

KANSAS FARMER

Volume XLVI. Number 30

TOPEKA, KANSAS, JULY 23, 1908

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NINE big loads of alfalfa hay the second cutting of 5½ acres is the report of C. P. Baker, of Valencia. The editor sees nothing discouraging about this state of facts, unless it be that the third cutting over the same field will soon require attention.

The "Alfalfa Studies" presented in this number reflect great credit upon the Colorado Experiment Station, at Fort Collins, and upon the author, P. K. Blinn. The illustrations, used by the courtesy of the Experiment Station, show well the variations of the plant, and point to opportunities for improvement and development.

Persons interested in the lumber trade are urging consideration of the fact that building materials are now cheaper than during recent years, that labor conditions are favorable for the builder, and that, therefore, the present is a good time to build. There is something in it. In most places dealers are again willing to figure on a good sized bill.

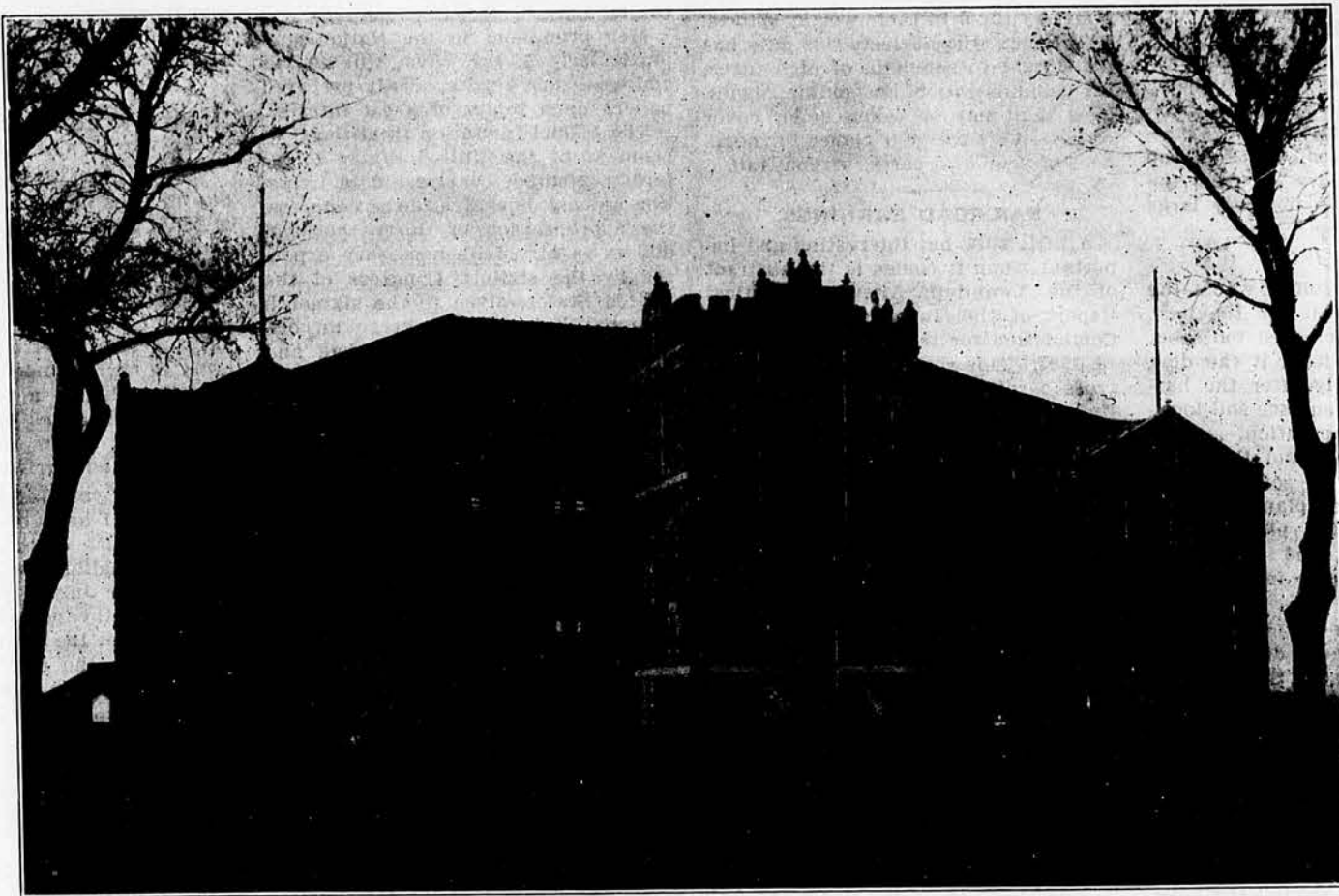
The excellent quality of the new winter wheat now going to market is a revelation to buyers and traders. It had been expected that the wet weather that occurred just before harvest would result in damp, sprouted, and molded wheat. The surprise coupled

with reports of unfavorable conditions in the spring-wheat States had a healthy influence on the market.

The Topeka Chautauqua is in session at Vinewood Park, a pleasure ground reached by an electric car ride costing five cents. The exercises are of a high order and will be found both entertaining and instructive. They will continue until July 30. A great many Kansas people come to Topeka in the winter on account of the State meetings that occur at that season. Those who come in summer are delighted with the beauty of the city, its pretty homes, many parks, and finely shaded parkings. Almost everything can be

reached by electric car. The system of transfers enables one to ride many miles for a nickle. If farmers' families can spend a few days at the capital city and its Chautauqua they may carry home pleasant memories of time well spent.

The production of alfalfa seed ought to be profitable at the price. But alfalfa has a fashion of growing at every opportunity and producing more forage and less seed. This is especially the case in Eastern Kansas. But Bradford Miller, who is greatly interested in the Topeka Industrial Institute, an institution for the education and industrial training of colored



THE AUDITORIUM-GYMNASIUM OF THE KANSAS STATE UNIVERSITY, LAWRENCE, KANSAS.

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KANSAS FARMER.

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youths, is taking pride in showing samples of the second crop now growing on ten acres of the institute's land, which promises to produce a fine crop of seed. At ten dollars a bushel the yield does not have to be very large to make a paying crop.

When wheat is to follow wheat the preparation of the soil for the next crop can not be commenced too soon. No mistake is committed if the disk harrow follows closely after the harvester. To keep the surface soil loose and thus retard evaporation, and to keep the weeds down and thus prevent the exhaustion of soil moisture and fertility through plant growth, these two assure easy plowing and effective harrowing and conditions favorable to quick germination and vigorous growth.

Yes, there has been difficulty in curing alfalfa this season. Some of the hay has been spoiled. It had to be removed from the fields to prevent smothering roots and thus damaging the stand. But the new crop kept right on growing and was ready for the mower almost before the farmer could find time to care for it. The third and the fourth will likewise be on hand in season to remind the boys that it is necessary to be up and doing to keep ahead of alfalfa. August will soon be here. Happy should the man be who on August 15 shall have a goodly field well prepared to receive alfalfa seed. Early plowing, much and frequent harrowing, and the selection of a time for sowing between August 15 and September 15 when the soil has moisture enough to start the growth, these conditions accompanying prompt action in drilling or broadcasting good seed are precursors of wealth in time to come.

ESTIMATING THE WHEAT CROP.

Mr. Snow, the crop expert, now estimates the probable yield of winter wheat in the United States at 420 million bushels, and that of spring wheat, if all go well with the crop, at 275 million bushels, or a total of 695 millions, as compared with 635 millions officially estimated last year, and 735 millions in 1906. The visible supply on July 1 is over 50 million bushels less than at this date last year, and the "invisible" supplies are ex-

pected to show an equally large reduction compared with last year. The present outlook for the United States and Canada is that the total production may reach 825 million bushels, against 716 million bushels last year, when, however, the stocks, visible and invisible, were probably 125 million bushels larger than they will be this year on August 1.

VOTE AT THE PRIMARY.

The date for the primary election to select candidates of the several parties in Kansas for the many offices to be filled in November is rapidly approaching. This primary election under the new law must be held on the same day for all parties. No Democrat may vote for a candidate to go on the Republican ticket and no Republican may vote for a candidate to go on the Democratic ticket. This provision eliminates an evil which has heretofore given great power to an unscrupulous element in the cities.

Every elector ought to consider it a sacred and patriotic duty to vote at the primary and thus help his party to select capable and honest men as candidates for office. Not only should the men selected be capable and honest, but they should have the right convictions on the questions of the day.

If all parties have such candidates the officers chosen can not be far wrong.

Be sure to vote at the primary, August 4. Remind all of the neighbors of their duty in this respect. The only way to have good laws and to have them executed fearlessly, faithfully, and justly is to select the right kind of candidates, elect them, and stand by them in their worthy efforts.

The man who neglects this duty has little right to complain of high taxes, lax administration, and unfair advantages that may be taken under cover of law. Vote for your choice for nominees of your own party, without fail.

RAILROAD EARNINGS.

A little slow but interesting and important when it comes is the abstract of the Twentieth Annual Statistical Report of the Interstate Commerce Commission for the year ending June 30, 1907. This abstract shows that the gross earnings of the railways in the United States from the operation of 227,454.83 miles of line were, for the year ending June 30, 1907, \$2,589,105,578, being \$263,340,411 greater than for the year 1906. Their operating expenses were \$1,748,515,814, or \$211,638,543 more than in 1906. The following figures present a statement of gross earnings in detail and show the increases of the several items over those of the previous year: Passenger revenue, \$564,606,343—increase, \$54,573,760; mail, \$50,378,964—increase, \$3,007,511; express, \$57,332,931—increase, \$6,322,001; other earnings from passenger service, \$12,674,899—increase, \$1,360,662; freight revenue, \$1,823,651,998—increase, \$183,265,343; other earnings from freight service, \$6,113,648—increase, \$468,426; other earnings from operation, including unclassified items, \$74,346,795—increase, \$14,342,708. Gross earnings from operation per mile of line averaged \$11,383, the corresponding average for the year 1906 being \$923 less.

The operating expenses were assigned to the four general classes as follows: For maintenance of ways and structures, \$343,544,907; maintenance of equipment, \$368,061,728; conducting transportation, \$970,952,924; general expenses, \$65,404,655; undistributed, \$551,600. Operating expenses averaged \$7,687 per mile of line, this average showing an increase of \$775 per mile in comparison with the year 1906.

The income from operation, or the net earnings of the railways, amounted to \$840,589,764. This amount exceeds the corresponding one for the previous year by \$51,701,868. The net earnings per mile of line for 1907 averaged \$3,696; for 1906, \$3,548, and for 1905, \$3,189. The amount of income attributable to sources other than operation was \$286,583,942. This amount includes the following items: Income

from lease of road, \$124,705,781; dividends on stocks owned, \$88,523,952; interest on bonds owned, \$24,361,054, and miscellaneous income, \$48,993,155. The total income of the railways (\$1,127,173,706)—that is, the net earnings and income from lease, investments, and miscellaneous sources—is the amount from which fixed and other charges against income are taken to ascertain the sum available for dividends. Such deductions aggregated \$677,712,518, thus leaving \$449,461,188 as the net income for the year ending June 30, 1907, available for dividends or surplus.

The amount of dividends declared during the year under review (including \$49,297 representing other earnings to stockholders) was \$308,137,924, leaving as the surplus from the operations of the year ending June 30, 1907, \$141,323,264. The surplus from operations as shown for the preceding year was \$112,334,761. The amount of deductions from income as stated above, \$677,712,518, comprises these items: Salaries and maintenance of organization, \$648,835; interest accrued on funded debt, \$344,242,617; interest on current liabilities, \$16,671,532; rents paid for lease of road, \$128,766,452; taxes, \$80,312,375; permanent improvement charged to income account, \$38,552,890; other deductions, \$68,517,817.

THE IRRIGATION CONGRESS.

The next annual meeting of the National Irrigation Congress will be held at Albuquerque, New Mexico, September 29-October 3, 1908.

The four great objects stated are to save the forests, store the floods, reclaim the deserts, and make homes on the land.

Men prominent in the Nation, and particularly in the West, will deliver addresses and read specially prepared papers upon topics of great interest.

The official invitation from the Government of the United States to all foreign countries interested in irrigation to send delegates to the congress, the appropriation of thirty thousand dollars in aid of its necessary expenses by the sixtieth Congress of the United States, gives to the sixteenth National Irrigation Congress an official character never before had and enjoyed by any of the great industrial conventions of this country.

The congress will be composed as follows:

Fifteen delegates appointed by the governor of each State or Territory.

Ten delegates appointed by the mayor of each city of the United States of more than twenty-five thousand population.

Five delegates appointed by the mayor of each city in the United States of less than twenty-five thousand population.

Five delegates appointed by each board of county commissioners or county supervisors in the United States.

Five delegates appointed by each State organization, having as its object the advancement of the public welfare of that State.

Five delegates appointed by each State irrigation, forestry, agricultural or horticultural society or association.

Five delegates appointed by each National or interstate association interested in the objects sought by the National Irrigation Congress.

Five Delegates by each State association of professional, commercial, fraternal, patriotic, religious or labor organization.

Two delegates duly accredited by each chamber of commerce, board of trade, immigration society or commercial club.

Two delegates duly accredited by each regularly organized irrigation, agricultural or forestry club, association or society in the United States.

Two delegates duly accredited by each irrigation company.

Two delegates duly accredited by each agricultural college, and by each college or university having chairs of hydraulic engineering or forestry in the United States.

Two delegates duly accredited by each regularly organized society of engineers in the United States.

The present season has thus far not tended to impress farmers in Kansas, Nebraska, Oklahoma, and Missouri with strenuous notions of the importance of irrigation, yet the people of these States remember how fickle the weather is, and they will be represented at the great meeting at Albuquerque. As the demand for the production of food supplies to the full capacity of the cultivated areas becomes more insistent the practice of irrigation will doubtless be extended and will result here as elsewhere in greatly increased yields and denser populations.

It is announced that special railway rates will be made for delegates to the congress and will prevail over all transcontinental lines, with stop-over privileges at all Western points.

COST OF ASSESSMENT.

EDITOR KANSAS FARMER:—Does it cost the State of Kansas any more to be assessed this year than it did last year? If it does cost more how much?

Rooks County. JOHN JONES.

It is almost certain that the cost of making the assessment under the new law is greater than under the old. The difference can not be stated accurately at this time. Under the new system vast amounts of wealth have been found that formerly escaped taxation. It is probable that the man who has not heretofore concealed a part or all of his property from the assessor will in general have less to pay under the new than he had to pay under the old law. There will be exceptions to this and some hardships, but the hope is that taxation under the new law will be more equitable and therefore more generally satisfactory than it was under the old lack of system.

MISSED A COPY OF THE KANSAS FARMER.

EDITOR KANSAS FARMER:—I do not like to miss any of the copies of THE FARMER, as sometimes a very valuable article may be missed. I see an article in this week's issue from Professor Kinzer on sheep that I would not like to have missed and so many replies every week from Professor Ten Eyck to correspondents which always contain valuable advice from experience, that it makes one feel as if he were losing a few dollars when your paper does not arrive.

A copy of your issue of July 2 did not arrive and I have been thinking that the busy time of the Fourth had delayed the mailing, etc., but when I got the copy of July 9 yesterday I complained to the postoffice department, thinking that the wrapper might have come off in the office, but they said they had no such paper there.

I notice that the wrapper on this copy of July 9 was very loose and came off more easily than usual and it may be possible that the wrapper may have come off of the missing one of July 2.

If you have a copy of July 2 issue to spare I would certainly be thankful if you would send me one.

JAMES R. BIRKBECK.

Belmont County, Ohio.

Subscribers are requested to notify this office promptly in case of any irregularity in the arrival of their KANSAS FARMERS. The missing paper has been sent to this subscriber, and the mailing department has had its attention called to the suggested cause of the failure.

The New Wheat Crop.

Reports from the wheat belt are optimistic in tone but seem to have a real foundation in fact, in some counties at least. The region known as the wheat belt which extends through Kansas from north to south has certainly been blessed with a bountiful crop this year and the prospects for corn are much above the average. Wheat in counties like Pawnee, Barton, Edwards, and Stafford is reported as yielding from 20 to 40 bushels per acre and testing from 61 to 63 pounds per bushel. An enterprising business firm in one of these counties is quoted as saying that, "In Pawnee County the wheat crop amounts to \$400 for every man, woman, and child in the county. This would be an average of about \$2,000 for each family." As the men who make this assertion have a fine business reputation it is believed that their figures are not far wrong.

Miscellany

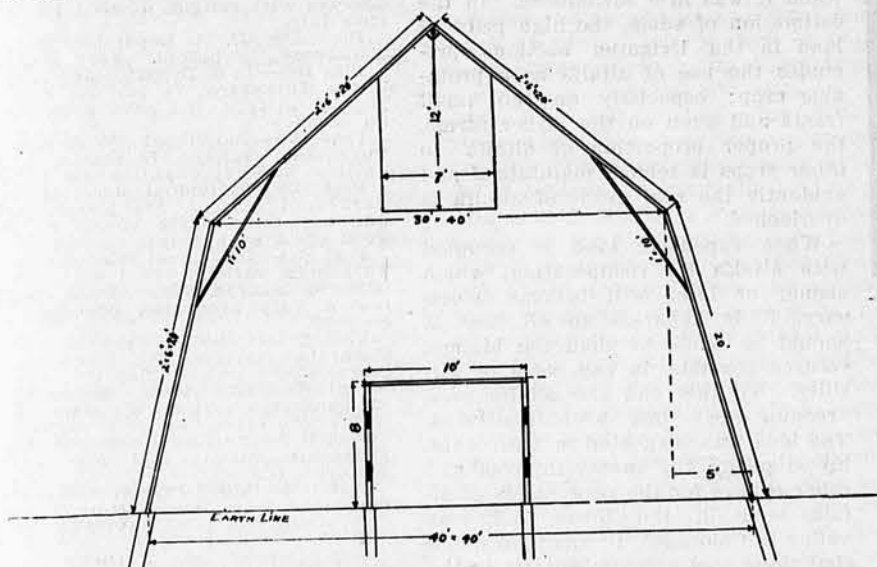
A Cheap Alfalfa Barn.

Mr. O. E. Walker, who is an active member of the Shawnee Alfalfa Club, and an alfalfa raiser, has erected a barn for the storage of alfalfa which has proved to be very satisfactory and which cost comparatively little.

As will be seen by the engraving herewith, the barn is constructed by setting posts in the ground about four feet and at a slight angle. To these are spiked the 2x6 studding slanted at the same angle. On top of the studding without any cutting is laid the plate and then the 2x6 rafters are cut to fit. Both the studding and the rafters are twenty feet long and the former are set at such an angle that the perpendicular line dropped from the plate will strike the ground five

not seem to realize what a small portion of Kansas has been affected by the floods and that the portion affected has little to do with Kansas crops. Wyandotte County, where the floods were most severe, does not produce as much wheat and corn as an average township in Sedgwick County. So far as grain is concerned the entire Kaw valley from Topeka to Kansas City might be washed down into the Gulf of Mexico without materially affecting the market. That valley produces apples and potatoes mostly and they are not commodities of any great influence on the American market. The East can rest assured that Kansas is all right, and if it does not feel quieter with this assurance it can keep on worrying about business. Kansas has only a benevolent interest in the East—the interest of a neighborly duty in calming its nerves about Kansas crops.

Here in Kansas we have no anxiety whatever concerning business. If the



feet inside the barn. The studding and rafters are braced together by 1x10 boards. The studding is set three feet apart and the entire building is covered with corrugated iron.

The dimensions of the door at the top are shown in the engraving and the small square in the apex represents the track for the sling. This barn stands 40x40 on the ground and is about 36 feet high at the peak. Mr. Walker finds that it is not practicable to build the barn wider than this though it may be made as long as desirable.

Aside from the cheapness of its construction the distinguishing feature of this barn lies in the ventilating passage shown in the middle of the engraving. This is not a drive-way but was built for the double purpose of allowing a passage of air through the center of the hay and of furnishing a shelter and feed rack for the calves and pigs. It is constructed of almost any kind of old lumber found about the place and consists of posts set in the ground so that they will be eight feet high above the surface and ten feet apart. On these posts are nailed boards at proper intervals for their support and to allow the cattle to get their heads through to the hay. This structure is covered by loose boards or brush and its most important use is in furnishing a place for the hay to fall from the sling and be distributed in the barn without packing in one place.

Mr. Walker states that this barn has been in use for four years and has given entire satisfaction as a house for his alfalfa crop; a shelter feed rack for his cattle and hogs; a perfect protection and curing house for his hay, and has withstood all of the wind storms during this time.

Worrying About Kansas.

The commercial East has cold feet again. As noted in the Eagle two weeks ago there was decided optimism. This agreeable feeling was reversed last week, and people who had been seeing the sunny side had a darkness come over them. And the curious thing about it is that they are now assigning the floods in Kansas as the cause of the changed feeling. This comes of the ignorance of the East of the Sunflower State. It does

East thinks our floods have materially affected the crops it might pay a higher price for what we will have left after the floods. That will be all the better for the State. We know exactly how much grain we will have and what stimulus it will give to Kansas business. We all know that this will be the best business year the State has had in a quarter of a century unless the East gets panicky and interferes with us in the enjoyment of our prosperity. It need not be worrying itself either about the moving of the Kansas crop. The Kansas farmer has enough money in hand to move his own crop if the railroads and their Eastern stockholders will furnish us enough cars to move it at the proper time. If they will attend to that part of the business the Kansas farmer will attend to it at this end. Kansas has no cold feet just now and is perfectly willing to stay in the game of national prosperity as long as any other State or any other people. Neither floods nor politics will have any effect on the business of Kansas this year and it is hoped that this assurance from the very core and center of the Kansas grain belt will have a quieting effect on our Eastern friends.—Wichita Eagle.

Rates of Wages and Retail Prices of Food, 1890 to 1907.

According to Bulletin No. 77 of the Bureau of Labor, of the Department of Commerce and Labor, which has just been placed in the hands of the printer, an investigation of the principal wage working occupations in 4,169 establishments representing the principal manufacturing and mechanical industries of the country showed that the average wages per hour in 1907 were 3.7 per cent higher than in 1906, the regular hours of labor per week were 0.4 per cent lower than in 1906, and the number of employees in the establishments investigated was 1.0 per cent greater than in 1906.

Investigations covering the sales of 1,014 dealers in 68 localities show that the retail prices of 30 principal articles of food, weighted according to consumption in representative workmen's families, were 4.2 per cent higher in 1907 than in 1906. As the advance in retail prices from 1906 to

(Continued on page 798.)

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

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

Kansas Farmer Special Offers.

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

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

Special Offer No. 1.

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

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

Our Price \$3.75

Special Offer No. 2.

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

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

Our Price \$5.35

Special Offer No. 3.

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

Our Price \$2.50

Special Offer No. 4.

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

Our Price \$2.00

Special Offer No. 5.

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

Our Price \$3.00

Special Offer No. 6.

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

Our Price \$1.50

Special Offer No. 7.

The American Magazine.....	\$1.00
Review of Reviews.....	3.00
Woman's Home Companion.....	1.00
The Kansas Farmer.....	1.00
Regular price.....	\$6.00

Our Price \$3.75

Special Offer on Dailies.

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

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

Special Offer on Weeklies.

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

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

Special Long Time Offer.

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

Two years' subscription, in advance, to one address.....	\$1.50
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We will accept as payment for all arrearages and one or more years in advance, your check, your note, postage stamps, or currency, which ever best suits your convenience.

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

Agriculture

Alfalfa Studies.

PROGRESS REPORT BY P. K. BLINN.

Alfalfa forms the basis of our farm values throughout the Western States; its unique adaptation to the

semi-arid conditions makes it an invaluable asset to our agriculture. Owing to its power to survive a drouth, or exist on scanty moisture, its deep-growing root system enables it to reach a great but a deep-lying supply of soil fertility, that is beyond the reach of common plant roots, but which will in turn, become available to any crop if the proper rotation with alfalfa is established.

