger's Durocs.

R. G. Sollenbarger, of Woodston, Kans., has had exceptionally good luck this spring with his pigs, and will have a strong offering for the public in the way of boars and gilts. He has claimed November 1 for his boar sale and February 29, 1908, for his sale of bred sows. Mr. Sollenbarger has made wonderful progress during the past year in breeding Durocs, and his herd is now one of the strong ones of Kansas. Among the late additions to Mr. Sollenbarger's herd is Morton's Belle 137978, a granddaughter of Ohio Chief. She has a fine litter by Surprise 3d; Belle was purchased at Grant Chapin's spring sale when Mr. Sollenbarger also bought a spring gilt sired by Chapin's Duroc 39673 and out of Mary D. 72036 by Surprise and bred to Colossal 18317A. At another sale in the same circuit he bought a sow sired by Chief Orion 28817, a son of Orion 2d, and at Charlie Pratt's sale he purchased three sows, one sired by Field Marshall Jr. 21097 and out of Kansas Queen. This sow has a fine litter by Improver 2d. One sired by Improver 2d and bred to Kansas Wonder and the other by Proud Advance and bred to Kansas Wonder. At Clarence Beaver's sale he bought two sows sired by Field Marshall Jr. and bred to a good son of W. L. A.'s Choice Goods. At John Joines's sale he also bought one of the best individuals in the offering, she being sired by Desoto 2, a son of Loudon's Bird and bred to a \$285 son of Ohio Chief. At this sale he also bought a daughter of John's Pride 128670, bred to Belle's Chief 2d. From these matings Mr. Sollenbarger has over 100 fine pigs that he will price reasonable. Any one in need of a good boar this fall or a number of good gilts will make no mistake in writing Mr. Sollenbarger. His herd is a good one and he deals square with his customers. When writing him mention THE KANSAS FARMER.

Ramaker's Durocs.

G. H. Ramaker, proprietor of the Prairie Queen Herd of Duroc-Jerseys, located at Prairie View, Kans., in writing to have the copy of his card changed in THE KANSAS FARMER, states that his spring farrow has been very satisfactory, and that he has about 70 of the finest pigs he has ever raised.

Mr. Ramaker has been a liberal buyer during the past year, at some of the great sales of the country, and has added to his herd animals representing the best blood lines of the breed. Among these are daughters of the great Ohio Chief, a great sow by Improver 2d, and the only sow bred to Alex Heir (who sold for \$410.06 in the Morrison sale) before he died.

Mr. Ramaker states that he has ten crackjack pigs from this mating; he also has pigs by Kant Be Beat (the \$5,000 show hog) out of daughters of Ohio Chief and Village Pride. Wilkes Echo, bought for the long price of \$300 by Mr. Ramaker and Mr. Finch, is also the sire of many good ones. These pigs are all of March and early April farrow, and are bred right, fed right, and will be priced right. Write Mr. Ramaker your wants for he can supply them.

Vick's Durocs.

Readers of THE KANSAS FARMER should not overlook the advertisement of W. L. Vick's Duroc-Jersey hogs at Junction City, Kans. Mr. Vick has one of the largest herds in the State and a choice lot of breeding. His spring crop of pigs now numbers over 125 head and they are doing fine. They have a range of about three hundred acres to develop on and always give a good account of themselves at the proper time. Mr. Vick has shipped out over thirty head of stock on mail orders during the past few months and has never yet had a complaint. This is because he is a business fellow who knows how to do business in a proper way. When you want some good stuff and a square deal go and see Vick or write him and mention THE KANSAS FARMER.

I offer, for quick sale, price \$125, an exceptionally fine-pointed young Galloway bull, Orphan Lad 28088; sire Dragon of Waverly 17819, dam Faisette of Nashua 28647. You might look far and pay much more for a much less worthy bull. W. A. Jones, breeder pure-bred Galloways, 2647 Victor st., 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.

325 Kansas Ave., Topeka, Kansas

SECURITY GALL SALVE

POSITIVELY HEALS SORE SHOULDERS

SORE NECKS OR BACKS ON HORSES AND MULES

IT HEALS THEM ANYWAY IN HARNESS, UNDER SADDLE OR IDLE

IF NOT SOLD IN YOUR TOWN WE WILL SEND YOU FREE SAMPLE, if you send us the name of your dealer. Put up in 25c, 50c and \$1.00 cans. MONEY BACK IF IT FAILS.

SECURITY REMEDY CO., MINNEAPOLIS, MINN.

FOR BARB WIRE & ALL CUTS USE SECURITY ANTISEPTIC HEALER

FARMERS AND STOCKMEN!

The Myers Pumping System designed to automatically supply fresh water as needed in feed lots, barns and, under pressure, in house. No Tank; No Stagnant Water. Great demand for machines everywhere. Agent wanted in each county. For information write or call

MYERS PUMP & MFG. CO.

SEALS BUILDING, 9TH & WYANDOTT ST. KANSAS CITY, MO.

HOTEL KUPPER

11th and McGee St.

Kansas City, Missouri



One of the newest and most centrally located hotel in the city. Absolutely modern in every detail.

European Plan, \$1 per day and up.

WANTED YOUNG MEN AND YOUNG WOMEN..

We can place them in GOOD POSITIONS through our EMPLOYMENT BUREAU. Must be good Stenographers or Bookkeepers. We prepare such at

The Kansas Wesleyan Business College Tuition low. Board cheap. Address

T. W. ROACH, Supt., Salina, Ks

CAPITAL COMMERCIAL COLLEGE

D. P. Beaudry, Prop. 706 Kansas Ave., Topeka, Kansas

We Will Pay Men \$85 Per Month

to travel, collect names, advertise and give away samples. Expenses advanced. Write today. H. O. Rider Company, Chicago.

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.

When writing advertisers please mention this paper.

Delights of Farming.

HORACE GREELEY.

An American boy, who has received a common school education and has an active, inquiring mind, does not willingly consent merely to drive oxen and hold the plow forever. He will do these with alacrity, if they come in his way; he will not accept them as the be-all and the end-all of his career. He will not sit down in a rude, slovenly, naked home, devoid of flowers and trees and books and periodicals and intelligent, inspiring, refining conversation, and there plod through a life of drudgery as hopeless and cheerless as any mule's. He has needs and hopes and aspirations, which this life does not, and should not satisfy. This might have served his progenitor in the ninth century; but this is the nineteenth, and Young America knows it.

He needs to feel the intellectual life of the period flowing freely into and through him—needs to feel that, though the city and the railroad are out of sight, the latter is daily bringing within his reach all that is noblest and best in the achievements and attractions of the former. He may not listen to our ablest orators in the Senate or in the pulpit; but the press multiplies their best thoughts and most forcible expressions at the rate of ten to twenty thousand copies per hour; and its issues are within the reach of every industrious family.

To arrest the rush of our youth to the cities, we have only to diffuse what is best of the cities through the country; and this the latest triumphs of civilization enable us easily to do. A home irradiated by the best thoughts of the sages and heroes of all time, even though these be compressed within a few rusty volumes, cheered by the frequent arrival of two or three choice periodicals, and surrounded by such floral evidences of taste and refinement as are within the reach of the poorest owner of the soil he tills, will not be spurned as a prison by any youth not thoroughly corrupted and depraved.

Any American farmer, who has two hands and knows how to use them, may, at fifty years of age, have a better library than King Solomon ever dreamed of, though he declared that "of making of many books there is no end;" any intelligent farmer's son may have a better knowledge of Nature and her laws when twenty years old than Aristotle or Pliny ever attained. The steam engine, the electric telegraph, and the power press have brought knowledge nearer to the humblest cabin than it was, ten centuries since, to the stateliest mansion; let the cabin be careful not to disparage or repel it.

But thousands of farmers are more intent on leaving money and lands to their children than on informing and enriching their minds. They starve their souls in order to pamper their bodies. They grudge their sons that which would make them truly wise, in order to provide them with what can at best but make them rich in corn and cattle, while poor in manly purpose and generous ideas. Modern agriculture is an art—or rather a circle of arts—based upon natural science, which is a methodical exposition of divine law. The savage is Nature's thrall whom she scorches, freezes, starves, drowns, as her caprice may dictate. He lives in constant dread of her frosts, her tornadoes, her lightnings. Science teaches his civilized successor to turn her wildest eccentricities to his own use and profit. Her floods and gales saw his timber and grind his grain; in time they will chop his trees, speed his plow, and till his crops as well.

Science transforms and exalts him from the slave into the master of the elements. If he does not yet harness the electric fluid to his plow, his boat, his wagon, and make it the most docile and useful of his servants, it is because he is still but little advanced from barbarism. Essentially, the lightning arched in a summer cloud should be as much at his command, and as subservient to his needs as the water that refreshes his thirsty fields and starts his hitherto lifeless wheels.

Only good farming pays. He who

sows or plants without reasonable assurance of good crops annually, might better earn wages of some capable neighbor than work for so poor a paymaster as he is certain to prove himself. The good farmer is proved such by the steady appreciation of his crops. Any one may reap an ample harvest from a fertile, virgin soil; the good farmer alone grows good crops at first, and better and better ever afterward.

It is far easier to maintain the productive capacity of a farm than to restore it. To exhaust its fecundity, and then attempt its restoration by buying costly commercial fertilizers, is wasteful and irrational. The good farmer sells mainly such products as are least exhaustive. Necessity may constrain him, for the first year or two, to sell grain, or even hay; but he will soon send off his surplus mainly in the form of cotton, or wool, or meat, or butter and cheese, or something else that returns to the soil nearly all that is taken from it. A bank account daily drawn upon while nothing is deposited to its credit, must soon respond, "No funds;" so with a farm similarly treated.

Wisdom is never dear, provided the article be genuine. I have known farmers who toiled constantly from daybreak to dark, yet died poor, because, through ignorance, they wrought to disadvantage. If every farmer would devote two hours of each day to reading and reflection, there would be fewer failures in farming than there are. The best investment a farmer can make for his children is that which surrounds their youth with the rational delights of a beautiful, attractive home. The dwelling may be small and rude, yet a few flowers will embellish, as choice fruit-trees will enrich and gladden it; while grass and shade are within the reach of the humblest. Hardly any labor done on a farm is so profitable as that which makes the wife and children fond and proud of their home.

A good, practical education, including a good trade, is a better outfit for a youth than a grand estate with the drawback of an empty mind. Many parents have slaved and pinched to leave their children rich, when half the sum thus lavished would have profited them far more had it been devoted to the cultivation of their minds the enlargement of their capacity to think, observe, and work. The one structure that no neighborhood can afford to do without is the schoolhouse.

A small library of well-selected books in his home has saved many a youth from wandering into the baleful ways of the prodigal son. Where paternal strictness and severity would have bred nothing but dislike and a fixed resolve to abscond at the first opportunity, good books and pleasant surroundings have weaned many a youth from his first wild impulse to go to sea or cross the continent, and made him a docile, contented, happylinger by the parental fireside. In a family, however rich or poor, no other good is so cheap or so precious as thoughtful, watchful love.

Most men are born poor, but no man who has average capacities and tolerable opportunities, need remain so. And the farmer's calling, though proferring no sudden leaps, no ready short cuts to opulence, is the surest of all ways from poverty and want to comfort and independence. Other men must climb; the temperate, frugal, diligent, provident farmer may grow into competence and every external accessory to happiness. Each year of his devotion to his homestead may find it more valuable, more attractive than the last, and leave it better still.

There are discoveries in natural science and improvements in mechanics which conduce to the efficiency of agriculture; but the principles which underlie this first of arts are old as agriculture itself. Greek and Roman sages made observations so acute and practical that the farmers of to-day may ponder them with profit, while modern literature is padded with essays on farming not worth the paper they have spoiled. And yet the generation whereof we are part has witnessed great strides in this vocation,

while the generation preparing to take our place will doubtless witness still greater. I bid you hold fast to the good, with minds receptive of and eager for the better, and rejoice in your knowledge that there is no nobler pursuit and no more inviting soil than those which you proudly call your own.

The old Carroll homestead, one-half mile East of Wakarusa Station, in Shawnee County, is advertised for sale by the Sheriff on Monday, the 24th inst., at ten o'clock. Mr. James Carroll, who preempted the property, died some time ago, and a suit in partition was brought by some of the heirs, and the property divided.

This particular tract of land is too valuable for any of the heirs to take, and it is to be sold under the order of the Court. It is one of the best farms in Shawnee County, lying in the Wakarusa valley, and it has very fine modern improvements.

It is appraised at \$10,000, and is easily worth that amount. Someone who wants a No. 1 farm will probably secure a good bargain at this sale. Any information desired can be had by calling upon or addressing, Troutman & Stone, Attorneys, Topeka, Kans.

Gossip About Stock.

The Aberdeen-Angus sale of C. J. Martin, at Adzala, Iowa, on May 28, averaged \$269.60 on 52 head.

The James I. Davidson sale of Shorthorns at Balsam, Ont., on May 24 brought an average price of \$211.77 for 48 head. Good cattle are worth money. Many United States breeders own cattle bought from this herd in years past.

A letter from W. H. Haith, of Vesta, Neb., states that his Durocs are doing fine. He has a fine young litter by Royal Ohio Chief, and a litter of nine by Arion that arrived last week. Mr. Haith now has about 125 spring pigs sired by various boars of leading blood lines and will be able to supply his customers with almost anything they want in way of breeding. Write him and mention THE KANSAS FARMER.

It pays to breed dairy cattle. The T. S. Cooper & Sons' sale of 124 head of Jersey cattle on May 30 netted them \$95,950, an average of \$773.80. The highest price was \$11,500 paid for the imported bull, Stockwell, who was sent to the Virginia farm of Thos. F. Ryan, of New York. This seems a long price but when it is remembered that 4 of his daughters recently sold for \$1,000 each and one for \$1,500, the price does not seem so exorbitant. A bull calf sold for \$10,200. The cheapest animal mentioned in our report was a calf which brought \$120.

Senator T. J. Wornall, of Liberty, Mo., who is better known to his millions of friends as the secretary of the American Royal, left for Europe on Wednesday in company with his son, "Young Tom." Senator Wornall has been very prominent as the owner and exhibitor of the Grasslands Shorthorns and he now goes across the water to attend the British Royal Cattle Show and other big cattle exhibits. During his absence all business connected with the American Royal will be attended to by Mr. R. I. Bruce, who is the assistant secretary.

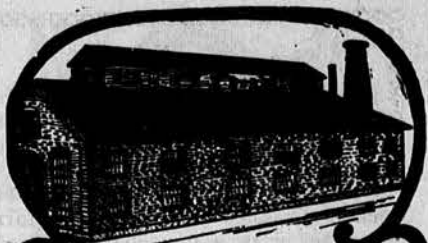
Attention is called to the advertisement of A. P. Wright, at Valley Center, Kans. He is offering some fifteen or twenty fine boars of fall farrow. They are sired by the boar, Proud Boy, who won first in class at the Kansas State Fair in 1905. These boars are out of Perfect I Know, Chief Perfection 2d, Mischief Maker and Corrector dams and are a lot that Mr. Wright has selected for breeders' trade. He wishes to close them out this month and offers them at a surprisingly low price. They are smooth, growth, well-built boars, possessing evenness all through, have great big bone, stand on the best of feet, have fancy head and ears, short nose, and their backs, ribs and hams are of the right make up. They will weigh from 150 to 200 pounds and will be sold well worth the money. Write Mr. Wright for particulars and prices and see how well you will be pleased for your trouble. Please mention THE KANSAS FARMER.

New Advertisers.

Rathbun & Rathbun, Rosebud Durocs. Cascaden Mfg. Co., invest two cents. A. P. Wright, Wrightwood Poland-Chinas. Thos. J. Anderson, Angus sale. Remington Arms Co., guns. Jos. M. Baier, Poland-Chinas. D. P. Beaudry, Capital Commercial College. T. W. Roach, Supt., Business University. R. H. Weir, Poland-Chinas. Davis, Wellcome & Co., money to loan. J. O. White, thrashing outfit. W. A. Jones, Galloway bull. Eureka Company, Magic egg keeper. Kansas Seed House, late seeds.

Are You Going to College?

Any one of our readers who is contemplating going to business college should not fail to note the advertisement of the Lincoln Business College of Lincoln, Neb. This is one of the best schools in the United States and students who complete their course are always able to secure good positions.



CONGO ROOFING

Congo costs little and lasts long; it keeps out the dampness and never leaks. The man who notices how his different roofs wear and how they protect the roof boards—the man who remembers or keeps records of costs and service, buys Congo. Congo is easy to lay. Nails and cement free. Every roll perfect. Sample free on request.

BUCHANAN-FOSTER CO.

537 West End Trust Bldg., Philadelphia
Chicago and San Francisco

Money Back

BE SURE AND

WORK THE HORSE.

Bickmore's Gall Cure

is guaranteed to cure all chaps, bruises, cuts, grease heel, scratches or torn or scorched teats, etc., in cows. Take no substitute. See trade mark. Every horse owner can have our illustrated Horse Book and large sample box Gall Cure for 10 cents for postage on both. Write today, or ask your dealer.

Bickmore Gall
Cure Co.
Box 916
Old Town,
Maine.

Horse Owners

Do not let your horses work with sore shoulders. Harness, Saddle or Collar Galls positively cured with three or four applications of Beardslee's Gall Cure. Also a sure preventive for soft or green horses from becoming galled just when you need them to do your heavy spring and summer work.

I will send a full pint of Beardslee's Guaranteed Gall Cure postpaid to any part of the United States for 5 cents, with a guarantee to cure or money returned. Also other valuable information sent to horse owners free.

—Address—

The Beardslee Co.

37 Belden St., Boston, Mass.

Agents Wanted in Every Locality

DR. COE'S SANITARIUM.

LOCATED AT 85TH AND WYANDOTTE.



BEST INVALID'S HOME IN THE WEST.

Organized with a full staff of physicians and surgeons for treatment of all Chronic Diseases. THIRTY ROOMS for accommodation of patients.

Difficult Surgical Operations Performed with Skill and Success when Surgery is Necessary.

DISEASES OF WOMEN Well equipped to treat diseases of women. Many who have suffered for years cured at home. Special book for women FREE.

PILES PERMANENT CURE Without knife, ligature or caustic. No money accepted until patient is well. Special Book FREE.

VARICOCELE Radically Cured in Ten Days, under a Positive Guarantee. Send for Special FREE Book. New restorative treatment for loss of Vital Power, Hydrocele, Rupture, Stricture, etc.

CRIPPLED CHILDREN CURED by improved methods. Trained attendants.

WRITE FOR FREE BOOK ON Club Feet, Curvature of Lung, Eye, Skin, Spine, Hare Lip, Kidney, Bladder, Epilepsy, Catarrh, Blood and Stomach Troubles, Nervous Diseases.

Patients successfully treated at home by mail. Consultation Free and confidential, at office or by letter. Thirty years' experience.

170 page Illustrated Book Free, giving much valuable information. Call at office or write to

OFFICE, 915 WALNUT ST.
DR. C. M. COE, KANSAS CITY, MO.

Miscellany

Twentieth Century Homes.

The home which we illustrate this week is designed primarily for a farm house but with a few changes would make an ideal city residence. The simple outline is given a substantial and rich effect by the commodious porch with its heavy pillars and the wide overhanging cornice. The first impression would make the reader estimate this house to cost \$4,000, but a good authority says that careful study of material, size, and arrangement will show that it can be built for \$2,250 by contract labor, and for considerable less if the blocks are made by the owner. Before deciding upon any plan it is desirable to study carefully houses made of concrete blocks and the price at which a machine for making same can be bought.

In planning this home, particular care has been taken to eliminate those features which while materially increasing the cost, do not add to the utility of the home. The living room opens directly to the porch and is connected with dining room by a column arch. A fine large kitchen with pantry and entry which is also used as a

paid upon receipt of 25 cents in stamps. This is No. 150. Complete plans and specifications will cost \$20. Address all letters to THE KANSAS FARMER, Topeka, Kans.

Dry Farming in New Mexico.

J. J. VERNON.

The interest in dry farming continues to grow. Throughout the northern half of the Territory and in several sections of the central and southern portion, much interest is being manifested in this subject. The influx of immigrants into the Territory, resulting in the settlement of large areas in the dry farming districts, has already increased the number of persons who desire information on dry farming methods.