The power of alfalfa to restore worn out lands, and to build up soil that is deficient in humus and nitrogen, is apparent to the most casual observer, who will compare the crops grown on alfalfa sod, with those on ordinary soil, or even where barnyard manure has been heavily applied. Realizing these facts, it is evident that alfalfa must be grown more extensively in our crop rotations to maintain and restore the soil that is being depleted by the large crops of sugar beets and other products.

Many acres of alfalfa hay land are sacrificed each year, for the more remunerative returns from beets, cantaloupes, or potatoes grown on alfalfa sod, and as a result alfalfa hay is becoming scarce, and the price is advancing to a point that will tend to dishearten the stock feeder. Also the high prices realized for hay has not encouraged saving the alfalfa crop for seed, consequently the price of good alfalfa seed is about equal to the cost when it was first introduced. In the estimation of some, the high price of land in the irrigated sections precludes the use of alfalfa as a profitable crop; especially on the small tracts and even on the larger farms, the proper proportion of alfalfa to other crops is seldom maintained and evidently the real merit of alfalfa is overlooked.

When expensive land is occupied with alfalfa for recuperation, which sooner or later will become necessary, it is apparent to all that it should be made to yield the highest returns possible, in hay, seed or fertility. To this end the alfalfa seed breeding work has been instituted. The idea was suggested in 1904, when investigating the insect injuries and other causes for the poor yields of alfalfa seed in the lower Arkansas valley in Colorado. It was then noted that there was a great contrast in the seed yields of different plants under apparently the same conditions, and also, that the type and quantity of hay from different individuals varied. Seed from some of the most promising plants were secured and sown the following season in a comparative test, with common alfalfa and some Turkestan seed from Germany, furnished through Professor W. H. Olin. This test the first season revealed a better seed production in the plants grown from seed selected for heavy-yielding traits, but the second season's growth revealed the superior hay producing qualities of the Turkestan plants, which also yielded as high as an ounce of seed from a single plant. The selections that season were principally from the Turkestan plants, descriptions of which were reported in Bulletin 121, Colorado Experiment Station. Through Mr. J. M. Westgate, of the Department of Agriculture, a large list of foreign and native strains of alfalfa seed from different States were secured for a wider base of comparison in the preliminary nursery work of selecting the best strain for the improvement of the qualities desired in alfalfa.

The new alfalfa nursery planted the past season comprises sixty-four different varieties or promising individual selections, each planted at the same time and given the same care and conditions, and could be considered under a fair comparative test. Each plat was designed to contain two hundred individual plants, twenty inches apart each way, and each plat separated by a path of forty inches wide.

The plats are designated in the following manner, the first tier of plats on the north are lettered "A" and numbered from east to west, one to eight, the next tier to the south is lettered "B" and the plats in the tier are numbered the same as the first tier, and so on, the eight tiers are lettered to correspond to the first eight letters of the alphabet.

The individual plants in a plat are designated by two numbers, the first denotes the number of the row in the plat, which is numbered from north to south, the second number denotes the plant in the rows, which are also numbered, but from the east to the west.

The nursery was planted April 15, 1907, and thinned to single plants about the middle of July. The following is an epitome of the first season's observations:

Plat A-1—Individual selection No. 1, from Turkestan variety, 183 plants. Irregular in type, undesirable for hay or seed compared to others.

Plat A-2—Individual selection No. 2, from Turkestan variety, 163 plants. Irregular in type, rather subject to fungus diseases.

Plat A-3—Individual selection No. 6, from Turkestan variety, 146 plants. Irregular in type, but fair for hay, no seed formed.

Plat A-4*—Individual selection No. 17 (from single plant on railroad right-of-way, grown without irrigation). Very uniform in type, upright in growth, fine stems and leaves, good hay type and fair set of seed, 165 plants. Very continuous in bloom.

Plat A-5—Individual selection No. 12, from Turkestan plants, 179 plants. Irregular type, coarse stems, very sparsely growth, leaves shed off badly, no seed.

Plat A-6—Individual selection No. 16, from Turkestan variety, 153 plants. Irregular type, sparingly stems, but fair for hay, no seed.

Plat A-7—Individual selection, No. 10, from Turkestan variety, 147 plants. Fairly regular in type, but leaves much affected with fungus, no seed, hay qualities fair.

Plat A-8—U. S. Department No. 991, Turkestan, 85 plants. Very poor.

Plat B-1—U. S. Department No. 12231, Texas Turkestan, 74 plants. Very irregular in type, but some good plants, no seed.

Plat B-2—Individual selection No. 3, Turkestan variety, 172 plants. Fairly uniform and hay qualities fair, no seed.

Plat B-3—Individual selection No. 7, Turkestan variety, 183 plants. Quite uniform, tall, coarse stems, no seed, good yield of hay.

Plat B-4—Individual selection No. 15, Turkestan variety, 180 plants. Fairly uniform in type, very dense set of leaves, very promising hay type, but no seed.

Plat B-5—Individual selection No. 9, Turkestan variety, 185 plants. Tall, coarse stems, no seed, hay fair.

Plat B-6—Individual selection No. 13, Turkestan variety, 181 plants. Fairly uniform type, hay good, no seed.

Plat B-7—Individual selection No. 11, Turkestan variety, 151 plants. Poor hay type, few leaves.

Plat B-8—U. S. Department No. 13999, Turkestan from Washington 72 plants. Poor stand, but good hay type, but no seed.

Plat C-1—U. S. Department No. 12231, Turkestan from Texas, 29 plants. Poor plat.

Plat C-2—Individual selection No. 5, Turkestan, 166 plants. Fair type for hay, but no seed.

Plat C-3—Individual selection No. 8, Turkestan variety, 178 plants. Tall, stiff stems, coarse hay.

Plat C-4—Individual selection No. 14, Turkestan, 166 plants. Short stems, hay fair, no seed.

Plat C-5—U. S. No. 13521, Algeria, 66 plants. Hay fair, leaves free of fungus, no seed.

Plat C-6—U. S. No. 12803, Setif, Algeria, 123 plants. Hay fair, no seed, leaves free of fungus.

Plat C-7—U. S. No. 12846, Kebelli, Tripoli, 97 plants. Poor plat.

Plat C-8—U. S. No. 16401, Dryland, Pullman, Wash., 83 plants. Irregular in type, some good plants for hay and seed.

Plat D-1—U. S. No. 88823, Arabian, 61 plants. Regular type of upright stems, no seed, poor hay qualities.

Plat D-2*—U. S. No. 12992, Arabian, 129 plants. Very irregular, no good.

Plat D-3*—U. S. No. 11651, Pueblo, Mexico, 76 plants. Irregular type, but some good hay types, no seed.

Plat D-4—U. S. No. 14786, Turkestan, 143 plants. Tall, coarse stems, fair for hay, no seed.

Plat D-5*—U. S. No. 16399, Sand Lucerne, Pullman, Wash., 140 plants. Hay type good, seed fair.

Plat D-6—U. S. No. 17698, Northern Montana, 156 plants. Extra good hay type, thick set to leaves, free of fungus, no seed.

Plat D-7—U. S. No. 12847, Tebis, Tripoli, 60 plants. Much like Arabian alfalfa, upright stems, no seed.

Plat D-8*—U. S. No. 18827, Utah, 121 plants. Extra good type for both hay and seed in some plants, rather irregular on whole.

Plat E-1—U. S. No. 11652, Mexico, 98 plants. Irregular type, but some good plants for seed.

Plat E-2*—U. S. No. 13768, Argentine, 143 plants. Extra good hay and seed type, leaves free from fungus.

Plat E-3*—U. S. No. 19566, Dryland, Nebraska, 169 plants. Good hay type, seed fair.

Plat E-4*—U. S. No. 12549, Argentine, 142 plants. Irregular types, but some extra good for hay and seed.

Plat E-5—U. S. No. 18470, Sand, Lucerne, Germany, 97 plants. Fair type for hay, no seed.

Plat E-6*—U. S. No. 16267, Irrigation Arabian, 106 plants. Regular in type, upright stems, large leaves, but sun scalded, no seed.

Plat E-7—U. S. No. 16317, China, 115 plants. Very sprangly, hay and seed poor.

Plat E-8*—U. S. No. 14972, Ecuador, 170 plants. Wonderful set of seed, hay fair.

Plat F-1—U. S. No. 11502, Siberia, 48 plants. Very poor traits.

Plat F-2—U. S. No. 13564, Peru, 133 plants. Short stems, fine, thick set with leaves, good seed and hay yield, seed not filled well.

Plat F-3—U. S. No. 9453, Turkestan Bokhara, 30 plants. Very poor types.

Plat F-4—U. S. No. 12772, Turkestan, Oregon, 111 plants. Irregular, hay and seed fair on some plants.

Plat F-5—U. S. No. 16403, Turkestan, Washington, 131 plants. Irregular, some good plants for hay and seed, stiff stems.

Plat F-6—U. S. No. 1159, Turkestan,

*See Plates.

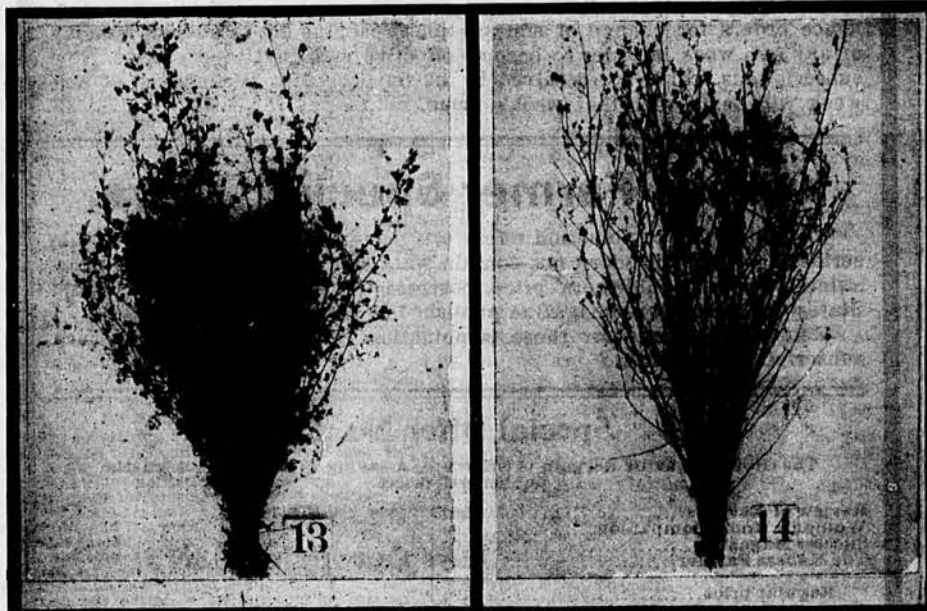


PLATE I.

No. 13. A-4, 7-12, yield of seed 5 grams. No. 14. Plant A-5, 7-18, no seed. Leaves Desirable hay type.

No. 7. G-6. Arabian Plat just 4 months old from seed. In bloom.

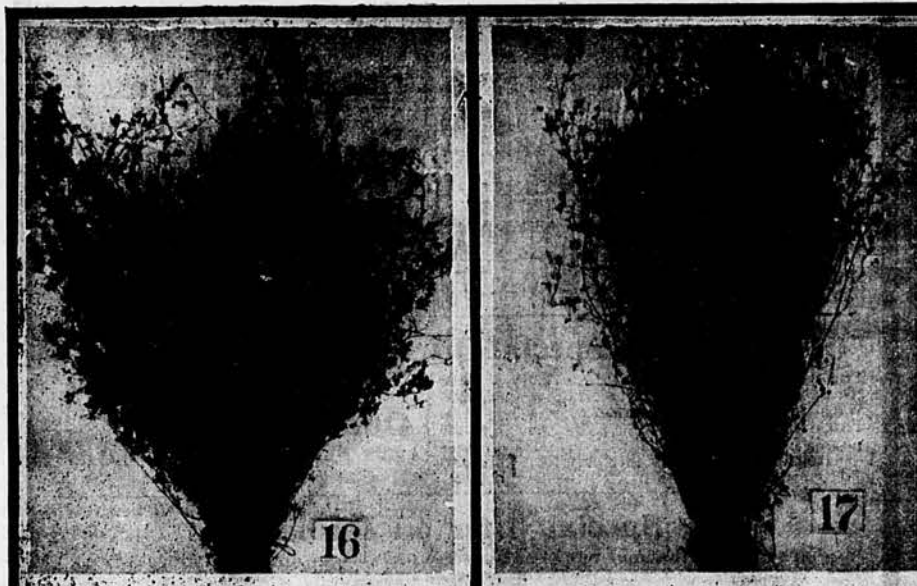


PLATE II.

No. 16. Argentine alfalfa. From Plat E-4, 6-14. Good hay and seed type, 12 grams of seed.

No. 17. Argentine alfalfa. From Plat E-2, 1-19. Good hay and seed type; 13 grams.

Contrast in size of bloom.

Plat A-4, after plants were cut.

Kuldja, China, 30 plants. Plants flat on the ground, no good.
 Plat F-7—U. S. No. 19969, Highmore, South Dakota, 138 plants. Extra good hay and seed types in some plants.
 Plat F-8—U. S. No. 19968, Turkistan, Kansas, 96 plants. Tall, coarse stems, no seed.
 Plat G-1—U. S. No. 14497, Russia, 146 plants, Turkistan type. Hay and seed type fair.
 Plat G-2—U. S. No. 13437, Arizona, 144 plants. Hay and seed qualities good.
 Plat G-3—U. S. No. 18751, Turkistan, 150 plants. Coarse, stiff stems, few leaves, no seed.
 Plat G-4—U. S. No. 9395, Turkistan, 75 plants. Sprangly, stiff stems, few leaves, no seed.
 Plat G-5—U. S. No. 1908, Kansas, 132 plants. Well set with leaves, good hay type, seed fair.
 Plat G-6—U. S. No. 18628, non-irrigated Arabian, 142 plants. Upright stems, sun scalded tops, no seed.
 Plat G-7—U. S. No. 13519, Spain, 142 plants, Arabian type. Hay fair, no seed.
 Plat G-8—U. S. No. 13436, Canada, Ontario, 114 plants. Sprangly type, hay and seed only fair.
 Plat H-1—U. S. No. 13440, Kansas, 132 plants. Thick set to leaves, good hay, seed set fair.
 Plat H-2—U. S. No. 13487, Texas, 146 plants. Good type, seed on some plants.
 Plat H-3—U. S. No. 679, Turkistan, Bokhara, 54 plants. Very poor type.
 Plat H-4—U. S. No. 9452, Turkistan, 96 plants. Very tall stems, few leaves, no seed.
 Plat H-5—U. S. No. 18591, Turkistan, Montana, 136 plants. Sprangly stems, hay and seed no good.
 Plat H-6—U. S. No. 18425, Turkistan, 123 plants. Sprangly type, seed and hay no good.
 Plat H-7—U. S. No. 9450, Turkistan, Trans-Caucasia, 6 plants. Failure.
 Plat H-8—U. S. No. 17792, Spain, 139 plants. Upright form like Arabian, hay and seed only fair.

In all our previous tests the Turkistan alfalfa has proven the most desirable in the type of hay. It will be noticed from the above report of nursery that one-half of the plats were sown with Turkistan strains, yet the most leafy plants, and those producing the most seed, were not found in the Turkistan varieties. The second season's growth may reveal different records. Of the plats that produced seed and hay, the following selections were made, besides the individual selections of exceptional qualities:

Plat A-4—Seed from 150 plants, fine, leafy stems, quite uniform seed producing, secured 11 ounces of clean seed.
 Plat E-8—From 50 plants, of heavy seed producing quality, secured 18 ounces clean seed.
 Plat C-8—From ten choice plants secured 87 grams of clean seed, plants of short, jointed stems, thickly leaved and fairly set to seed.
 Plat D-7—Seed of ten plants of the Arabian type, 71 grams.
 Plat D-8—Seed of ten plants of the thick, fine leaved type, 70 grams.
 Plat F-2—Seed of ten plants of the short, dwarfed stems, 118 grams.

The above six selections were made with a view of sowing increase plats in order to get seed in considerable amount, as these selections seemed so much superior to the common alfalfa.

Alfalfa on High Table Lands of the Western Plains.

EDITOR KANSAS FARMER:—June 19 the writer visited Louis Brott, residing two miles north of Sextorp, in Cheyenne County, Nebraska. The Brott family have a section of fairly good table land, depth to water 250 feet. For nine years they have been experimenting, seeking to learn the best methods of growing alfalfa, under the conditions surrounding those table lands lying at an elevation of about 4,200 feet.

At this time they have eighty-five acres in alfalfa. Their work is keyed to the production of alfalfa seed for market. In their experience, the alfalfa plant seeds more freely on the elevated table lands than in the low, rich valleys. Alfalfa seed grown on table land without irrigation also brings a higher price in the market than seed grown under irrigation.

LACK OF MOISTURE.

In his first efforts, he followed the common method of sowing alfalfa seed broadcast on soil that had been prepared with special care. He soon found that the alfalfa seed on those elevated table lands in Western Nebraska, with limited rain fall, failed to develop two crops during certain seasons from lack of sufficient moisture. He then began experimenting with alfalfa seeded in drills, and allowing the use of cultivators, which breaking the crust, conserved some portion of the moisture and secured better results. From year to year, he has widened the drills until now he plants the seed in drills thirty-

six inches apart. This allows the use of two-row cultivators, enabling a man with good team and half mile rows to cultivate eighteen or twenty acres daily. He finds that to secure the best results in conserving the moisture, he should cultivate to the depth of four inches, cultivating perhaps twice or three times during the season, and as soon as the plants are well established, that is after the first season, cross harrowing. By cross working with the harrow two or three times during the season, they are able to break the crust in the row and destroy a good many of the weeds which would spring up in the uncultivated portions of the surface. Mr. Brott originally attempted to save seed from the first crop, but he soon found that the first crop of alfalfa seed was apt to be uneven, some of the seed pods would be ripe, while others would be green. His later method is to cut the first crop for hay, and to save the seed from the second crop. In Cheyenne County, under this method, the second crop of seed matures about the 10th to 20th of September, and ripens more evenly than when saved from the first crop.

Mr. Brott remarked that the alfalfa plant would not bear its maximum quantity of seed unless it could have an abundance of sunlight.

In a field of alfalfa sown broadcast nearly all the blossoms and seed pods would be found only on the upper tips of the plants. When the alfalfa plant is grown under cultivation in rows, then it develops bloom and seed pods from top to bottom and its lower as well as its upper branches are loaded with seed pods. In endeavoring to produce the maximum seed crop, the ideal distance for the plants in the row is twelve inches. This allows each plant to fully develop an abundance of seed pods.

BREAKS UP THE CRUST.

Mr. Brott called attention to one of the fields containing thirty-five acres of alfalfa seeded June 4, 5, and 6, 1907. He was cutting the first crop of alfalfa at the time of my visit, June 19. After cutting and removing the first crop of alfalfa, he then runs over the field lightly with a disk. This with a view of breaking up the crust and destroying as many of the small weeds which may have started as possible. The disking is done lengthwise with the row, then using a slanting toothed drag, the field is cross harrowed. This breaks up the crust which has formed, destroys the major portion of the weeds that may have started and assists in conserving the moisture. Following this work, the field should be cultivated two or three times and may perhaps be cross harrowed once more.

THE DRILLER.

In response to the question as to what kind of a drill was used in seeding the field of thirty-five acres, he stated that the seed was put in with a corn planter, using the onion plate in a No. 9 John Deer. He stated that it made very little difference what form of planter was used, since nearly all the improved planters have the same attachments. He used seven or eight pounds of seed per acre. If it could be dropped evenly, then five pounds per acre would be ample. He stated that if one had a wheat drill, preferably one which opens the drill with a disk, the alfalfa can be seeded more rapidly. Almost any of the up-to-date drills can be used in seeding.

Cover to a depth of an inch or an inch and a half, just sufficient to get the seed down where the ground is moist. Mr. Brott pointed out another field which they had broken with steam plow at contract price of \$3 per acre. They were bringing this field into condition to seed next season. He believes it to be practicable to break prairie in May and to disk, harrow, and prepare the ground with sufficient care so that seeding can be done during the more favorable seasons about the first of August. Since the sod on these Cheyenne County table lands is very tough with a large amount of Black Root, he prefers to break and prepare the ground one season and to seed it the next June.

By delaying the seeding until the

Continued on page 800.)



PLATE III.

No. 1. Arabian alfalfa, Plat D-2, 9-12.

No. 2. D-2, 2-9.

Contrast in individual plants same age.

No. 8. Plat E-6, 9-5. Arabian alfalfa. No. 3. Plat D-3, 2-5. Mexican alfalfa.

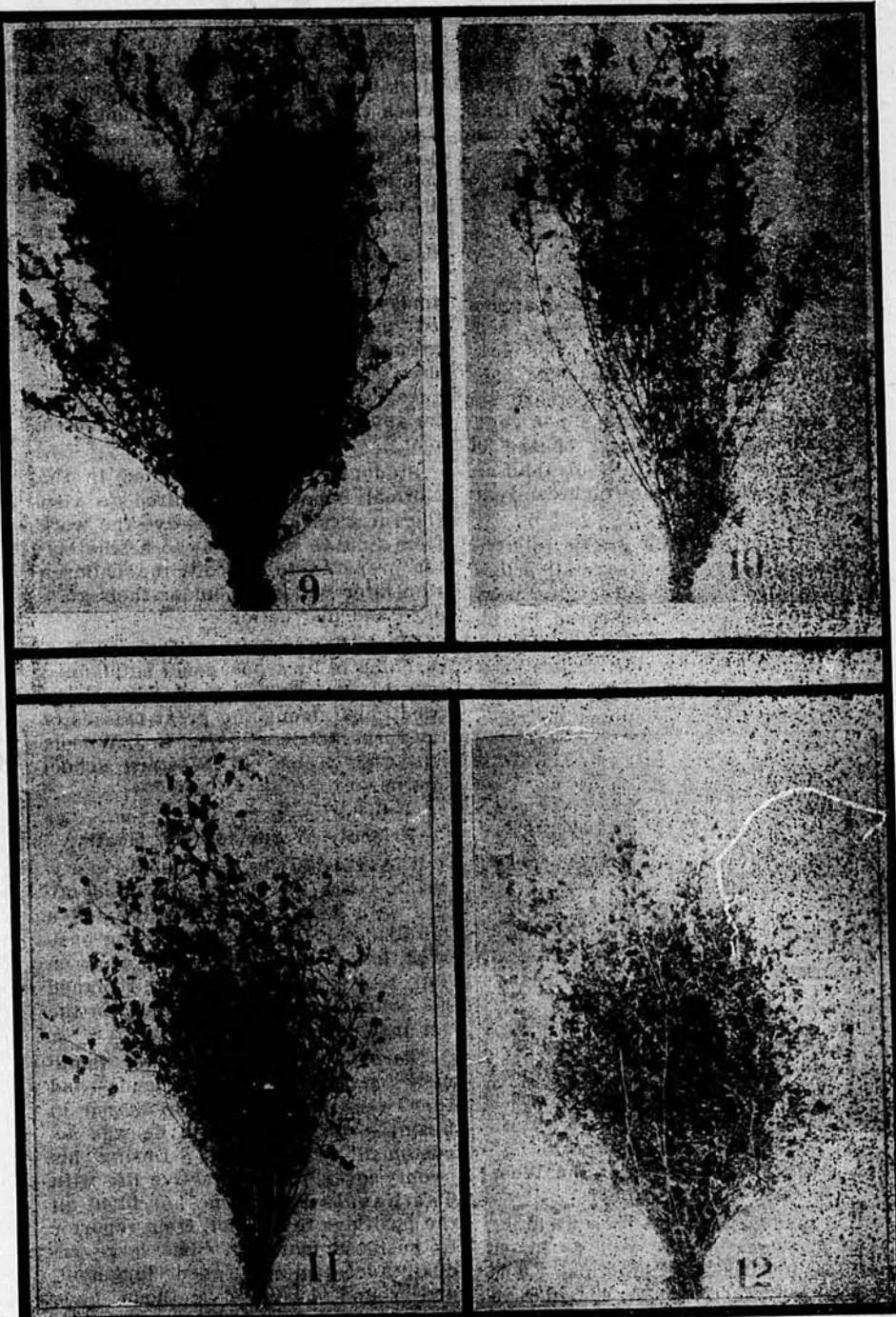


PLATE IV.