The principles of dry farming are by no means new to agriculture. The fundamental principles involved in tillage are the same the world over. The differences appear only in the varying conditions of soil, water, climate, etc. For example, under dry farming conditions we can not, as under irrigation, substitute water for cultivation, because in the case of the former there is no excess of water available.


All of the operations of dry farming cluster around two important features, namely, the formation of a capacious water storage reservoir, and the conservation of the soil moisture

U.S.

GETS ALL THE CREAM

PAYS BIG PROFITS

PICTURE PROVES IT



12 lbs.



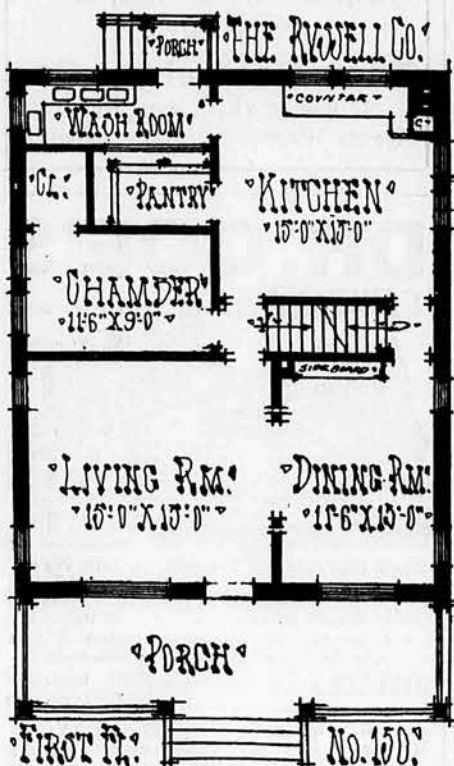
26 lbs.

We were only making about 12 pounds of butter a week. The first week the U. S. Separator was in our house, we made 26 pounds, a gain of 14 pounds over the old way. This increase would well repay any farmer to buy a U. S. Separator. January 6, 1907. Auburn, Ill. WALTER S. WOOLSEY.

The picture above shows how clean the U. S. skims— Holds the World's Record— and with its simple bowl (only 2 parts inside), easy-running, self-oiling gearing, low milk tank, strong frame and proved durability—the U. S. is far and away the best separator. That's what users say after trying other kinds.

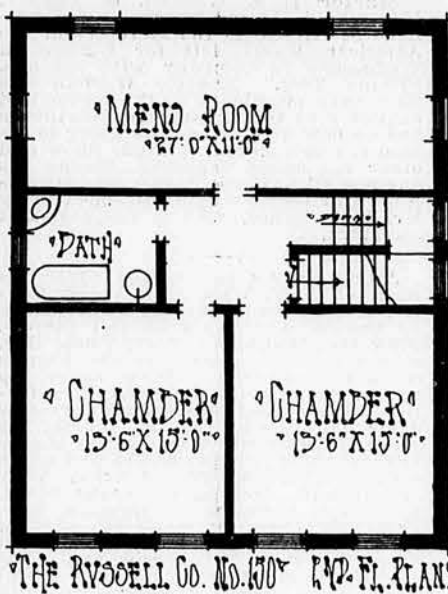
Send for handsome free catalog telling ALL about its construction and operation. Just write for "No. 91" today.

VERMONT FARM MACHINE CO.
BELLEWS FALLS, VERMONT
470 EIGHTEEN DISTRIBUTING WAREHOUSES



wash room are provided on this floor. The cellar stairs open from the passage between the kitchen and dining room, and the stairs to second floor are just above. The second floor has two good chambers and a large back room which is used as a men's room or could be divided into two chambers. One or more rooms could be finished in the attic if needed.

All of those who have not already done so, should send for a copy of the book, "Twentieth Century Cottages," which shows a number of views and complete floor plans of moderate priced houses. This will be sent post-



until the season of the year when the crop can make the best use of it. The soil must be loosened up by deep plowing so as to permit the rain and melting snow to penetrate it—not a single drop being allowed to run away over the surface. After the water has soaked into the soil it must be prevented from returning to the surface, to be evaporated and lost. Should the soil be left rough after plowing, a large surface will be exposed to the air which will result in the loss of much soil moisture. Leveling the ground at once after plowing will result in the least amount of surface exposure to the desiccating power of the air and wind. Very much less moisture will be lost from a smooth surface than from a rough surface. Furthermore, pulverizing the surface retards the movement toward the surface of the moisture in the deeper layers of

the soil. Surface cultivation must be continued at frequent intervals, not only until the crop is planted but also for some time thereafter, even with the cereals. By deep plowing, and level, thorough, timely cultivation we may hope to succeed; without them we surely will fail.

Dry farming requires strict attention to detail, and every operation must be performed at the proper time and in the right manner. Neglect is intolerable, and it makes not the least difference whatever, whether the neglect is a result of ignorance or of carelessness. There is only one road leading to success in dry farming, and that is, to know the underlying principles governing tillage and unhesitatingly to practise methods which, by repeated trials, have demonstrated their soundness.

The New Mexico Agricultural Experiment Station has just published Bulletin No. 6, entitled "Dry Farming in New Mexico." This bulletin deals with dry farming methods and recites some results obtained by dry farming in New Mexico. The purpose of the publication is to supply information on dry farming to those who are seeking it. This bulletin, as well as other available station bulletins, will be sent to farmers of New Mexico free upon request. The request for bulletins should be made to Director Luther Foster, P. O. Agricultural College, New Mexico.

Preparing for the Irrigation Congress.

While the Fifteenth National Irrigation Congress is still three months in the future, the people of California, and especially of Sacramento, are already active in arranging details of the entertainment to be accorded visiting delegates. The Board of Control, consisting of prominent citizens of the State, including the Governor of the State, mayor of the city of Sacramento, and representatives of the leading business houses, banks, and other institutions of the capital city of California, holds weekly meetings. At a meeting held last week committees were appointed to take charge of various lines of work. Among these are committees on reception, accommodations, comfort, and subsistence, entertainment, parades, and excursions.

California is going to make a special effort to entertain royally on this occasion, and in order that plans may be ample and organization perfected insuring precision in execution, the greatest comfort and enjoyment of guests, the details are being worked out now.

The people of Sacramento and suburban towns are going to open their homes to delegates. The Board of Control announces that assurance has already been received that practically every home of the better class will be available.

Stannard's Processed Crude Oil.

C. A. Stannard, of Emporia, Kans., says: "The most profitable investment a farmer can make with five dollars is to buy a barrel of Stannard's Processed Crude Oil. Why? Because it will absolutely kill all lice and mites and cure mange. If your hogs have a cough, are constipated, or are not thrifty, feed one tablespoon of it to each grown animal in slop or milk once a day for five days. If you have ten hogs I will guarantee that you will make more than twice the cost of a whole barrel of the oil in one treatment in the increased weight you will put on your hogs by having fed them the oil."

Read what some of Jackson County, Missouri's best farmers say: P. S. Alexander, one of the largest farmers and feeders in the county, says: "It is the only thing I have ever tried that will really destroy lice and mites on hogs at one application. I have fed and raised hogs for fifty years. It is the best thing I have ever used." W. R. Shawhan says: "It not only destroys lice and mites on hogs but is the best thing I have ever used for barbed wire cuts." E. C. Allen says: "Will not only remove lice and mites and keep them off but is a specific for mange." C. E. Shawhan says: "The only thing I have ever used that will rid hogs of lice and keep them off."

Read advertisement on page 719 of this issue.

Holsteins to Kansas.

Dr. Geo. C. Mosher, owner of the Hillcrest Holsteins at Kansas City, Mo., reports the following recent sales to Kansas breeders: Prince Iuka Aargle Canary Mercedes to C. J. Conlon, Atchison; Duke Geertje Brightest Son to S. E. Graham, Olathe; Prince Iuka Colantha Mercedes to J. T. Meierdicks, Marion; bull calf, the son of Hillcrest Sarcastic Lad, to G. F. Babcock, Roxbury.

Dr. Mosher was obliged to refuse other orders for cattle because he could not fill them. Prof. W. J. Fraser of the Illinois Experiment Station says they need 40,000 good dairy bulls in that State and we believe Professor Erf will say that at least that number is needed in Kansas.

For over 25 years Dr. Carson has practised his method known as Vital Healing, which has proved the greatest boon ever known to suffering humanity. Old and young alike have been partakers of the bounty offered by this great healer and humanitarian.

The Temple of Health, established by Dr. Carson, at the corner of Twelfth and Washington Streets, in Kansas City, Mo., is a feature of this mighty city and has been and is the scene of physical restoration which appears to be almost miraculous.

Every difficulty of the heart, stomach, bowels, kidneys, and all nervous disorders meet with the same successful treatment at the hands of Dr. Carson.

The doctor publishes a magazine descriptive of his method, which is sent free on application. Address Dr. C. H. Carson, Temple of Health, Twelfth and Washington Streets, Kansas City, Mo.

A Book About the Silo.

"Modern Silage Methods" is the title of an excellent book, of 200 pages. It discusses the points of interest concerning silos and silage. An instructor in one of the agricultural colleges says this is one of the best books he has seen and he intends using it as a text in his lecture room. The book is well indexed and is an authority on the subject. If you are interested write to the Silver Manufacturing Company, Salem, Ohio. If you say you saw their address in THE KANSAS FARMER they will send you a copy free.

Agriculture

Harvesting Cow-Peas.

Do cow-peas bloat cattle or not? What is the best method for harvesting them for seed, and also thrashing?

ELI HELMUTH.

Reno County.

I have mailed you a copy of circular No. 8 giving information regarding the culture and use of cow-peas. I have never heard of cow-peas causing bloat in cattle. We have pastured the crop at this station with cattle and no injury to the animals has resulted. On the other hand, cow-peas make an excellent pasture for cattle, especially for milch cows. Information regarding the harvesting and thrashing, etc., is given in the circular referred to.

A. M. TENEYCK.

Cow-Peas and Corn.

I have had two acres of prairie broken for orchard and shelter belt. I wish to start the orchard next spring. Gophers have been in the land so it works up quite well. I have double disked it; after this rain shall do so again. I now purpose to plant Kafir-corn with a corn-planter and cultivate for seed and have fodder for milch cows. Could I not in July plant cow-peas between the rows, or sow them for forage, as I shall need some fodder containing more nitrogen than Kafir fodder?

I am starting 12 acres of alfalfa this spring and fall, and next winter shall need protein roughage for my cows. May I also sow cow-peas after wheat? The soil is black, upland and has been growing 25 to 30 bushels of wheat for the last few years. With an ordinary season what amount of feed could I expect per acre from cow-peas?

W. C. STAATZ.

Dickinson County.

If you get a stand of Kafir-corn there would be no use to plant cow-peas between the rows. If you have grown Kafir-corn you know that if the Kafir-corn makes a good stand even the weeds will not grow between the rows. I would advise to plant the cow-peas in a separate plot or plant them with corn by mixing the peas and corn in about equal parts by weight, planting the mixture quite thickly in drill rows. It is preferable to plant in rows 3 to 3½ feet apart and cultivate the crop, or the peas and corn may be sown in close drills. If sown in close drills do not use too much corn since the thick, rank growth of corn will smother the cow-peas.

Cow-peas may be planted after the wheat is harvested, either by disking and planting the cow-peas with the disk drill or with the lister. The lister method of planting requires that the crop be cultivated while by the first method of planting the usual plan is to plant in close drills and give the crop no cultivation after seeding. With a sufficient amount of rainfall, cow-peas planted immediately after the wheat is harvested, say about July 10, should yield from one to two tons of hay per acre. The more cultivation you can give the land previous to planting the peas the larger will be the return in crop. I have mailed you a copy of circular No. 8 giving more detailed information regarding the culture of cow-peas.

A. M. TENEYCK.

Grasses for Clay Subsoil.

I write to inquire as to the adaptability of the following grasses to our soil and climate, and how much seed to sow per acre of each: Bermuda grass, Bromus inermis, Alsike clover, red clover, sand vetch, meadow fescue. Are any of the above-named grasses liable to become a pest?

My farm has a clay subsoil commonly called "joint clay;" it has pockets of sand in it and is nearly always moist. One pasture, for hogs, will be sown on bottom land; the other, for horses and cows, will be upon upland.

O. LONERGAN.

Nemaha County.

Of the grasses which you name in

your letter, only the Bromus inermis, Alsike and red clover are adapted for growing in your section of the State. Sand vetch is not a grass but is an annual plant belonging to the pea family. It should be sown each spring. It is usual to sow about two bushels of the vetch-seed per acre when seeded alone, or the preferable method is to sow a bushel to a bushel and a half of good vetch-seed with about the same amount of oats per acre. The oats and vetch grow well together and the combination crop may be cut with the mower since the oats hold up the vines whereas if the vetch is planted alone, the vines run close to the ground and the crop is hard to cut with the mower. Vetch, field peas, and cow-peas are about equally valuable for growing in your section of the State as a forage and fertilizing crop. I would prefer the cow-peas, however, to vetch or field peas. I have mailed you a copy of circular No. 8 giving information regarding the culture and use of cow-peas, and also a circular letter giving information regarding the seeding of Bromus inermis.

Clover is commonly sown in your section of the State, and either the Alsike or red clover grows well in combination with Bromus inermis. Sow about four pounds of clover with twelve pounds of Bromus inermis per acre. The Alsike clover is preferred on low, wet land, the red clover on higher, better drained land. If either the clover or the grass is seeded alone, sow about 18 pounds of Bromus inermis, six or eight pounds of Alsike clover, or eight to ten pounds of red clover per acre. The Bromus inermis may be seeded in the fall of spring, but clovers should always be seeded in the spring.

Clover will make a good hog pasture, but alfalfa is better. I would advise you to try alfalfa, sowing a little Bromus inermis with it. Perhaps the clover-Bromus inermis combination would be safer for cows, but alfalfa-Bromus inermis makes a good horse pasture, and is now being used to some extent in this section of the State for cattle with very good results. Cattle are much less likely to take injury from feeding on the combination pasture than from pasturing on alfalfa alone.

A. M. TENEYCK.

Insects Injurious to Corn.

PROF. E. A. POPE, KANSAS STATE AGRICULTURAL COLLEGE, MANHATTAN, BEFORE THE KANSAS CORN-BREEDERS' ASSOCIATION.

The most common and serious injuries to germinating seed-corn are the work of certain small beetles and the grubs of others. To this list should be added the maggot of a small fly.

BEETLES.

On several occasions last spring and also less conspicuously in preceding years complaints were received at my office of the destruction of softening seed-corn in the ground, accompanying which were specimens of two small ground beetles. The fact that these two beetles belong to a large family, most of which are well known destroyers of other insects, led to some doubt in my mind as to the truth of the charge against them, and I asked the sender to examine further and send additional specimens taken in connection with the work. The sending of additional specimens of the same species leaves little room for doubt of the guilt of one at least of these, a small, narrow, yellowish brown beetle with no common name, but known to entomologists as *Clivina impressifrons*, a common species, and less certainly of a second, *Agonoderus pallipes*. These beetles seem to be most open to complaint in moist bottom lands, and, as believed by Prof. F. M. Webster, with whom I have been corresponding regarding them, in lands subject to overflow. At all events, it is in such lands that the adults are most abundantly found. The nature of the injury in such cases is the excavation of the softening seed by the adults, and in the observation of my correspondents is a warrant for the accusation of these beetles. They are responsible at times for the com-

plete loss of the first seeding at least. From the nature of the case, there seems to be no means of protecting the seed in the ground from such attacks under the conditions stated.

A third beetle, and its grub, may be held also to be a troublesome species, on the basis of findings by Professor Forbes. It is very abundant in our State, and while well known to most observers as destructive to ripening fruit of all classes, and some vegetables, it has not been directly noted in Kansas as attacking the seed of corn in the ground. This species is the banded Ips. The nature of its work is the same as that of the other two beetles mentioned.

The maggot known as the seed-corn maggot (*Phorbia fuscipes*), while generally attacking seed-corn, usually seems to injure it in trifling degree, though cases are on record of its having practically destroyed the entire seeding. This insect in the maggot state is a small, white legless worm, in shape quite like that of the maggot of the common fly, but more slender and about one-half the length. It excavates the soft grain, quite commonly destroying the germ, and in any case preventing the healthy growth of the sprout. The adult is a small brown fly, coming from a pupa within the soil, and maturing during the summer. The particular circumstances determining the abundance of this fly and its maggot seem not to be understood, and there are no known methods of anticipating or preventing its attacks.

WIREWORMS.

Probably the wireworms are most largely concerned among insects in the destruction of germinating corn, at least in new land or in a rotation after grass and pasture. These pests are uniformly the grubs of beetles, of which several of the most destructive species are everywhere common in the corn-growing areas of Kansas. The wireworm is a smooth, shining, cylindrical, slender, 6-footed larva, with a distinct head, and a length when full grown, according to species, of half an inch to an inch. The adults are narrow, hard-shelled beetles from one-fourth to five-eighths of an inch in length, yellow to brown in color, the light species with dark lines on the wing covers. These beetles all have the habit of springing with an audible click when taken in the hand, whence the common name of click beetle or spring beetle. The perfect insects are abundant everywhere in summer, flying commonly to lights and feeding on leaves of various plants or trees, or lying concealed in the foliage during the day.

Wireworms are more destructive than all the other seed-corn pests by reason of their long life as larvae, their ability to make their way readily from seed to seed, and their abundance generally in the soil. Their natural food is the roots of the various grasses, and they may be found in abundance and variety in grass lands everywhere. It is believed that the larval life extends through two years for the more important species, and from this it results that they are worse in sod corn than in fields long in cultivation. The injury done by wireworms is not limited to the destruction of the sprouting corn, but extends also to the small growing plant, and later, in some species particularly so, to the eating off or boring out of the roots. In the Kaw Valley near Manhattan I once found the larva of a medium-sized click beetle in numbers in the roots and braces of corn in old ground, their injuries so destroying the upper root system that the corn over considerable area was blown down by an inconsiderable wind. Under listing this danger seems to be now largely averted.

Protection from the attacks of wireworms is largely to be gained by avoiding the planting of corn on sod, and by a rotation in which corn follows preferably clover or some other crop which is not susceptible to their attacks, or at least does not propagate and mass them as does grass in any form. No application to the soil



Give your harness "life" and strength—make it weather-proof, sweat-proof and durable by using

EUREKA Harness Oil

Tones up the leather fibres. Prevents decay. Contains nothing that will cut and chafe.

BOSTON COACH AXLE OIL helps the wheels go round. Makes heavy loads light and hard roads easy. Better than Castor Oil. Every where—all sizes. Made by

STANDARD OIL CO.
Incorporated

\$10.00 Sweep Feed | \$14.00 Salvaged Steel Wind Mill.

We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO.,
Topeka, Kansas.

Stock & Poultry FENCE

Many styles and heights. Diamond or Square Mesh. Prices low. Sold direct. 30 days free trial, freight prepaid. Catalogue free.

KITSELMAN BROS.
Box 61, Muncie, Ind.

THE LARGEST AND BEST LINE OF WELL DRILLING MACHINERY in America. We have been making it for over 20 years. Do not buy until you see our new illustrated Catalogue No. 41. Send for it now. It is FREE.

Austin Manufacturing Co., Chicago

WITTE GAS ENGINES

The highest type of self-contained engines on any commercial, gas or liquid fuel. Now sold on 30 Days' Free Trial. Very sensitive governor; perfect electric igniter, other exclusive essentials. Result of 20 years' experience. Write for Catalogue No. 1.

WITTE IRON WORKS CO.,
W. 5th Street, Kansas City, Mo.

THE AUTO-FEDAN HAY PRESS 3 Men Can Run It.

Satisfaction Guaranteed



THE AUTO-FEDAN HAY PRESS CO.,
1064 Jefferson St., Topeka, Kans.

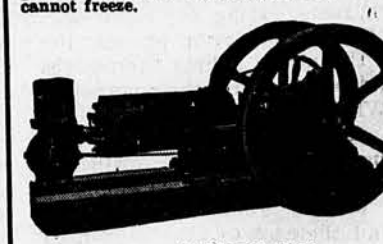
BALES 15 TONS A DAY HAY

frequently 18 and 20 tons. Such wonderful records are possible because our Gem Full Circle Steel Baler has a 30 inch feed opening, making it easy to charge and quick rebounding plunger allowing two charges to each circle of team. The patent power-head with its 9 inch trip lever arms enables us to realize the greatest baling pressure ever produced in a similar machine. We will save you \$25 or more in first cost and much more every year in repairs and because of greater capacity. Drop us a postal for prices and a free copy of our "Baler Book."

GEO ERTEL & CO., QUINCY, ILL.

WATERLOO VAPOR COOLED GASOLINE ENGINES

The only horizontal vapor cooled gasoline engine in the world. Absolutely frost proof and cannot freeze.



(Patented May 15, 1906.)

The king of all gasoline engines. Our catalogue will tell you all about them, also our power and sweep feed grinders. Send to-day.

WATERLOO GASOLINE ENGINE CO.
1014 3d Avenue West
WATERLOO, IOWA

containing wireworms for their destruction seems practicable.

It may be stated here that experiments the country over looking to the protection of seed-corn from any of these pests by dips of offensive substances or poisons have given no hopes of any practical application. Some do not protect, others injure the germination, and others, while not open to the foregoing objection, prevent the use of the drill or planter through their action on the seed.

CORN ROOT WORMS.

Beside the wireworm already mentioned, there are two small, slender, whitish larvae known as root worms. The adults of these are beetles, allied to the well-known striped cucumber beetle, and like that species, they are both common throughout the State, at least in the corn regions.

These beetles are the 12-spotted diabrotica, the parent of the Southern corn root worm, and the long-horned diabrotica, the parent of the Northern corn root worm.

The most troublesome of these appears to be the Northern form. It burrows lengthwise through the root, the tip being frequently the point of first attack. Beside the direct destruction of the root tissue by the feeding of the worm, it is likely also to cause rot, the root thus becoming of no use to the plant. Forbes reports finding twelve to fifteen to the hill, and states that the eggs are massed within a few inches of the hill in the soil, where they pass the winter. Beside finding the beetle abundantly in our corn-fields, I have observed the work of the larva in the corn-fields of the Kaw bottoms east of Manhattan, where the destruction of the roots allowed the stalks to be blown down, covering acres of profitable land.

In this work they were associated with a small wireworm noted above, and it is hardly possible to consider one more destructive than the other. As the eggs are known to be deposited in the soil during autumn, and as the grubs are practically limited to corn roots as food, rotation seems to solve the problem of prevention.

CORN ROOT LOUSE.

The corn root louse, or aphid, has shown itself sufficiently abundant in our State in recent years to be an insect capable of doing considerable damage, and one to be reckoned with by every farmer who does not completely study the requirements of modern farming. This aphid is a small, soft-bodied, light green, sap-sucking insect that lives in abundance on the corn roots during the entire season of growth, but is relatively most destructive while the plant is small, sometimes practically destroying it. The louse is one of the several insects that are largely dependent for their destructive abundance upon a system of non-rotation, corn following corn several seasons together. Its injuries are accomplished by sucking the sap from the roots of the growing plant, causing it, when small, to become weakened and die, and no doubt with plants that finally outgrow this initial danger, so attacking the vigor of the plant as to lessen seriously its productiveness.

The life history of this insect is one of the curiosities of nature. This aphid, like all others of its tribe, produces a sweet secretion that is greatly liked by the ants. The common field ant, for the sake of their sweet secretion, takes care of the aphids, protecting them in their station on the corn roots, caring for their eggs during the winter, even placing the eggs or the active aphids themselves on corn roots to insure their perpetuation. Without the fostering care of the ant, the aphids would be far less numerous and troublesome, owing to the fact that only a small proportion of the minute young on hatching would find themselves near enough to the roots of the proper plants to enable them to get a start. While the young lice are hatched in spring, some time before the corn has started, they subsist meantime on the sap of a few roots or weeds, particularly on the large seeded foxtail and the common smartweed, both common in corn

ground. Until the corn is ready for the aphids the ants provide that these are brought near their temporary food. During the winter the aphids are in the egg state, and these eggs are gathered and stored by the ant in its underground nests. Immunity from the attacks of the root louse can largely be secured by a procedure suggested by a knowledge of the foregoing facts. First, rotation, since the eggs of the lice are usually stored most abundantly in the corn ground of last year. Secondly, where rotation is inconvenient, destruction of the ants' nests and the scattering of the stored aphid eggs by plowing old corn ground quite late in the fall, or in open winter weather. Third, destruction of the early weeds constituting the first food of the plant lice by disking early in spring the ground to be put into corn. Regarding the danger to fields under rotation from the spreading of the winged mothers of the second and following generations, it may be said that infestation under these circumstances will come so late as not to endanger greatly the life of the plants in new ground, the first winged lice appearing by the middle of May. Under the second proposition experiment has shown that winter plowing, followed at once by harrowing, to break up the ants' nests, results in the diminution of the latter to less than one-third of the previous number. The third proposition is made much more certain of effect if clean culture the preceding year has kept the weeds named from seeding.

WHITE GRUB.

The white grub in various and numerous species is well known as a corn root pest, more especially in sod corn, as the condition of grass land encourages the concentration of these grubs in the soil. The adults are the well-known June bugs or May beetles, which fly in great numbers during warm nights in spring and summer, feeding by night on the leaves of most trees and shrubs and many herbaceous plants, but concealing themselves during the day by burrowing in the soil, most generally near where they were feeding the previous night. These beetles lay eggs in the ground, the young grubs, thick, short, white, 6-footed worms with large brown heads, feeding on the roots of a great variety of plants, and requiring at least three years in most, if not all, the species for their full growth and development. The injury done by these grubs is most noticeable in lawns, and strawberry plantations, but it is only necessary to observe with some care to find them also doing similar damage in corn and other field crops. It has been thought that these are introduced specially in barnyard manure, but that the manure grubs are largely to blame for plant injuries has yet to be demonstrated. From the entomological standpoint, the manure grubs belong to a very different genus, though in the same general family. At any rate, withholding manures will certainly not lessen the number of the really destructive white grubs in the soils, while the use of fertilizers in this, as in other cases, is a direct benefit in producing in the plant a strength and vigor that enables it to withstand otherwise fatal injury. Efforts to destroy the grubs in the soil by the use of chemical fertilizers have so far given no hope of practical utilization. It is possible to kill the grubs, but only by application of the chemical in such quantity as to endanger the plants or destroy them. Professor Forbes states that kerosene emulsion applied to a lawn, followed by a copious watering, will destroy the grubs, but such a method is obviously inapplicable on farmlands. He concludes that no direct method is superior to the thorough pasturing of hogs on all grass lands intended for corn, and believes it practical, in the worst cases, to employ proper labor in collecting the grubs at the time of plowing, since a number of grubs, 6,700 to a square rod, 288 pounds per acre, so small as to work inappreciable injury to a grass-field, may do relatively, by their condensation on the fewer plants, great damage to the corn crops. Here let me

point the inestimable advantage to the corn-grower of the birds that follow the plow. He is blind who has not observed the usefulness of a flock of black birds or crows in a furrow behind him when plowing his corn ground, and he is shortsighted who will not exchange the softening corn in a few hills after the planter for the multitude of grubs and other harmful insects eaten by the birds during the season.

Since, on favorable nights, the May beetles are greatly attracted by lights, around which they swarm until midnight, it is possible to collect numbers of them by the use of light traps. While unfortunately most of the flying individuals are males, the method still has its value in the number of eggs laid, since for every male destroyed some female may die unmated. Again, as both sexes cling after nightfall to tree leaves, feeding there till daylight, they may be gathered by gallons, or even bushels, and destroyed. While such methods will not commend themselves to corn-growers they are worth noting as having a possible future bearing upon the control of the insect here as they long have had in Europe.

CORRESPONDENCE.

Correspondence from several localities in Kansas makes it plain that among corn pests we have to reckon with the corn bill-bugs, several of the largest species of which occur in suitable localities through the eastern section of the State. The corn bill-bugs are large snout-beetles, the largest measuring in specially well developed individuals, more than half an inch in length. In shape these beetles are a long oval. The head in front is prolonged into a slender curved snout which bears a pair of jaws at the tip. By means of this beak the beetles puncture the corn stalk or young plant for food. The food puncture is frequently made through the rolled leaf before its expansion, and as growing unrolls the leaf, the puncture is disclosed as a row of holes extending straight across it. The wound in the heart of the young plant often causes its death, and it is not infrequent that patches of corn of some extent in suitable localities are completely killed by these beetles. The natural food of the beetles is composed of several large bulbous grasses and sedges, according to species. In the base of the thick stems of such grasses the beetles place their eggs, and the grub-like larva live there till maturity. It has everywhere been noted that the bill-bugs are particularly abundant only in corn planted in sod land where these thick-stemmed grasses were growing previous to the breaking. Commonly they occur in wild plants growing in moist ground, but they have also been found in some species to make trouble in corn after timothy. It is the testimony of all who have tried it that a practically sure preventive of their work is to grow other crops than corn in such ground for at least one year after breaking.

CUTWORMS.

Cutworms are everywhere regarded as among the most common and destructive pests in corn-fields, especially in seasons or conditions conducive to their multiplication and safe hibernation.

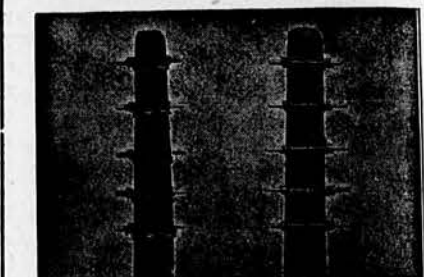
Leaving out of present consideration the minor attacks of the cutworms upon plants well started in growth, and discussing the pests in connection with the well-known method of attack upon small plants which gives them their name, it may be well stated that the most troublesome forms are those that pass the winter partly grown, having been hatched the previous autumn and having hidden in the soil or under other protection during the season of their semi-dormancy. Every careful observer has found them alive in such winter quarters, or has noticed their destructive attacks on the earliest garden vegetation at the end of their long season of fasting. As is well known, these worms mostly lie concealed during the day, traveling from plant to plant, and feeding principally after nightfall. They are the caterpillars of noctuid moths, the adults of which



Remington
AUTOLOADING RIFLE

SELF LOADING
This Remington rifle loads itself. Its recoil does the work—you do the shooting. It can be as quickly loaded as a single shooter. Solid locked breech prevents accidents. Compare it with other rifles of this type.
New Catalogue free.

REMINGTON ARMS CO., ILION, N. Y.
Agency, 215 Broadway, New York City.
Sales Office, 515 Market St., San Francisco, Cal.



The Banner Cement Post

A Post for the Future as Well as the Present. (Patented)
Adapted to and covering every possible requirement of farm, ranch, railroad, or wherever posts are needed. The best, cheapest, most convenient, most practical wire fastener, and the most durable post ever made. For particulars write
GEO. HASS, Lyons, Kans.

CEMENT STONE

Build your buildings with cement stone. We can sell you a down face outfit complete for \$30 F. O. B. Wichita. Write for particulars.

J. H. TURNER, -:- Wichita, Kans.

What Would You Do

If three good physicians should pronounce your case hopeless. If they should decide that you could not live longer than six weeks. And if you should get well, after using only \$12.00 worth of Dr. Miles' Heart Cure and Nervine, what would you advise a friend in like condition to do?

"I have to thank you for saving my wife's life two years ago. We had continued with the doctor until the third doctor, like the two previous ones, said that nothing could be done for her; that she had better be taken home from the hospital to quietly wait her time, which would not be over 6 weeks at the most. I brought her home, and then I thought probably Dr. Miles' Heart Cure and Nervine might help her, so I got a bottle of each and some Nerve and Liver Pills and commenced to give them to her. We soon seen an improvement, and encouraged by this we continued giving the medicine. We gave her eleven bottles in all of the medicine. She takes it occasionally now if she feels the need. I am in the ministry, and have been for 44 years.

REV. P. MILLIGAN,
Genda Springs, Kans.

Dr. Miles' Heart Cure is sold by your druggist, who will guarantee that the first bottle will benefit. If it fails he will refund your money.

Miles Medical Co., Elkhart, Ind

When writing advertisers please mention this paper.

1015 Osage Avenue, Kansas City, Kansas

Home Departments

CONDUCTED BY RUTH COWGILL.

Boil It Down.

If you've anything to write,
Boil it down.
Any letter to indite,
Boil it down.
If you want the right of way
Better say your little say
And come back some other day
Boil it down.

When your article is writ,
Boil it down.
If you wish to make a hit
Boil it down.
Let us have the winnowed grain
From the garner of the brain;
But a straw-stack gives us pain,
Boil it down.

Read it through and don't forget,
Boil it down.
Trim it well and make it net,
Boil it down.
Draw your pencil boldly through it,
Chip it, chip it, and renew it,
Or perchance you'll later rue it,
Boil it down.

Though your message be inspired,
Boil it down.
Other worthies have been fired,
Boil it down.
There's a censor in his chair,
And beside him in his lair
Stands his huge waste-basket there,
Boil it down.

—Rev. H. Vander Werp, in Banner of Truth.

Rest and Recreation.

It is time to plan for a rest, dear mothers. Begin to think about it and talk it over with the family. It is as essential to the well being of a person as is exercise and food. When God made the earth and divided time into days He set one day aside for rest. When He gave rules and laws to mankind to live by He told them to observe the times of rest and recreation and provided times and occasions for such things. He who is all wise looked to the end of time and saw the needs of humanity. Not only did He think it wise that man should rest, but also the beasts and the land. Every seven years the land was not to be tilled but should be left to rest and in that way it would be renewed. In like manner the human body needs to be refreshed and renewed that it may be rejuvenated and fitted for the wear and tear of life and its toll, its burdens and its crosses.

No doubt every one of you, in looking into the coming weeks, can see not a crevice that is not filled with work, and feels that the time is far too short for what should be accomplished, but God has taught us that the body is more than raiment and does not require of us the things that are hurtful to our bodies. He teaches us also that the soul of man is of more importance than the body, that the body is the home of the soul while in this world—hence the body should be in good condition that the soul or spirit may grow and expand and not be warped in its place of abode. It may seem to you at first thought that it is impossible to take even a little rest and change, but look the situation over again, eliminate here and there and make room for the much-needed change.

It may be that we can spare only a day or half day, for this pleasure but plan and work for as many as possible during the summer. Make as little work of it as possible. Get away from the haunts of man and close to nature—into some shady nook—and throw to the winds every care and thought of work—forgetting for a little while that there are hot kitchens filled with kettles and pans—dishes to be washed and food to be cooked.

A neighborhood picnic is a most enjoyable affair. The associations of friends and neighbors enlivens the occasion and helps one to free oneself of the thoughts of work and home cares that have been constant companions so long. If all the family can not go at once let the mothers have a day, taking plain, wholesome food and something in which to make coffee over a campfire—and give the day over to idle happiness. Try it and try it as often as possible.

The Rewards of Life.

FLORENCE SHAW KELLOGG.

"And remember that we must not expect reward to come immediately for each right action."

The words floated out to me on the still evening air. It was just a phrase from the conversation of two friends riding past my home, that stands "by the side of the road," but it caught my attention and made me thoughtful. Long after the speaker had passed from my sight I sat on the doorstep, thinking, wondering, and questioning.

Should we expect reward to come for each right action immediately or at any time? Should we not rather do the right thing whatever it may be because it is right, without thought of reward or lack of reward? Is it the highest or best way for ourselves, or to teach our children, to expect reward and to act because of this expectation? Is it not better, infinitely better and more satisfying, to teach them to do right at all times, and under all circumstances, because it is right; because there is no other noble or true way to do? No other way to attain to the heights of life and form character of real worth and usefulness? We often see parents beginning the management of their children by saying, "Do this or do that and I'll give you such and such a thing," thus unconsciously and unthinkingly appealing to an ignoble motive and implanting seeds that can not bring forth the best fruits in after years. We hear people say many things that must give children wrong ideas of life and its relations, its duties, and responsibilities, and that will lead to disappointments and vexations later; for life is not a story-book and rewards and punishments do not follow swiftly on each deed as is the case with the wonderful heroes and heroines of the "goody, goody books" too often found in our libraries and upon the home book shelves.

WE REAP WHAT WE SOW.

Let me not be misunderstood here. Let no one think I would for a moment lessen the force of that old, old truism, "As ye sow, so shall ye also reap." All of life teaches us this, all that comes to us either of joy or of sorrow, all of life's sunshine and all of life's rain, all have this as its sure foundation. It is a law of nature and of nature's God, as just as it is irrevocable, as constant in its workings as the law that ordains the rising and the setting of the sun, or the coming and the going of the seasons. We would not, if we could, have it different; we would not, if we could, lessen its solemn import or make it less sure and impressive. It can not be too early impressed upon the mind of a child, or made a working force, a principle of action in his life. But to teach this great law, to let the child know that nothing can change it, that from the highest to the lowest, from the greatest action to the least it must be that good seed sown must by a sure law of God, in His own good time and plan, bring forth its great measure of good fruit, and evil seed, by the same law and with the same certainty must bear evil fruit; to teach him that we can not "gather figs from thistles, or grapes of thorns" now any more than could the people of the olden time, and that just so surely as we "sow the wind" we must "reap the whirlwind," to let him feel all that these great truths mean now and must ever mean, to teach him to "stand true and firm for the right at all times and in all places," to make right and truth the great motive forces of life, whether it be that he share its "wretched crust" or that the multitude "look applaudingly on," with straight paths for his feet stretching on and on before him, across the beautiful valleys and up the rugged mountain sides alike, to inculcate a love of right, because it is right, a desire to act truly always, and to build up a strong, manly character,

to do all this is one thing while to teach him to act with the hope of definite reward, and for the sake of that reward, is quite another thing. The one is ever ennobling and grand; the other is belittling and a degrading of life and its eternal verities.

THE VALUE OF HIGH IDEALS.

Honesty is indeed "the best policy," but one should have a higher motive in being honest than "policy."

Beautiful ideals should be kept before our children always. They should be taught the worth and nobility of life, and be made to feel how grand a part they may take in it. They should early be impressed with the thought of what individual life means, and how surely each one of us, though ever so weak and humble, has a work to do, a part and a responsibility in the whole. They should learn beyond all doubting that he who does not live a good life is by just the extent and influence of that life defrauding not only himself but all mankind. Only God, the all-wise and omnipresent God, can know the measure of a life and how far and wide its influence reaches. It is a fearful thing to make bad that which should be good and so to take from, instead of adding to the joy and blessedness of living.

EACH GOOD DEED ADDS TO UNIVERSAL GOODNESS.

Though we should not make the hope of a reward the motive for what we do and are, we may have, for our encouragement, and for the strengthening of our purpose, the sure knowledge that no right act can fail to bear fruit, that all right is stronger and surer because of our right doing, all good, better, and more beautiful because we do good. We may know and joy to know that, when we try to live as we should, either individually, or as a community, "The great light will be clearer for our light, and the great soul be stronger for our soul."

"VIRTUE HAS ITS OWN REWARD."

Emerson tells us that "Beauty is its own excuse for being." In a deeper, holier sense this is true of good, of right, of truth, not only its "own excuse" but its own reason and its own reward. No one can be truly happy save as he strives for goodness. The good man who lives with an honest purpose to make the most of his time and talent and be true and pure and just in all the relations of life, to

"Live up and not down,
To look out and not in,
And lend a hand."

in brotherly love and kindness to whoever has need of him, this man though he be ever so poor in purse, though he lives humbly, and is unknown to the great world, sharing not in its pomp or riches, though he must perforce work long and hard for his daily bread and have little time for higher pleasures or enjoyments, little rest or recreation save as it comes in the odd moments of the busy days; though he have little sight of the world's magnificence and beauty, save as he

"From his doorway, sees
The miracle of the flowers and trees;"

though all of this be true of him, yet he is a rich and happy man, and can in no way be robbed of his heritage of blessing and of peace. Kings may well envy him his high estate, while the multi-millionaire, with all the luxuries that money can buy, lacking his simple goodness and content, is poor indeed.

Let us teach our children this, emphasizing our words with our lives; let us help them to be free and untrammelled from all evil thinking or doing, and though they have no thought of reward it shall be theirs in overflowing measure.

A New Club.

The ladies of this community met this afternoon at the home of Mrs. Chas. Noel and organized a Branch Mutual Helper Club, consisting of seven members. Officers were elected as follows: Honored helper, Mrs. Mollie Huggins; assistant helper, Mrs. Addie Hill; recording helper, Mrs. Lily Johnson; art instructor, Mrs. Dell Noel. Social members, Mrs. Lila Maxfield, Miss Mattie Maxfield,

Mama, Be Warned! Protect the Little Ones!