No. 9. Argentine. Plat E-4. Plant 7-6. Thickly set to leaves. Yield of seed, 2 grams.

No. 10. Ecuador. Plat E-8. Plant 7-1. Tall, stiff stems, set well to seed. Yield, 7 grams.

No. 11. Utah. Plat D-8. Plant 6-1. Remarkable yield of seed. 24 grams from 1 plant.

No. 12. Ecuador. Plat E-8. Plant 3-4. Fine combination of seed and hay quality. 15 grams.

Rates of Wages and Retail Prices of Food, 1890 to 1907.

(Continued from page 795.)

1907 was greater than the advance in wages per hour, the purchasing power of an hour's wages, as measured by food, was slightly less in 1907 than in 1906, the decrease being one-half of 1 per cent.

Average hourly wages in 1907 were higher than in any other year of the eighteen-year period, 1890 to 1907, and more than 20 per cent higher than the average in any year from 1890 to 1900. As compared in each case with the average for the ten-year period, 1890 to 1899, average hourly wages in 1907 were 28.8 per cent higher, the number of employees in the establishments investigated was 44.4 per cent greater, and the average hours of labor per week were 5.0 per cent lower.

The average price of food in 1907 was also higher than in any other year of the eighteen-year period 1890 to 1907. The average price of 30 principal articles, weighted according to family consumption of the various articles, was 20.6 per cent higher in 1907 than the average price for the 10 years from 1890 to 1899. Compared with the average for the same ten-year period, the purchasing power of an hour's wages in 1907 was 6.8 per cent greater.

The increase in average hourly wages in 1907 over 1906 was quite general, occurring in 40 of the 41 industries covered by the investigation of the Bureau of Labor. The greatest increase was in the manufacture of cotton goods, where the average wages per hour in 1907 were 12.9 per cent higher than in 1906. In the manufacture of paper and wood pulp the increase was 10.1 per cent; in 8 other industries the increase was 5 per cent but less than 10 per cent, and in 30 industries the increase was less than 5 per cent. In one industry, Bessemer steel, there was a decrease of wages of 0.9 per cent. In the 41 industries as a whole, weighted according to importance, the increase in wages per hour was 3.7 per cent.

Of the 30 articles of food covered by the investigation 29 were higher in price in 1907 than in 1906. The articles which showed the greatest advance in prices are flour 8.9 per cent, butter 8.0 per cent, evaporated apples 7.8 per cent, milk 7.3 per cent, cornmeal 6.8 per cent, cheese 6.7 per cent, and potatoes 5.4 per cent. The only article which showed a decrease is tea, the decrease being 0.2 per cent. The average prices of 20 of the 30 articles were higher in 1907 than in any other year of the eighteen-year period 1890 to 1907.

The following table giving relative wages per hour, relative retail prices of food, and relative purchasing power of hourly wages, measured by retail prices of food, for the eighteen-year period, 1890 to 1907, makes easy a comparison of year with year:

(Relative numbers computed on basis of average for 1890-1899=100.0.)

Year	Wages per hour	Retail prices of food weighted according to family consumption	Purchasing power of hourly wages measured by retail prices of food
1890	100.3	102.4	97.9
1891	100.3	103.8	96.6
1892	100.8	101.9	98.9
1893	100.9	104.4	96.6
1894	97.9	99.7	98.2
1895	98.3	97.8	100.5
1896	99.7	95.5	104.4
1897	99.6	96.3	103.4
1898	100.2	98.7	101.5
1899	102.0	99.5	102.5
1900	105.5	101.1	104.4
1901	108.0	105.2	102.7
1902	112.2	110.9	101.2
1903	116.3	110.3	105.4
1904	117.0	111.7	104.7
1905	118.9	112.4	105.8
1906	124.2	115.7	107.3
1907	128.8	120.6	106.8

The Model Rural School at the Western Normal School.

The tendency of the present in all lines of education as well as invention, is toward the practical. The man with a practical idea demands attention at every turn.

The Kansas State Agricultural College had this in mind quite early in its history when it laid the foundation for teaching the mechanic arts and later in sending out its wheat lecture trains and its institute lecturers, carrying the principles of practical scientific farming, stock-raising, and dairying to the farmer's very door. This is practical education.

The introduction of manual training and domestic science into the schools in every city and village of our land is evidence of this very idea of reaching the great masses with the practical phases in common-school education.

The founding of model graded schools in connection with our normal training schools as aids to teachers in city grades and later the model rural school for teachers of country schools are of inestimable value to both the inexperienced teacher and her pupils. Such a rural school was established last year, in connection with the other departments at the Western State Normal School at Hays, with Miss Julia Stone as principal.

The old barracks building formerly used by the soldiers on the Fort Hays reservation has been removed to the normal campus and fitted up with convenient furnishings for a country school comprising all grades from the chart class through to the graduation class. This department is intended to give instruction to teachers of rural districts in the management and teaching of schools in any country school in the State.

The equipment is very simple and inexpensive, yet useful.

The seating is suitable to the various sizes of the children; good light, and plenty of blackboard room within easy reach of the children is provided. There is a small library including dictionary, also a cabinet containing such articles as cotton bolls, acorns in their cups, butterflies, cocoons, etc.

Pictures of Washington, Lincoln, and Longfellow, also home made maps and charts adorn the walls. A sand box at one side of the room is used by pupils in elementary geography class. A table near the teacher's desk is well loaded with various devices (many of them home made), for teaching number, spelling, sentence-building, and other work. Some suggestions for busy work were shown in paper folding, paper mat weaving, and home made valentines, and May baskets.

A class in elementary agriculture finds a place on the somewhat crowded program, and a nearby plot of ground has been prepared for the children's vegetable garden, where lettuce, peas, beets, and potatoes make an appetizing display in the geometric plot.

Students regularly enrolled in the Normal School are required to visit the rural school and observe the work from time to time so as to be the better prepared to educate the children who later will come under their guidance and instruction.

What better preparation, so far-reaching in its scope, could be planned for the improvement of educational conditions among the great masses of the rural districts?—Mrs. L. J. Wilson, Hill City, Kans., in Western School Journal.

Friendly Words for Mr. Heath.

H. A. Heath, who for almost twenty-seven years has been closely identified with THE KANSAS FARMER and a familiar figure in the advertising business, has retired from active work on THE KANSAS FARMER, having resigned his connection with that paper on the 1st inst.

"Farmer" Heath, as he was familiarly known among his friends—and they were legion—will be missed in business circles in which he was accustomed to circulate. During his twenty-seven years of active life with THE KANSAS FARMER he has filled all the positions in the list, from reporter to business manager. His large acquaintance, energy, good judgment, and sound business methods have been a large factor in promoting the rapid growth of the paper.

Mr. Heath, while not actively interested in THE FARMER, retains a goodly financial interest in the paper. Mr. I. D. Graham, who purchased an interest in THE FARMER about fifteen years

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ago, will take up the work relinquished by Mr. Heath, as Mr. Graham's long association with the paper naturally fit him for the position.—The Commercial Union.

Field Notes

LIVE STOCK REPRESENTATIVES.

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

PURE-BRED STOCK SALES.

Shorthorns.

Oct. 5—A. O. Stanley, Sheridan, Mo.
Nov. 25—E. D. Ludwig, Sabetha, Kans.
Feb. 17—J. F. Stodder, Wichita, Kans.
Feb. 17—J. C. Robison, Mgr., Wichita, Kans.

Herefords.

Sept. 15, 16—J. F. Gulick, Jasper, Mo.
Sept. 29—Mrs. S. W. Hudson, Sibley, Mo.

Red Polls.

Oct. 7—J. B. Davis, Fairview, Kans.

Poland-Chinas.

Aug. 4—J. F. Hastings, Edgerton, Kans.
Sept. 3—T. P. Crabb, Moberly, Mo.
Sept. 7—Ross Bros., Ottumwa, Mo.
Sept. 9—R. E. Maupin, Pattonsburg, Mo.
Sept. 10—Leslie McCormick, Laddonia, Mo.
Sept. 10—McCormick & Porter, Vandalia, Mo.
Sept. 11—G. W. McKay, Laredo, Mo.
Sept. 12—Ed McDaniel, Parsons, Kans.
Sept. 22—B. F. Ishmael, Laredo, Mo.
Sept. 23—Knorr Bros., Pleasant Hill, Mo.
Sept. 24—A. K. Sell, Fredonia, Kans.
Sept. 26—J. A. Jenkins, Conway Springs, Kans.
Sept. 26—P. L. Clay, Broken Arrow, Okla.
Sept. 28—W. L. Wright, Jr., Rosendale, Mo.
Sept. 29—J. H. Harvey & Son, Maryville, Mo.
Sept. 30—B. H. Colbert, Tishomingo, Okla.
Sept. 30—W. E. Ramer & Sons, Shelbyville, Ind.
Oct. 1—W. J. Wright, Jr., Rosendale, Mo.
Oct. 2—J. M. Devlin, Cameron, Mo.
Oct. 2—Andrew Johns, Rosendale, Mo.
Oct. 3—Lee Stanford, Lyons, Kans.
Oct. 3—Andrews Stock Farm, Kearney, Mo.
Oct. 5—L. D. Arnold, Enterprise, Kans.
Oct. 5—E. A. Vanscoy, Mont Ida, Kans.
Oct. 5—A. O. Stanley, Sheridan, Mo.
Oct. 6—J. M. Baier, Elmo, Kans.
Oct. 9—Barkley Bros., Louisburg, Kans.
Oct. 9—Eli Zimmerman, Fairview, Kan.
Oct. 10—Crofford & Drummond, Norton, Kans.
Oct. 10—H. H. Harshaw, Butler, Mo.
Oct. 10—N. R. Riggs, Lawton, Mo.
Oct. 10—C. D. Swain, Robinson, Kans.
Oct. 10—A. & P. Schmitz, Alma, Kans.
Oct. 12—Andrew Jones, Rosendale, Mo.
Oct. 12—Fred Collet, Lincolnville, Kan.
Oct. 12—E. E. Axline, Oak Grove, Mo.
Oct. 12—D. A. Moats, Polo, Mo.
Oct. 12—Andrew Johns, Rosendale, Mo.
Oct. 13—H. H. Crawford, Rea, Mo.
Oct. 13—O. E. Wade, Rising City, Neb.
Oct. 14—G. W. Allen, Tonganoxie, Kans.
Oct. 15—W. R. Webb, Bendena, Kans.
Oct. 15—M. W. Adamson, Lincoln, Kans.
Oct. 15—Thos. Collins, Lincoln, Kans.
Oct. 15—G. E. Hayden & Son, Newkirk, Okla.
Oct. 15—Myers & Son, Clifton Hill, Mo.
Oct. 16—G. M. Hull, Burchard, Neb.
Oct. 17—Scott & Singer, Hiawatha, Kan.
Oct. 17—F. C. Ryston, Canute, Okla.
Oct. 17—Stryker Bros., Fredonia, Kans.
Oct. 17—J. F. Burnham, Fayette, Mo.
Oct. 19—Frank Michael, Erie, Kans.
Oct. 19—W. H. Griffiths, Clay Center, Kans.
Oct. 19—Herman Groninger, Bendena, Kans.
Oct. 19—W. E. Adams, Elk Falls, Kans.
Oct. 20—L. P. Fuller, Morrowville, Kan.
Oct. 20—A. R. Enos, Lost Springs, Kan.
Oct. 20—Jno. McKelvie, Dawn, Mo.
Oct. 20—J. L. Darst, Huron, Kans.
Oct. 20—Bolan & Aaron, Leavenworth, Kans.
Oct. 20—Davidson & Chrysler, DeWitt, Neb.
Oct. 21—Leon Calhoun, Porter, Kans.
Oct. 21—Jno. Blaine, Pawnee City, Neb.
Oct. 21—A. B. Hale, Cameron, Mo.
Oct. 22—J. A. Harness, Hamilton, Mo.
Oct. 22—T. R. Pitcher & Son, Topeka, Kans.
Oct. 22—W. H. Bullen & Son, Belleville, Kans.
Oct. 23—A. P. Young, Lexington, Mo.
Oct. 23—Carl Jensen & Son, Guide Rock, Neb., at Belleville, Kans.
Oct. 23—S. W. Coleman, Sedalia, Mo.
Oct. 23—Everett Hayes, Hiawatha, Kan.
Oct. 24—T. F. Walker, Alexandria, Neb., at Fairbury, Neb.

Oct. 24—C. L. Hurless, Coleta, Ill.
Oct. 24—J. H. Hamilton & Son, Guide Rock, Neb.
Oct. 24—Reischick, Wittrock & Wyatt, Falls City, Neb.
Oct. 24—B. T. Wray & Sons, Hopkins, Mo., at Marysville, Mo.
Oct. 26—Geo. J. Hibbs, Pattonsburg, Mo.
Oct. 26—D. S. Weir, Clay Center, Kans.
Oct. 27—C. E. Tennant, New Hampton, Mo.
Oct. 27—Logan & Gregory, Beloit, Kan.
Oct. 27—W. H. Johnston, Frankfort, Kans.
Oct. 27—Homer L. McKelvie, Fairfield, Neb.
Oct. 28—Cavett Bros., Phillip, Neb.
Oct. 28—R. E. Maupin, Pattonsburg, Mo.
Oct. 28—C. Pilcher, Glasco, Kans.
Oct. 29—F. D. Fulkerson, Brimson, Mo.
Oct. 29—Thos. F. Miller & E. J. Hays, York, Neb.
Oct. 29—Klaus Bros., Bendena, Kans.
Oct. 30—Geo. W. McKay, Laredo, Mo.
Oct. 31—F. D. Page, Orrick, Mo.
Oct. 31—J. B. Hamilton, Spickard, Mo.
Nov. 5—John Book, Talmage, Kans.
Nov. 6—C. S. Nevius, Chiles, Kans.
Nov. 6—J. E. Bowser, Abilene, Kans.
Nov. 6—J. E. Summers, Clifton Hill, Mo.
Nov. 6—Kivett Bros., Burr Oak, Kans.
Nov. 7—D. C. Stayton, Blue Springs, Mo.
Nov. 9—Herbert Griffith, Clay Center, Kans.
Nov. 10—N. E. Copeland, Waterville, Kans.
Nov. 10—H. H. Harshaw, Butler, Mo.
Nov. 11—J. W. Beauchamp, Bethany, Mo.
Nov. 12—Schneider & Moyer, Nortonville, Kans.
Nov. 12—H. O. Sheldon, Wichita, Kans.
Nov. 12—J. R. Sparks, Hunter, Okla.
Nov. 13—Frank Zimmerman, Centerville, Kans.
Nov. 14—J. E. Bundy & S. N. Hodgson, Parker, Kans.
Nov. 14—Geo. B. Rankin, Marion, Kans.
Nov. 16—Wm. Wingate, Trenton, Mo.
Nov. 17—C. G. Mills, Pleasant Hill, Mo.
Nov. 17—W. R. Crowther, Golden City, Mo.
Nov. 18—Geo. F. Beezley, Girard, Kans.
Nov. 19—Leyhe & Purcell, Marshall, Mo.
Nov. 20—Sensintaffer Bros., Brookfield, Mo.
Nov. 23—F. A. Dawley, Waldo, Kans.
Nov. 24—A. P. Wright, Valley Center, Kans.
Nov. 25—F. F. Oerly, Oregon, Mo.
Nov. 25—F. G. Niese & Son, Goddard, Kans.
Nov. 27—J. H. Harvey & Son, Maryville, Mo.
Nov. 28—J. D. Willfong, Zeandale, Kans., at Manhattan, Kans.
Nov. 28—C. T. Coats, Cleveland, Okla.
Dec. 5—G. W. Roberts, Larned, Kans.
Dec. 7—H. N. Holdeman, Meade, Kans.
Jan. 19—T. A. McCandles, Bigelow, Kan.
Jan. 21—H. H. Harshaw, Butler, Mo., at Sedalia, Mo.
Jan. 25—Frank Michael, Erie, Kans.
Jan. 27—Homer L. McKelvie, Fairfield, Neb.
Jan. 28—W. H. Johnston, Frankfort, Kans.
Feb. 3—F. G. Nies & Son, Goddard, Kan.
Feb. 4—W. W. Martin, Anthony, Kans.
Feb. 4—H. O. Sheldon, Wichita, Kans.
Feb. 9—Kivett, Burr Oak, Kans.
Feb. 10—C. S. Nevius, Chiles, Kans.
Feb. 10—Lemon Ford, Minneapolis, Kans.
Feb. 12—Geo. Wedd & Son & C. S. Nevius, at Spring Hill, Kans.
Feb. 12—D. A. Wolfersperger, Lindsey, Kans.
Feb. 13—Frank Georgia, Mankato, Kan.
Feb. 17—John Book, Talmage, Kans.
Feb. 18—J. C. Larrimer, Wichita, Kans.
Feb. 18—J. E. Bower, Talmage, Kans.
Feb. 21—J. W. Hoyle, Dwight, Kans.
Feb. 24—Logan & Gregory, Beloit, Kan.
Feb. 25—H. H. Harshaw, Butler, Mo.
Feb. 25—W. A. Prewett, Asherville, Kans.
Feb. 26—C. H. Pilcher, Glasco, Kans.

Duroc-Jerseys.

Aug. 20—H. L. Stites, Pilot Grove, Mo.
Sept. 2—F. F. Bowman, Kinston, Mo.
Sept. 8—A. F. Russell, Savannah, Mo.
Sept. 10—B. W. Hale, Laddonia, Mo.
Sept. 10—Maupin & Applegate, Shelbyville, Mo.
Sept. 11—C. A. Wright, Rosendale, Mo.
Sept. 24—J. W. Taylor, Edwardsville, Kans.
Oct. 1—Ditmars Bros., Turney, Mo.
Oct. 7—J. B. Davis, Fairview, Kans.
Oct. 7—W. H. Diffenderfer, Lost Springs, Kans.
Oct. 7—W. J. Tucker, Elk City, Kans.
Oct. 8—F. J. Miller, Wakefield, Kans.
Oct. 16—Lynch & Addy, at Independence, Mo.
Oct. 19—J. E. Ellsworth, Formosa, Kans.
Oct. 20—Sweany Bros., Kidder, Mo.
Oct. 21—E. D. Ludwig, Sabetha, Kans.
Oct. 21—T. S. Larowe, Miltonvale, Kan.
Oct. 21—Pearl H. Pagett, Beloit, Kans.
Oct. 22—Ola Nordstrom, Clay Center, Kans.
Oct. 22—W. T. Hutchinson, Cleveland, Mo.
Oct. 22—H. G. Warren, Inland, Neb.
Oct. 23—Hopkins Bros. & Sanstead, Holdrege, Neb.
Oct. 23—J. C. Monk, Ridgway, Mo.
Oct. 26—Watts & Dunlap, Martin City, Mo., at Independence, Mo.
Oct. 27—E. S. Watson, Torney, Mo.
Oct. 27—R. B. Adams & Son, Thayer, Kans.
Oct. 27—O. N. Wilson, Silver Lake, Kans.

Oct. 28—S. A. Hands, Thayer, Kans.
 Oct. 28—Grant Chapin, at Manhattan, Kans.
 Oct. 28—W. H. Wheeler & Sons, & W. H. Miller, Cameron, Mo.
 Oct. 29—Chas. Leibhart, Marquette, Neb.
 Oct. 29—G. W. Colwell, Summerfield, Kans.
 Oct. 29—J. M. Hammond & K. S. A. C., Manhattan, Kans.
 Oct. 30—Thompson Bros., Garrison, Kans.
 Oct. 30—Burton Hahn, Norton, Kans.
 Oct. 30—J. E. Rome, Stockham, Neb.
 Oct. 31—E. C. Gwinner, Holdrege, Neb.
 Oct. 31—J. E. Joines, Clyde, Kans.
 Nov. 3—E. M. Myers, Burr Oak, Kans.
 Nov. 4—B. F. Potter, Mayfield, Kans., at Caldwell, Kans.
 Nov. 5—J. F. Stodder—Marshall Bros., Burden, Kans.
 Nov. 6—Coppins & Worley, Potwin, Kans.
 Nov. 10—W. L. Addy & Son, Parnell, Mo.
 Nov. 11—Chester Thomas, Waterville, Kans.
 Nov. 11—J. W. Beaucamp, Bethany, Mo.
 Nov. 13—T. I. Woodall, Fall River, Kan.
 Nov. 17—L. D. Padgett & Segrist, Beloit, Kans.
 Nov. 20—A. S. Alkin, Parsons, Kans.
 Nov. 21—Lant Bros., Parsons, Kans.
 Nov. 28—J. Harvey & Son, Marysville, Kans.
 Jan. 19—Jas. L. Cook, Marysville, Kans.
 Jan. 19—W. C. Whitney, Agra, Kans.
 Jan. 26—Ward Bros., Republic, Kans.
 Jan. 27—J. C. Logan, Onaga, Kans., at Havensville, Kans.
 Jan. 28—Samuelson Bros., Manhattan, Kans.
 Feb. 1—W. T. Fitch, Minneapolis, Kan.
 Feb. 2—Pearl H. Pagett, Beloit, Kans.
 Feb. 3—Jno. W. Jones & Son, Concordia, Kans.
 Feb. 4—J. E. Joines, Clyde, Kans.
 Feb. 5—Grant Chapin, at Manhattan, Kans.
 Feb. 6—G. M. Hammond & K. S. A. C., Manhattan, Kans.
 Feb. 9—B. F. Porter, Mayfield, Kans.
 Feb. 9—Thompson Bros., Garrison, Kan.
 Feb. 9—H. Metzinger, Caldwell, Kans.
 Feb. 10—T. E. Goethe, Leonardville, Kans.
 Feb. 11—Ola Nordstrom, Clay Center, Kans.
 Feb. 12—L. E. Kretzmeier, Clay Center, Kans., at Emporia, Kans.
 Feb. 13—Frank Georgia, Mankato, Kans.
 Feb. 15—J. A. Rathbun, Downs, Kans.
 Feb. 16—D. O. Bancroft, Downs, Kans.
 Feb. 17—R. G. Sollenburger, Woodston, Kans.
 Feb. 18—Jno. W. Jones & Son, at Emporia, Kans.
 Feb. 18—E. M. Myers, Burr Oak, Kans.
 Feb. 19—H. B. Miner & A. T. Cross, Guide Rock, Neb., at Superior, Neb.
 Feb. 23—A. B. Skadder & Son, Frankfort, Kans.
 Feb. 23—Wm. Sutter, Liberty, Neb.
 Feb. 28—Jas. M. Williams, Home, Kans.

The Lincoln Top Sale Circuit.

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

Central Kansas Sale Circuit.

Oct. 6—N. J. Fuller, Garnett, Kans.
 Oct. 7—J. B. Davis, Fairview, Kans.
 Oct. 7—J. F. Staadt, Ottawa, Kans.
 Oct. 8—H. R. Ginrich, Wellsville, Kans.
 Nov. 9—C. R. Green, Spring Hill, Kans.

Southeastern Kansas Sale Circuit.

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

Berkshires.

Aug. 19—Kinlock Farm, Kirksville, Mo.
 Aug. 21—C. E. Sutton, Lawrence, Kans.
 Aug. 22—Missouri Berkshire Association at Jefferson City, Mo.
 Sept. 18—T. F. Guthrie, Strong City, Kans.
 Oct. 15—American Royal, Kansas City, Mo.
 Oct. 17—A. C. Dugan, at Blackwell, Okla.
 Oct. 27—C. A. Robinson, Kirksville, Mo.

O. I. C.

Sept. 24—Combination sale, St. Joseph, Mo., I. M. Fisher, Mgr., box K, Hastings, Neb.
 Sept. 30—Combination sale, Cameron, Mo., I. M. Fisher, Mgr., box K, Hastings, Neb.
 Oct. 1—Combination sale, Independence, Mo., I. M. Fisher, Mgr., box K, Hastings, Neb.
 Oct. 8—Combination sale, Sedalia, Mo., I. M. Fisher, Mgr., box K, Hastings, Mo.
 Oct. 13—J. E. Simpson, Sheridan, Mo.
 Oct. 15—Combination sale, Independence, Mo., I. M. Fisher, Mgr., box K, Hastings, Neb.
 Oct. 22—Combination sale, Hastings, Neb., I. M. Fisher, Mgr., box K, Hastings, Neb.
 Oct. 27—Combination sale, Holdrege, Neb., I. M. Fisher, Mgr., box K, Hastings, Neb.
 Oct. 30—Combination sale, Concordia, Kans., I. M. Fisher, Mgr., box K, Hastings, Neb.
 Nov. 4—Combination sale, Sioux City, Iowa, I. M. Fisher, Mgr., box K, Hastings, Neb.
 Nov. 4—D. O. Stayton, Blue Springs, Mo.
 Nov. 18—A. T. Garth, Larned, Kans.
 Dec. 10—S. W. Artz, Larned, Kans.

Percherons.

Feb. 16—J. C. Robison, Mgr., Wichita, Kans.

Horses.

Nov. 23, 24, 25—Draft breeds registered horses at Springfield, Ill., W. C. McGavock & Co., Mgrs.

Combination Sales.

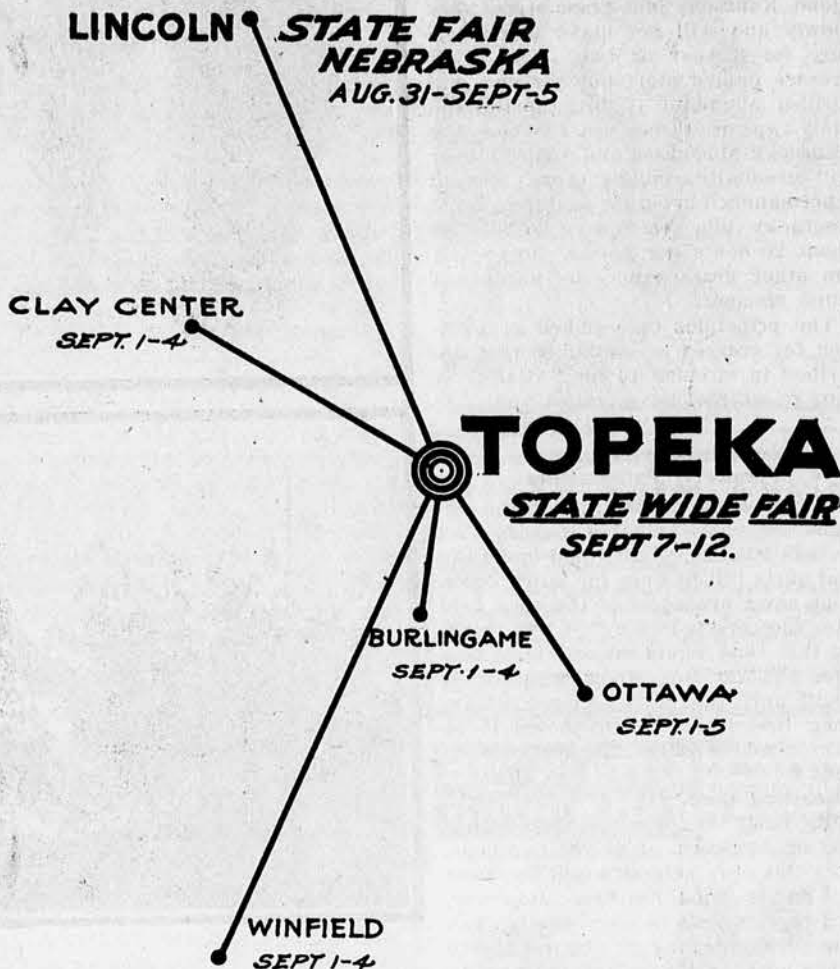
Feb. 16, 17, 18—J. C. Robison, Mgr., Topeka, Kans., at Wichita, Kans.
 Oct. 15—American Aberdeen Angus Association breeders' sale, at American Royal, Kansas City, Chas. Gray, Live Stock Record Bldg., Chicago, sales manager.

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

The Big Fair at Topeka.

Secretary R. T. Kreipe of the Kansas State Exposition Company announces that the prospects for a big exhibit of live stock at Topeka during the week of September 7 to 12, are more than promising. He has never had so strong a demand for premium lists and every-

found, and many of them might be kept over for breeding purposes. Not so many old and broken-mouthed sheep are on the range as formerly and a large proportion of the old ewes coming forward have good mouths. If a farmer wants to start a small flock, he could purchase a band of old ewes, and either by using care in the selection or by purchasing about 100 more than he wishes to retain, could send back the sheep with broken mouths or bad udders and get a select bunch for a very moderate price. The writer was talking only a day or two ago with Mr. William Daley of Rawlins, Wyo., who



thing points to the success of the rejuvenated exposition. The association now has plenty of money behind it and breeders who come need have no fears about collecting the premiums which they win.

The circuit has been so arranged that breeders can come direct from the State Fair of Nebraska and then have a choice of points for the week following. A well conducted fair is an education institution of immense value. In fact, its real value has never been properly appreciated in Kansas.

If you are an exhibitor you will be interested in the accompanying map which shows the relative positions of a number of fairs, and if you are not an exhibitor you will want to come anyhow and see the State-wide fair and enjoy the hospitalities of the capital city.

More Sheep Needed.

During the week there have been two farmers from different sections of the State in the office of THE KANSAS FARMER to seek advice as to starting in the sheep business. They desire to follow out a suggestion made some time ago in these columns that there is room for a few good sheep on very many farms in Kansas and that there is money to be made in breeding pure-bred sheep. It is not advised that sheep ranching be engaged in to any great extent but is urged that there is a place on nearly every Kansas farm for a few head of sheep and that they will be found to be profitable.

In this connection the following statement from Director E. A. Burnett of the Nebraska Experiment Station will doubtless be read with interest as the conditions in that State are almost identical with those in Kansas:

"The writer has just completed a trip over two railroads in Eastern Nebraska which is suffering from excessive rains, and has been particularly impressed with the need for sheep to clean up the stubble fields and the rain on low, wet spots, which are too wet to harvest. Weeds will be sure to come on rapidly and furnish a large amount of feed which, if not eaten, will damage the fields and infect them with seed to trouble in subsequent years. Many corn fields will also be very weedy and will need sheep to clean them up after the corn matures. Almost every farm in the eastern counties of the State could handle a band of sheep from August 1 to the middle or last of October and have the farm the better for it, even if the sheep did not pay anything for the feed eaten. The small farmer could handle perhaps a single deck, while a man with 160 acres of grain and an equal amount of corn and pasture could handle a double deck or more. Many farmers would be glad to have their grain fields cleaned up without charging for the pasture if they could be sure that other crops would not be damaged.

"Prices of sheep are moderate at the present time and some dry ewes are coming forward which are not fed for killers. These might be taken out for a month or more and put back on the market before the rush comes in October.

"A half million sheep could be distributed among the farmers of the State so that they could hardly be

said: 'We sell all ewes over 5 years old. They will last two or three years yet if well handled and make the very best mothers. We sold a band last fall to a man on the range, who got 85 per cent lambs this year in spite of a cold, backward spring.'

"Sheep have made a great deal of money in the last few years to experienced feeders, although some have lost money. This was especially true of last year, when men purchased at very abnormal prices, which broke sharply in November and later. Sheep are now on a much lower and safer basis than last August and it is probable that these favorable conditions for the purchase of feeding stock will continue during the summer, so that farmers who wish to start with a few sheep will find this a favorable time."

A Kansas Jersey Sale.

We have often wondered what made the Jersey Bulletin, which is published at Indianapolis, Ind., as the representative journal for the Jersey breed of cattle so popular. Last week when H. C. Kurtz held his sale of Jersey cattle at Topeka, Editor McAnlis of the Jersey Bulletin came out to attend it. His report of this sale is as follows and serves to show one of the reasons why the Jersey Bulletin is always interesting:

For a "hurry up" sale in "new" territory, the dispersal by auction of the Jersey herd owned by Mr. H. C. Kurtz at Topeka, Kans., might well be called a "crackerjack." Quite a bit has been said through The Jersey Bulletin of late concerning the demand for Jerseys in Kansas and surrounding States, and this demand was certainly evidenced when Mr. Kurtz closed out his little herd on Tuesday of last week (July 7). Buyers from Utah, Nebraska, Missouri, and Kansas just about fell over themselves in their eagerness to secure the offerings, and prices went as high as \$140 for a mature cow, \$100 for a two-year-old heifer, \$90 for a yearling heifer, \$55 for a heifer calf, \$62.50 for a yearling bull, and \$80 for a bull calf.

There were only nineteen head of registered animals in all, and, as was to be expected in a closing-out sale, some of them were defective in various respects. But they were Jerseys, and most of them were good ones, too. Mr. Kurtz had placed a small advertisement in The Jersey Bulletin, and the usual result followed—buyers were there who knew good Jerseys and were willing to pay for them. The registered animals brought \$1,515, an average of \$79.74. Not one sold for less than \$50, except two little bull calves. Two young grade cows were sold to Messrs. James Chappelle and W. J. Davis, both of Topeka, at \$50 and \$41, respectively.

Of the nineteen head, only six animals remained in Kansas, and only three are in the immediate vicinity of Topeka. Mr. J. B. Smith, the well-known Jersey breeder of Beatrice, Neb., was present and secured five head of good ones at an average of \$98 each, and was a liberal bidder on many of the others. Five others went to Mr. George Whitehead, of St. George, Utah, at an average price of \$90. Mr. Whitehead is making up a carload to ship to Utah, and had already purchased a number from Mr. Smith. Included in his five secured at Topeka, was the

(Continued on page 802.)

The Dain Pull Hay Press
MAKES NEAT
SMOOTH SQUARE-ENDED BALES
 Our rocker tucker (nothing like it on any other Press) folds every feed so that Dain made bales pack close in cars. The Pull Power feature saves Time, Work, Money, increases capacity. The Dain Press is simplest, Strongest Hay Press made. No complicated toggle joints to wear and make trouble. No bungle-some Pitman for team to step over. No waste power and rebound like a pile driver. We want you to know why it turns out most perfect bales, is lightest running, fastest baling Press made. Our Free Book proves its superiority—send for it today.
DAIN MANUFACTURING COMPANY
 836 Vine Street Ottumwa, Iowa

DOES THE WORK
5 MEN & 20 HORSES
 For the large farmer the Hart-Parr Kerosene Engine is a necessary economy. Depending somewhat upon the class of work, it will save the labor of five men and twenty horses. For the farmer with a large acreage in oats, wheat or corn, it means dollars in pocket. It is also ideal for plowing, threshing, discing, seeding, harrowing, road-grading, feed-grinding, and shelling or shredding corn. Its OIL COOLED features enable it to operate just as well in summer as in winter. Write us today for illustrated catalogue and testimonials from scores of actual users.
HART-PARR CO.
 212 LAWLER ST., CHARLES CITY, IA.

"OHIO" ENSILAGE CUTTER
 There's something in a name when you are talking ensilage machinery. The name "Ohio" stands for—
The Highest Type of Ensilage Cutters and Blowers
 Will you hear the proof?
 We have it in the form of reasons. Reasons that nobody can get around. We have it in what the users say. Hundreds of them are telling mighty interesting stories of the efficiency of "Ohio" Monarch Ensilage Cutters and Blowers.
 Let us tell you something of "Ohio" capacity, power, elevating, self-feeding, distributing, and other features. Write for "Ohio" 92-page Catalog. It's free. "Modern Silage Methods." 216 pages, 10 cents. Address—
Silver Mfg. Co.
 Salem, Ohio
Superiority

3 STROKE BALER
SELF FEED
 Our "Cyclone" three stroke self feed hay press is the latest, most powerful and most efficient press on the market. Each circle of the team presses in three charges. The self feed automatically puts the hay down to the bottom of the bale chamber. These two improvements wonderfully increase capacity of our presses. Write today for circular and prices. Five days' free trial.
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L. M. PENWELL,
 Funeral Director and Licensed Embalmer.

511 Quincy St. Topeka, Kansas

Alfalfa on High Table Lands of the Western Plains.

(Continued from page 797.)

early days of June, it is practicable, by cultivating during the months of April and May to destroy the major portion of the weeds which are likely to be starting and to get a comparatively clean seed-bed in which to drill the alfalfa.

WESTERN NEBRASKA GOOD FOR GROWING ALFALFA SEED.

Mr. Brott is very much pleased with the steady development of this enterprise. He firmly believes that the elevated table lands of Western Nebraska are worth \$20 to \$30 per acre, if utilized in the growing of alfalfa seed. He sold a portion of his 1906 crop to the Department of Agriculture at twenty cents a pound, and has just received another order from the same source for five hundred pounds to be delivered July first.

Under the methods of cultivation pursued, he succeeds in growing alfalfa seed that is very nearly free from weed seeds. The produce is in excellent repute and there is no difficulty in marketing all that can be grown.

KHERSON OATS.

The writer was much interested in their experience growing Kherson oats. They found by cultivating the field the previous year—cultivation means plowing once, disking about twice and harrowing perhaps four times—that they were able to nearly conserve the soil moisture of that season and to place the land in the best possible condition for a crop the following season. It is their experience that land handled by summer tilling is placed in a mechanical condition that renders it unlikely to crust. This particular field of twelve acres, summer tilled, the next season, gave 1,080 bushels of Kherson oats, which weighed out forty pounds to the bushel or 90 bushels to the acre. It will be noted that the expense of growing 90 bushels to the acre of oats in one crop by this method is considerably less than to grow the same quantity of oats in two crops. The land has to be seeded but once, and harvested once and the cost of labor for preparation is not equal to the expense of seeding twice. The average crop of oats on these table lands, under ordinary farming, averages from thirty to fifty bushels per acre. Mr. Brott regards the Kherson oats as a safe and profitable crop on their table lands.

Crete, Neb. E. F. STEPHENS.

Kentucky Blue-Grass as Permanent Pasture.

Will you tell me, through the columns of THE KANSAS FARMER, how to proceed to seed a piece of land for permanent pasture, with Kentucky blue-grass? I would like information regarding the preparation of the soil, time of seeding, amount of seed per acre, etc. I have just harvested a crop of wheat from the land. The character of this land is rich, black limestone, second bottom, and does not overflow. What will be the probable cost of seed?

Cherokee County J. O. BEEMAN.

I would advise to plow the wheat ground rather shallow as soon as possible, following with the disk or common harrow, continuing the disking at intervals in order to pulverize the soil, destroy weeds, and conserve the soil moisture. Sow the grass about the last week in August or first week in September. If Kentucky blue-grass is sown alone it requires from two to three bushels of seed per acre, according to the grade of seed. Usually 25 pounds of good, clean seed which will germinate fifty per cent or more, is sufficient to plant an acre.

For permanent pasture, I would advise you to sow two or three pounds of White clover per acre with the blue-grass. If the blue-grass is sown this fall, perhaps it will be best to wait until early next spring to sow the clover, since clover is much more apt to winter kill than the grass. A permanent pasture of Kentucky blue-grass should always contain White clover. The clover acts as a feeder, and fertilizer to the grass.

Rather than sow the Kentucky blue-

grass alone, a better plan is to sow a combination of other grasses with the Kentucky blue-grass. In your section of the State Kentucky blue-grass, Orchard, and English blue-grass makes an excellent pasture. Ten or fifteen pounds of Kentucky blue-grass with ten pounds of Alsike and one or two pounds of White clover per acre should make an excellent pasture within a year after seeding. Sown alone, Kentucky blue-grass starts very slowly and will not make much pasture for a year or two. The other grasses named start quicker and will furnish abundant pasture during the first two or three years when the Kentucky blue-grass and White clover will gradually replace them, making a permanent blue-grass pasture. Good Kentucky blue-grass seed retails at about 20 cents per pound, clover and the other grasses may be purchased much cheaper.

The principles of seed-bed preparation for grasses is similar to that described in circular 10 for "Alfalfa," a copy of which I have mailed you.

A. M. TENEYOK.

For Early Fall Pasture.

Please let me know, through the columns of your valuable paper, THE KANSAS FARMER, what would make the best early fall pasture for milch cows, to be sown broadcast in the corn field after the corn is laid by? I was thinking that rape would make a good pasture, but do not know whether it would hurt the corn. Please advise along that line. When should it be planted and what is the best way to plant it?

URN HOLM.

Marshall County.

For early fall pasture sow either rape or cow-peas. I prefer cow-peas, since this crop acts as a soil fertilizer and makes good pasture. However, seed of cow-peas is more costly than rape seed, retailing at about \$2.50 to \$3 per bushel. By drilling the peas in close drills will require about a bushel of peas per acre. Four or five pounds of rape seed per acre is sufficient.

It will be advisable to plant the catch crop soon, the general plan being to plant at the last cultivation. At this station the results of sowing cow-peas in corn indicate that cow-peas check the growth of the corn and reduce the yield. It will depend, however, upon the season, whether the yield of corn will be reduced by growing a catch crop of cow-peas. With plenty of moisture the catch crop may not affect the yield of corn.

The plan has been recommended to plant a single row of cow-peas between the corn rows. It is claimed that by planting in this way the growth of the corn is not injured by the peas.

Rye is a good catch crop for planting in corn for late fall pasture, which should be sown some time during August, preparing the seed-bed by the use of a single horse and cultivator. In fact, it will usually be advisable to use a single horse and cultivator in preparing the seed-bed for cow-peas or rape.

It is not advisable to sow a catch crop of any kind in corn which is weedy. The corn should be well cultivated and kept free from weeds in order to start the catch crop.

A. M. TENEYOK.

Crops Suitable for Hog Pasture—Sweet Clover.

I wish, immediately after harvest, to sow some kind of forage plant on stubble ground (peas of some sort) to feed a bunch of fifty shoats. Would you kindly advise me as to the proper methods of preparing the seed-bed, what kind to sow, and where to procure seed?

Enclosed I send a sample of plant growing in my alfalfa. This alfalfa was sown in April, 1907, from seed procured of a firm in McPherson, Kans. The field has made wonderful growth, second cutting now almost ready, and is now knee high. There is not much of this plant among it. Will it injure the crop or land?

Rice County.

A. A. WEST.

Cow-peas and soy-beans may be used in the way which you propose.

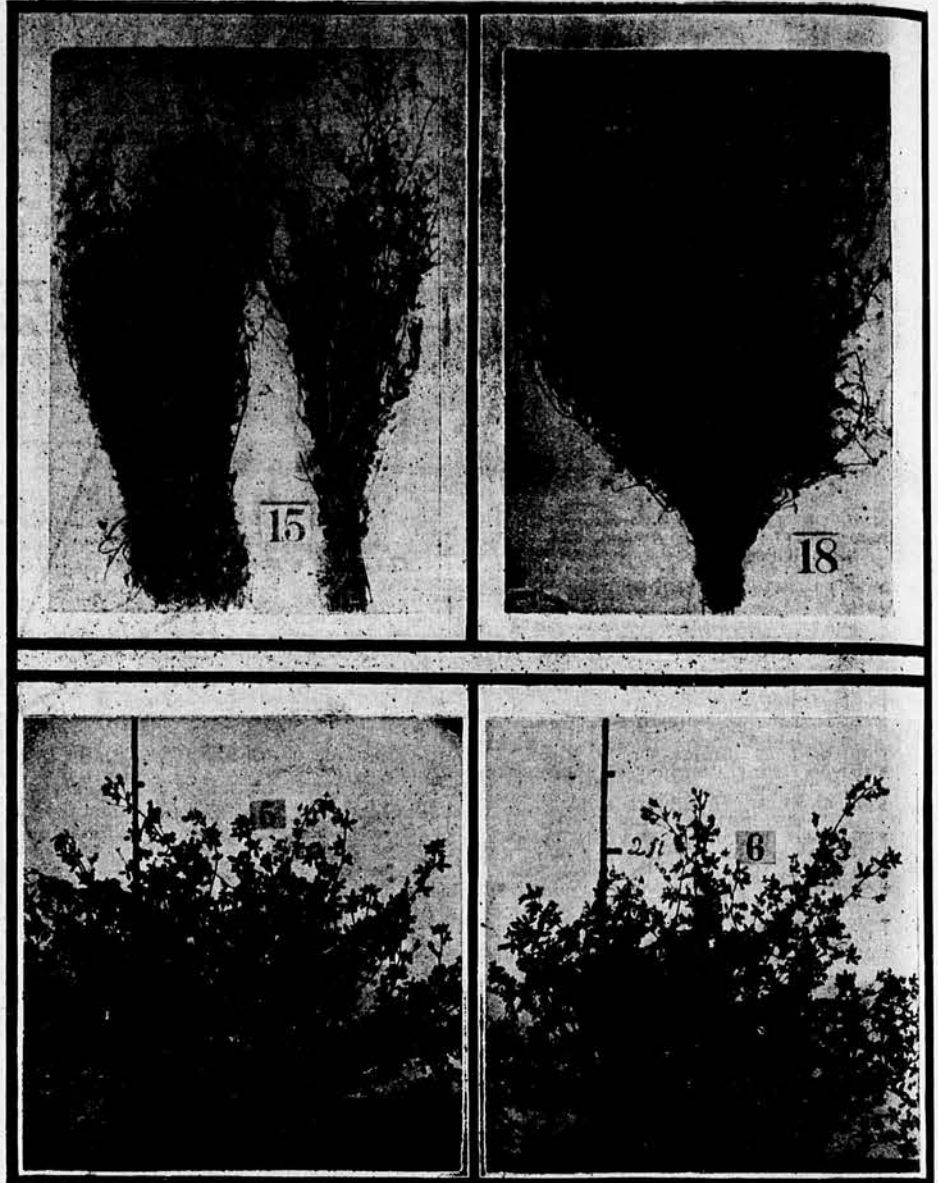


PLATE V.

No. 15, from Plat E-3. Dry land Nebraska. Plant 10-17, to left. Remarkable stooling trait, 250 stems from one single plant the first year. Yield of seed, 7 grams.

No. 18, from Plat D-5, 6-20 Sand Lucerne, Pullman, Wash. Extra fine stems and leaves, fine hay type. Yield of seed, 4 grams.

Contrasting Qualities of Single Plants.

No. 5, From Plat E-4, 10-1. Argentine. This plant grew adjacent to No. 6, and shows that while they are similar in size there is a contrast in seed yield. Yield, 6 grams.

No. 6, From Plat E-4, 9-4. Argentine. This plant, while a fine hay type, is also a good seed yielder; produced 20 grams.

Such varieties as the New Era, Black Eye White, and Warren's Extra Early cow-peas and Early yellow soy-beans may be recommended. However, neither of these crops will produce a very large yield of grain per acre and unless the season is quite favorable, and the frosts rather late, there is a possibility that the crop may not make a good growth or mature early enough to furnish much grain for feeding hogs. If you can secure a good early-maturing variety of corn—some variety of early sweet corn or field corn—I would recommend planting it for grain in preference to cow-peas or soy-beans. On the other hand cow-peas or soy-beans may furnish considerable pasture and some grain and the growing of the crop should benefit the soil more than the growing of corn. Another disadvantage is the cost of seed of cow-peas and soy-beans, the seed retailing at from \$2.50 to \$3 per bushel. Seed of cow-peas and soy-beans may be secured from Kansas seedsmen.

Considering the wet season and the weedy condition of the soil in preparing the seed-bed it will perhaps be advisable to plow as soon as possible, following with the disk or harrow in order to pulverize and settle the soil and put it into good seed-bed condition.

The cow-peas or soy-beans may be sown broadcast or in close drills which requires about a bushel of seed per acre, or the seed may be planted in rows and the crop cultivated the same as corn or other intertilled crop. This method of planting requires about eight or ten quarts of seed per acre, and will furnish as much feed and possibly more seed than if the crop were planted in close drills and given no cultivation.