MAMA! Don't be frightened—but be warned! Every Mother knows, or should know that the terrible Mortality among children is caused by Stomach and Bowel troubles. Colic, Sour Curd, Cholera Infantum, Summer Complaint, Measles, Rashes, Scarlet Fever—even Mumps—have their first cause in constipation.

The Delicate Tissues of a Baby's Bowels will not stand rough treatment. Salts are too violent, and Castor Oil will only grease the passages, but will not make and keep them Clean, Healthy and Strong.

There is no other medicine as safe for a child as Cascarets, the fragrant little Candy Tablet, that has saved thousands of families from unhappiness.

The Nursing Mother should always keep her Milk Mildly Purgative by taking a Cascaret at night before going to bed.

No other medicine has this remarkable and valuable quality. Mama takes the Cascaret, Baby gets the Benefit.

Cascarets act like strengthening Exercise on the weak little bowels of the growing babe, and make them able to get all the Nourishment out of Baby's Natural Food.

Larger children cannot always be lashed, and will eat unreasonably. The Ready Remedy should ever be at hand—Cascarets—to take care of the trouble when it comes.

No need to Force or Bribe children to take Cascarets. They are always more than ready to eat the sweet little bit of Candy.

Home is not complete without the ever ready Box of Cascarets. Ten cents buys a small one at the Corner Drug Store.

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

Kendall Sun Bonnets



Made of best Manchester Chambray; Lt. Blue, Cadet Blue, Navy Blue, Pink, Brown, Grey, Buff, Nile Green. Also India Linen in Black or White. Can be laundered without injury. If dealer doesn't have them, we deliver to any address at 50 cents each. Doll Bonnets, 10 cents.

American Sun Bonnet Company
Lathrop, Mo.

PREPARATORY SCHOOL FOR BUSINESS
WHITMORE
BUSINESS
COLLEGE
Book-keeping, Shorthand, and Business Courses, 100% of positions, big wages, pleasant work for young men and women. Don't delay—Start now. Special Rates. Write A. R. Whitmore, Pres., St. Joseph. For Particulars & Catalogs.

Organized in 1868.

Bank of Topeka

CAPITAL, SURPLUS, PROFITS

\$400,000.00

RESOURCES JAN. 26, '07

\$2,369,593.16

DIRECTORS

J. R. Mulvane, Pres. A. W. Knowles, Vice-Pres.
J. W. Thurston, Cashier.
T. B. Sweet J. P. Mulvane A. Washburn
J. P. Griswold M. A. Low
J. W. Farnsworth Chas. Wolff
W. H. Davis

Res. Tel. 775.

Office Tel. 192

L. M. PENWELL,

Funeral Director and Licensed Embalmer.

511 Quincy St.

Topeka, Kansas

HENRY W. ROBY, M. D.

SURGEON

720 Kansas Avenue.

Topeka, Kansas

Mrs. Laura Noel. Our motto is, Have you had a kindness shown, pass it on. Our club song, Pass it on. Our Watchword, Kindness. Our club colors, green and white, club flower, white rose.

Our next meeting will be at the home of Mrs. Hill, June 19. Club meets every four weeks at 2.30 afternoon. Our work we have taken up is drawn work. Our subject to discuss is, The care of young children.

MRS. MOLLIE HUGGINS,
Syracuse. Honored Helper.

As stated a couple of weeks ago the Club Department will be discontinued until the first of September, but I am glad to hear from clubs new or old and shall like to publish anything sent in and give any information desired. The Branch Mutual Helpers of Syracuse will be placed upon the Club Roll and will appear with the others in the early fall. I sincerely hope many more new clubs will be organized this summer and if I can in any way aid in their organization shall be happy to do so.

The Boer's Refrigerator.—How Provisions Are Preserved in the High Plains of the Transvaal.

The Boers who live on the high veldt of the Transvaal have a simple way of preserving perishable provisions in the summer. On the high veldt the weather during the day is extremely warm, but once the sun sets a breeze springs up, and in about two hours' time the cold is intense. This is due to the rarefied air, says "London Ice and Cold Storage."

When the sun has disappeared for two hours or so the vrow brings out her provisions and wraps each article in a piece of thin sacking, and hangs it from the roof of the eaves which run around the outside of the building. In the morning, when the cattle in the cattle kraals proclaim by their lowing that it is time to rise, she comes out and takes the bags in. The butter, if butter is one of the articles, is so hard that you could not spread it; the meat, if it is buck's head, has much the same texture and appearance as buck's meat that has been transformed into biltong by being dried in the sun, though it differs from this in that it can, of course, be cooked, which biltong can not, and still retains the greater part of its juice; the beef or mutton is frozen.

The bags are taken inside and placed on that side of the house which is "against the sun." When the sun veers around to this side of the house they will be transferred to the other side. Travelers who call at one of these farms on some summer day, when the sun is blazing down and there is not a breath of air, marvel how the people keep their provisions, shut off as they are from all helpful adjuncts. If they express their surprise to the vrow she takes them to the front of the house and gravely points out the large hooks, which she will later on in the day call into use again.

Recipes.

I will send a few recipes which will doubtless come handy as Kansas fruit is scarce this year. These I find a good substitute for pie:

Buttermilk Pie.—Make a pastry as for any pie, line a pie tin then take the yolk of two eggs, reserving the whites to whip on top. With the yolk add pinch salt, 4 tablespoons sugar, level tablespoon flour and $1\frac{1}{2}$ cups buttermilk; flavor with lemon extract, bake without cover. When most done whip whites of eggs, with 1 teaspoon sugar, and pour over top and you will have a pie that most people will say is a lemon pie.

Orange Pie.—Pastry same as above, 1 large orange or 2 small ones sliced and laid over crust. Then take 2 beaten eggs, 4 tablespoons sugar, pinch salt, 1 cup sweet milk or sour cream whichever desired and pour over orange; then place on top crust, sprinkle lightly with sugar and bake.

Mrs. LIZZIE GRIFFITH.
Emporia, Kans.

The "old reliable" KANSAS FARMER is an efficient assistant on the farm.

The Young Folks

The Sorrows of a Skipper.

"I hates to think of dyin'," says the skipper to the mate; "Starvation, shipwrecks, heart disease I loathes to contemplate. I hates to think of vanities and all the crimes they lead to."

Then says the mate
With looks sedate,
"Ye doesn't reely need to."

"To conger up the happy days what careless has slipped by,
I hates to contemplate the day I ups and left me Mary."

Then says the mate
"Why contemplate,
If it ain't necessary?"

"Suppose that this here vessel," says the skipper with a groan,
"Should lose 'er bearin's, run away, and bump upon a stone;
Suppose she'd shiver and go down when save ourselves we couldn't!"

The mate relies,
"Oh, blow me eyes!
Suppose, ag'in, she shouldn't?"

"The chances is ag'in us," says the skipper in dismay,
"If fate don't kill us out and out, it gits us all some day.
So many perish of old age, the death date must be fearful!"

"Well," says the mate,
"At any rate
We might as well die cheerful."

"I read in them statistic books," the nervous skipper cries,
"That every minute by the clock some feller ups and dies.
I wonder what disease they gits that kills in such a hurry!"

The mate he winks
And says "I thinks
They mostly dies of worry."

"Of certain things," the skipper sighs,
"me conscience won't be rid,
And all the wicked things I done I sure should not have did.
The wrinkles on me inmost soul compel me off to shiver!"

"Yer soul's fust rate,"
Observes the mate;
"The trouble's with yer liver."

—Wallace Irwin, in the Century.

Elbert Hubbard's Bee Story.

A little girl 'leven years old, goin' on twelve, has been telling me something about the Apis mellifica, which is short for bee.

The bumblebees and wasps are to Apis mellifica what a punster is to a humorist. Wasps make wood-pulp paper, for I have used their nests for gun-wad.

Bumblebees only make a little honey, and as it is inconvenient to get it away from them, there is no money in raising bumblebees—only excitement. Wasps make honeycomb, but instead of putting honey in the cells they catch spiders and use the cells for prison cells. The wasp is either an undeveloped bee or a degenerate one.

Wasps and bees are second cousins; like men and baboons they have a common ancestor. Ages ago one band of monkeys struck out for the plains in search of adventure, and these evolved into men; the others took to the woods and are monkeys yet.

Wasps stuck to the woods and still are wasps; but the wasp that followed the clearings became Apis mellifica, or words to that effect.

Bees sting but once and die, but wasps can sting eight hours a day.

Columbus found no bees in America, any more than he found horses, cattle, sheep, and goats. He found dogs, but dogs are only domesticated wolves. There were deer and buffalo here, but no one ever hitched a buffalo to a cart until Buffalo Jones did the trick in 1893.

There were honey-bees in Egypt in the time of the Pharaohs. The bees followed the track of civilization around to Greece and did business at Hymettus in order to supply poets symbols. Then the bees went to Rome, and Pliny anticipated Maeterlinck and wrote a whole book on them.

Wherever man plants fruit-trees and cultivates flowers, and especially white clover, you will find bees. Just as martins come when you put up a bird box, and as pigeons appear when you have a house for them, and corn and wheat; so do bees carry the Message to Garcia when they find apple-trees and white clover.

Bees send out scouts when about to swarm, looking for good territory, and so when the Spaniards brought the first bees to America in 1720, the bees started west when they swarmed and stayed right with the folks. They did not get across the Mississippi, however, until about the year 1800.



Simpson-Eddystone Shepherd Plaids

Beautiful and economical for Spring and Summer dresses. Some designs have a new silk finish. They wash without fading and they wear long because their quality is standard—never equaled in over 60 years.

Ask your dealer for Simpson-Eddystone Shepherd Plaids.

Three generations of Simpsons have made Simpson Prints.

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



Central Business College

YOU CAN SAVE \$15, and secure home instruction in Penmanship or Shorthand free until you enter college by writing at once. Central Business College, 112-14 Grand Ave., Kansas City, Mo. 6-page catalog free.

Topeka Business College

The School that always gets you a good position in

BOOKKEEPING
SHORTHAND
TELEGRAPHY
CIVIC SERVICE or
PENMANSHIP

Address

TOPEKA BUSINESS COLLEGE, Topeka, Kansas

The Philistines had bees in Palestine or Canaan, when the Jews broke loose and went west looking for a good place to locate. The Jews have always followed civilization just like bees, sending out scouts ahead.

No sooner do the pioneers start a town, than Moses Mosinsky shows up with a stock of clothing. Bees and Jews are alike in this—they are industrious and useful. When we want honey, we go to the bees, and when we want to borrow money, we apply to Kuhn, Loeb & Co. People who persecute Jews have no more sense than men have who kill bees with brimstone in order to steal the honey. People who believe in brimstone always kill bees and things.

It has been said, "Man is the most wonderful of all the works of God," but no one ever said so but man. Bees can do things man can not, and they know things man never will. A queen bee will lay over a million eggs during the summer. The eggs she lays every day are about double her own weight. These eggs are all alike when they hatch, but by feeding the larvae differently, bees produce drones, workers or queens, at will.

It takes only three days for the eggs to hatch. The young are then fed by the nurse bees, which are the bees under sixteen days old. These nurse bees feed the others from glands in their heads that secrete milk.

When the bee is sixteen days old she is of age and goes to work. The average life of the worker is only forty-five days. She just works herself to death, unless winter comes on, and then she may live through until the next year.

There are about fifty thousand bees in a hive, thirty-five thousand workers and fifteen thousand nurse bees or housekeepers. Then there are six hundred drones and one queen. The queen often lives for five years, but the drones never live over winter. As soon as the first sign of winter comes and the flowers begin to wither, the bees have a St. Bartholomew day and kill every drone. Drones have no stingers, but queens and workers have. The workers are females—undeveloped queens.

Bees have five eyes; three they use for seeing in the dark and for reading, and two for long-distance hustling.

When a hive gets too full, the bees swarm, the old ones going away led by the queen. As soon as the old queen goes, the bees that remain at home immediately grow a new queen.

Bees are cleanly and very orderly. They have inspectors that stay at the door of the hive and see that no bee comes in from the field without a good load of honey. Often if the bee has

The Key to Success

IS A BUSINESS EDUCATION

If you desire a Business Education fill out the blank below and mail it to us today.

Lincoln Business College,

13th and P Sts., LINCOLN, NEB.

Kindly mail me your catalogue which explains all about your school.

Name.....

Address.....



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

E. E. GARD, Prop., 311 Edmund St., St. Joseph, Mo.

**NORMAL
COMMERCIAL
SHORTHAND
TELEGRAPHY**

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

LAWRENCE Business College

LAWRENCE, KANSAS.

Elegantly illustrated catalogue sent free. Send for a copy.

Address Look Box F.

Finlay Engineering College

136 Boston Bldg., Kansas City, Mo.
Teaches steam, electricity, gas, refrigeration, architecture. The only school of the kind in the West. Machinery in actual operation. Students enroll any time. Assisted to positions. Have not been able so far to fill positions. Reference: National Bank of Commerce.

Going to School or Learn a Trade?

If so, write for our fine new catalogue giving complete information about the special opportunities offered for obtaining an education in almost any subject and learning some of the best trades. Address O. H. LONGWELL, Pres. Highland Park College, Des Moines, Ia.

BEE SUPPLIES



We can furnish you bee and all kinds of bee-keepers' supplies cheaper than you can get elsewhere, and save you freight. Send for our catalogue with discount sheet for early orders.

TOPEKA SUPPLY HOUSE,
7th and Quincy, Topeka, Kans.

only a little honey, the inspector will turn him back and give him what is coming to him. The drones buzz around and make a bluff at working, flying around in the sunshine near the hive watching for the queen. The workers do not like the drones, and they always kill a great many before St. Bartholomew's day, if Br'er Drone gets too gay. Bees very seldom die in the hive: if they do, it is a sign the whole hive is weak. The bees clean out all dust and dirt with great care, and if a bug or mouse gets into the hive they will straightway kill the intruder. Then if the body is too big for them to drag out they will cover it over and seal it up with propolis, a sticky substance, which bees gather from buds or the bark of trees.

A hive of thirty-five thousand workers will often bring in twenty pounds of honey in a day, if the flowers are just right, and one man I know who owns eighty-five hives, has had his bees make a ton of honey in ten hours. And yet one bee only gathers a grain of honey a day, and may visit three hundred flowers to get it.

The wax is a secretion from the bee's body, but the honey they get from the flowers. The object of the honey in the flower is that the insect will come and get itself dusted with pollen, which they carry to other flowers. So besides gathering honey, bees do a very necessary work in the fertilization of flowers. In fact, you can not raise white clover without bees, and bees do not thrive at their best excepting when they find white clover, so thus does nature understand her business.

Nature plays some rather mean tricks on men and birds and bees, just to get her work done. Nature seems to make use of man just as she uses bees, and all the time man chuckles and congratulates himself that he is using nature. But nature says nothing—just lies low and works, and man can only guess what the end of it all is.—The Phillistine.

The Little Ones

Bed in Summer.

In winter I get up at night
And dress by yellow candle-light,
In summer, quite the other way,
I have to go to bed by day.

I have to go to bed and see
The birds still hopping on the tree,
Or hear the grown-up people's feet
Still going past me in the street.

And does it not seem hard to you,
When all the sky is clear and blue,
And I should like so much to play,
To have to go to bed by day?

—Robert Louis Stevenson.

Little Brother.

ANNA DEMING GRAY.

(Continued from last week.)

"Under a clean towel and smelling strongly of dried rose leaves, which were scattered over it, was a suit of black clothes, and on top of them was a long, queer white silk vest.

"I spread it out and looked at it. There were tiny bunches of pink roses embroidered all over the cloth, and it was a creamy white color with age. I thought it quite the most beautiful cloth I had ever seen, but none too beautiful for little brother's new cap. How pleased mother would be when she saw him in it, and how surprised!

"If I had any doubts or misgivings as to my right to meddle with the things, I silenced them and began thinking only of how little brother would look in the lovely cap I should make him. Everything else I put very carefully back in the box with the dried and spicy rose leaves about them, and with some difficulty got the box back once more upon the shelf.

"Then I got mother's work basket, and sat down on the floor by baby. Snip, snip went the scissors, and the embroidered silk was cut into what it seemed to me should when sewed up, make a perfectly fitting cap. But though I could sew very well for a little girl of eight, I knew little about cutting out, for mother always did that part.

"The first effort was a complete failure, but the next one was better,

and by the time I had tried the third, and was very tired and had used up all the silk but scraps, I at last had what seemed to me a very nice little cap.

"See, little brother!" I said, "See pretty cap; let sister put it on you."

"He laughed and nodded, and said 'bye, bye,' and reached his chubby hands for me to take him. This was his one word, and I was delighted. I tied it on his curly head, and carried him downstairs, though that was a dangerous thing for me to do, and I knew that mother expected Mummy June to carry him over the stairs.

"For some reason, as the day went by, I was not so very anxious for mother and father to come home. But at last when I heard the carriage coming, I went out and sat on the steps, little brother beside me. When father and mother stepped from the carriage, I ran to meet them.

"Look, mother!" I cried, "just see what a lovely new cap I have made for little brother! You don't have to buy him one now. It took me most all day to make it, but next time you won't have to leave him at home."

"Mother looked half smiling, at the poor little pucker'd affair, and then she caught father's hand.

"Father!" she cried, "Do look. I believe the child has cut up your wedding vest!"

"I think that was the last time I meddled with things I had no right to touch. It was a lesson I could not easily forget."

"And did her whip you hard once?" asked Katie, her solemn little face full of interest.

"No," said grandmother. "Three whippings would not have hurt as much as the look in mother's eyes, when she said, 'Oh, little daughter, how could you?' But if you will bring Katie again, dear, I will try to think of a more cheerful story."

"Oh, a cheerfuller one might not be true," said Elizabeth. "And anyway, it isn't so very sad, when you didn't get punished."

And as they paused outside, to put on their wraps in the hall, grandmother heard Katie say, "I would a whipping get hard once, if it was me, and I meddled already in closets."

"But it was such a dreadful thing to happen that it just cured her of meddling forever, without the whipping," said Elizabeth. "And that was much pleasanter—for grandmother. And I guess it's easy enough to see the mortal in that story, Katie Strauss."

Advice to a Young Man.

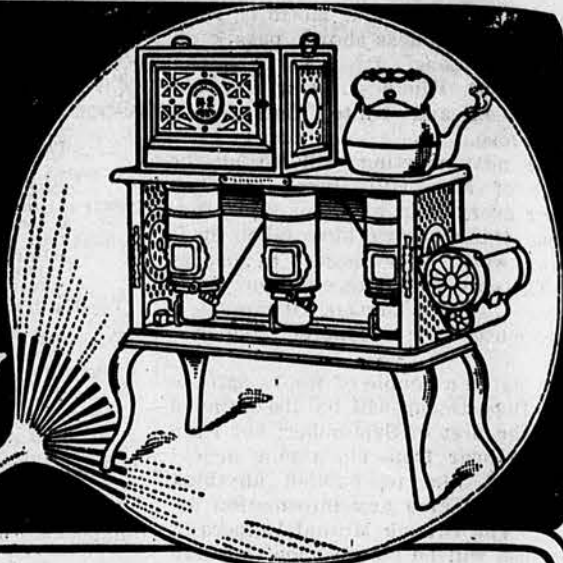
Remember, my son, you have to work. Whether you handle a pick or a pen, a wheelbarrow or a set of books, digging ditches or editing a paper, ringing an auction bell or writing funny things, you must work. If you look around, you will see that the men who are the most able to live the rest of their days without work are the men who work the hardest. Don't be afraid of killing yourself with overwork. It is beyond your power to do that on the sunny side of thirty. They die sometimes but it is because they quit work at 6 p. m. and don't get home until 2 a. m. It's the interval that kills, my son. The work gives you an appetite for your meals; it lends solidity to your slumbers; it gives you a perfect and grateful appreciation of a holiday.

There are young men who do not work, but the world is not proud of them. It does not know their names even; it simply speaks of them as "old So-and-so's boy," nobody likes them; the great busy world doesn't know they are there. So find out what you want to be and do, and take off your coat and make a dust in the world. The busier you are the less harm you will be likely to get into, the sweeter will be your sleep, the brighter and happier your holidays, and the better satisfied will the world be with you.—Robert Burdett.