If you plant corn and need the pasture, it may be advisable to sow rape, since seed of cow-peas and soy-beans will be costly and hard to secure. On



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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

fertile soil rape will supply an abundance of green forage. I have mailed you circular 8 on "Cow-peas," and circular letter on annual crops for hog pasture, including rape.

The sample of plant which you send in is the common sweet clover, White Melilot (Melilotus alba). This is an annual or at least a biennial and will soon be destroyed by regular cutting of the alfalfa. It is a common roadside weed.

A. M. TENEYCK.

Preparation of alfalfa, clover, and Timothy Ground for Seed.—Barley Ground for Alfalfa.

Would you please tell me, through THE KANSAS FARMER, how to prepare alfalfa, clover, and timothy ground for seed?

I have a small piece of ground from which I have just cut the barley and I intend to sow it to alfalfa this fall. I have some ground I want to sow to clover and timothy next spring? How and when in the best time to sow?

ROY E. PEARSALL.

Woodson County.

To prepare the barley land for fall seeding of alfalfa, I would advise you to plow shallow as soon as possible; follow with the harrow or disk and continue the disking at intervals in order to pulverize and settle the soil, destroy weeds and maintain a soil mulch for receiving the rain and conserving the soil moisture. Sow the alfalfa the last of August or first of September. If it is desired to prepare the same kind of ground for spring seeding or seeding timothy and clover, plow late in the summer or early in the fall; disk late in the fall or during the winter, and finish the preparation of the seed-bed in the spring, sowing the grasses and clover as soon as the soil is in fit condition to cultivate. A seed-bed for alfalfa, clover, or grasses should be free from weeds, finely pulverized and well settled and provided with a sufficient supply of moisture and plant food to germinate and start the seed at once when it is placed in the ground.

In drier seasons, simply disking and harrowing after harvest without plowing may prepare a good seed-bed for fall sowing of alfalfa, but the thick, rank growth of foxtail and crab-grass this season, due to the extremely wet weather, makes it necessary to plow.

It will not be advisable to let the weeds seed on the barley ground before plowing. If the plowing can not be done, it is preferable to mow to prevent the weeds from seeding. In a drier season with less weeds, it would be desirable to disk the ground at intervals between harvest and plowing; perhaps disking will not do much good this year.

For more detailed information on the subject I have mailed you copy of circular 10 on "Seeding Alfalfa."

A. M. TENEYCK.

Horticulture

Packing of 1907 Crop of Apples.

In its April issue our excellent contemporary, the Fruit-Grower, indulged in some reflections on "The Price of Apples." The editor of the Fruit-Grower has heard from some persons interested on account of which circumstance he prints in his July number as follows:

We have received several letters from subscribers regarding the article in the April Fruit-Grower entitled, "The Price of Apples." One is from I. Henthorn, Bentonville, Ark., who admits that too many apples of poor quality were packed last season, but says that the growers were not responsible for this, for in his section most of the apples were sold to buyers who packed their own fruit, and therefore the blame for the poor packing rests upon them. Mr. Henthorn closes his letter as follows:

"In future the grower should strive to produce a better quality of apples, and whoever packs them should pack and grade more carefully, and mark each grade just as it is, and also mark the name of the packer or association putting up the fruit. Then if there is

anything wrong the blame can be placed where it belongs."

Mr. Henthorn is correct in his statements. Most of the Arkansas fruit was packed by regular dealers and not by the growers—this is usually true of the fruit grown in the Middle West. It is also true that the chief complaint of poor quality fruit does not refer to the Arkansas apples, for most of the low-grade stuff we have seen was fruit from Michigan, New York, and what is generally known as "the Baldwin country."

Another letter comes from Verhalen Bros., well-known apple handlers of Chicago, and we quote their letter in full:

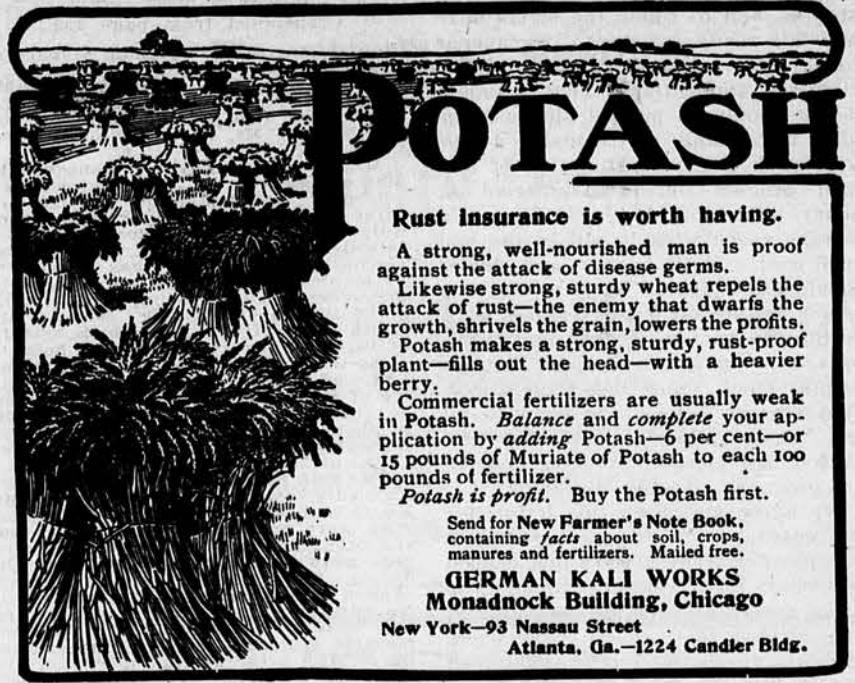
"We wish to take exception to your article on 'The Price of Apples' in your April issue. While your deductions are in the main correct, you are not well informed and speak too early when you say, 'We don't believe that any buyer has lost money on really good apples this year.' While this may apply to an individual case in some local market, it must not be taken as a criterion. In the large central markets, where the dealers operate in apples on a large scale, they have all suffered severe losses, and grief aplenty in sight with heavy stocks still in storage on which movement is slow regardless of price.

"Eastern apples were sold on the Chicago market during March and April at prices that did not cover cost of barrel, freight, and storage. These same apples looked good enough to the buyer last fall to pay the grower \$3 per barrel for the fruit in the orchard.

"That the large amount of low-grade stuff which was packed and put on the market was the cause of this condition is accepted by every one; however, we should not blame the grower entirely for this. From long practise we have come to accept a ruling on grading apples, which does not apply to any other fruit and which is wrong in principle. No matter how poor the quality, the best they have must be called No. 1 stock for that year. Had the buyers condemned the New York and New England crops last fall largely, as too poor to go into barrels, this rubbish that we have been complaining about all winter would have either been converted into cider or allowed to go to waste. But the cry of light crop was taken up and buyers started out early to corner everything in sight, some regardless of price, others regardless of quality, which soon had the grower excited. Everything that resembled an apple was carefully stored away for those fabulous prices to come later. These apples in growers' and local dealers' hands are what caused the mischief.

"While the operator who had bought and stored good stock realized that this low-grade stuff would have to clean up before he could market his fruit, it was figured that if it did not go into consumption it would waste away, but that stuff was so downright mean, it even refused to rot, and as a result, it was on the market all winter to help keep prices low. Even at this late date, May 1, cellar-stored stock is still coming from the East to the Chicago market. With peaches ready to move from the Southwest in thirty days, there is little consolation to be drawn out of the apple situation.

"In this mad scramble of recent



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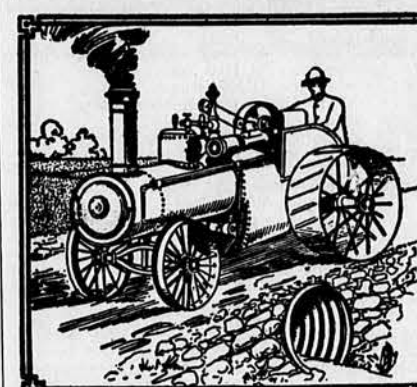
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Fig Preserves made at Aldine, near Houston, best known. Figs never fail to bear here. One acre set in Figs and one town lot at Aldine, both \$230. Payable \$10 down, \$10 a month, without interest, no payments when sick. Clear warranty deed in case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

E. C. ROBERTSON,

Gen. Mgr., 501 Klam Bldg.,

HOUSTON, TEXAS

years to put food products into cold storage, and to which the banks have lent too ready assistance, we appear to have lost sight of its correct principle and application: That it should be used only to protect surplus supplies is certainly a reasonable deduction. When the consumption of any food product during its period of heavy production is checked by cold storage speculation it will in the end spell ruin. Both grower and dealer should allow apples to go to the consumer freely at a reasonable price during the packing season and thereby create an active demand for the surplus stock which has been stored. Cold storage houses are open to all and when properly used and not abused are factors for good both to the producer and the consumer."

We agree also with this letter, for our positions are the same—that it was the low-grade stuff which caused the loss. Last season's apple crop would have been short, if the fruit had been graded as it should have been, but when the entire crop was dumped into barrels the total quantity stored was much larger than had been expected would be placed on the market.

Notwithstanding this, however, good fruit has sold well all through the season. Within a week of the date of the letter printed above The Fruit-Grower bought three barrels of Jonathan apples in Chicago and paid \$8 per barrel for them. And at the same time other apples were being sold at just any price the buyers would pay.

Our correspondents are hardly justified in saying that the poor fruit which caused the break in the market was that which was in the hands of growers and local dealers. Some of the fruit may have been stored by this class, but even the professional apple handlers were not free from blame. Low-grade apples owned by farmers are not more harmful to the market than fruit of the same grade in possession of the largest dealers in the country. The fault lies first with the man who packed the fruit, and then it extends to the man who bought such stuff, to be dumped on the market later.

The point for members of The Fruit-Grower family is that they ought to get out of the class which grows this low-grade stuff. Strive to produce first-grade apples, as Mr. Henthorn suggests. Competition there is less keen, and the market is looking for that kind of fruit.

Alfalfa or Clover in the Orchard?

I have an apple orchard that has been set five years. The land is sandy and rolling, consequently washes badly. Would it be prudent to set this orchard to alfalfa or clover? If either, which is preferable?

J. M. TEMPLETON.

Pottawatomie County.

The advisability of seeding your orchard down will depend largely upon your local conditions of rainfall and quality of soil. If the rainfall is only about sufficient to keep your trees in good condition, the presence of a growing crop during the spring and early summer months may be detrimental to the growth of the trees. In such case, growing a cover crop, sown about the middle of July, of cow-peas or oats, or a mixture of these, will be beneficial in preventing washing and blowing of the soil during the spring. Disking or plowing under after the spring rains are past and keeping clean until time to sow again will benefit the growing trees. In thin soils, where there is moderate rainfall, this combination of cover crops and cultivation is proving a very good method of treatment.

ALBERT DICKENS.

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MADE BY R. E. DIETZ COMPANY NEW YORK

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PIONEERS AND LEADERS

A Kansas Jersey Sale.

(Continued from page 799.)

"top" of the sale, a splendid 6-year-old cow that had milked as high as 45 pounds a day. She is a daughter of Mr. Recorder 54798, a grandson of Recorder, and out of a granddaughter of Tolt, bred by Mr. H. C. Taylor, Oxfordville, Wis.

Mr. F. O. Chesney, of Kansas City, Mo., was another of the prominent Jersey men present, and he "bid last" on three fine granddaughters of Rosette's Golden Lad, for his choice herd maintained near Peoria, Ill. Lad's Gay Duchess, of this trio, was considered by many to be the best individual sold, her udder and teats being exceptionally fine. A splendid young son of Mr. Smith's noted bull, Emanon, is worthy of especial mention. His sire being a prize-winning son of Golden Fern's Lad, and his dam a double granddaughter of Exile of St. Lambert, makes him of rich breeding on both sides. He went to Mr. A. M. Floersch, but was later resold at an advance to Alvey Bros., of Meriden, Kans.

The sale had been arranged for very hurriedly, owing to the fact that Mr. Kurtz had sold the farm, and the Jerseys were sold at the same time that the other live stock, farm implements, etc., were put up at auction. But the Jersey folks "laid low" until their chance came and then they waded in. No catalogue had been prepared, and this is to be regretted, for it was impossible to get an adequate understanding of the breeding and merits of the different animals. A little "printer's ink" along this line always proves a good investment. Mr. Kurtz and Auctioneer Chas. M. Crews did the very best they could, however, and the result was very satisfactory all 'round. The following is a complete list of the registered animals, given in the order in which they were sold:

LIST OF SALES.	
Mr. Recorder's Duchess 180180, cow (6)—J. B. Smith, Beatrice, Neb.	\$135.00
Lad's Gay Duchess 216156, heifer (2)—F. O. Chesney, Kansas City, Mo.	100.00
Lad's Pretty Duchess, heifer (1)—F. O. Chesney	82.50
Emma Lecq 2d 198705, cow (4)—J. B. Smith	85.00
Emma Lecq 3d 206487, cow (3)—George Whitehead, St. George, Utah	82.50
Emma Lecq's Orphan 217061, heifer (1)—F. O. Chesney	70.00
Mr. Recorder's Gladys 182127, cow (6)—Geo. Whitehead	140.00
Gladys' Laddy 80687, bull calf (3 mos.)—A. M. Floersch, St. George, Kans.	35.00
Mr. Recorder's Daisy 173769, cow (7)—George Whitehead	72.50
Daisy's Gay Lad 80688, bull calf (2 mos.)—A. M. Floersch	37.50
Susie Hulise 164556, cow (8)—J. B. Smith	90.00
Susie Hulise 2d 193255, cow (4)—J. B. Smith	90.00
Susie Huse 6th 217063, heifer calf (9 mos.)—J. W. Russell, S. Topeka, Kans.	50.00
Susie Hulise 5th 217060, heifer (1)—J. B. Smith	90.00
Susie Hulise 4th 209174, heifer (2)—Hughes & Jones, Topeka, Kans.	65.00
Mr. Recorder's Millie 206486, cow (7)—George Whitehead	92.50
Lad's Millie 217062, heifer calf (10 mos.)—J. W. Russell	55.00
Exile of Topeka 78474, bull calf (9 mos.)—Alvey Bros., Meriden, Kans.	80.00
Grizette Brown's Lad 75561, bull (1)—George Whitehead	62.50

"The Bulletin man" was glad to meet so many friends of The Jersey Bulletin at this sale, and to have the opportunity of meeting with so many of those prominent in dairy circles in that vicinity. So far as we remember, this is the first Jersey sale in Kansas that has ever been attended by a representative from the home office of The Jersey Bulletin, but judging by the ever-increasing demand for the "dairy queens" in that State, it will not be the last, for the time is coming when Nebraska, Kansas, and Oklahoma will be Jersey States second to none.

The above list gives only a few of those present; there was a very good attendance of local breeders and dairymen, and a number of others from a distance, who helped the sale both by their presence and their bids. Among these, "The Bulletin man" noted Mr. O. P. Dovel, of Auburn, Neb.; Mr. W. S. Bane, of Belton, Mo.; Mr. T. O. Brown, of Reading, Kans.; and Mr. A. J. Swingle, of Leonardville, Kans.

L. A. Keeler's Durocs.

L. A. Keeler, who formerly bred Duroc-Jerseys at Ottawa, Kans., and whom many of our readers will remember as a regular advertiser in THE KANSAS FARMER, has recently purchased a fine 320-acre farm adjoining the townsite of Toronto, Kans., on the main line of the Missouri Pacific, half way between Kansas City and Wichita, and on the Santa Fe line from Emporia to Chanute, thus giving him the very best of shipping facilities. Mr. Keeler has located his herd at this point, and is now prepared to furnish his many old patrons and a host of new ones with up-to-date breeding stock of the best quality.

The writer recently had the pleasure of visiting the herd, and was pleased with what he saw. Mr. Keeler certainly understands mating and developing in a way that obtains the best results for breeding purposes. His young stock is not fattened but is "grown" on alfalfa and bone and muscle producing feeds, and the result is heavy bone, sturdy frames, and an abundance of muscle and vitality to fit them for the important work of reproduction.

The spring farrow has been a good one, and Mr. Keeler has raised from 16 sows, 98 pigs that are among the best that we have seen. A large portion of these came early and will soon be ready to ship. They are a growthy, thrifty, vigorous lot, with good bone, the very best of feed, good, broad, short heads, strong, thick-fleshed backs, and plenty of stretch. These are out of dams representing some of the best strains of

Duroc breeding, with good feet and bone, coupled with size and finish and strong producing qualities.

A sire that has exerted a strong influence on the herd is Johnny Orion by Orion. He has a number of extra good daughters that are giving a good account of themselves in the herd. He is also well represented in the spring farrow. Colonel K. by L. H. Roberts, he by Lord Roberts, has done excellent work, a number of the producing females being by him, and he is well represented in the crop of spring pigs.

Mr. Keeler has recently purchased from the State Agricultural College at Manhattan the outstanding young boar, Highland Chief, to head his herd. This fellow is a show prospect and Professor Kinzer pronounces him one of the best Duroc boars produced at the college. He is richly bred, being by College Chief, a grandson of Ohio Chief. His dam is College Gem 2d by Manhattan Boy, bred by J. U. Howe, of Wichita.

Mr. Keeler has some very fancy yearling kits that will be bred to Highland Chief for early fall litters. Some of these are for sale at right prices. These with the fine crop of springs that are coming on will make Highland Stock Farm headquarters for Durocs this fall. Watch for Mr. Keeler's advertisement in THE KANSAS FARMER and in the meantime write him your wants, mentioning this paper.

Kansas State Agricultural College Names a Special Day for "Wheat" Institute.

Not how many acres of wheat but how many bushels per acre is to be the "slogan" for the next few years if the Kansas State Agricultural College is to have its way. And so on Saturday afternoon, August 1, from 2 to 4 o'clock, every farmers' institute in Kansas is asked to hold a meeting to talk over methods of getting more wheat from each acre. Every county institute president is asked to arrange for meetings at every village and town in his county—just informal conferences. Leaders may be appointed to arrange for halls and to start the meetings. The farmers' institute department wants these conferences to be largely "experience" meetings, getting at the best methods of the best wheat farmers of Kansas. And so it is hoped that on Saturday afternoon, August 1, from 2 to 4 o'clock, there may be several hundred of these "wheat conferences" in this great wheat State, looking for better methods and to better seed. Several meetings will no doubt be held in this county. Literature on the subject is being sent out to all who ask for it. Address all inquiries for literature to Farmers' Institute Department, Manhattan, Kans.

Michael's Big-Boned Poldas.

Frank Michael, of Erie, Kans., has certainly made a hit with his big Poland-Chinas in that part of the State. He has held two very successful sales, and is planning for his third one October 19.

The Michael kind not only have scale and bone to carry it, but they have finish, and those feeding and fleshing qualities that make them especially valuable to the breeder, farmer, and feeder.

Mr. Michael informs us that his hogs are doing fine and that he has one of the best lots that he has ever raised. He is planning for one of the best offerings for his October sale that he has ever made. Prospective buyers should keep this date in mind and make arrangements to attend.

Watch for advertising in THE KANSAS FARMER and get your name on the list for a catalogue.

Stryker Bros.' Poldas.

Stryker Bros., the well known Poland-China breeders of Fredonia, Kans., have claimed October 17 for the date of their fall sale.

Stryker Brothers have established a reputation for quality in their herd and are planning to put through the sale ring on the above date one of their choicest offerings. It will be remembered that these enterprising breeders captured a good share of the prizes at the Hutchinson State Fair last year. They are fitting for the shows this fall in our judgment the best lot of stuff they have ever exhibited. This means their share of awards this fall, even with stronger competition than they have met before.

Stryker Bros. understand selecting and fitting and they know how to produce the stuff to select from.

O. W. Simerly Sells Durocs Nov. 14.

O. W. Simerly, of Parsons, Kans., is a member of the Southeast Kansas Duroc-Jersey Sale Circuit, and will hold his sale November 14, as per date claimed in THE KANSAS FARMER. Mr. Simerly has one of the good herds of Durocs in that part of the State. It is headed by Jumbo Hustler, a strong breeding son of the champion and prize-winner, Kant Be Beat, assisted by O. W. Choice Goods, by W. L. A's Choice Goods, and Perfection by Perfection Chief, who won first in class at the Iowa State Fair, 1904.

These males are of different types. Jumbo Hustler has great scale and length with heavy bone and strong masculine head. O. W. Choice Goods is very fancy with nice head and ears, and easy feeding, early maturing qualities. Perfection is a strong medium in scale and bone, with lots of quality. These are all prepotent, strong breeding animals and judging from their get, which we saw in their work on the herd, is very satisfactory.

The matrons of the herd are the large, heavy-boned, prolific kind, representing some of the best strains of the breed, such as Ohio Chief, Red Chief I Am, Billie K., Oom Paul 2d, Captain by Oom Paul 2d, Royal 2d, and Star Wonder. The daughter of Ohio Chief is bred to Buddy K. 4th for an early fall litter. The other sows have given a good account of themselves in the spring farrow and there are 50 good pigs, part of which came early. Mr. Simerly has some fine fall yearling

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36-60 Reeves Separator with wind stacker, all new; 32 H. P. Reeves Engine, used one year; four 6-disc LaCrosse High Private gang plows, used one year. Fine condition guaranteed. Will sell one or all at practically your own price.

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glits, and his offering will be composed of thees and the earliest and best of his spring crop of pigs. Mr. Simerly's stock has plenty of free range, and his young stuff is all developed on muscle and bone producing feed, fitting them for the important work of reproduction.

Mr. Simerly's herd has established a reputation along this line, his stock being noted for its strong breeding qualities. Watch for future advertising in THE KANSAS FARMER and don't forget this sale.

Berkshires at Kansas City.

To Berkshire Breeders:
The year 1908 will be one to be long remembered by the Berkshire breeders of the United States for marked progress and satisfactory results.

The events of the year 1908 in Berkshire circles will not only make a bright page in the history of the breed for advancement, but its record will enthrall every progressive breeder to obtain better results in breeding, exhibiting, and selling Berkshires.

The American Berkshire Congress has decided to inaugurate an annual show of Berkshires that will ensure exhibits from and the attendance of the more enterprising breeders of the United States.

The promoters of the Berkshire industry have made the important and far-reaching decision that the breed is worthy of an annual show that will assemble for exhibition the best specimens of the breed to be found in America.

The American Berkshire Association has provided a valuable trophy for the best under a year herd to be competed for by the breeders residing in the respective States at the several State fairs.

There will be competition for the herd prizes offered by the American Berkshire Association at the State Fairs of Alabama, Arkansas, California, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Missouri, Oklahoma, South Carolina, Tennessee, Virginia, Washington, and Wisconsin.

The State Berkshire Associations in the States named above have provided special cash prizes for Berkshire exhibits made in 1908 in addition to the regular prizes offered by the managers of State fairs.

The American Royal Live Stock Show has duplicated the prizes offered by the American Berkshire Association for exhibits of Berkshires made at Kansas City October 12-17, 1908.

The inducements offered at Kansas City in the way of cash prizes and silver cups are such as to ensure the attendance of the first prize under a year herds shown at twenty or more State fairs.

S. W. Artz Lives at Larned, Kans.

In a recent article in THE KANSAS FARMER a typographical error made Mr. Artz's place of residence read Lawrence, Kans., instead of Larned, Kans. In correcting this error we wish to state that Mr. Artz has lived at Larned for a long time and is one of the oldest breeders of O. I. C.'s in that part of the State, having established his herd there fourteen years ago. In that time he has built up one of the good herds of this valuable breed of swine, and has a good patronage from over a very large territory, many of his hogs being shipped to customers in New Mexico and other points west and south and his growing business numbers many satisfied customers.

This year Mr. Artz is better prepared than ever to supply his old customers and many new ones, with the best specimens of the breed. He has 75 good spring pigs, many of which came early and are large enough to ship. He also has some choice, well-grown fall and winter gilts that are just the thing to buy and breed for next spring's farrow.

Write Mr. Artz your wants for he can supply you with the best.

The Guthrie Berkshires.

The Guthrie breeding farm at Strong City is said to own more Black Robinhood blood in its Berkshire herd than any other in the United States. This fact coupled with the ability of Mr. T. F. Guthrie, the owner, to select, breed, and feed has made the Guthrie Ranch Berkshires known far and wide. As an illustration of this Mr. Guthrie reports that he has just filled orders from Colorado, Virginia, and Connecticut in the same week. He also states that these hogs have made money for him and that they will do the same for any one else who will give them decent care. He offers a splendid opportunity for buyers to secure some of this noted strain in different ages and both sexes at very reasonable figures. He has an extra fine lot of spring pigs that he can fill orders with you and can be sure of satisfaction if you buy from him. He has letters expressing satisfaction and approval which he has received from many different sources. Remember that the Guthrie Berkshires hold a record of 80 per cent first prize ribbons and 20 per cent of second prize in the show ring, together with the grand championship of the American Royal.

Hastings Sells Polands August 4.

Elsewhere in THE KANSAS FARMER J. F. Hastings, of Edgerton, Kans., is advertising his sale of richly bred Poland-Chinas, which will be held at the farm near Edgerton, Tuesday, August 4. Mr. Hastings is one of the oldest breeders in that part of the State, and has long since established a reputation for the quality and breeding of his hogs. He has held a number of successful sales in the past, and he is planning to make this one of his best.

His offering will consist of 45 head, good individuals and representing some of the best families of the breed. The female portion of the offering will be composed of 14 proved sows in the prime of their usefulness, by champion and prize-winning sires. Among these there will be two by Meddler, one by Corrector 2d, one by Top Roller, one by Top Chief, and two by Take Warning. They will be safe in service for early fall farrow to King Edward (one of

Mr. Hastings' herd boars), and sons of Perfection E. L. and Next in Line.

There will be 25 choice, well-grown fall yearling gilts. These are largely by Corrector 2d, a brother of Corrector, who was sold recently for \$1,000. Grand Perfection 2d and Perfect Challenger are also represented among them. Part of these will be bred to sons of Perfection E. L. and Next in Line.

Among the attractions will be the show sow, Onion Skin by Keep On, pronounced by competent judges to be one of the best Keep On sows living. She will be safe in service for an early fall litter to Meddler 2d.

In the boar division there are 6 fall boars that are hard to beat, every one of these should go to do service in good herds. Two of these are by Spellbinder out of a Top Chief dam. Three are by Next in Line, dam Sweet Perfection by Chief Perfection 2d, and a full sister to America, who sold for \$6,000, and there is one extra good one by Perfection E. L., out of a dam by Ideal Sunshine. Everything offered will be in the pink of condition, not too fat but in shape to go out and do purchasers good.

Look up Mr. Hastings' advertisement on another page and write him for a catalogue, and arrange to attend his sale. Don't forget the time and place, Tuesday, August 4, at Edgerton, Kans.

The American Aberdeen-Angus Breeders' Sales.

For the first time in the history of the American Aberdeen-Angus Breeders' Association this great organization will conduct its own sales at the two National live-stock shows this fall. Under the capable supervision of Secretary Charles Gray as sales manager this association will hold a combination sale at the time of the American Royal, October 15, at Kansas City and another on December 1 at Chicago during the International Live Stock Exposition. Whatever Charles Gray undertakes will succeed and any breeder of Angus cattle who would like to contribute to either of these sales should address him at 17 Exchange Ave., Chicago. Everybody who is interested in this great beef-making breed of cattle will want to be at these sales and bring his wife.

Special Notice.

In the last issue of THE KANSAS FARMER, we called the attention of our readers to the Berkshire sale at Kirksville, Mo., from the Kinloch Farm, for August 20, but since going to press we have received advice that the date had been changed to August 19. Our readers will please make note of this change and make their arrangements accordingly for attending this sale.

This will record one of the important events in Berkshire history and "the time and place" for the selling of as grand a lot of Berkshire hogs as will be offered at public auction this season. Messrs. Still & Laughlin, are putting forth every possible effort to make this sale a strictly high-class one, and one that will reflect a lasting credit to this worthy industry.

The catalogues will soon be ready and we would suggest that you place your application now and one will be mailed you as soon as they are off the press.

More will be said of this event in a future issue of this paper.

Don't Overlook This.

Have you written T. O. Brown, of Reading, Kans., about those Jersey cattle and O. I. C. swine which he is advertising in THE KANSAS FARMER? The Jersey bull that he is offering is a St. Lambert bred bull just in his breeding prime and of excellent quality. He traces directly to Princess 2d with a butter record of 46 pounds 12½ ounces in seven days. Mr. Brown's only reason for parting with him is that he is now too closely related to the herd. Mr. Brown also has some choice young stock, both sexes, that he is offering at right prices. In O. I. C.'s he is prepared to furnish choice stock of the best breeding and can furnish them in pairs or trios not related. If interested write him your wants or go and see the stock. Mr. Brown lives in Reading and will be glad to show his stock to prospective purchasers.

Third National Dairy Show.

The executive committee, consisting of J. A. Walker, A. O. Auten, and W. J. Gillett met Saturday, June 6, in Secretary Sudendorff's office at the headquarters of the National Dairy Show Association in the Record-Herald building, and decided that the next National Dairy Show would be held in Chicago the latter part of November or first part of December next.

The Emporia Business College.

This school has been in successful operation for twenty-seven years. During that time they have assisted thousands of students to profitable positions, and acquired a reputation for thorough, honest work second to none in the West. Their courses of study are frequently revised and kept up-to-date. The school has a fine equipment of furniture and office appliances and has arranged a course especially for farmer boys which is becoming very popular.

Walk 2450 Miles.

Over mountains and through snow, through wet, slush, and mud, freezing at times, and oppressed by heat at others, William Jackson and R. T. Hay, two sturdy Scotchmen, walked every mile of the way from Seattle to Chicago, just arriving within a few hours of the time limit, thereby winning a purse of fifteen hundred dollars given by the Seattle Athletic Club, for accomplishing this feat within the prescribed time.

Jackson and Hay left Seattle with but five dollars in money, were obliged to earn their way as they went and leave no unpaid bills, and complete the journey in ninety days.

An interesting incident in connection

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Poland - Chinas

AT AUCTION

Edgerton, Kans., Tuesday, August 4

45 ——— RICHLY BRED ONES ——— 45

By champion and prize-winning sires of the breed; 14 proven sows, that are extra good ones—2 of these are by Meddler, 1 by Corrector 2d, 1 by Keep On, 1 by Top Roller, 1 by Top Chief, 2 by Take Warning. They will be mated for early fall farrow to Meddler 2d, Perfection E. L., and King Edward; 25 choice, well-grown yearling gilts bred to Next in Line 2d and a son of Perfection E. L. for August and September farrow. Attractions. The celebrated sow, Onion Skin by the great Keep On, safe in service to Meddler 2d; 8 outstanding fall yearling boars—2 of these are by Spellbinder, 3 by Next in Line, and 1 by Perfection E. L., dam by Ideal Sunshine. For catalogues and information address

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CHICAGO

with the walk, was that each of the contestants wore a pair of the well-known Mayer shoes, that neither ripped nor lost a stitch during the entire trip of 250 miles—the hardest test any shoes could be put to—speaking volumes for the extraordinary wearing qualities of the shoes manufactured by the F. Mayer Boot & Shoe Co., Milwaukee.

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

The Blossom House

Kansas City, Mo.

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

Home Departments

CONDUCTED BY RUTH COWGILL.

HOW DOES IT SEEM TO YOU?

It seems to me I'd like to go
Where bells don't ring nor whistles
blow,
Nor clocks don't strike, nor gongs
don't sound,
And I'd have stillness all around.

Not really stillness, but just the trees'
Low whisperings, or the hum of bees,
Or brooks' faint babbling over stones
In strangely, softly tangled tones.

Or maybe a cricket or katydid,
Or the songs of birds in the hedges hid,
Or just some such sweet sounds as
these
To fill a tired heart with ease.

If 'twere not for sight and sound and
smell
I'd like a city pretty well.
But when it comes to getting rest
I like the country lots the best.

Sometimes it seems to me I must
Just quit the city's din and dust,
And get out where the sky is blue,
And say, now, how does it seem to
you?

—Eugene Field.

Keep Cool.

One of the dentists in Topeka has tacked up in front of the chair in which he tortures his victims, a card on which is printed in large red letters "Keep Smiling." The topic, at the head of this article, may make those who have to spend much of their time in the hot kitchen feel as it does those who have to look at the "Keep Smiling" card, when it is impossible to smile, even if one felt like it. I hope, however, to make some suggestions that may be helpful. We have had very few hot days in Kansas yet and in this respect we are more fortunate than people in the East, where the heat has been so disastrous and uncomfortable. We can much better endure the heat and come through the summer better than we began it if we pay attention to a few things and use common sense and good management. Over heating the body is often debilitating and even proves serious sometimes. It is wise to keep as cool as you can. The windows of the house should be opened early in the day, but as soon as the rays slant into the house they should be excluded.

Vines or awnings are fine for this purpose. It is too late to grow vines for this year's use, but the awnings may be procured or if the expense is too great, canvas tacked up to the porch or over a frame over the windows and doors is good and adds to the comfort of the home wonderfully.

The housekeeper who is so fortunate as to have a gas or gasoline stove, a fireless cooker, an ice box, and a well-ventilated, shaded kitchen, ought to be able to keep very comfortable if she manages the work wisely. Not every one can have gas and many do not like gasoline, for such, wood or coals are the next best for they do not hold the heat as long as coal. But almost any one can have a fireless cooker and until she has had one and used it aright she can not know its value as a saving of fuel and strength, nor understand what a comfort it is to the whole household. Much of the dinner may be cooked in it without heating the kitchen or the cook, and the food will be better cooked. A little more than a year ago I gave a description of one with directions how to make it. These cookers may be procured from dealers for about ten dollars, but for a little outlay of money and time one can be made at home. I have one which I made out of an old trunk. I first had it made tight, papered it inside and lined it with several thicknesses of newspapers. On the bottom I put about six inches of chopped cork such as is used for packing grapes, and placed upon it two cardboard cylinders, made so that the granite buckets I had procured, would just fit into them, and then packed the cork in around to the top of them. This left about three inches to the top of the trunk. I then spread a piece of cretonne over it all and tacked it to the sides of the trunk and cut it

to fit the cylinders and lined them also with the cretonne. The lid of the trunk I filled tight with hay and tacked the cretonne over it. Then I made two cushions to fit the trunk one for each side, and put the cork into them. These are placed on the buckets, which have lids, to help retain the heat. Sawdust, hay, excelsior or wool may be used to pack these cookers. Three Topeka ladies, Mrs. T. J. Lovewell, Mrs. L. D. Whittemore, and Mrs. T. S. Lyon, have published a book about the fireless cooker, which gives full and clear directions how to make and how to use it, also recipes which they have tested with the time required for cooking. These women have used the fireless cooker for two years, and this book is the result of their experience.

The diet and clothing has to be taken into consideration in this matter of keeping cool. Carbonaceous foods, those that produce the heat of the body, such as sugar and fats, should be used sparingly, and fruits and vegetables should be partaken of freely. These latter are fine also medicinally, and assist in the destruction of germs. Lemons, oranges, and apples are especially good. Uncle Joe Cannon, speaker of the House, who is 70 years old, says the heat does not bother him and attributes it to the wearing of light weight clothes and eating a light diet. The body, however, needs plenty of nutritious food in summer as in winter, the amount depending upon the individual and his employment. The laborer requires more than one who is resting, but much of the heating foods should be discarded. The women are not disposed to dress too warmly in summer, but many times men wear heavy coats especially on Sunday, from custom and not from choice. It is hard to step over old conventional ways, but it is a pity that men must sit in a hot church with a coat on for an hour. If they must wear a coat let it be as thin and light as possible. Keep cool, do not become hurried or flurried. Keep peaceful and calm inside and don't worry and fret about the heat.

Why Study Home-Making?

Miss Helen M. Day of the Bradley Institute, Peoria, made the following excellent points in addressing the Department of Household Science, Illinois Farmer's Institute, at its annual meeting in that city:

The women who have made a study of home-making have grown to feel that it is a profession, calling for years of careful preparation and earnest study, not an occupation which may be entered upon at any time by any person without the slightest training. We are all familiar with the general impression that a girl may grow up without any knowledge of cooking and home work and yet fall into domestic science ways and be a perfect home-maker when the proper time comes, quite as an naturally as a child catches the whoopingcough, and quite as inevitably.

In the days gone by, however, there was special training for the work of housekeeping. Early in the history of our own country there was not much for a girl to do except to stay at home and learn and practise household occupation. In colonial days marriage was thought to be the chief end of woman, and it was thought worth while to prepare for the duties of home-making. To-day woman stands on an equality with man and practically economically independent of him. She may enter any profession or engage in any trade or occupation that is open to men except those requiring too great physical strength.

TRAINING FOR EVERYTHING BUT THEIR REAL BUSINESS.

But notwithstanding all these possibilities, what she really does in nine

cases out of ten is to marry and become a home-keeper just as she did when there was nothing else for her to do. In other words the training of women to-day fits them for everything except for that which is to be their real business in life, namely, the making of homes. But should we not expect more of a housekeeper of this generation than that she shall do things as well as her mother did them? No scientific farmer of the present generation would be satisfied to do things exactly as his father or grandfather did them. He studies the needs of the stock and gives them food of the proper sort and in the right amounts to produce the best results.

WOMEN HAVE NOT WAKENED.

Is a child of less importance than a calf that we take so much less trouble to have it nourished properly, or is it simply that women have not wakened to the possibilities and to their responsibility in the matter? Not only the body of the child, but his mental development also is influenced by the nutriment he receives.

CHANGES DRUDGERY TO INSTRUCTIVE WORK.

I think it will give interest and pleasure to what has been mere drudgery when a girl discovers that the ordinary processes of cooking and cleaning are based upon scientific truths of physics and chemistry. The same process may be drudgery to one person and pleasure to another, according to the amount of interest and understanding there is back of it. The scientific farmer does not complain of the dull routine of his life. He is too much interested in what is happening and in the results ahead.

Then, too, a man puts his wits to work and invents some piece of machinery to do routine work for him. Perhaps woman may gradually become more inventive and think up ways and means of minimizing the routine work of the house. Some labor-saving devices have already been invented, chiefly, however, by men.

THE WOMAN WITH THE BROOM.

Is it not true that science has transformed "the man with the hoe?" Has it not given back the "upward looking and the light" by putting interest and understanding in the place of dull routine? Modern inventions, too, have helped to emancipate him. He is now the man with the sulky plow getting the best results with the smallest amount of labor on his part.

We may picture for ourselves "The Woman with the Broom." A woman so bowed down by the weight of hard routine work of cleaning that she has no time or thought of higher things or enjoyment, and no pleasure in the work itself. Can you not imagine her emancipation through the application of science to every-day affairs?

There is no particular merit in sweeping, scrubbing, dusting, except to have the house sanitary and comfortable, and if we can get the same result by scientific means with less labor, we are making progress. Changes such as these can come about only through education.

WHAT DOMESTIC SCIENCE MEANS.

The object of education in domestic economy is set forth in these words: First, "The utilization of all the resources of modern science in improving home life." This implies the necessity of understanding the sciences and also home life, and the application of the one to the other. Sec-



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OLIVER D. NOBLE, PRESIDENT.

only, "The freedom of the home from the dominance of things and their due subordination to ideals." Thirdly, "The simplicity in material surroundings which will free the spirit for the more permanent interests of home and society." These permanent interests of home and society form the instinctive thing in home-making as distinguished from housekeeping. There are many instances of housekeepers who are not home-makers. The permanent interests of home are the making of better men and women by surrounding the children in the home with those things which shall tend to their best development physically, mentally, and morally.

THE CHANCES TO LEARN.

For those who are entering upon home-making as a profession there are the courses offered by the agricultural colleges. Girls who desire to take advantage of short courses may learn a great deal in a limited time. Most of the girls, however, who become the home-makers have no opportunity for a college course; indeed many of them will never reach the high school, but must learn what they knew, or at least must be set thinking in the right direction in the grammar schools. One advantage of having domestic science as a part of a general education is that it puts it on a basis with other school subjects, and so dignifies the work, which in so many minds lacks the dignity of book-learning.

Frequently mothers do not encourage their girls enough, but are inclined to laugh at their first efforts; this is entirely wrong. We can not expect to turn out trained cooks in a few weeks with one hour's lesson a week. The girls are taught to know the reason for things—not merely to cook or do the work. It is just as important to know why anything is done as it is to know how to do it.

Lady Baltimore Cake.

"Here is a South Carolina recipe for this cake, deservedly a favorite in all Southern dining rooms long before Mr. Owen Wister heaped drawing-room honors upon it," says July Woman's Home Companion.

"Two-thirds of a cupful of butter, five eggs, two cupfuls of sugar, four cupfuls of flour, one-half cupful of rich milk, two level teaspoonfuls of cream of tartar and one level teaspoonful of soda. Cream half the sugar with the butter, beat the remaining sugar into the yolks of the eggs, and sift the cream of tartar and the soda twice through the flour; beat the eggs and sugar together with the butter and sugar, add the milk slowly, and finally beat in the flour and stiffly beaten whites of the eggs. Flavor half this mixture with rose, and into the other half beat one teaspoonful of powdered cinnamon, one teaspoonful of powdered cloves and one grated nutmeg, and flavor with vanilla, lemon, or almond; bake in four layer-cake pans—two white layers and two spiced layers.

"For the filling: Cut one cupful of seeded raisins, shred thin half a citron melon, grate one small cocoanut and blanch three-fourths of a pound of almonds; make an ordinary boiled icing, and into it beat all these ingredients save the almonds. Put the mixture thickly between the layers, and finish the top layer—which should be a white one—with sprinkled powdered sugar and the almonds stuck in porcupine wise. The measuring cups are ordinary coffee cups and are filled just level. This is a successful recipe and one easily followed."

Always-Ready Lemonade.

There is nothing more refreshing on a hot day than a long drink of cool lemonade, but however anxious the hostess may be to serve this beverage, it is sometimes impossible to do so owing to the lack of necessary ingredients. In fact, it is for just this reason that the sirup that may be prepared by the following recipe is one of the greatest of household conveniences. It is delicious, but what is still more important it enables one to procure a supply of lemonade literally at a mo-

ment's notice, says the May Delineator. Extract the juice from a dozen large lemons; grate the rind of six of the lemons, and add it to the juice. Let the mixture stand for twelve hours or over night. In the morning make a thick sirup of granulated sugar and water using about six pounds of the sugar, and just as little water as possible, as the sirup must be both thick and smooth. When it has cooled, strain the lemon-juice into it; bottle in glass, being certain that the tops are secure and air-tight. In making lemonade with this sirup, place a little crushed ice in the bottom of a tall glass; add one or two teaspoonfuls of the sirup, according to taste, and fill with either carbonated or plain water.

This sirup may also be used successfully in making cakes, pies, puddings, custards, etc., being a most economical method of utilizing lemons, as it enables the cook to obtain absolutely the full value of both sugar and fruit. Surely this is a fact worthy of consideration by the economical housewife.

Household Hints from Here and There.

In cutting hard butter into even slices or tiny squares fold a piece of waxed paper over the blade of the knife used. In this way a smooth cut may be made without breaking or crumbling the butter. A piece of the paper which comes around the butter may be used for this purpose.

When covering an ironing board make it on the principle of a pillow slip, making it the shape of the board and very tight to prevent wrinkling. It is a good plan to have several of these covers, so they can be frequently changed and laundered.

After ironing linen, place it near a good fire or in the heat of the sun until perfectly dry, as the garments will then be made stiffer than if allowed to dry slowly. If the linen is a bit scorched, wet it with cold water and hang it in the sun.

An excellent thing for the laundry is the following mixture: Take two ounces of fine white gum-arabic powder, put it in a pitcher, and pour on a pint of boiling water; cover tight, and let it stand over night. In the morning strain, bottle, and cork. A tablespoonful of this stirred into a pint of starch made in the usual way will give a new look to the clothes.

To rid a place of red ants, grease a plate with lard, and set it over night where the ants are troublesome. Place three or four sticks leading up to the plate, so that they can get to it easily. In the morning the plate will be covered with the ants. They may be killed by immersing the plate in hot water.

To keep an egg several days while using it for coffee, use an egg cup with the small end up. Set the egg in the cup and break a small hole in it. Use a little of the egg at a time, as a little will clear the coffee as well as half an egg. An egg may be kept good three or four days in this way.

To facilitate accurate seaming and hemming on the machine without stopping to adjust the gauge or hemmer each time, I have ruled, or etched, vertical lines on my machine plate at distances of $\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, 1 inch and 2 inches from the needle. Other measurements may be used if desired.

These lines, ruled with some sharp, pointed instrument, show clearly on either the nickle or enameled plate. The help it gives in seaming, where all seams should be the same width, as in a skirt, for running a tuck quickly, or for ordinary hemming, is well worth the small amount of time and trouble it takes to prepare it.

The Home Canner Company, of Lawrence, Kans., is now offering kitchen utensils with which you may with economy preserve your own corn, meats, etc., in cans, by the same scientific methods employed in the larger canneries. They will mail you a pamphlet of information and recipes upon request.

THE UNIVERSITY OF KANSAS LAWRENCE KANSAS

The forty-third year of the University of Kansas will open September 15. The attendance will reach 2400 next year. The University plant is now valued at \$1,500,000. A \$100,000 gymnasium and a \$100,000 engineering building are the latest additions to the building equipment. A mining engineering laboratory and a mechanical engineering building are in course of erection. The library numbers 60,000 volumes. Over 150 high schools prepare their graduates for admission to the freshmen class. The faculty has increased to 125 members. Over 800 courses are open to students in Liberal Arts, Engineering, Law, Medicine, Pharmacy, and Fine Arts.

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The Young Folks

A MEADOW DARLING.

One day I met a little maid who roamed the meadows over,
A slender, winsome little thing, oh!
so very fair to see.
I lost my heart completely when she
leaned to kiss the clover,
As she wandered through the meadow
with the butterfly and bee.

When apple trees were blooming,
through the orchard she was going.
I have seen her at the pasture bars,
and coming up the lane,
Or along the dusty highway, where the
pink wild rose was growing;
And I've met her on the hillside
smiling brightly through the rain.

They say her name is Marguerite, this
darling of the meadow,
With her snowy pointed ruffie and
her yellow shining hair.
When June puts on her robe so green
of shifting shine and shadow,
And the robins wake the countryside,
you'll find the daisy fair.

—Jean Flower, in the New England Magazine.

In Camp.

Teddy disconsolately munched a soda cracker, wondering the while how she had ever come to insist that a camp stove was a useless luxury.

It was her first season in camp, and her brothers had readily enough given in to her demand for an absolutely correct atmosphere. They had camped in tents on the little lake instead of in the comfortable wooden shack on Lower Lake, and they had cooked in primitive fashion over an open fire.

The boys had done the cooking since they had gone into camp three weeks before, but it had all seemed so easy that when they wanted to go down the lake to the village, she had insisted that it would be no trouble at all to get her meals.

They had paddled away just as the sun began to tinge the clouds in the east, and would not be back before night. Twice Teddy had spilled the bacon into the fire, and as a crowning accident she had set the coffee pot wrong, and that, too, was sliding into the flames, putting out what little fire there was left.

A crashing in the underbrush roused her and she sprang to her feet, nervously handling the revolver the boys had left with her for protection. She raised the glistening weapon as a man burst through the tangle of brush, and with a voice that she tried to make stern, commanded him to hold up his hands.

They went above his head in an instant, and staid there while he parleyed. Teddy knew that the next thing was to bind her victim, but how to do that and retain the revolver was something that was not told in books.

He smiled at her look of helplessness and came a few steps forward.