Never charge up delinquencies of your friends, but be sure to credit all their excellencies.

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

Keep Cool; Save Money



For cool cooking, less work and least fuel-expense use a

NEW PERFECTION Wick Blue Flame Oil Cook-Stove

—the ideal stove for summer. Does everything that any other kind of stove will do. Any degree of heat instantly. Made in three sizes and fully warranted. At your dealer's, or write our nearest agency for descriptive circular.



The **Rayo Lamp** is the best lamp for all-round household use. Made of brass throughout and beautifully nickeled. Perfectly constructed; absolutely safe; unexcelled in light-giving power; an ornament to any room. Every lamp warranted. If not at your dealer's, write to our nearest agency.

STANDARD OIL COMPANY
(Incorporated)

Now



is the time
to make your

CALIFORNIA TRIP \$50

THERE AND BACK

One way through Portland \$12.50 extra. Tickets on sale every day from June 8th to 15th, and June 22 to July 5, 1907. Tickets good in either Pullman Palace or Tourist Sleeping Cars.

By taking a tourist sleeper, passengers can materially reduce the cost of a California tour without sacrificing the slightest degree of comfort.

Tourist Sleeping Cars run daily to California

VIA

UNION PACIFIC

For reservations and all information
Inquire of

F. A. Lewis

J. C. Fulton

City Ticket Agent.
525 Kansas Avenue.

OR, Depot Agent.

ALFALFA SEED

less. Write for prices.

McBETH & KINNISON,

Kansas grown. Highest award at St. Louis for best alfalfa seed in world. Crop of 1906. Also Cane and Millet. Macaroni Wheat and other Field Seeds in carload lots. Garden City, Kans.

Lost Strayed or Stolen—One Cow

That is about what happens each year for the man who owns five cows and does not use a Tubular cream separator. He loses in cream more than the price of a good cow. The more cows he owns the greater the loss. This is a fact on which Agricultural Colleges, Dairy Experts and the best Dairy men all agree, and so do you if you use a Tubular. If not, it's high time you



did. You can't afford to lose the price of one or more cows each year—there's no reason why you should. Get a Tubular and get more and better cream out of the milk; save time and labor and have warm sweet skimmed milk for the calves. Don't buy some cheap rattle-trap thing called a separator; that won't do any good. You need a real skimmer that does perfect work; skims clean, thick or thin, hot or cold; runs easy; simple in construction; easily understood. That's the Tubular and there is but one Tubular, the Sharples Tubular. Don't you want our little book "Business Dairyman," and our Catalog A-165 both free? A postal will bring them.

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

come. That's because they were never fed right all winter.

Prepare for summer drouth by sowing some sweet corn broadcast, or sorghum will do, though not so good until late in the fall. Sow something to feed during fly time.

Teach the boys to be gentle with the cows. Stoning and chasing will not do for the cows, and it's mighty bad on the boy.

Cows eat lots of salt when out of spring grass. Let them have it.

"To weigh is the only way" to judge the milk yield of a cow. Let this weigh heavily on your mind.

Other things being equal a large cow will produce milk and butter-fat cheaper than a small cow.

A good cure for "lost cud" is a half pail of bran night and morning and a good pasture all day.

Some cows are foolish enough to try to fill the pail when it makes them skin and bones to do it. Help such cows by feeding them heavily.

To what extent are cows the result of habit? That's a problem yet unsolved.

You've heard of chickens "going light" haven't you? Can't you find some cows that have that trouble this spring? It isn't due to disease, either.

This and next month is the cow's paradise—provided that pasture is ample. If it isn't it's your fault.

The dilution separator separates the farmer from his hard earned cash. It continues as long as operated.—Successful Farming.

The Cause and Remedy for Defects in Butter.

In referring to defects in the sample of dairy butter shown in a recent contest, Prof. J. C. Kendall, of North Carolina, pointed out the causes which produced them, and suggested some simple methods for preventing them. The Professor says:

"At a recent butter contest where butter was entered as much to find out its faults and how to remedy them as to compete for the prizes that were offered for different classes of dairy butter there were found some very good examples of common defects in butter. One otherwise very fine sample of butter entered in the farm dairy class when cut down through the middle of the cake by the judges was found to be streaked. Light streaks running crosswise and extending about two-thirds of the width of the cake gave to the exposed surface a very bad appearance. This is a common occurrence with farm butter, and results from the method of manufacture employed on the farm. It is caused by the action of the salt on the casein of the buttermilk left in the butter. The salt precipitates the casein, and then when the butter is worked it is rolled out in layers of white streaks, as was found in the above sample.

"To remedy this defect the buttermilk must be thoroughly removed from the butter, which can be accom-

plished best by stopping churning when the butter grains are about the size of a half pea and allowing the buttermilk to thoroughly drain from the butter. Then wash the butter only enough to rinse off what buttermilk still adheres to the butter grains. Care should be taken not to use too large an amount of water nor permit the butter to stand in the wash water, as it tends to produce a tasteless butter. If this plan is pursued there will be no trouble from streaked butter.

"Another and more common trouble with country butter is to find small, irregular white specks distributed all through the butter. This trouble is usually accompanied by a strong taste and the butter very soon goes 'off flavor.' The unsightly condition is caused by the cream becoming too ripe or not keeping the cream well mixed during ripening. The dry particles of cream or casein, which have become hard by the action of too much acid, appear mixed with the butter-fat as little angular white pieces. This trouble is more common during warm weather, when the cream ripens so quickly, and perhaps canning days

or some other days interfere with the churning day, with the usual result that the churning has to wait. If this is the case, then hold the cream at a low temperature to retard the ripening and there will be no ill effects. When the cream is too sour it should be carefully strained through cheesecloth. This will remove part of the trouble. Stopping the churn when the grains are small will permit some more of those little white pieces to be washed out, but the best and surest way to avoid this trouble is to prevent the cream from passing beyond the "danger point," which is that stage of ripening when the whey or water begins to separate from the cream. For a mildly acid, good-flavored butter do not let it pass beyond the point where the cream has a smooth, glistening appearance and is of a uniformly thickened condition.

"Another trouble often found in butter and a good example of which was shown at this butter contest, was a more or less evenly mottled appearance in one of the samples cut by the judges. This is caused by the unequal distribution of the salt, and can be

IMPORTANT CROP FACTS

Farmers generally in almost every section are very "blue" over the unfavorable grain crop outlook at this time, but there is one crop that they need not feel doubtful about and which becomes of more than usual importance to them by reason of the uncertain outlook as to other crops, and this is the MILK CROP, which continues month in and month out and of which it has well been said "the harvest never ends."

There is nothing doubtful about the outlook for the MILK CROP. Dairy product prices have been high and promise to continue so. The uncertainty about other crops makes it all the more important to make the most of the one that is sure. There is only one way to make the most of it, to be certain of recovering all the butter-fat with the least effort and under the most favorable conditions, and that is with the help of

A DE LAVAL CREAM SEPARATOR

Every farmer with milk to separate needs a separator, and there never was a better time to make the purchase of one. There can hardly be good reason to defer putting in a machine or replacing a poor one with a DE LAVAL. Machines are made in all sizes to meet all conditions, and may either be bought for cash or on such liberal terms that they will actually save their own cost while you are paying for them.

Catalogues with full particulars is to be had for the asking.

THE DE LAVAL SEPARATOR CO.

Randolph & Canal Sts.,
CHICAGO.
1213-1215 Filbert Street,
PHILADELPHIA.
Drum & Sacramento,
SAN FRANCISCO.

General Offices:
74 CORTLANDT STREET,
NEW YORK.

173-177 William Street,
MONTREAL
14 & 16 Princess Street,
WINNIPEG.
107 First Street,
PORTLAND, ORE.

Dairy Interests

Some Dairy Rules.

Professor Carlyle, the well-known dairy authority in the Colorado Agricultural College, has laid down some rules for work to be followed in the dairy business of that State that should be followed by every one who keeps a cow. These rules are:

The solids of cow's milk are manufactured from the feeds the cow eats. Good milk, cream, and butter can be produced when cows have a liberal supply of clean, wholesome, and nutritious food. Do not feed cows on any feed not pure, wholesome, and well flavored enough to be manufactured directly into butter.

Cow's milk is about 86 per cent water. See to it that your cows have free access to pure running water at all times in summer. Stagnant pools and dirty or impure water can not be made into good milk, cream, or butter by either cows or men.

Cows should be milked regularly, and as nearly as possible by the same persons and at the same hour each night and morning.

Cows' udders should be brushed clean, and rubbed with a damp, coarse towel before milking. Be as particular with your hands, your clothing, and the udders of the cows in milking as you would have your wife be in making bread.

See to it that all pails, pans, strainers, cans, and separators are thoroughly scalded with boiling water after being used each time. Boiling water should only be used after washing, and is the only agent that will keep dairy utensils clean and sweet.

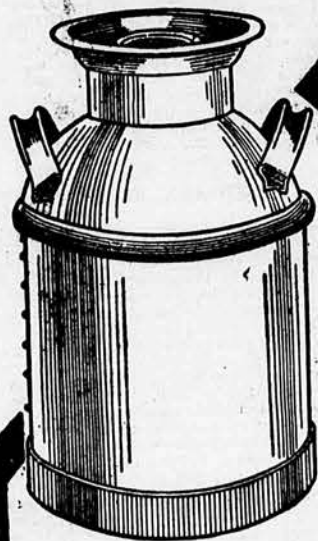
Milk should be strained into cans and removed from the stable and separated as soon as possible after milking. Never allow milk or cream to stand exposed in cow stables. Milk or cream absorbs odors quickly.

After separating cream, it should be cooled quickly to 50° and kept at that temperature till sent to the creamery.

Dairy Notes.

The "cow with the crumpled horn" is getting to be a relic. Dehorning is the modern method. Breeding the horns off is the next step and will some day be the only step.

Too many cows have to spend all the month of May getting in good shape to do good work in June. Some never get in good condition until flies



The Secret of Successful Farm Dairying

We have a book, which we have prepared with much time and expense, entitled "THE SECRET OF SUCCESSFUL DAIRYING, or Cream Shippers' Guide." We believe this is the best book ever issued for instructing the farmer about shipping cream. It tells how to do less work and make more money in this branch of farming: it tells why we don't have receiving stations and local agents, and why these stations are failures; it tells of the benefit of shipping direct to the creamery, how it is economical and profitable; it tells how we want to co-operate with you and how we make payments; it tells you from what distance you can ship cream and the kind of cans to ship it in; what kind of cream to ship; in fact, it tells everything the farmer wants to know about this business. We had a man who got one of these books last year say it was worth \$100 to him. We believe it is worth that much to every farmer. If you are neglecting your farm by not developing the dairy business, this book will tell you what you are losing. It won't cost you but one cent for postal card to ask for copy of this book. We are sure you would be willing to pay 100 times more to get a copy if you were to lose the one we send you.

Send to us right away and get posted on this valuable information so that you can begin shipping cream to us and get your dairy department on the best paying basis.

Blue Valley Creamery Company,
St. Joseph, Mo.

overcome by a second working of the butter. Add the proper amount of salt to the butter, work it about a third as much as you would if the working was to be done at once, then set aside for a few hours until the salt has dissolved thoroughly, and then complete the working. This will overcome the trouble, but necessitates a little extra labor. Brine salting will be found effective in overcoming this defect, but only a mild salting can be given to butter by this method."

The Green Bug Problem in Texas. (Continued from page 707.)

las and Denison and over a lateral area of about fifty to one hundred miles east and west of a line connecting these two cities. It should be remembered that the green bug alone was not altogether responsible for entire damage, because the wheat louse (*Siphocoryne avenae*) did nearly as much damage as the green bug in some localities.

Let us consider the life history of this insect. The green bug is a louse belonging to the same family as the cotton louse, plum louse, apple louse, cabbage louse, etc., but it is a distinct from all of these in minute structure and in general habits. This insect reproduces by giving birth to its young, alive, and without the presence of the male. A single individual can attain its growth and begin to reproduce in eight days from the time of birth. Under favorable conditions it can reproduce at the rate of 10 young each for a period of twelve days. After having given birth to from 100 to 125 young it loses its vitality and dies. I have said before that we know little about this insect and its life history, and its food plants throughout the year are still largely unknown. We do know, however, the life history of several related forms and by comparing this insect with these forms we conclude that at some time males must be produced, also true females. After the mating of these sexes the females lay true eggs. This egg stage will enable the insect to be carried through unfavorable seasons. This stage, however, is yet unknown, but to any one familiar with animal breeding it would at once appear that were there no intervention of the male it would result in degeneration of the race. If this stage appears during the year we confidently expect it to be the most practicable stage in which to eradicate this pest. This stage we are expecting soon after harvest time, and for that reason we have established a green bug laboratory at Plano with Mr. E. S. Tucker, of the University of Kansas, in charge.

The question arises: Should we fail to find such a stage, or, if found, it should not be available for the purpose of eradicating the pest, what are we to do?

I say, help the department of entomology of the Texas Agricultural and Mechanical College to successfully develop its policy of modern bug fighting. We have long ago realized that the methods employed against insect pests in Northern States are not ordinarily adaptable to bug-fighting in Texas. We must have something that is more rapid, more thorough, and more universal.

We have studied this problem carefully for several years and have come to some definite conclusions. Most of our agricultural insect pests have important natural enemies. In the case of the melon louse and the green bug the natural enemies are of great importance. However, the natural enemies can not be depended on under natural conditions at critical times. In the laboratory at College Station we have carefully studied these parasitic and predaceous enemies. We have reared them through their entire life history. We know how many eggs they lay and how long they require to become full grown. We know how many green bugs they eat daily, and we have determined at what temperature they hibernate successfully. From this knowledge we are enabled to place them in cold storage and keep them alive for many months. From this laboratory, quantities of the enemies can be sent out to sections of the

wheat belt where they become scarce through a lack of food supply. The green bug's appearance, as every wheat-grower well knows, fluctuates. It appears every fifth, sixth, or seventh year, while the two years following the most destructive one, generally have sporadic outbreaks scattered over the wheat belt. If it is thought that the green bug is absent during those years when no damage is noticeable, it is a mistake. The green bug is with us during all that time but in the presence of natural enemies the pest is held at bay. When through a lack of plant-lice food the natural enemies die the green bug is given an opportunity for development, and owing to its wonderful powers of reproduction, the pest soon sweeps over the wheat belt. Our prediction of a green-bug outbreak last fall was based on the absence of natural enemies in the territory where the trouble generally begins.

It must be remembered that the natural enemies are only effective in fall and spring. The green bug does not hibernate, but breeds at temperatures ranging from 30° to 90° F.

The winged specimens are not the real parents. These are the individuals that disperse the infestation over new territory, thus insuring the preservation of the race. If these winged forms were absent, the bugs would have to die when the food plants have been devoured.

The pest is an enemy to wheat and oats. Indian corn, Kafir-corn, and sorghum, although attacked, are not desired food plants and will be attacked only where the wheat and oats is harvested or on other account becomes unavailable.

The procedure toward eradication of the green bug is being followed along three distinct lines:

(1) By ascertaining its life history, thus learning the different stages through which it passes. The most important is the sexual stage and this is unknown thus far. We confidently expect this to be determined at the green bug laboratory at Plano, and it is reasonably certain that it will be the stage in which it can be most thoroughly and most economically controlled.

(2) By providing conditions whereby natural enemies, so abundant in Texas, can control it. That this can be done has been demonstrated at the Agricultural and Mechanical College green bug laboratory. It has also been shown on a large scale in Kansas by the work of the Kansas State University.

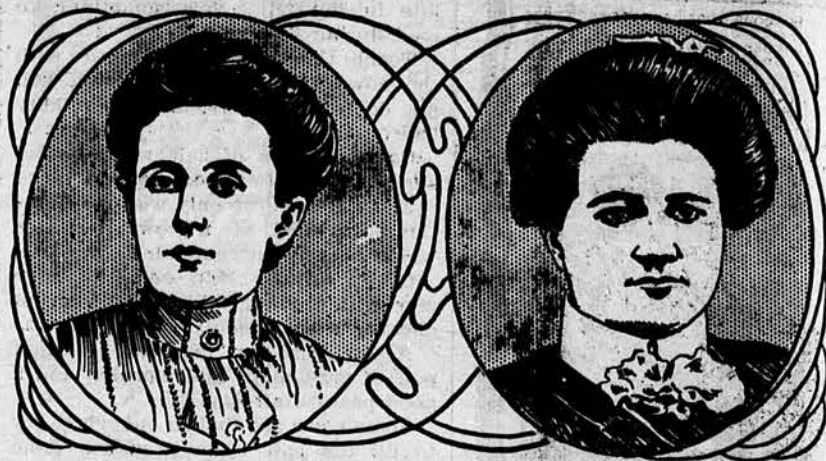
(3) By mechanical devices. All the mechanical devices such as rolling, harrowing, dusting, and steaming infested fields have been tried and found impracticable.

The editor takes great pleasure in presenting the above discussion of the green bug problem from the Texas point of view. No doubt it will be profitable for Kansas and Oklahoma to cooperate with Texas in a war of extermination against this pest. True, the problem in Texas is somewhat different from that presented in Oklahoma and Kansas. By the time the green bugs have reached destructive numbers in Kansas, the parasite, *Lysiphlebus* sp., will generally have been produced in such numbers in the country south of us that we can import it in sufficient quantities to speedily overcome the green bugs. The cost of this work under scientific direction will be so ridiculously small compared with the value of the crop at stake that it need not be considered.

But, if the problem can be handled by the joint action of the three States, or in a vigorous and comprehensive way by the U. S. Department of Agriculture, such handling should minimize the expense and practically eliminate the damage.

THE KANSAS FARMER congratulates the State of Texas on having secured the services of Prof. E. S. Tucker, formerly of the Kansas State University, to take charge of its green bug field laboratory. Professor Tucker will be remembered as having contributed several most valuable papers to the columns of THE KANSAS FARMER during the last two or three years.

WORKING WOMEN, WHAT THEY SHOULD KNOW



MRS. SADIE ABBOTT

MRS. PREE MCKITTRICK

Women for the most part spend their lives at home, and it is these women who are willing and ambitious that their homes shall be kept neat and pretty, their children well dressed and tidy, who do their own cooking, sweeping, dusting and often washing, ironing and sewing for the entire family, who call for our sympathy.

Truly the work of such a woman is "never done" and is it any wonder that she breaks down at the end of a few years, the back begins to ache, there is a displacement, inflammation or ulceration of the abdominal organs, a female weakness is brought on, and the struggle of that wife and mother to continue her duties is pitiful.

Lydia E. Pinkham's Vegetable Compound, made from native roots and herbs, is the exact medicine a woman needs whose strength is overtaxed. It keeps the feminine organs in a strong and healthy condition. In preparing for childbirth and recuperating therefrom it is most efficient. It carries a woman safely through the change of life and in making her strong and well assists her to be a good wife and mother.

Mrs. Sadie Abbott, of Jeannette, Pa., writes:
Dear Mrs. Pinkham—
"I suffered severely with pain every month and also a pain in my left side. My doctor prescribed for me but did me no good; a friend advised Lydia E. Pinkham's Vegetable Compound and I wrote you in regard to my condition. I followed your advice and am a perfectly well woman. The pains have all disappeared and I cannot recommend your medicine too highly."

Lydia E. Pinkham's Vegetable Compound Succeeds Where Others Fail.

Mrs. Pree McKittrick, of La Farge, Wis., writes:

Dear Mrs. Pinkham:

"For six years I suffered from female weakness. I was so irregular that I would go from three weeks to six months, so I thought I would give Lydia E. Pinkham's Vegetable Compound a trial.
"Now I am once more well and can do my work without a pain. Any one who wishes, can write to me and I will answer all letters gladly."

Women should remember that Lydia E. Pinkham's Vegetable Compound holds the record for the greatest number of actual cures of female ills. Every suffering woman in the United States is asked to accept the following invitation: It is free, will bring you health and may save your life.

Mrs. Pinkham's Invitation to Women.

Women suffering from any form of female weakness are invited to promptly communicate with Mrs. Pinkham, at Lynn, Mass. From the symptoms given, the trouble may be located and the quickest and surest way of recovery advised. Out of her vast volume of experience in treating female ills Mrs. Pinkham probably has the very knowledge that will help your case. Her advice is free and always helpful.

TIMELY NEW BOOKS

Books which every Farmer and Gardener should own.

BEAN CULTURE

By Glenn C. Sevey, B. S. A practical treatise on the production and marketing of beans. It includes the manner of growth, soils and fertilizers adapted, best varieties, seed selection and breeding, planting, harvesting, insects and fungous pests, composition and feeding value; with a special chapter on markets by Albert W. Fulton. A practical book for the grower and student alike. Illustrated. 144 pages. 5x7 inches. Cloth.....\$0.50.

CELERY CULTURE

By W. R. Beattie. A practical guide for beginners and a standard reference of great interest to persons already engaged in celery growing. It contains many illustrations giving a clear conception of the practical side of celery culture. The work is complete in every detail, from sowing a few seeds in a window-box in the house for early plants, to the handling and marketing of celery in carload lots. Fully illustrated. 150 pages. 5x7 inches. Cloth.....\$0.50.

SQUABS FOR PROFIT

By William E. Rice and William E. Cox. This is the most complete and exhaustive work of the kind ever published on squab raising. It is not a book of second-hand references, but contains the hard earned experiences of the authors. Every detail of their methods of selecting, breeding, feeding, killing and marketing squabs is given in plain, simple language, with numerous illustrations, all taken from the home plant of Mr. Rice, in New Jersey. The plans and specifications for building, etc., are as complete as an expert architect could make them. Illustrated. 150 pages. 5x7 inches. Cloth.....\$0.50.

Address all orders to

THE KANSAS FARMER COMPANY
TOPEKA, KANS.

THE BOOK OF ALFALFA

History, Cultivation and Merits. Its Uses as a Forage and Fertilizer. The appearance of the Hon. F. D. Coburn's little book on Alfalfa a few years ago has been a profit revelation to thousands of farmers throughout the country and the increasing demand for still more information on the subject has induced the author to prepare the present volume which is, by far, the most authoritative, complete and valuable work on this forage crop published anywhere. It is printed on fine paper and illustrated with many full-page photographs that were taken with the special view of their relation to the text. 336 pages. 6½x9 inches. Bound in cloth, with gold stamping. It is unquestionably the handsomest agricultural reference book that has ever been issued. Price, postpaid.....\$2.00.

DWARF FRUIT TREES

By F. A. Waugh. This interesting book describes in detail the several varieties of dwarf fruit trees, their propagation, planting, pruning, care and general management. Where there is a limited amount of ground to be devoted to orchard purposes, and where quick results are desired, this book will meet with a warm welcome. Illustrated. 112 pages. 5x7 inches. Cloth.....\$0.50.

TOMATO CULTURE

By Will W. Tracy. The author has rounded up in this book the most complete account of tomato culture in all its phases that has ever been gotten together. It is no second-hand work of reference, but a complete story of the practical experiences of the best posted expert on tomatoes in the world. No gardener or farmer can afford to be without the book. Whether grown for home use or commercial purposes, the reader has here suggestions and information nowhere else available. Illustrated. 150 pages. 5x7 inches. Cloth.....\$0.50.

SEEDS

Field, Garden, Flower. Fresh and reliable. Do not disappoint. Have you tried them? If not, try them now. My catalog tells about them. WRITE FOR IT, and we will send you a FREE TRIAL. High Grade Clover, Alfalfa, Timothy, Millet, Corn, Seed Oats, Seed Corn. Tell me your wants. I can fill them and please you. T. LEE ADAMS, 417 Walnut St., Kansas City, Mo.

When writing Advertisers please mention this paper

The Poultry Yard

CONDUCTED BY THOMAS OWEN.

Preserving Eggs.

I read an article in THE KANSAS FARMER some time ago in regard to preserving eggs in water-glass. As I have forgotten the recipe will you please state how much to use in 3, 5, or 10 gallons of water? About what does it cost per gallon, and is it against the pure food law? Can I use a barrel or galvanized tub to pack the eggs in, or does it require stone jars? Please state all you can so I may pack a state and see how they will do. What is a good remedy for chicken roup?

W. O. PHILLIPS.

Rooks County.

Answer.—Water-glass is silicate of soda and comes in dry or liquid form. It is better to buy it in the liquid state. It can be bought at from 60 to 80 cents per gallon, depending on the drug store you buy it from, and also on the quantity you purchase. The directions for use are: Use pure water that has been thoroughly boiled and cooled. To each quart of water-glass use ten quarts of water, or if in gallons, ten gallons of water to one gallon of water-glass. Pack the eggs in a jar and pour the solution over them. The solution may be prepared, placed in the jar and fresh eggs added from time to time until the jar is filled, but care must be taken that all the eggs should be covered with the solution at all times. Keep the jars in a cool place, with covers over them, to prevent evaporation. A cool cellar is a good place in which to keep the eggs. If the eggs are kept in too warm a place, the silicate will be deposited at the bottom of the jars, and the eggs will not be properly protected. Do not wash the eggs before packing, for by so doing you will injure their keeping qualities. For packing, use only perfectly fresh eggs, for eggs that have already become stale can not be preserved by this or any other method, and one stale egg will spoil the whole batch. Barrels or galvanized tubs can be used, provided they are perfectly clean, for any odor that may be in a barrel is liable to be communicated to the eggs. We do not believe there would be any conflict with the pure food laws, for the solution does not amalgamate with egg, but simply acts as a preservative, the same as a sealed can does to preserve fruit.

One of the best remedies for roup is Conkey's Roup Cure. We can have it sent to you for 50 cents per box, post-paid.

Poultry Notes.

It is very important that all young chicks should be kept dry. If allowed to get wet they are almost certain to get chilled and in many cases thorough chilling proves fatal. It is even dangerous to let them out too early in the morning while the dew is on the grass.

The best time to sell anything is when you are offered a good price for it. The selling of chickens is no exception to the rule. If you are offered a good price for your chicks when they are at a broiler size, from a pound to two pounds in weight, then is the proper time to sell them. You can thus dispose of all the young cockerels and it is a much better way to dispose of them than to try and caponize them and wait several months before selling them. To be a success at caponizing one must be an expert at the business, besides near to a market that pays high prices for such products. Keep the earliest and best looking pullets for winter layers and next year's breeders, but sell all the young cockerels that you do not especially need.

From this time on one of the principal things to combat in the poultry houses will be lice, and as "an ounce of prevention is better than a pound of cure," the sooner you get to doing some of the preventing the better. Whitewashing the poultry houses is

absolutely necessary, preventing and exterminating parasitic and other insect pests, and at the same time acting as a disinfectant. In all houses where poultry is kept, its value can not be overestimated, and where used frequently, insect life is practically extinct. Make as follows: Mix unslaked lime and water till they are of a consistency of gruel; then add a small quantity of carbolic acid to exterminate any insects that may exist, and finally a little soft soap, to make the whitewash stick. This mixture is then ready for application to the building and should be applied evenly with a brush, and well worked into all corners and crevices, thus leaving no untouched space for insect life to board.

After they are once well started, goslings grow very rapidly and if well cared for until they are well feathered they can be turned into a pasture and will look out for themselves until cold weather sets in. They are great foragers and eat great quantities of grass and other green stuff.

It is important that turkeys should have a wide range. The birds are natives of the wild forest and they have not fully been weaned from a desire to roam over a large section of country. In raising turkeys on the farm provision should be made to allow them to run at will all over the place. If you have alfalfa-fields for them to roam in, it will be all the better for both the alfalfa and the turkeys, for they will rid it of the grasshoppers and bugs that prey upon it. Wide range insures a variety of food and that is important in the production of poult. The birds will become sickly if fed only one kind of food, while they will make rapid growth if given a variety, notwithstanding the fact that the different feeds may contain practically the same food elements. Then a wide range, in a great measure, prevents the increase of parasites. There is nothing that hinders the growth of the poult more than parasites, which increase very rapidly when the young turkeys are confined to small areas. In giving the birds a wide range, it should be remembered, however, that they can not stand an excessive amount of dampness. They should not be given their liberty while there is a heavy dew on the ground or immediately after a rain.

There have been two Perrys commanders not without honor in our navy. They were sons of Capt. Christopher Raymond Perry of the Continental navy, says the New York Sun, who put his five sons in the navy of the United States, where all won distinction. Commodore Oliver Hazard Perry was the victor of the engagement on Lake Erie. His brother, Matthew Calbraith Perry, was the Commodore Perry of the expedition which opened Japan to the world. August Belmont, the elder, married the daughter of this Commodore Perry. His sons, Perry, August, and Oliver Hazard Perry, are, therefore, grandsons of one Commodore Perry and grandnephews of the other.

13 WEEKS FREE Or 15 Months for Only \$1.00

The "old reliable" KANSAS FARMER, established in 1883, the best genuine agricultural weekly paper in the West. It solves the problems for the busy farmer. It helps and interests every member of the farmer's family. It has 12 regular departments. Its contributors are expert authorities. It contains 24 to 32 pages each week. Sent on trial three months free. Test it. Clip the coupon below.

THE KANSAS FARMER CO.,
Topeka, Kans.

I accept your trial offer to new subscribers to send me THE KANSAS FARMER three months free. At the end of the three months I will either send \$1.00 for a full year from that date or write you to stop the paper, and you are to make no charge for the three months' trial.

Name.....

P. O.....



White Plymouth Rocks

STOCK AND EGGS FOR SALE.

My first range consists of 100 large white hens weighing from 8½ to 10½ pounds, headed by eight large, white cockerels from my first pen. Stock—100 eggs \$10; 15 eggs \$2. Second range—100 eggs \$5; 15 eggs \$1. First pen—100 eggs \$25; 15 eggs \$5. Second pen—100 eggs \$15; 15 eggs \$3. You run no risk when you buy eggs of me. Satisfaction guaranteed.

G. R. Davis,

VALLEY CENTER, KANSAS

The Talbott Poultry Farm

Breeders of the best in the world. Strain of Buff, Brown and White Leghorns, Barred Rocks and White Wyandottes. My birds have won at Chicago, Galveston, Mexico, Illinois, Fremont, Hebron and the Poultry Show of Nebraska, and they will win for you. See old birds for sale at \$1.00 each; also 1,000 youngsters at \$1.00 and up.

W. R. TALBOTT, Prop.

Hebron, Nebr.

PLYMOUTH ROCKS.

WHITE PLYMOUTH ROCKS—Exclusively pure white birds, farm range. Eggs \$1 per 15, \$1.75 per 30. R. J. Yust, Route 2, Sylvia, Kans.

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

Eggs for Hatching

White Holland turkey eggs, \$1.50 per sitting of 10. Mammoth Pekin ducks eggs, \$1 per sitting of 11. Barred Plymouth Rock eggs, \$1 per sitting of 15. 3 sittings of either of the duck or chicken eggs for \$2. Carefully packed and safe arrival guaranteed.

A. F. Huse, Manhattan, Kans.

White Plymouth Rocks EXCLUSIVELY

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

THOMAS OWEN, Sta. B. Topeka, Kans.

BLACK LANGSHANS.

American Central Poultry Plant

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

Also Bronze Turkeys, small Pekin ducks, Rouan ducks, Toulouse geese and peacocks. Each variety kept on separate tract of farm. Write for free twenty-page catalogue giving prices on stock and eggs. Address

J. A. LOVETTE, Prop., MULLINVILLE, KANS.

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

BUFF ORPINGTONS.

S. C. BUFF ORPINGTON EGGS—Extra fine cock, headed by an 11-pound cockerel. 15 eggs \$1.25. C. H. Owen, Lawrence, Kans.

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

BUFF ORPINGTONS

State Show First

Prize Winners.....

Breeders, eggs and baby chicks. 32 page illustrated catalog free. Prices for June, July and August reduced one-half. S. C. BUFF LEGHORNS. Eggs now, \$4 per 100. Scotch Collie and Fox Terrier dogs.

W. H. MAXWELL,

1996 McVicar Ave. Topeka, Kans.

LEGHORNS.

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

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

ROSE COMB BROWN LEGHORN EGGS—15 for \$1.50, 30 for \$2.50, 100 for \$4. Mrs. Jehn Holzhay, Bendena, Kans.

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

STANDARD BRED SINGLE COMB BUFF LEGHORNS—Headed by first prize pen. Chicago show 1903 and took six first prizes and first pen at Newton 1904. Eggs \$3 for 15. S. Perkins, 301 East First Street, Newton, Kans.

White Leghorn Hens

I have a few good B. C. and S. C. White Leghorn hens one year old. Will close them out at \$5 per dozen. W. S. YOUNG, Larned, Kans.

WYANDOTTES.

INCUBATOR EGGS from prize-winning White Rocks and White Wyandottes at \$5 per 100. W. L. Bates, Topeka, Kans.

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

WHITE WYANDOTTE EGGS from choice matings; \$1.50 per fifteen. S. W. Arts, Larned, 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.

NEOSHO POULTRY YARDS—Rose Comb R. I. Red eggs the balance of the season \$1.00 per 15. This year's breeders for sale after June 10. J. W. Swartz, Lock Box G, Americus, Kans.

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

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.

Rose Comb Rhode Island Red eggs for sale. Circular free. G. D. Williams, Inman, Kans.

BRAHMAS.

Light Brahma Chickens

Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kas., Route 4

Minorcas.

Exhibition S. C. Minorcas, the world's greatest laying strain. Beautiful in plumage, tall and comb. Eggs, \$1.50 per 15; baby chicks, \$1; hens, \$2 illustrated circulars 5c. Address George Kern, 317 Osage St., Leavenworth, Kans.

SCOTCH COLLIES.

Scotch Collies.—Fine pups, royally bred; sired by grandson of Ormakirk Gallopis; two months old; from \$5 to \$10. A. P. Chacey, Route 5, N. Topeka, Kans.

MISCELLANEOUS.

MAGIC EGG KEEPER—Keeps eggs twelve months fresh as new laid eggs. Cost 1c dozen, trial pkg 10c. Eureka Co., Enville, Tenn.

CHICK-O-FOR-BABY CHICKS—"Just the feed and all they need." A balanced ration of pure grains, seeds, bone, etc. Ask your dealer or write to headquarters. D. O. Coe, 119 East Sixth Street, Topeka, Kans.

AGENTS—To sell and advertise our Poultry Compound; \$5 weekly; rig furnished. Franklin Manufacturing Company, Norwalk, Ohio.

FOR SALE—White Plymouth Rock eggs. Stock from two excellent strains, careful selection for years. 1907 eggs hatching as high as 95 per cent strong chicks. After May 10th, \$3 per hundred, \$1.75 for 50. Address Elizabeth M. Willett, Lawrence, Kans., Route 1.

TOPEKA POULTRY BREEDERS

The fifty members of the Topeka Poultry Breeders Association raise all varieties of pure-bred poultry. Transactions of members guaranteed. Send for list of breeders and varieties.

W. H. MAXWELL, Secretary,
1990 McVicar Ave. Topeka, Kansas



Horticulture

The National Lumber Manufacturers' Association Supports the National Forest Policy.

That the condition of the timber supply of the United States has become a source of anxiety to representative lumbermen of the country was emphasized in practical talks on the subject at the annual session of the National Lumber Manufacturers' Association held recently at the Jamestown Exposition.

A striking feature of the proceedings was that at this meeting of manufacturers of lumber, representing a body of men whose annual production aggregates 14 of the 34 billion board feet of saw-timber yearly cut in the United States, close attention was given to the question of the future supply of timber. One of the strongest papers read reviewed the whole situation carefully and showed the importance of preserving forest resources by conservative lumbering or applying the principles of forestry. The following resolutions were adopted, endorsing heartily the policy of the Federal Government in creating National forests throughout the country, and pledging the support of the association to the movement generally:

"Resolved, That the National Lumber Manufacturers' Association in convention assembled, hereby voices its hearty approval of the policy of our Federal Government in establishing large forest reservations in various sections of our land, and would urge the Congress to give liberal consideration to such policy.

"Whereas, In view of our rapidly decreasing forest resources, it is of the greatest importance that an accurate determination be made of the kind and quantity of standing timber in the United States in order to secure a sound basis for plans for forest management and utilization.

"Resolved, That we respectfully request the Forest Service of the Bureau of Census to undertake this work at the earliest convenience, and that we hereby pledge our heartiest cooperation to all efforts of the Government to secure information concerning any of the interests of the lumber industry."

It must be accepted as a sentiment significant of the general attitude of the industry directly affected by the policy of the Government in reserving timber where resolutions endorsing the policy are unanimously adopted by an association of lumbermen which annually cuts more than 40 per cent of the lumber produced in the United States.

Renewing Old Strawberry Beds.

The strawberry season will soon be over and decisions will have to be made as to the future of the fields or beds. There is quite a difference of opinion among growers as to the expediency of renewing old beds and again, as to how long it pays to maintain an old bed. Formerly there were many advocates of annual beds—allowing the plants to fruit but once and then turning them under, and putting out a fresh bed each spring; but now the drift of opinion is in favor of the renewal of beds at least for a second year and some claim to have renewed or built them up for three or four years one well known grower announcing that he has beds eleven years old that are still bearing with undiminished vigor.

The fact cannot be contested that it is cheaper to renew an old bed than to plant a new one, and, besides, the land produces a crop each year while the spring set bed returns nothing until the second year. The fertility of the ground must be maintained, however, by annual top-dressings of manure or fertilizers.

The simplest way of renewing old beds is to bar off the rows with a small plow leaving the remaining plants on a narrow ridge. These are now thinned out by running across the rows with some implement that

will tear out a third or half of them. The middles are next leveled and fined with whatever tools the farmer may possess that he thinks best for the purpose. After a period of rest and recuperation following the strain of bearing, the plants will again begin to put out runners and fill the row as full as before with young plants that will bear a full crop the next year.

These directions are simple but practical difficulties sometimes appear that complicate the work—such as dry seasons, when the ground becomes very hard and consequently it is not easy to bar off the rows smoothly and the plants dry out and sometimes die before the middles can be worked down. The best way to renew beds of not over half an acre is to do all the work with a hoe. This does not take as long as might be supposed. Stretch a line over the middle of a row and shear away all plants on both sides so as to leave a single row of plants; then remove the line and cut across the row, leaving a plant every few inches. Rake up and remove all the rejected plants and then either cultivate with a light tool or simply loosen the soil along the row of plants with a hoe. Keep them well cultivated for it is important to start the plants into a second growth as quickly as possible. A fertilizer that will not interfere with cultivation should be applied along the sides of the rows.—L. R. Johnson in Inland Farmer.

Expositions and State Fairs.

American Royal—Kansas City, Mo., October 14-19. T. J. Wornall, secretary.

Blue Grass Fair—Lexington, Ky., September 9-13. Jouett Shouse, secretary.

Canada National Exhibition—Toronto, Ont., August 26-September 9. Dr. J. O. Orr, secretary.

Illinois State Fair—Springfield, September 27-October 5. W. G. Garrard, secretary.

Interstate Fair—LaCrosse, Wis., September 23-28. C. S. VanAuken, secretary.

Interstate Fair, Sioux City, Ia., September 9-14. F. L. Wirick, secretary.

Iowa State Fair—Des Moines, August 23-30. J. C. Simpson, secretary.

Indiana State Fair—Indianapolis, September 9-13. Chas. Downing, secretary.

International Live Stock Exposition—Chicago, Ill., November 30-December 7. B. H. Heide, general superintendent.

Kansas State Fair—Hutchinson, September 16-21. A. L. Sponsler, secretary.

Kentucky State Fair—Louisville, September 16-21. R. E. Hughes, secretary.

Michigan State Fair—Detroit, August 29-September 6. J. H. Butterfield, secretary.

Minnesota State Fair—Hamline, September 2-7. E. W. Randall, secretary.

Interstate Fair and Exposition—Elm Ridge, Kansas City, Mo., September 23-October 5 inclusive. Dr. J. S. Gardner, president, Dwight Building, Kansas City, Mo.

Missouri State Fair—Sedalia, October 7-12. J. R. Rippey, secretary.

Nebraska State Fair—Lincoln, August 30-September 6. W. R. Mellor, secretary.

New York State Fair—Syracuse, September 9-14. S. C. Shaver, Albany, secretary.

North Carolina State Fair—Raleigh, October 14-19. Jos. S. Pough, secretary.