"I am not a tramp or a robber," he said, with a flash of white teeth beneath his mustache. "I saw a fire awhile back and thought that perhaps I might beg some breakfast. I wandered further from our camp than I intended. I am on the other side of the ridge on Blue lake."

"There isn't any breakfast," she said, forlornly. "I spilled the bacon into the fire, and then the coffee pot

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tell in. I was eating these." She waved her revolver toward the box of crackers, and the tramp smiled.

"If you will take my parole," he suggested, "I'll earn my breakfast. I believe that is the proper thing for a tramp to do."

Teddy lowered her gun. He probably was a tramp, but he had nice eyes and a pleasant smile, and she felt that she could trust him.

"If you will set the table," he called, "I'll have things ready in a jiffy."

For a moment Teddy paused. She did not quite like the idea of eating at the same table with a tramp. None of the campers she knew wore such outrageous garments.

But the smell of the coffee and the frying fish decided her, so she set two plates.

Skillfully he dished up the fish and took the coffee from the fire. He was even more expert than the boys. Probably that was because he had to camp out the year around.

The breakfast put her in an excellent humor, and when the tramp suggested that if she would lend him a gun he would try and get something for dinner, she loaned him a shotgun without a thought until he had left the camp.

Then the realization of what Bob would say should he come home and find the gun gone led her to follow the trail the tramp had taken.

She soon overtook him, and he looked up with a smile at her approach.

"Come to share the fun?" he asked pleasantly. Her blush told its own story, and he threw his head back and laughed. "I was going to bring the gun back," he declared. "Do you really think I am a tramp?"

"No," her voice lacked conviction. "But, you see, you are not like the boys."

"Possibly they would be like me," he suggested, "if they were in camp without ladies. Kahki and leggings are all very pretty, but there is more comfort in an old suit that won't be hurt if you do take a notion to wade a trout stream before breakfast."

After dinner he entertained her with stories of the woods, and neither realized how late it had grown until a boat shot around the point, and the boys waved a welcome.

They swarmed up the beach a few moments later, and Teddy started as they warmly greeted the tramp.

"I didn't know that you knew Mr. Charteris," said Bob in surprise.

"He came for breakfast," explained Teddy.

"And having had the breakfast, I stayed to get dinner," Charteris added with a laugh. "You see I was out early this morning, and got too far away from camp to make it for breakfast. Then I saw this fire and came over."

"Hope you'll come over often," said Bob heartily. He liked the young railroad magnate.

"Thank you," said Charteris, seeing a second invitation in Teddy's brown eyes. "I think I shall be over very often—if Miss Trevor does not mind such trampish fellows hanging about the camp."

"I rather like tramps," said Teddy demurely, "especially before breakfast."—San Jose Mercury.

Chinese Song Birds.

TRANSLATED FROM THE NEW YORK STAATS-ZEITUNG BY LAWRENCE B. FLETCHER.

The Chinese take great interest in the breeding of animals, especially of new and rare sorts. They have attained great success in the training of animals, and trained bears, monkeys, and mice are among the commonest and most popular of street spectacles. Canary birds, introduced a half-century ago, have thriven wonderfully. They are raised in all the large cities and are very cheap. Larks and other song birds are also very popular.

When a Chinaman takes a walk for recreation, which, however, he does not very often do, he takes his bird cage with him and hangs it on a tree where the birds may be moved by the beauties of nature to burst into song, which delights the heart of their own-

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

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

DESCRIPTION.

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

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SEND US \$13.85 (postoffice or express money order, bank draft or check), fill out and cut out this coupon, state if you want 30 or 32-inch barrels and we will send you immediately one of these matchless, genuine and celebrated A. J. Aubrey Hammerless 12-Gauge Double Barrel Breech Loading Shotguns. When received, examine it carefully, compare it with any gun you can buy at home or elsewhere, let your friends examine it, let any gun expert or specialist examine it, and if everyone does not admit that it is positively the finest hammerless double barrel gun ever made, the finest constructed, best made and finished, best balanced, most graceful and handsomest shotgun ever seen, if you are not more than pleased with your purchase, convinced you have received the finest hammerless gun made, and at a great saving in price, you can return it to us and we will immediately return your money, including the small amount you paid for freight or express charges.

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

GLOBE SIGHT FREE. This Globe Sight, given free with every order sent us from this paper, is our own patent, controlled exclusively by us. It can be instantly attached or detached, is of wonderful value to every shooter, a perfect marvel for wing shooting.

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er more than the conversation of his dearest friends.

Cheerful and melodious as the canary's song is, however, it is not to be compared with that of the palling, or Mongolian lark, a species of thrush, which, the Chinese claim, has a repertory of thirteen distinct songs, imitating the magpie, crow, sparrow, and other birds and giving a wonderful imitation of the music of the cat. Among other Chinese cage birds are the nightingale, thrush, blackbird, lark, and bullfinch. The lark is trained to flutter his wings and wave his tail like a fan while he sings. For centuries the ability of the parrot to imitate the human voice has made that bird a great favorite in China.—Pets and Animals.

The Little Ones

TEDDY BOY AND TEDDY BEAR.

A lively little Teddy Boy,
Who owned a Teddy Bear,
A very strange adventure had,
And sadly did he fare.
One night, upon his pillow white,
He'd scarcely laid his head,
When suddenly a fuzzy form
Stood right beside his bed.

In gruffish tones it growled, "You've played
With me a year or two;
'Tis only fair that I should play
A little while with you.
I've been a very patient bear,
And now I'm going to see
Just how you stand the treatment that
You have been giving me."

Then seizing Teddy by the hair,
Bear through the window jumped.
Dear me! how fast against his ribs
The heart of Teddy thumped!
He tried his best to call aloud,
That help he might bespeak;
But not a sound could utter, save
A dismal little squeak.

With skip, and hop, and leap, and stride,
Each longer than the last,
They sped along until they reached
A forest, dim and vast.
And there, beneath a giant tree,
Was heard the sound of joy;
And there stood twenty Teddy Bears
Each with a Teddy Boy.

Our Teddy's special bear stepped forth,
And seemed to take the lead.
"Begin, begin," he growled. "You know
How fast the night will speed.
We'll have a game of tenpins first,

With lots of fun and noise."
And quickly in a row they stood,
That group of luckless boys.

Biff! bim! the cocoanut balls spun by
By skilful Bruin's cast.
Heels over heads, along the line,
Those boys they toppled fast.
A merry game of football
Next added to their woe.
As twenty whirling, dizzy lads
Bounced light, from toe to toe.

And so the topsyturvy night
Went on until the dawn;
Till Bruin cried, "One contest more,
And then we must begone.
Up, up, with every Teddy Boy,
See who can toss most high!"
And hurling through the air, those
boys
Shot upward toward the sky.

Our Teddy higher went than all,
And came down with a whack!
And presto! as he hit the ground,
The voice he'd lost came back.
And such a mighty howl he gave
Was never heard before.
Mama and nurse and papa, too,
Came hurrying to his door.

Then Teddy opened wide his eyes
And lifted up his head,
To find himself upon the floor,
Beside his little bed.
While to the bedpost, safely tied,
With beady eyes astare,
And paws stretched out in helpless
wise,
There hung his Teddy Bear.

And Ted may be mistaken, but
He thought he saw him wink.
As slowly he climbed into bed,
To rest awhile—and think!
—Pauline F. Camp, in St. Nicholas.

The Squirrel and the Mastiff.

"What an idle vagabond you are!"
said a surly mastiff to a squirrel that
was frolicking about in a tree above
him.

The squirrel threw a nut-shell at
him.

"I've been watching you these two
hours," said the mastiff again, "and
you've done nothing but dance and
swing and skip and whisk that tail of
yours about all the time."

"What an idle dog you must be,"
said the squirrel, "to sit for two hours
watching me play!"

"None of your pertness. I had done
all my work before I came here."

"O, ho!" said the squirrel. "well,
my work's never done. I've business
up in this tree that you know nothing
about."

"Business, indeed! I know of no
business that you have but kicking
up your heels and eating nuts and
pelting honest folks with the shells."

"Fie!" said the squirrel, "don't be ill-tempered," and he dropped another nut-shell at him. "Don't envy my lot; for, although I rejoice in the happiness of it, I must remind you it isn't all joy. Summer doesn't last forever; and what becomes of me, think you, when the trees are bare and the wind howls through the forest and the fruits are gone? Remember that then you have a warm hearth and a good meal to look forward to."

"You wouldn't change with me, however," said the mastiff.

"No, nor you with me, if you knew all," said the squirrel. "Be content, like me, to take together the rough and the smooth of your proper lot. When I'm starved with cold in the winter, I shall be glad to think of you by your pleasant fire. Can't you find it in your heart to be glad now of my sunshine? Our lots are more equal than they seem."—Early Days.

Do Your Vegetable Canning at Home.

The Home Canning Company, of Lawrence, Kans., are manufacturers of small, direct fire, steam pressure kettles and accessories which will enable the housewife to can her vegetables and meats as well as she now does her fruits and to do so in exactly the same way that is used in the canning factories. The Home Canner is capable of properly preserving a number of cans of fruits, meat, or vegetables at the same time. It is cheap and easily operated and it does the work. Just think what a lot of good cash could be saved and satisfaction secured by being able to put up your own vegetables and meats and know that they were not preserved with chemicals.

If you will write to the Home Canner Company, Lawrence, Kans., they will tell you all about it. It is surely worth a postal card.

Have you written for
that sample copy of
The Club Member
yet?

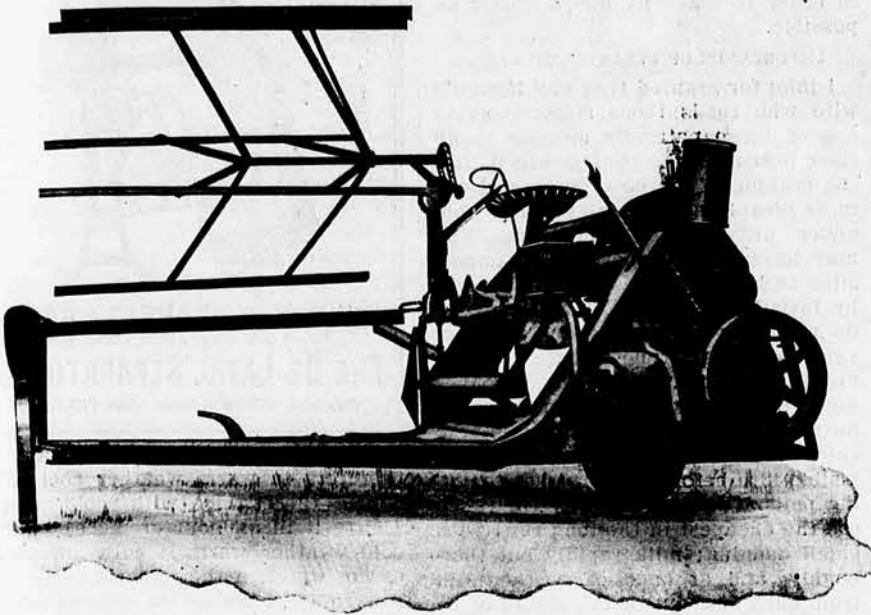
A Post Card Will Bring It

The Club Member
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Gasoline Power Binders.

The pictures shown herewith are specially interesting, not only as showing the latest advance in substituting machinery for hand work but on account of the present wet season the light weight of the machines makes them available for use in fields where the ordinary team and binder could not operate.

The engines shown herewith are made by the Olds Gas Power Company,



who found that they could apply this form of air cooled engines very readily to any kind of binder by simply moving the bull wheel about four inches toward the rear.

This is one of a number of steps that have been taken in the past few years by this enterprising manufacturing company to develop uses for their gasoline engines on the farm. The West-

school field meet, the students from the Kansas high schools were given the freedom of this building. It is safe to say that it will be the direct means of attracting to the university as many high school boys as any other of the many inviting opportunities at the State institution. This building is only one of fifteen large buildings now used to educate the 2,100 students in attendance. The group of engineering buildings which are to cost \$250,000 will be completed during the present biennium.

The university will be somewhat relieved when these buildings are finished, but the student body is increasing so rapidly that within two years there will be urgent need of other building equipment to furnish the necessary class rooms. The university has taken high rank among the educational institutions of the country and it is only a question of a few years un-

share towards the support of this institution which opens its doors so freely to his children.

The Third Annual Dairy Show Will Be Held at Chicago and in the Coliseum, December 2 to 10, Inclusive.

The time and place for holding the Third Annual Dairy Exhibition was given much consideration. The exhibitors of machinery prefer the winter months for displaying their goods and the exhibitors of live stock would like to have the dairy show held early in October or at the close of the State fair season. The officers being anxious to please both the cattle and machinery exhibitors, brought this matter before the stockholders at the regular annual meeting and discussed very thoroughly the most suitable time for holding the show. It was finally decided to hold it not later than December 15; the exact dates and place was left to the executive committee.

It is desired to make this dairy show a strong representative of all dairy interests, to bring together dairymen, butter- and cheese-makers, farmers and manufacturers of dairy products from all parts of the country, for educational purposes; also to present at this gathering the best and most up-to-date makes of dairy machinery, and to show choice herds of cattle representing all the different dairy breeds; in fact, it is desired to make the occasion the big event of the year for dairying, and to so exhibit the different branches of the dairy industry that the people of the country will realize the importance and magnitude of this great industry.

The purpose is to make this exhibition of cattle and machinery something more than a show. It is the purpose to make it a strong educational affair where questions of National import may be discussed and plans made for a greater development of all dairy interests. The first two shows were a success, and it is the desire to make the coming one better, bigger, and more instructive.

All communications should be addressed to the National Dairy Show Association, 154 Washington St., Room 307, Chicago, Ill.

Spalding's Commercial College.

One of the oldest, largest, and most successful institutions of learning in the West is Spalding's Commercial College, Kansas City, Mo., which through its forty-two years' establishment has acquired for itself an unquestioned reputation as a progressive and reliable institution for the attainment of a thorough and practical business education. To meet the demands of the constantly increasing attendance each year, the college erected and is now occupying its own building which in all its appointments and conveniences is considered to be one of the finest and most complete in the United States.

The college is offering for free distribution, its eighty-page illustrated catalogue which contains a photograph picture of its founder and president and nineteen views of the college rooms, gymnasium, and auditorium, also cuts of some of the silver and bronze medals awarded for its beautiful penmanship for over twenty years at the county and interstate fairs. It also contains full and complete descriptions of the Commercial, Shorthand, Typewriting, Telegraph, and English Courses of Study; of its experienced faculty of nineteen teachers and lecturers, and of the beautiful diplomas awarded its graduates. In addition to this it also contains a large number of highly commendatory letters from recent graduates and students holding lucrative positions in Kansas City and elsewhere. It also contains information regarding its free employment bureau which has placed during the past forty-two years, thousands of its students in good positions and which is now many times unable to supply the demand for office help.

Kansas State Agricultural Men at Cornell.

The graduate summer school for teachers in agricultural colleges is being held this month at Cornell University, Ithaca, N. Y. Prof. J. C. Kendall and two of his assistants in the dairy department of the Kansas State Agricultural College, Manhattan, are the delegates from the Sunflower State. These assistants are Merss, Atsushi, Milljauski and Ralph Caldwell.



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A Most Valuable Agent.

The glycerine employed in Dr. Pierce's medicines greatly enhances the medicinal properties which it extracts from native medicinal roots and holds in solution much better than alcohol would. It also possesses medicinal properties of its own, being a valuable demulcent, nutritive, antiseptic and antiferment. It adds greatly to the efficacy of the Black Cherrybark, Bloodroot, Golden Seal root, Stone root and Queen's root, contained in "Golden Medical Discovery" in subduing chronic, or lingering coughs, bronchial, throat and lung affections, for all of which these agents are recommended by standard medical authorities.

In all cases where there is a wasting away of flesh, loss of appetite, with weak stomach, as in the early stages of consumption, there can be no doubt that glycerine acts as a valuable nutritive and aids the Golden Seal root, Stone root, Queen's root and Black Cherrybark in promoting digestion and building up the flesh and strength, controlling the cough and bringing about a healthy condition of the whole system. Of course, it must not be expected to work miracles. It will not cure consumption except in its earlier stages. It will cure very severe, obstinate, hang-on, chronic coughs, bronchial and laryngeal troubles, and chronic sore throat with hoarseness. In acute coughs it is not so effective. It is in the lingering hang-on coughs, or those of long standing, even when accompanied by bleeding from lungs, that it has performed its most marvelous cures.

Prof. Finley Ellingwood, M. D., of Bennett Med. College, Chicago, says of glycerine:

"In dyspepsia it serves an excellent purpose. Holding a fixed quantity of the peroxide of hydrogen in solution, it is one of the best manufactured products of the present time in its action upon enfeebled, disordered stomachs, especially if there is ulceration or catarrhal gastritis (catarrhal inflammation of stomach), it is a most efficient preparation. Glycerine will relieve many cases of pyrosis (heartburn) and excessive gastric (stomach) acidity."

"Golden Medical Discovery" enriches and purifies the blood curing blotches, pimples, eruptions, scrofulous swellings and old sores, or ulcers.

Send to Dr. R. V. Pierce, of Buffalo, N. Y., for free booklet telling all about the native medicinal roots composing this wonderful medicine. There is no alcohol in it.

Epilepsy, Fits

Convulsions, or Spasms and St. Vitus' Dance are Nervous Diseases. Most cases can be cured by strengthening and building up the nervous system. To do this a nerve medicine is needed. Dr. Miles' Nervine will be found efficacious and satisfactory. It has cured many cases of these diseases and we believe it will cure you. We can give you names of many who have been cured through its use. Write for advice.

"My son John had epilepsy for years, and after having him treated by specialists for over 2 years he still continued to have spells. I had almost given up in despair, but knowing the virtue of Dr. Miles' Anti-Pain Pills for sick headache, I concluded to try the Nervine. During June, 1906, I gave him a teaspoonful three times a day, then in July I gave it as directed, and I could see that he was improving, and he has not had a spell since August 28, 1906, and has taken no medicine since Jan.-07. I am writing the case just as it is hoping it will induce others to try it."

W. R. ALLISON, Mooresville, N. C.

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

Miles Medical Co Elkhart Ind

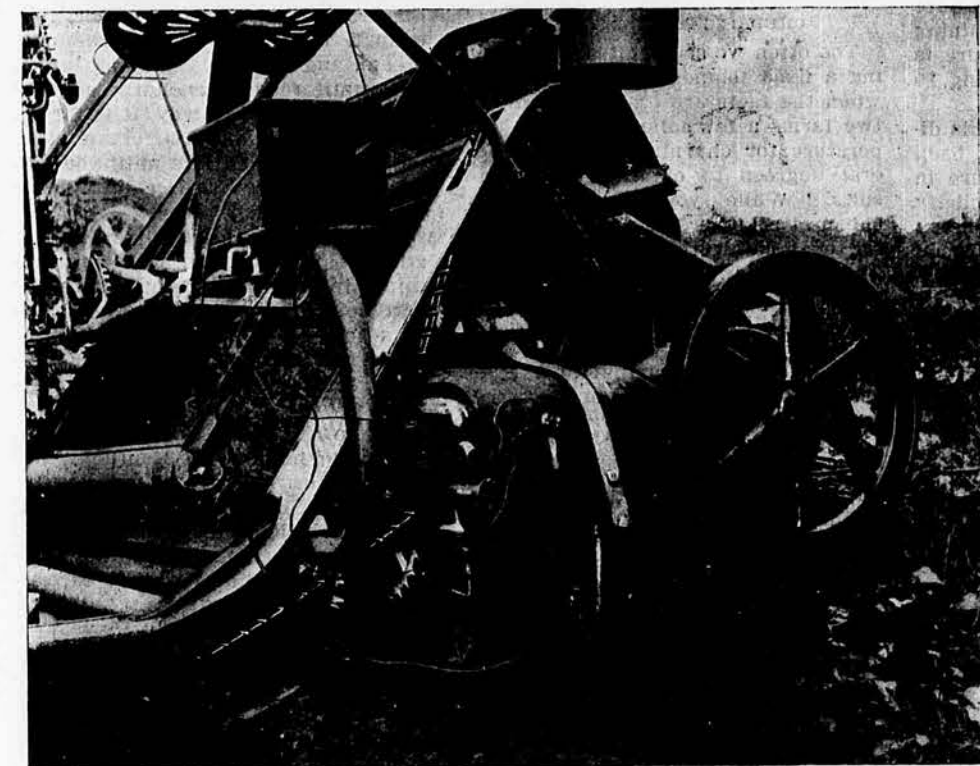
GRAIN GRADING NOTICE.

Notice is hereby given that the "Grain Grading Commission" will meet at the office of the Governor in the city of Topeka on the 24th day of July, 1908, at 11 o'clock A. M., for the purpose of establishing grades for all kinds of grain bought, sold or handled in the State of Kansas and to be known as "Kansas Grades."

All interested persons, farmers or associations are invited to be present or to send representatives to meet with said commission for consultation and council.

G. W. GLICK, Chairman,
J. M. CORY,
J. T. WHITE, Secretary.

July 1, 1908.



ern manager of the Olds Gas Power Company at Kansas City is so enthusiastic over the results obtained through this combination of engine and binder that he predicts that the time is not far distant when the faithful horse will be dispensed with and the gasoline engine take its place as a creator of motive power as well as the binding power on such machines.

The Robinson Gymnasium.

During commencement week at the University of Kansas, the most notable event was the dedication of the new \$100,000 gymnasium. The building is named in honor of ex-Governor and Mrs. Charles Robinson. The Robinson gymnasium is one of the largest in the West. Its length is 178 feet, and the wings are 90 feet wide. The central part of the new building is 70 feet in width at its narrowest point. The tower is 25 by 34 feet. In the basement is a swimming pool 20 by 50 feet and 8 feet deep. The boys' locker room has 1,000 steel lockers, and the girls' locker room contains 200 double-size steel lockers. On the first floor are a girls' gymnasium 70 by 54 feet, and a boys' gymnasium of the same size, connected by a rolling partition, a special apparatus room, a trophy room, an examining room, office of the girls' director, office of the boys' director, men's examination room, and a reception room. The second floor is 70 by 112 feet with a gallery suspended from the roof by steel girders. There are no pillars on this floor. This is the auditorium of the university and is used for all large gatherings. It is used for a basketball court in the winter. In the wings are hand ball, faculty, class, boxing, wrestling, and fencing rooms. The gallery around this large auditorium room contains an 18-lap running track with a cork covering. A thousand students can work out in the Robinson gymnasium at one time. At the recent high

til it will be rated as one of the greatest State universities in America. It has practically the entire Southwest as its rightful territory from which to draw its students. Kansas alone has over 150 high schools that prepare their graduates for admission to the freshman class without examination. About 3,000 students graduated from these high schools last spring, many of whom will seek a higher education. With the increasing popularity and reputation of the State University, the greater part of these students who will go away to school will go to Lawrence. The moral atmosphere is wholesome and the spirit of the institution is intensely Kansan. No more democratic body of young people can be found anywhere than the student body of this great State institution. No student is barred for lack of money. The half-a-chance man has opportunity. Three-fifths of the students have earned or are earning the money which supports them in school. Merit counts above money. There is no such thing as social ostracism because of the degree of wealth. Every student knows every other student, and there is a cordiality of relations that is very refreshing when compared with the conditions in some other schools of the country. The student body more nearly represents the manhood and womanhood of the commonwealth than any similar gathering within its borders. They are splendid and glorious young citizens who leave the classic environments of Lawrence to return to their scattered homes to take up life's responsibilities. Not alone is Kansas proud of them, but the hope of the country centers in them and in others like them in different quarters of the Union. This educational sentinel that stands guard at the top of Mount Oread is the barometer of the State's progressiveness. The pride of the people of this great State is the public school system at the head of which is the University of Kansas and every tax payer cheerfully pays his

Dairy Interests

Prof. G. L. McKay Accepts Position With the American Butter Manufacturers Association.