Ohio State Fair—Columbus, September 2-6. T. L. Calvert, secretary.

Oregon State Fair—Salem, September 16-21. F. A. Welch, secretary.

South Dakota State Fair—Huron, September 9-14. Geo. M. McEathron, secretary.

Tennessee State Fair—Nashville, September 23-30. J. W. Russworm, secretary.

Texas State Fair—Dallas, October 19-November 3. Sidney Smith, secretary.

Washington State Fair—North Yakima, September 23-28. Geo. E. Graham, secretary.

West Virginia State Fair—Wheeling, September 9-13. Geo. Hook, secretary.

Wisconsin State Fair—Milwaukee, September 9-14. John M. True, secretary.

West Michigan State Fair—Grand Rapids, Mich., September 9-13. F. D. Conger, secretary.

Kansas Fairs in 1907.

Following is a list of fairs to be held in Kansas in 1907, their dates, locations and secretaries, as reported to the State Board of Agriculture and compiled by Secretary F. D. Coburn:

Allen County Agricultural Society: Frank E. Smith, secretary, Iola; August 27-30.

Barton County Fair Association: W. P. Feder, secretary, Great Bend; September 10-13.

Brown County—The Hiawatha Fair Association: J. D. Weltmer, secretary, Hiawatha; September 3-6.

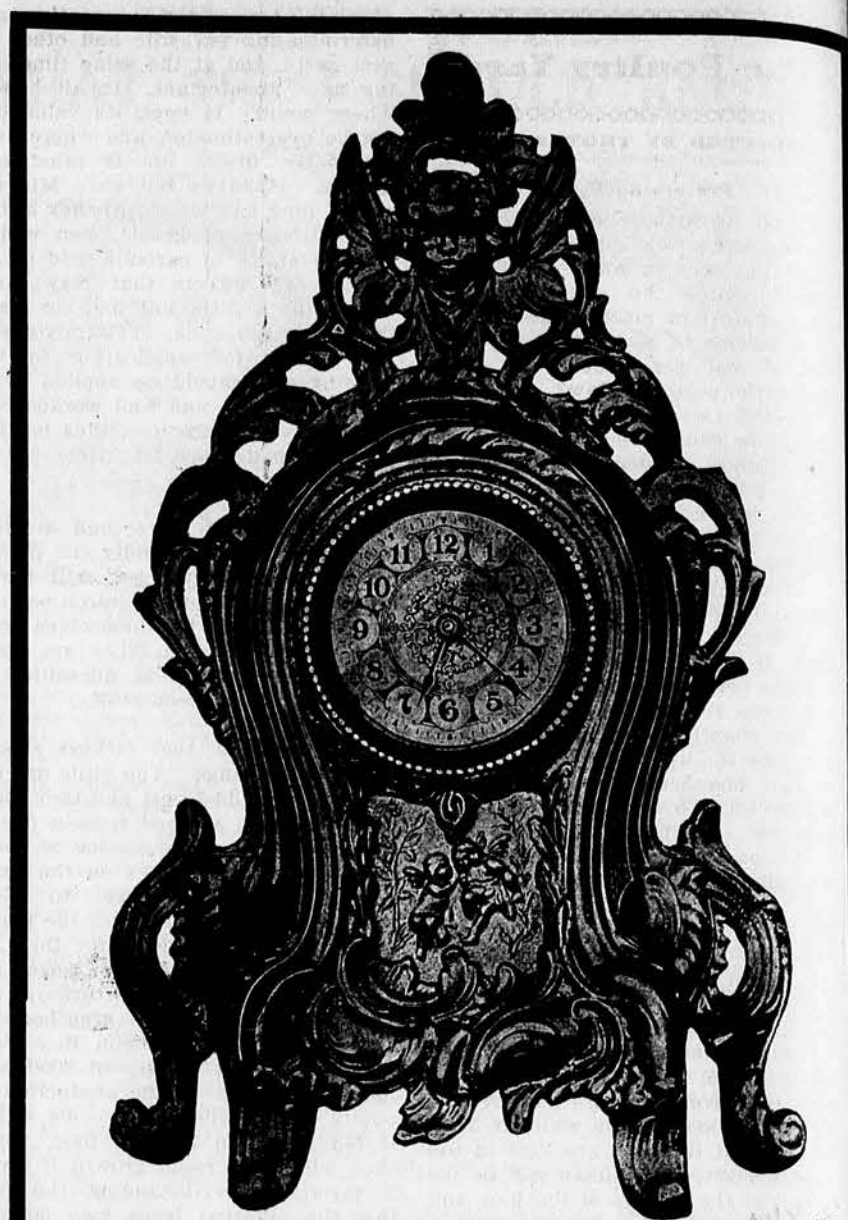
Butler County Fair Association: W. F. Benson, secretary, Eldorado; August 27-31.

Butler County—Douglass Agricultural Society: C. R. Alger, secretary, Douglass; September 12-14.

Chautauqua County—Hewins Park and Fair Association: W. M. Jones, secretary, Cedarvale.

Clay County Fair Association: Walter Puckey, secretary, Clay Center; September 3-6.

Clay County—Wakefield Agricultural



A Gold Plated Clock

Fine American movement guaranteed for 10 years. A printed guarantee with every clock. Made of solid metal and plated with 24 kt. gold. A beautiful and useful household timepiece. Given with one year's subscription to THE KANSAS FARMER for only \$2.50

The Kansas Farmer Co., Topeka, Kansas

Society: Eugene Elkins, secretary, Wakefield; October 2-4.

Cloud County Fair Association: W. L. McCarty, secretary, Concordia; September 24-27.

Coffey County Agricultural Fair Association: S. D. Weaver, secretary, Burlington; September 9-13.

Cowley County Agricultural and Live-Stock Association: Frank W. Sidle, secretary, Winfield; October 1-4.

Cowley County—Eastern Cowley County Fair: W. A. Bowden, secretary, Burden; September.

Dickinson County Fair Association: H. C. Wann, secretary, Abilene; October 2-4.

Elk County Agricultural Fair Association: E. B. Place, secretary, Grenola; September 25-27.

Finney County Agricultural Society: A. H. Warner, secretary, Garden City.

Ford County Agricultural Society: Nicholas Mayrath, secretary, Dodge City; September 4-7.

Franklin County Agricultural Society: Carey M. Porter, secretary, Ottawa; September 3-7.

Greenwood County Fair Association: C. H. Weiser, secretary, Eureka; August 20-23.

Harper County—Anthony Fair Association: L. G. Jennings, secretary, Anthony; August 6-9.

Harvey County Agricultural Society: J. C. Mack, secretary, Newton; September 24-27.

Jefferson County Fair Association: Frank Leach, secretary, Oskaloosa.

Linn County Fair Association: P. S. Thorne, secretary, Mound City; October 1-4.

Marshall County Fair Association: R. W. Hemphill, secretary, Marysville; October 1-4.

McPherson County Agricultural Fair Association: H. A. Rowland, secretary; September 2-7.

Miami County Agricultural and Mechanical Fair Association: Geo. R. Reynolds, secretary, Paola; October 1-4.

Mitchell County Agricultural Association: Ira N. Tice, secretary, Beloit; October 2-5.

Montgomery County—Coffeyville Fair and Park Association: A. E. Holloway, secretary, Coffeyville; August 13-16.

Nemaha County Fair Association: Chas. H. Herold, secretary, Seneca; September 11-13.

Neosho County—Chanute Fair and Improvement Association: A. E. Timpane, secretary, Chanute; August 20-24.

Ness County Agricultural Association: Thos. Rineley, secretary, Ness City; September 11-13.

Ness County—Utica Fair and Agricultural Association: R. C. Webster, Jr., secretary, Utica.

Norton County Agricultural Association: M. F. Garrity, secretary, Norton; August 27-30.

It's Easy

to hatch them, but it takes the proper feed to raise them. Otto Weiss Chick Feed is scientifically prepared by a poultryman of 25 years experience. A trial will soon convince.



Products for stock and poultry as feed and conditioner. Guarantee everything we sell. Free circular.

The Otto Weiss Alfalfa Stock Food Co.

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

THOS. OWEN, 2801 West Euclid Avenue, Ind. Phone 6306, is Topeka agent for these goods.

VARICOCELE

A Safe, Painless, Permanent Cure GUARANTEED 30 years' experience. No money accepted until patient is well. CONSULTATION and valuable BOOK FREE, by mail or at office.

DR. C. M. COE, 915 Walnut St. Kansas City, Mo.

Osage County Fair Association: F. E. Burke, secretary, Burlingame; September 3-6.

Reno County—Central Kansas Fair Association: A. L. Sponsler, secretary, Hutchinson; September 16-21.

Republic County Agricultural Association: W. R. Wells, secretary, Belleville; September 10-13.

Rice County Agricultural and Live-Stock Association: F. L. Goodson, secretary, Sterling; September 10-14.

Riley County Agricultural Association—W. E. Craig, secretary, Riley; August 20-23.

Rooks County Fair Association: E. L. Williams, secretary, Stockton; September 10-13.

Saline County Agricultural, Horticultural, and Mechanical Association: B. B. Stimmel, Jr., secretary, Salina; September 24-27.

Shawnee County—Kansas Exposition Company: R. T. Kreipe, secretary, Topeka; September 9-14.

Sheridan County Agricultural Association: Miles Gray, secretary, Hoxie; September 3-6.

Smith County Fair Association: H. C. Smith, secretary, Smith Center; August 20-23.

Stafford County Fair Association: G. W. Grandy, secretary, St. John; August 28-30.

Wilson County—Fredonia Agricultural Association: V. L. Polson, secretary, Fredonia; August 6-9.

Weather Bulletin

Following is the weekly weather bulletin for the Kansas Weather Service for the week ending June 11, 1907, prepared by T. B. Jennings, Station Director.

DATA FOR THE WEEK.

	Temperature.			Precipitation.		
	Maximum.	Minimum.	Mean.	Departure from normal.	Total.	Departure from normal.
WESTERN DIVISION.						
Ashland.	95	38	68	.....	0.85	87
Colby.	93	42	66	.....	0.72	75
*Dodge City.	91	46	68	—3	0.14	—0.66
Dresden.	89	45	66	.....	0.78	79
Farnsworth.	92	40	66	.....	0.47	75
Hill City.	92	41	66	.....	1.20	70
Hoxie.	92	38	66	.....	0.61	86
Liberal.	95	44	72	.....	0.90	71
Norton.	90	42	66	.....	0.64	91
Scott.	95	40	68	.....	0.28	95
Wakeney.	91	40	67	.....	0.40	77
Wallace.	92	41	66	.....	0.51	78
Division.	95	38	67	.....	0.67	80

MIDDLE DIVISION.

Alton.	91	44	68	...	0.63	.....	...
Chapman.	87	44	66	...	2.02	.....	...
Clay Center.	90	43	66	...	0.42	.....	...
Coldwater.	94	48	69	...	0.32	.....	79	
Concordia.	90	46	66	...	0.12	.....	57	
Cunningham.	92	44	70	...	0.15	.....	92	
El Dorado.	97	44	67	...	0.01	.....	57	
Ellinwood.	90	43	68	...	0.16	.....	...
Ellsworth.	90	41	68	...	0.24	.....	...
Enterprise.	94	44	69	...	3.16	.....	64	
Hanover.	95	44	65	...	1.19	.....	67	
Hays.	90	40	66	...	0.34	.....	67	
Hays.	90	44	68	...	0.34	.....	75	
Hutchinson.	92	44	68	...	T	.....	...
Larned.	91	38	66	...	0.10	.....	...
Larned.	91	43	68	...	0.15	.....	79	
McPherson.	92	45	67	...	0	.....	58	
Minneapolis.	88	45	66	...	1.48	.....	82	
Norwich.	92	50	70	...	0.05	.....	88	
Pratt.	95	43	68	...	0.06	.....	75	
Republic.	85	36	64	...	0.71	.....	...
Rome.	95	44	...	...	0.05	.....	...
Russell.	87	45	66	...	0.90	.....	83	
Wichita.	93	50	71	...	0.04	.....	73	
Winfield.	96	47	72	...	0	.....	...
Division.	97	36	66	...	0.53	.....	...

EASTERN DIVISION.

*Atchison.	84	45	66	...	1.07	.....	67	
Baker.	82	43	64	...	0.91	.....	29	
Burlington.	93	45	70	...	0.08	.....	...
Cottonwood Falls.	92	43	68	...	0.04	.....	...
Emporia.	90	48	68	...	0.16	.....	79	
Escondido.	94	49	66	...	1.91	.....	...
Eureka.	...	...	...	...	0.16	.....	57	
Fall River.	93	46	71	...	0.30	.....	71	
Fort Scott.	94	43	67	...	0.48	.....	57	
Frankfort.	88	42	64	...	0.67	.....	71	
Garnett.	97	45	69	...	0.21	.....	63	
Grenola.	96	48	71	...	0.19	.....	82	
Independence.	101	48	74	...	0.01	.....	57	
Iola.	94	48	70	...	0.29	.....	75	
Kansas City.	86	52	66	...	0.80	.....	79	
Lawrence.	86	53	68	...	0.03	.....	43	
Lebo.	92	48	69	...	0.24	.....	...
Madison.	94	46	...	...	0.37	.....	...
Manhattan.	92	42	66	...	0.04	.....	...
Moran.	96	44	70	...	0.83	.....	...
Olathe.	85	45	63	...	1.86	.....	...
Osage City.	90	45	65	...	0	.....	70	
Oswego.	92	47	71	...	2.16	.....	85	
Ottawa.	90	47	66	...	1.75	.....	57	
Paola.	89	44	...	...	0	.....	66	
Pleasanton.	91	47	68	...	T	.....	71	
Sedan.	96	48	70	...	0.53	.....	...
Topeka.	88	50	67	...	0.48	.....	66	
Toronto.	96	43	...	...	0	.....	...
Valley Falls.	83	44	64	...	0.54	.....	71	
Division.	101	42	68	...	0.56	.....	...
State.	101	36	67	...	0.56	.....	...

DATA FOR STATE BY WEEKS.

Week Ending	...	...	...	...	...	...	...	...
April 6.	87	18	54	...	0.12	.....	...	...
April 13.	93	15	49	...	0.06	.....	...	...
April 20.	80	12	44	...	0.15	.....	...	...
April 27.	69	16	51	...	0.27	.....	...	...
May 4.	88	5	44	...	1.42	.....	...	...
May 11.	90	30	54	...	0.65	.....	...	...
May 18.	95	17	62	...	0.46	.....	...	...
May 25.	87	37	70	...	0.13	.....	...	...
June 1.	83	20	55	...	0.68	.....	...	...
June 8.	101	36	67	...	0.56	.....	...	...

*Too late to use in means.

GENERAL SUMMARY.

The mean temperature for the week was below the normal deficiency was much less than that of the preceding week. In the southern counties the mean temperature was 1° below the normal, while in the northern counties it was from 4° to 5° below the normal. The maximum temperatures generally occurred on the 7th, and the minimum temperatures generally on the 2nd. About two days were cloudy and three days clear during the week. Rain occurred on three days in the northern counties and on one day in the southern, tho in a few counties no rain was recorded. This has been the most favorable week this season.

EASTERN DIVISION.

Allen.—The temperature was only one degree below normal. A maximum of 94° was recorded on the 7th and a minimum of 48° on the 2d. There was much sunshine, but only 0.01 of an inch of rainfall. The drouth was relieved, however, by over an inch of rain on the 9th.

Kansas Farmer Crop Report.

EASTERN DIVISION.

Atchison: The week was warm with a total rainfall of 1.07 inches covering two days. The warmer nights and the increased moisture have benefited all crops.
Brown: Warmer nights and a two-days' rain have put crops in a much better condition.
Chase: The weather this week has been favorable to crops.
Chautauqua: The week has been warmer and, though dry, closes with strong prospects for rain.
Coffey: Fine growing week; the week for corn this spring.
Elk: Good growing weather this week.
Lyon: Wheat in good condition and will yield a good crop; it is beginning to head. Corn, though late, is in excellent condition but needs warm weather.
Montgomery: Warmer weather and fair rains are doing good work in the fields. Early wheat about ready to harvest.
Osage: Warmer weather with nearly two inches of rain this week benefited wheat and greatly helped the corn.
Shawnee: Warmer nights and Thursday's rain were decidedly beneficial to corn, which has improved greatly. First crop of alfalfa ready to cut.

MIDDLE DIVISION.

Barton: Warmer nights, and a slow, drizzling rain Wednesday have been of much assistance to crops, which are now doing well.
Butler: The warmer weather this week was very beneficial to corn and wheat, and the week closes with strong indications of rain.
Cowley: A good growing week for all crops.
Dickinson: The great rains of the 6th and 7th caused washouts and will necessitate some replanting. Crops are in much better condition.
Ellis: Light showers, of little benefit to crops. Strong winds continue.
Harper: Early wheat harvest will begin next week.
Kingman: The weather was much warmer this week, and closes with good prospects of rain.
McPherson: Much oat ground has been put to corn which needs rain to germinate. The week closes with good promise of rain.
Osborne: Good showers on five days, and warmer weather, greatly benefited all crops.
Pawnee: Very dry. All crops in need of moisture. Weather mostly clear. However, the week closes with strong indications of rain.
Phillips: This has been a very seasonable week although nights were a little cool for corn. Nice showers on

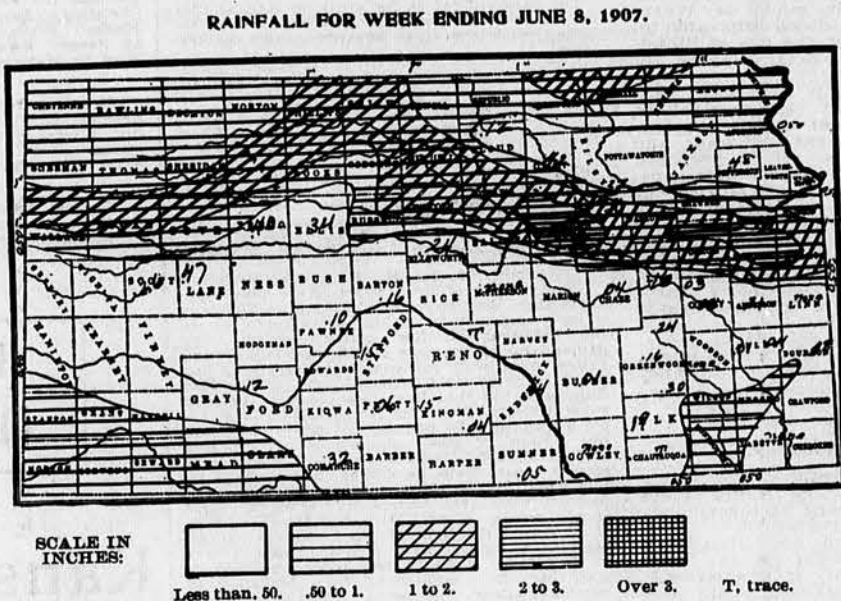
three days and traces of rain on three more, and the ground is in fine condition.
Pratt: Light showers fell on 5th and 6th but more is needed.
Reno: Warmer weather has benefited corn but rain is needed. Good promise of rain at close of week.
Republic: Good rains on three days this week, with warmer weather, have benefited all crops.
Rice: The week has been warm—good for growing corn. Wheat is in fair condition.
Russell: Good rains on four days have put crops in very good condition.
Sumner: Good growing weather. Corn very small for time of year. Alfalfa beginning to boom.
Washington: Warm weather and frequent showers have benefited corn, gardens and wheat. All crops doing well.
WESTERN DIVISION.
Clark: Warm weather, with good rains on the 5th and 6th. Crops are doing well.
Decatur: Frequent showers and warmer weather beneficial to all crops.
Lane: Light showers on the 3d, 4th, and 6th were quite beneficial to crops. More needed soon.
Norton: Good week for all kinds of growing crops, with nice growing showers. Work progressing finely.
Scott: Showers on four nights—

days clear. Pasture very good. Crops growing well.
Wallace: Showers on three days. Good growing weather for crops.

A Chance to Make Money.

Since making my big hit in a Mexican gold mine, I get so many letters that I can not answer them, and ask you to publish this statement:
I believe any man or woman can make big money, with absolute certainty by buying stock in any of the rich operating mines, because Mexico has the richest mines in the world, and the Mexican laws do not permit fraudulent mining schemes. Be sure to invest in a mine that is actively operated, and owned by a reliable company, whose officers and directors are known to be men of integrity and honesty; a few dollars invested with such a company now, will bring you thousands in a year. The Pittsburg-Oaxaca Mining Company, Block 1034, Pittsburg, Pa., is absolutely reliable, and through them I made over \$20,000 in less than a year, having only a few dollars to begin with. A friend of mine invested \$10, and is now getting a dividend of \$5 a month. You do not have to go to Mexico; write to the above company, and you can rely implicitly on the information you receive.

JACK MARSTON.



The Berkshire Record.
Secretary F.S. Springer of the American Berkshire Association, Springfield, Ill., announces that Volume 27 of the American Berkshire Record is now being delivered. It contains pedigrees from 95001 to 100000, together with a list of transfers of animals sold whose pedigrees appear in previous volumes, indices to breeders, animals, and owners, rules of entry, etc. The book is free to members. Non-members pay \$1 for it.

Shorthorn Record Volume 68.
Secretary Groves announces the issuance of Volume 68 of the American Shorthorn Herd Book, containing the pedigrees of bulls numbered from 263115 to 268186, both inclusive; also pedigrees of 6,843 cows. This volume is now ready for general distribution, the price to non-members of the association being \$3 at this office or \$3.30 prepaid. Volume 69 is in the hands of the printer and current receipts of pedigrees are being filed for Volume 70. For copies of the herd-book address Secretary John W. Groves, Union Stock Yards, Chicago, Ill.

Official Recognition Given by the Bureau of Animal Industry to Standard Stock Dip.

The Bureau of Animal Industry at Washington under date of May 27, advised the Standard Stock Food Company, of Omaha, Neb., manufacturers of Standard Stock Dip, that inspectors of the Bureau will be notified that Standard Stock Dip may be used in official dipping under the provisions of Regulation 33 of Order 143, provided the containers are properly labeled.

This ruling of the Bureau of Animal Industry is based on a result of a laboratory examination, made at Washington, of Standard Stock Dip, and includes permission for the use of Standard Stock Dip in official dipping for sheep scab.

Standard Stock Dip has been used very largely the past year throughout the West, giving most satisfactory results on hogs, sheep, cattle, horses, and all domestic animals. It is prepared full strength and is exceedingly uniform in its composition. It is also put up full measure, every claimed gallon is a full gallon. The manufacturers claim it to be the most economical dip on the market and have recently issued an offer of \$1,000 reward to any person who shall first prove that every statement they make concerning their dip is not absolutely correct.

We know our readers will be interested in the Standard Stock Dip booklet which will be sent free if you mention this paper and address the Standard Stock Food Co., Omaha, Neb.

New Seed Company.

It is pretty well assumed that Iowa will soon boast of "The Henry Field Seed Company." It will be incorporated, and capitalized at \$100,000.

This is a development necessitated by the remarkable increase of the seed business of Mr. Field, of Shenandoah, Iowa. Five years ago Mr. Field was practically unknown. His business has doubled and trebled during these five years and now he stands among the foremost seedsmen of the United States.

The new company will take charge of the business July 1. Close friends, employees, and others who know Mr. Field's honesty have purchased stock and will assist him in making the company an active dividend-payer.

A new fire-proof seed-house to cost between \$25,000 and \$30,000 is to be built. This will be two stories high, 300 feet long and 50 feet wide. It will be equipped with the newest and improved seed and corn machinery. The grounds will be laid out by Mr. Field. Walks, drives, and lawns will be beautified by shade trees, handsome flowers and flowering shrubs.

Altogether this will be a seed-house second to none in the West. Its reputation has been built on the solid foundation of honesty and trade-confidence; by giving thousands of seed-buyers all over the country exactly what has satisfied them.

Kansas City Grain Market.

Kansas City, Mo., June 10, 1907.
Although the cattle supply last week was 45,000 head, which is very liberal for this season, the market held up strong all week, with the exception of a slight decline on medium to common she stuff, for which the outlet is small at this time. Packers were forced to fill all orders with steers, and the good demand enabled salesmen to secure advances of 15¢ to 25¢ before the close of the week. Independent buyers took all the desirable cows and heifers at about steady prices, but the lower grades were slow to move. Bulls remained firm, calves advanced a quarter, and stockers and feeders sold strong, under the stimulation of packer buyers taking all that had any kill to them, although demand from the country is small. The supply to-day is 9,000 head, including nearly 3,000 grass cattle in the quarantine division. The proportion of fed steers is not as heavy to-day as it was last week, and the market on steers is strong to 10¢ higher, cows steady to strong. A string of branded steers sold at \$6.20 and numerous sales were at \$5.75 to \$6.10, including steers weighing under 1,200 pounds at \$6.10, and bulk of steers at \$5.50 and upwards. Nebraska steers that sold at \$5.90 last week brought \$6.10 to-day. Good heifers sell at \$4.25 to \$5.50, cows \$3.50 to \$4.65, bulls \$3.40 to \$5, veals \$5.07, stockers \$3.75 to \$5, feeders \$4.25 to \$5.15. Packers still refuse to buy cows and heifers except subject to post mortem inspection, and the country is standing solid against this proposition. There are only a few cases of defection, as the largest packing house here was able to secure only 85 head of she stuff all last week.

More than 81,000 hogs were received here last week, yet the market made only a net loss of 6¢ per cwt. The run is 10,000 to-day, market weak to 6¢ lower, buyers counting on heavy supplies to-morrow. A moderate supply later in the week will result in higher prices, as all hands are buying freely, one packing house here importing 2,000 hogs from another market last week, in addition to the large number secured here. Light hogs sold to-day at \$6.10 to \$6.20, medium weights \$6.05 to \$6.15, heavy hogs \$6.00 to \$6.10, pigs generally in without sorting, stags and rough cows out at 75¢ to \$1 per cwt. less than loads. Quality runs good, and no reports of shortage are received from any locality.

Mutton supplies are fairly liberal, 32,000 last

week, but not so many are in sight for this week. Run is only 3,000 to-day, market strong at the \$26.30 advance made last week. Native spring lambs sell at \$3.75 to \$4.40, clipped ewes \$4.00 to \$4.25, wethers \$4.40 to \$4.75, yearlings \$7.25 to \$7.50, goats \$4.75 to \$5, and everything quickly cleaned up at the high prices.

J. A. RICKART.

Kansas City Live Stock Market.

Kansas City, Mo., June 10, 1907.
Receipts of wheat in Kansas City to-day were 110 cars; Saturday's inspections were 60 cars. Some cash wheat sold 101½¢ lower after the close Saturday. Prices were unchanged to 1¢ lower. The sales were: Hard Wheat—No. 2, 1 car 98¢, 1 car 96¢, 1 car 95¢, 1 car 94½¢, 7 cars 94¢, 5 cars 93½¢, nominally 92¢ to 91¢. No. 3, 1 car corn mixed 92½¢, 5 cars 92¢, 5 cars 91½¢, nominally 89¢ to 88¢; No. 4, 1 bulkhead car 88¢, 1 car 87¢, 2 cars 85¢, 1 car 81¢, 2 cars 80¢, nominally 75¢ to 73¢; rejected, 1 car 74¢, 1 car 71¢, 2 cars 70¢, 1 car 60¢; no grade, 1 car live weevil 78¢, 2 cars live weevil 70¢. Soft Wheat—No. 2, 2 cars 98¢, 1 car like sample 97¢; No. 3, 2 cars 95¢, 1 car 94¢, nominally 92¢ to 91¢; No. 4, 1 bulkhead car 85¢, 2, 1 bulkhead car 84¢, 2, 1 bulkhead car 83¢. Durum Wheat—No. 2, 1 bulkhead car 85¢; No. 3, 1 bulkhead car 84¢.

Receipts of corn were 126 cars; Saturday's inspections were 72 cars. Prices were unchanged to ¼¢ lower. The sales were: No. 2 white, 18 cars 50½¢; No. 3 white, 1 car 50½¢, 2 cars 50¢; No. 4 white, 1 car 49½¢, No grade, 1 car 47½¢; No. 2 mixed, 12 cars 50¢, 8 cars 49½¢; No. 3 mixed, 2 cars 50¢, 14 cars 49½¢; 1 car 49½¢; No. 4 mixed, 1 car 48¢; No. 2 yellow, 5 cars 50½¢; No. 3 yellow, 6 cars 50¢. Receipts of oats were 17 cars; Saturday's inspections were 18 cars. Prices were unchanged. The sales were: No. 2 white, 1 car 46½¢, 1 car 46¼¢, nominally 46¼¢ to 47¢; No. 3 white, 1 car 46¼¢, 4 cars 46¢, 2 cars color 46¢, 2 cars color 45½¢; No. 2 mixed, nominally 45½¢ to 46¼¢; No. 3 mixed, nominally 45½¢ to 46¼¢. Rye, 74¢ to 77¢; flaxseed, \$1.14 to \$1.15; kafir-corn, \$1.05 to \$1.15 per cwt.; bran, 97¢ to 98¢ per cwt.; shorts, \$1.01 to \$1.05 per cwt.; corn chop, \$1.01 to \$1.02 per cwt.; millet-seed, \$1.65 to \$1.75 per cwt.; cover-seed, \$7.00 to \$11.50 per cwt.

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

	Open.	High.	Low.	to-day.	Sat'day.
WHEAT.					
July.	91½	92	90	90½	91½
Sept.	92½	93½	91	91½	92½
Dec.	94½	94½	92½	92½	93½
CORN.					
July.	49½	49½	49½	49½	49½
Sept.	49½	49½	49½	49½	49½
Dec.	46½	46½	46½	46½	46½

South St. Joseph Live Stock Market.

South St. Joseph, Mo., June 10, 1907.
Local receipts of cattle to-day were more moderate than they have been coming on Mondays of late, and included a big proportion of steers but comparatively few cows or heifers. The demand for steers were active, and last week's prices were well sustained on everything offered. The receipts included some of the best finished cattle that have been here in the past several weeks. Fully fat branded Nebraska cattle averaging 1,355 pounds sold up to \$6.20, and big strings of good, smooth, weighty steers sold at \$5.60 to \$6. There were not as many light weight steers here as during middle days of last week, and in the absence of she stock, the packers were free buyers of them at fully steady prices. Good 1,100 pound steers sold up to \$5.60 and the bulk of light weights ranged between \$4.90 to \$5.40 with common light killers at \$4.25 to \$4.50. Only a few cows and heifers were well wanted, and these were unloaded to outside traders, the regular commission trade refusing to sell she stock to the packers under the post mortem rule. There was practically no trade in stockers and feeders, prices being nominally steady.

With a liberal supply of hogs in sight at the leading markets the trade opened slow with packers bidding 5¢ to 10¢ lower than Saturday prices. It was well on towards noon before business got to going but after that the supply was quickly consumed at around 5¢ under closing prices of last week. The bulk of hogs sold at \$5.10 to \$5.20 and the latter figure was the outside price. Range of prices continues quite wide with the slaughtering trade favoring nice smooth hogs of 225 pounds average and under. The only sheep and lambs arriving to-day were direct to the packers from outside markets. The trade continues nominally good with quotations steady. Now that the feed lots are about emptied it is likely that receipts will run light for some time, as grassers are now ready to move in large volume.

WARRICK.

Special Want Column

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

CATTLE.

FOR Red Polled bulls or heifers, write to Otto Young, Utica, Ness County, Kans.

DOUBLE-STANDARD POOLED DURHAM BULLS—Extra good quality, well bred, good color. Address C. M. Albright, Overbrook, Kans.

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

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

SEEDS AND PLANTS.

SEEDS FOR LATE SOWING.

FOR SALE—Cov-pens, Cane, Mita, Buckwheat, Milo Maize, Kafir corn, Rape, Turnip, and all other seeds. Ask for prices, Kansas Seed House, The Barteldes Seed Co., Lawrence, Kans.

SWEET POTATO PLANTS—8 varieties; also tomatoes and cabbage, \$1.75 per 1,000; also bean thousand, 20 cents per hundred. All varieties. Have the famous Southern potato "Pumpkin Yam." Prompt shipment. W. A. Schreier & Son, Argonia, Kans.

PLANTS—Cabbage. Early Jersey Wakefield, Winnigstad, Early Summer Flat Dutch and Succession 20 cents per hundred, \$1.50 per thousand. Sweet Potato, Yellow Jersey, and Yellow Nansemond 20 cents per hundred; \$1.50 per thousand; Red Jersey, Red Bermuda, Black Spanish Southern Queen, 25 cents per hundred, \$1.75 per thousand. F. P. Bude & Son, Ind. Phone 4008, North Topeka, Kansas.

Trees At bargain prices. List now ready tells all about our cleaning-up sale of choice trees. Send for it to-day. Easterly Nursery Co., Cleveland, Ohio.

BEEF PRODUCTION

The New Book on Cattle Feeding

By PROF. HERBERT W. MUMFORD, of ILLINOIS

The subject is presented clearly and concisely from the cattle feeders' standpoint. The conclusions of experience and experiment have been combined in a such a way as to present the latest thought on all phases of cattle feeding. It is authoritative and accurate. Professor Mumford is recognized as the leading authority on the feeding of beef cattle. His book is packed from cover to cover with practical facts and suggestions that will save the cattle feeder many times the cost of the book.

CONTENTS.

The following contents of "Beef Production" will give a very clear idea of the subjects discussed in the book.

Part I.—Fattening Cattle for the Market.

The Relation of Cattle Feeding to Soil Fertility, General Consideration in Buying Feeding Cattle, The Various Grades of Feeding Cattle Described, Incidental Expenses in the Cattle Feeding Business, Freight and Commission, Labor, Some Business Phases of Cattle Feeding—Relation of Cost of Feeds to Profits; Relation of Initial Weights of Feeding Cattle to Profits on Finished Beef; Relation of Cost Price of Various Grades of Feeding Cattle to Profits, Wintering Stockers and Feeders, Getting Cattle on Feed, Feeds Used for Fattening Cattle—Their Preparation and Use, Corn, Cotton Seed Meal, Ground Linseed Cake or Oil Meal, Oats, Molasses, Roughages; Chaffing Hay and Mixing with Grain, Baby Beef, Selecting Cattle for, and the Possibilities of, the Short Feed, Making Christmas Beef, Care of Cattle on Feed; Quietness; Number of Times to Feed; Number of Cattle Together; Salting; Dehorning Stockers and Feeders, How and Why, Length of the Feeding Period, Feeding Cattle for the Home Market, Kind and Care of Pastures for Beef Production, Fitting Steers for Exhibition, Advantages of Demand for Prime Cattle; Demand for Baby Beef; Demand for Export Cattle other than at Christmas; Demand for Common Cattle, Marketable Condition—When is a Steer Ready for Market; Preparing Cattle for Shipment, Lice; Mange; Ringworm; Lump-jaw; Blackleg; Texas Fever, Equipment for Cattle Feeding—Building and Shelter; Feed Bunks; The Paved Lot, How to Make and Use It; The Self-feeder, How to Make and Use It.

Part II.—Breeding Beef Cattle for the Market.

Breeding for Beef; Selection and Use of Bulls; Management of the Bull; Care and Management of the Herd; When to Have Calves Dropped; Age to Breed Heifers; Summer Feeding, Winter Feeding of Beef Breeding Cows, Cost of Rearing Calves Allowed to Nurse Their Dams, The Dual Purpose Cow and Beef Production, Skim Milk Calves; How to Raise a Skim Milk Calf.

Part III.—Elementary Principles of Stock-Feeding.

General Discussion; Composition of Food-stuffs; Digestion and Growth, Compounding of Rations; Feeding Standards for Beef Cattle; Computing a "Balanced Ration." Completely indexed so that any subject can be easily found.

Price \$1.50, Postage Paid.

Beef Production
AND
Kansas Farmer \$2.00

Address

Kansas Farmer Company
TOPEKA, KANSAS

SWINE.

POLAND-CHINAS—A special lot of fall boars, smooth, stretchy kind, large bone, of approved breeding at bottom rock prices, 150 to 225 pounds. A. F. Wright, Valley Center, Kans.

FOR SALE—A fine Berkshire herd boar, 18 months old. Best breeding in the land. G. D. Williams, Route 8, Inman Kans.

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

HORSES AND MULES.

\$150 OFFERED

for each mule colt bred from J. Sheneman's Jack, ¾ mile east and 2 miles south of Agricola. P. S. G.

FOR SALE—A Jack Daw stallion, dam Happy Heir; 4 years old, color dark brown and nicely marked. Good disposition, stylish driver, time 2:38. Can be seen for a short time at 523 Van Buren St., Topeka, or write F. R. Baker. A bargain.

PERCHERON STALLION FOR SALE—Owing to circumstances I am forced to sell my 7-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 2500 pounds. Mr. and Mrs. Henry Schrader Wauneta, Kans.

FOR SALE—Registered Percheron stallion colt, yearling. Dapple black. American-born but has more style and action than his French ancestors. He will weigh 2,000 pounds when matured. Sidney S. Linscott, Holton, Kans.

MISCELLANEOUS.

FOR SALE—A complete threshing outfit. A bargain if sold soon. Address J. O. White, Sterling, Kans.

FOR SALE—One 14 horse-power Minneapolis Tractor Engine. Address, J. E. Kumil, Marquette, Kans.

VISITING CARDS FREE.—Send six names and addresses of young people wanting a business education to the Omaha Commercial College, Omaha, Neb., and in return get your name elegantly written on six cards.

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

WANTED—MEN to learn barber trade, will equip shop for you or furnish positions, few weeks complete, constant practice, careful instructions, tools given, wages Saturdays, diplomas granted, Write branch, Molar System of Colleges, St. Louis, Kansas City, Mo., or Omaha, Neb.

Can You Afford to be Without It When Experienced Cattle Feeders Commend It?

What Mr. E. D. Funk, of Bloomington, Ill., says:

"You have filled a very great want in compiling and putting into practical words something that the average man can read and comprehend and thereby receive some benefit. I would urge every cattle man to procure one of these books and study it thoroughly."

DRUGS AND PHOTO SUPPLIES—Eastman's Kodak, Premo Cameras, Vox and Sollo paper. Films for all cameras and kodaks. Fred T. Walker, 825 Kansas Ave., Topeka, Kans.

FOR SALE—Special bargains in rebuilt engines and separators. They will make you money. Write us quick before they are all sold. The Gelsner Manufacturing Co., 1410 Union Ave., Kansas City, Mo.

WANTED—A secondhand traction engine, not less than 16 horse power. Dr. W. E. Barker Chouteau, Kans.

Stray List

Week Ending June 6.

Barton County—H. D. Ashpole, Clerk. STEER—Taken up by Andy Gell in Clarence tp., May 23, 1907, one black steer, about 18 months old, small out on lower side right ear; valued at \$20.

Crawford County—Fred A. Gerken, Clerk. Pony—Taken up by John F. Ruby in McCune tp., April 27, 1907, one 1-year-old bay pony, female, weight 800 pound, star in forehead.

Week Ending June 13.

Chautauque County—L. G. Wells, Clerk. HORSE—Taken up by J. W. Ellis in Niotaze, Kans., May 21, 1907, one light bay, 4 foot 11 inches high, weight 1,100 pounds, 9 or 10 years old, bald face, blind in left eye, left hind foot white, C brand on left jaw; valued at \$100.

[First published in The Kansas Farmer, June 6, 1907.]

Publication Notice.

In the District Court of Shawnee County, Kansas.
Fannie E. Seymore, Plaintiff, vs. Edward J. Seymore, Defendant. No. 24447.
The State of Kansas to Edward J. Seymore: You will take notice that you have been sued by Fannie E. Seymore in the District Court of Shawnee County, Kansas, in the above entitled action and that you must answer the petition filed by said plaintiff in said cause on or before the 25th day of July, 1907, or said petition will be taken as true and judgment rendered accordingly against you in said action for divorce in favor of the plaintiff and for other and further relief as equity may require.
[Seal]
R. L. THOMAS, Clerk of the District Court of Shawnee County, Kansas.
By JENNIE C. ROSEN, Deputy.
A. B. JETMORE, Attorney for plaintiff.

LEGAL.

FRED C. SLATER, Lawyer.

Topeka, Kansas.
Collections made in all parts of the country. Advice given on matters by mail. Inheritances collected and estates investigated in all parts of the world.

When writing advertisers please mention this paper.