In speaking of the acceptance of position of secretary of the new centralizer's association by Professor McKay of the Iowa State College, the Creamery Journal says:

"Professor McKay has accepted and at the present time enjoys the distinction of receiving the highest salary of anyone engaged in a similar line of dairy work in the United States. We are not at liberty to publish the amount, but it is several times what he was receiving at Ames and includes a month's vacation on full pay. The contract covers a period of five years. Professor McKay's office will be in Chicago and his home in Evanston.

"The new company is organized ostensibly for the purpose of improving their product and it is to a general superintendency of this work that Professor McKay has been called. He will have several men in the field working for improvement of quality.

"In an interview Professor McKay recently said: 'My work will be largely educational. I do not expect to mix in any of the difficulties between the centralizers and the cooperative creameries. It is the aim of the new company to put their business on a high standard. We want everything on a straight basis, and in the near future will send out a number of men among the farmers to teach feeding and breeding. We want a better grade of goods. The cutting of weights and the reading of tests low, if carried on, must be discontinued.

"I may be censured somewhat for going with this company, but to me it is a larger field and is at the same time a pleasant position. I have just as much liking for the interests of the Iowa dairymen as I ever had, and intend still to help them as much as I can."

"It seems most unfortunate that the educational institutions of our State do not seem to be in position to pay salaries that will keep our best men.

"Professor George L. McKay was born on a farm in Ontario, Canada, of Scotch parentage. After finishing his education in the town of Ingersoll, he became interested in dairying and spent two years on one of the largest dairy farms in Ontario, so became familiar with milk production. After that he spent two years with Dr. Rob-

ertson, who is now president of McDonald Agricultural College, Quebec.

"In 1890 he came to Iowa, still interested in dairying. His success in winning prizes in Iowa and other States both in butter and cheese attracted the attention of Secretary Wilson, who was director of agriculture of the Iowa State College at that time.

"He was invited in 1892 to give instructions to the senior class in cheese-making at the college. Two years later he was placed in charge of the dairy department, in which position he has achieved great success.

"Outlining and pursuing investigations seem to be his forte. His first work, which was on cream ripening and the use of starters, brought him considerable favorable comment. He conceived the idea that the flavor of butter was largely a product of fermentation, and pursued work to demonstrate the fact. He was of the impression that he was the first to take up work along this line, but later found that Dr. Storch of Copenhagen had been doing the same sort of work previously. He brought out the fact that in testing the acidity of cream the per cent of serum had to be taken into consideration; that the fat in cream was neutral, or, in other words, that cream, with varying per cents of fat, should be ripened to different degrees of acidity; hence he gave the formula now in common use to determine what degree of acidity to ripen to.

"His work that possibly attracted the most attention was on the control and effect of moisture in butter. This work has saved Iowa and other States hundreds of thousands of dollars. He demonstrated that butter containing from 15 to 16 per cent of moisture is equally as good as that containing 10 or 12 per cent.

"During the past year, under his direction, a new rapid test had been brought out to determine moisture in butter, which, owing to its simplicity and accuracy, gives promise of being universally adopted. It is composed of a double aluminium cup, using a paraffine bath for transmitting the heat. This does away with the danger of oxidation of fats.

"He has brought out a milk and cream sampler that is considered the best on the market.

The book, entitled "The Principles and Practice of Butter-making," which is being used as a text-book in nearly all the leading schools of the country, was compiled by Professors McKay and Larsen.

"In 1901 Professor McKay was sent abroad by Secretary of Agriculture, Honorable James Wilson, to investigate dairying, as carried on in European countries.

"Many of the dairy professors in the leading agricultural colleges, including Dairy Chief Webster, have been Professor McKay's pupils."

Butter-Making on the Farm; Practical Points Which Aid in Producing First-Class Butter.

As every farmer can have an excellent pamphlet on home butter-making sent to him free from the Agricultural Department, at Washington, D. C., I shall make only a few suggestions from personal experience.

If you make butter at home from all your milk, from a small number of cows which yield say 10 or 15 gallons daily, and are not yet using a separator, it is important that your milk should be kept in as sweet and pure condition as possible until skimming time. If you are located in a section where ice is a luxury and cold spring water not handy, you may be obliged to follow the old fashioned system of setting your milk almost warm from the cow in shallow tin pans in as cool a place as you can find. If you use a cellar, get all the ventilation you can and keep out any articles which contaminate the atmosphere or cause unpleasant odors, as milk readily absorbs such and transmits them to the butter. The cow-warm milk in a shallow pan, having a large surface, is naturally far easier affected than milk rapidly cooling in a deep, narrow can. In our climate,

whether in Virginia or New York, milk thus exposed in summer time is likely to sour in twenty-four hours or less, and as no more cream rises on milk after souring, the only proper course is to skim the cream off at once. We all know that a considerable loss of butter is unavoidable in this way, but I speak only of what is best to do under the circumstances in order to make as fine a butter as possible.

IMPORTANCE OF CLEANLY MILKING.

I take for granted that any farmer's wife who reads these suggestions is one of those naturally anxious to do their best and who thus see to it that the milking of the cows is carried out in as cleanly a manner as practicable under unfavorable conditions. You may have a very poor stable, impossible to keep clean as you desire, but by insisting on a few things you can do much toward the production of a very palatable article of butter of fair keeping quality. Let not whoever milks put on the very dirtiest overalls he can find, but decent ones; let the cows' udders be free from at least all visible filth before milking; have milking pails of the best quality tin (such are the cheapest in the long run) with small opening; milk rapidly but thoroughly, and at once carry the milk from each cow out of the stable to be strained through a cloth strainer (boil and air these cloths every day) and you will soon find how much longer the milk keeps sweet than without these simple precautions. I shall say nothing about feeding, except that its character must be considered as well as the breed of your cows when you make butter.

CHURNING TEMPERATURES.

Too often we see printed advice giving a fixed temperature for churning, when the facts are that frequently on two farms a few miles apart the temperature for churning may vary several degrees to obtain the best results. While you generally must churn at a higher temperature, where, for example, cottonseed is fed, and likewise, a lower temperature is used for cream from Holsteins than from Jerseys, still often we can not see just why a different temperature is required in one place from that in another. I have churned cream from four grade Jerseys, feeding on a rather dried up pasture in summer weather, at 70 degrees Fahr., and obtained a firm butter. The same temperature was used by me in a Tennessee creamery, where milk from mixed breeds was received, but where cottonseed was fed freely. In Northern creameries the temperature I used for sour cream was generally about 60 degrees, still varying 4 or 5 degrees. With the average cream you skim milk partly soured in shallow pans, you will have to spend a little more time and elbow grease for churning than where you have a richer, less milky cream, derived from deep setting in ice water or by separating. Which temperature is the best for you has to be determined by practice, and you should allow from 30 to 45 minutes' time to do the work right. Whenever you try to use a higher temperature to make the butter come quicker, you will find it not only injuring the quality but the quantity as well. After noticing the temperature at which you start churning a few times, as well as that at which you finish, and the time for churning a butter of firm grain and body, you have a good guide for future work, and will also know how much time to allow for doing it right. Try it, and you will surprised how much satisfaction you will gain by allowing ten or fifteen minutes more time than you were accustomed to.

NECESSITY FOR ACCURATE THERMOMETER.

If you always use the same thermometer, of course, it does not matter much whether it is a few degrees off; only every farmer should have one reliable standard thermometer by which he regulates the cheap ones, good enough for daily use. Otherwise you never can compare your work with that of others, nor do you know just what you are doing.

The smaller the amount of cream you churn, the more is the temperature apt to change during churning;

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therefore in warm weather cool your churn thoroughly with cold water (leave it in an hour or more) and in cold weather warm it with lukewarm or hot water, if the room is very cold. Remember, I am all the time speaking of the small farm with few conveniences.

No matter how few cows you have, never churn less than twice a week, rather three times. If the cream you skim is already partly sour and you have poor cooling facilities, it is apt to be over-sour if left two days more. A good plan is to have a tall, well-made tin can, with water-tight cover, large enough to hold two or three days' cream, and keep this hanging in your well until ready for churning; while this is not an ideal way, it is far better than having the sour cream standing about in stone jars until you have enough; of course, in cold weather, the jars are all right.

While no advice will fit every case, still I think you can pick out some things in what I have suggested which will help you to make better butter than some of your neighbors, and for which some private families in town will gladly make a regular engagement at a special price. My daughter, who knew nothing of butter-making when she married in Kentucky, now sells all her butter from four cows at a premium, besides always having an excellent article on her own table. I sometimes do not wonder that farmers and their children don't care for either butter or buttermilk! By the way, that sour skim-milk in your tin pan, when beaten up as soon as thick, makes as fine a buttermilk as any one wants; just keep it cold.

SWEET-CREAM BUTTER ON THE FARM.

All I have suggested thus far refers entirely to the making of what is termed ripened cream butter. To make a palatable article of that character proper acidity is absolutely essential as over-ripening or extreme acidity of the milk or cream is ruinous. Not only is by far the largest demand in all the world's markets for butter with this aromatic ripened flavor, more or less salted, but from many years' experience in different countries, I feel convinced that "Sweet Butter," thereby meaning such which is churned from perfectly sweet cream without additions of any salt, will only be in limited demand, and for the supply of certain nationalities (like the Hebrews) and some special fancy markets. Real sweet-cream butter is curiously enough always, in greatest demand in countries where butter consumption is not common among the working classes, but more of a luxury. In most northern lands, as the United States, Canada, Great Britain, Northern Germany, and the Scandinavian countries, sweet, unsalted butter is not popular even among the wealthy.

To those who only make butter a couple of times a week and do not have plenty of ice, I say, do not try to make sweet-cream butter. On the other hand, if you have ten or more cows and keep all your milk at home, run a separator, and have plenty of ice—well, then you may be able to make

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a fine butter from sweet cream. Still, I advise you never to do so unless you have an opportunity to make a contract for the greater part of your product and at a price a couple of cents above what you can get for the best make of salted ripened cream butter.

RECIPE FOR A FINE SWEET CREAM BUTTER.

What is commonly called "sweet butter" simply means butter from sour cream but unsalted. The real sweet-cream butter must be churned from cream which is perfectly sweet, has been extracted by the separator, and is very rich in butter-fat, say 50 per cent. Such butter, while perfectly fresh, may have a pleasant taste (though never aroma), but it very soon deteriorates when not salted and even in salted condition butter from sweet cream spoils much quicker than what is churned after proper ripening. There is only one method for churning a real valuable article of sweet-cream butter of such keeping quality as is necessary for any article in the open market, and I shall describe it here, just as I made it more than thirty years ago:

"Paris Butter," made from sweet, pasteurized cream; unsalted, still of great keeping quality.

As the name indicates the genuine Paris butter was made in France. The original process consisted in heating the whole milk to a high temperature, above 180 degrees, then letting it cool, skimming the cream off and churning it sweet. Curiously enough the first imitation of Paris butter seems to have been produced in Finland, where I, coming from Denmark, first learned to make it. In those days, butter was only used in Russia by the higher classes, and France was their pattern in everything, even butter eating. Thus it came to pass that Paris butter became the fashion in St. Petersburg, and as all the fine butter used in Russia in those days came from the large Finnish dairy estates or creameries, before long all their fancy trade was supplied with "Paris" butter.

In this case, as frequently, the imitation became a superior product to the original article, though the process, to some extent, was turned upside down; instead of heating the whole milk this was set in "shotgun" cans in ice water for cream raising for twenty-four hours (separators were not invented yet), then skimmed by hand, the cream heated in tall tin cans in a hot water bath during frequent stirring to a temperature of about 190 or 200 degrees, then cooled to about 50 degrees and churned into butter, the butter-milk (perfectly sweet, but with a cooked flavor) was run off, and the butter washed in sterilized or boiled water, slightly cooler than the buttermilk; the butter was worked as usual, only no salt was added. It was generally molded into half pound blocks (about 10 pounds), sometimes into one pound prints, and shipped in boxes containing 50 or 100 pounds to St. Petersburg, Russia, where it sold at the highest price, (at least mine did).

HARDLY WORTH MAKING HERE.

While I have described the making of "Paris" butter nobody should try to make it unless he has steam at his disposal, and cold water and ice are plentiful. If such is the case, still a slight alteration should be made in the process, because that so-called "nutty" (really cooked) flavor would hardly be popular here. Therefore, the cream should never be heated above 160 degrees, and it should be left in a cold condition (40 or 50 degrees) for several hours before churning; otherwise be handled as described. Such butter will have no cooked flavor but an excellent keeping quality though unsalted, and I am quite sure would be a winner over any sweet-cream butter from raw cream. Still, I repeat it, never go into making any kind of sweet, unsalted butter until you first have secured a market.

I shall be exceedingly pleased if any one interested in my home butter-making talk would let me hear from them, and ask any questions regarding details not quite clear.—Julius Moldenhawer in Practical Dairyman.

The Poultry Yard

CONDUCTED BY THOMAS OWEN.

Poultry Notes.

There is a hen in Jackson, Mich., that has attained the ripe old age of 22 years, duly sworn and attested to. Her owner says that she still lays about three eggs a week from April to September and that she has never wanted to sit. Whatever we folks may think, who believe that a hen has seen her best days at 4 years of age and should be killed, this old hen deserves to be allowed to end her days in peace and in the natural way, without any fear of the hatchet.

The premium lists for the Kansas State Fair at Topeka, September 7 to 12 are now ready and can be secured by applying to the secretary, R. T. Kreipe, Topeka. The premiums on poultry are very liberal and should induce a very large number of breeders to show their stock. One thing about the Topeka Fair that is different from others, is that no entrance fee is required for any stock. It will be a "state-wide fair" and the most successful of any. Large contributions of money have been donated to guarantee the payment of all premiums. Be sure and have Topeka down on your list as one of the fairs to be visited.

While there is no good reason why the farmer should not have as good poultry as the fancier, and of all kinds, at the same time it is very questionable if it is good policy to have more than one variety. Usually the farmer expects to give the poultry the range of the farm. In doing this, it costs less to keep them, as a considerable part of what they pick up would otherwise be wasted, and in doing this they destroy a large number of insect pests, that if left alone would seriously injure the growing crops. If more than one breed is kept, they would have to be kept separate, and this would entail quite an expense for poultry fencing. There is nothing gained by keeping a number of different varieties while there is always a risk of their getting together. If you raise several varieties you have a comparatively small number of each with not enough wherein to cull and select; whereas, if you have one variety you raise a great number of one kind and you have a chance out of so many to select some extra choice specimens.

Breeders who are expecting to exhibit their fowls at the State fairs should be getting them in shape. If the old fowls have not yet started to molt, they should be half starved for a week or ten days till their feathers begin to fall, then they should be fed all the nourishing food they will eat so as to make the new feathers grow rapidly. For a gloss on the feathers feed plenty of sunflower seeds. The young stock should be fed all they will eat, in fact they ought to be forced to eat by tempting them with the most appetizing foods you can find. Otherwise they will not be in shape or condition to show. At fall fairs we find it the rule that the more advanced young birds are the ones that win the prizes. Therefore, feed them well and take care of them and commence it now if you have not yet begun. No use to pick up your fowls from the yard just as they run and expect to win a prize. It takes lots of previous work and preparation to raise a prize-winner.

The Sale Was Genuine.

Not long ago in these pages we wrote of a sale of five White Orpingtons by Mr. Ernest Kellerstrass of Kansas City to Madame Paderewski for the sum of \$7,500.

When such high-priced sales are made, considerable doubt is expressed as to their genuineness. Such was the case when Mr. Northrup was paid \$1,000 for a Black Minorca and Mr.

Fishel \$800 for a White Plymouth Rock, and when this latest and largest priced sale of five birds at \$1,500 each was announced many were the doubts expressed. Probably this is accounted for by the fact that so many fanciers place fictitious prices on their birds, never expecting to realize the same. We remember a couple of years ago of a man sending a Barred Plymouth Rock male to the State Show and conspicuously marking its price at one thousand dollars. The bird was the joke of the show and was not worth over ten dollars.

But this sale of White Orpingtons has been proved to be a boni-fide sale at the price named. Mr. Leonard W. Lott, editor of the American Fancier, New York, interviewed Madame Paderewski at her hotel apartments in New York City, at which time she stated that she paid \$7,500 for the pen of five birds. The following is what Mr. Lott says of the matter:

"My office had received many letters asking for an opinion of this sale, which had been so conspicuously advertised in the press alongside of a reproduction of Madame's letter, which stated how to ship the pen. So I explained the matter and also told her how one could misconstrue her letter, because nowhere did it state that she had paid this figure, but it contained the following: 'Please ship my \$7,500 pen,' which could mean that she valued it at this figure, but it was not proof that it had cost this amount. 'Yes, Mr. Lott, I paid \$7,500 for the pen, and it was sent all transportation charges prepaid to Morges, Switzerland. The pen was entered at the Lansanne Show and captured the champion prize. I like Lady Helen best, but in Switzerland they prefer Victoria.' I never believed that a woman of Madame Paderewski's distinction would connect her name with any advertising scheme, and now I knew that I was right, simply because Madame had told me. And then I thought of the many doubtful ones and those letters of inquiry down at my office and I asked to see the receipt showing that she had paid \$7,500. This was cheerfully shown me, and now with such positive proof no one could question further."

While this price of \$7,500 for five chickens is phenomenally high, and the chances are against the ordinary breeder ever realizing such a price for his stock, still it shows what can be done with pure-bred stock and that it pays to raise the best. The cost of raising pure-bred stock is no larger than raising scrubs and there is always a surety of selling stock and eggs at a much higher price than barnyard fowls with a chance of winning a prize occasionally by raising an exceptionally high-scoring and high-priced bird.

About Lice.

Body lice are to be found upon almost all chickens as well as on many other kinds of birds. Their presence in small numbers on mature fowls is not a serious matter. When body lice are abundant on sitting hens they go from the hens to the newly hatched chicks. The successful methods of destroying body lice are three in number.

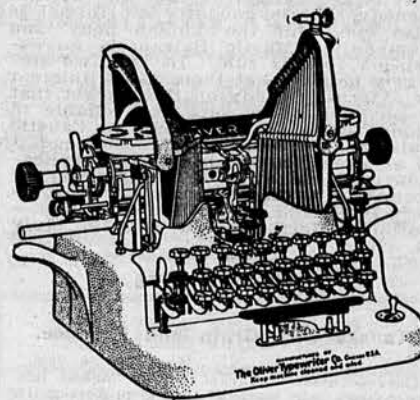
1. The provision of dust or earth wallows in which the active hens will get rid of lice. These dust baths should be especially provided for yard-ed chickens and during the winter. Dry earth can be stored for this purpose. Sitting hens should have access to dust baths.

2. The second method by which body lice may be destroyed is the use of insect powder. The pyrethrum powder is considered best for this purpose, but is expensive and difficult to procure in the pure state. Tobacco dust is also used. Insect powder is applied by holding the hens by the feet and working the dust thoroughly into the feathers, especially the fluff. The use of insect powder should be confined to setting hens and fancy stock, as the cost and labor of applying it is too great for use upon the common chicken.

3. The third method is suitable for

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

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

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var. \$10@12.50 per cwt.; Kafir-corn, \$1.45@1.50 per cwt.; cane, \$2.25@2.30 per cwt.; millet, \$1@1.25.
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Kansas City Live Stock.

Kansas City, Mo., July 20, 1908.
 Although cattle receipts last week were moderate for the season, 45,000 head here, the market softened all week, and closing prices were 40¢ lower on steers, and a quarter lower on cows. Killers claim the hot weather has greatly reduced the demand, and used every effort to enforce the usual summer slump in prices. Fed cattle felt the loss fully as much as grassers, although they were scarce all week. The situation is different to-day, run here 14,000 head, and light supplies at all other points. Prices are 10¢ higher to-day, all kinds participating in the advance. At each decline this summer, receipts have dropped down sharply, bringing a recovery in prices, which indicates either astute marketing, or an actual shortage in the total available cattle supply, or possibly both. Top in the last week was \$7.35, and only a handful of cattle have exceeded \$7, account of extreme scarcity of prime grades. Bulk of the grazed Westerns bring \$4.50@5.75, grass cows at \$2.75@3.75. A few fed cows bring up to \$1.50, and heifers as high as \$6.40, bulls \$2.40. Veals are 50¢@75¢ higher than a week ago, at \$5.50@6 for tops. Stockers and feeders closed last week about steady for the week, after selling stronger first of the week, and are 10¢@25¢ higher to-day, stock steers \$3@4.60, feeders \$4@4.90. Illinois buyers took some fleshy feeders above \$5.

The hog market made a net advance of 7¢ last week, although wide fluctuations were the rule from day to day. Packers contest every inch of the ground, and insist that present range is too high, but moderate receipts, 43,000 last week, and 6,000 to-day, give salesmen some advantage. The market is off 5¢@10¢ to-day, but closing prices are the best, with top at \$6.60, bulk of sales \$6.40@6.55. Heavy hogs still lead, account of scarcity, although shipping demand seldom calls for weights above 220 pounds. Pigs advanced 25¢ last week. Average weight of all the hogs is running under 200 pounds. Present prices are 60¢ above a year ago.

The mutton market advanced around 25¢ last week, account of light receipts, 16,000 head here. The run is 7,000 to-day, and with weak reports from other points, prices are off 10¢@15¢ here. Top spring lambs to-day brought \$6.50, not quite the full strength of the market, and grass wethers and ewes are worth \$3.90@4.60, feeding sheep \$3@4. Utah is beginning to ship freely, and a larger amount of country stuff will be available from now on. Trend of the market will depend on volume of receipts, although the conditions appear healthy.
 J. A. RICKART.

DUROC-JERSEYS

Deep Creek Herd Duroc-Jerseys
 Deep Creek Durocs of the very best of breeding for sale. Choice spring boars very cheap. Write me your wants. C. O. Anderson, Manhattan, Kans.

STROH'S HERD OF DUROC-JERSEYS
 70 spring pigs for sale, most sired by Hogate's Model, the sweepstakes boar at Nebraska State Fair, 1906 and out of popular breeding dams. Correspondence solicited.
 J. STROH, R. 4, DeWitt, Neb.

GEO. KERR'S DUROCS.
 Pigs for sale sired by such boars as Lincoln Chief, Leader, Lincoln Top, Out of dams from the Improver 2d, Proud Advance, Top Notcher, Wonder and Ohio Chief families.
 R. R. 3, Box 90, Sabetha, Kans.

MADURA DUROCS.
 BROOD SOWS—Some fine brood sows bred to Major Roosevelt and Miller's Nebraska Wonder, he by Nebraska Wonder.
 FRED J. MILLER, Wakefield, Kans.

Vick's DUROCS are bred for usefulness. Choice young stock for sale by such great boars as Vick's Improver 47885, Red Top 22241, Fancy Chief 24923 and other noted sires. Correspondence invited. Visitors coming to Junction City and telephoning me will be called for. W. L. VICK, Junction City, Kans.

SPRING CREEK HERD DUROC-JERSEYS
 75 choice spring pigs of both sexes for sale, by 7 noted sires and out of popular breeding dams. Tried sows and gilts bred to farrow in August and September. Boars in service, Raven's Pride 63145 and Nordstrom's Choice 75741. Ola Nordstrom, Clay Center, Kans.

GAYER'S DUROCS: 38 choice fall gilts and 14 top fall boars by Golden Chief, a good son of Ohio Chief. These will be sold cheap to make room for my spring crop. Also 1 good yearling boar, \$25.
 J. H. GAYER,
 R. R. 1, Cottonwood Falls, Kans.

Fairview Herds—Durocs, Red Polls
 20 high grade Red Polled cows and heifers, 40 Duroc-Jersey sows, mostly males, will be sold at my fall sale on October 7, 1908. Nothing for sale now. Stock doing fine.
 J. B. DAVIS, Fairview, Brown Co., Kans.

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

PEERLESS STOCK FARM
DUROC-JERSEY HOGS
FOR SALE.
 R. G. SOLLENBERGER, Woodston, Kans.

Howe's DUROCS. 100 early spring pigs, the best I ever raised. Improver, Top Notcher, Sensation and Gold Finch blood lines. Call or write.
 J. U. HOWE,
 Route 8, Wichita, Kans.

OAK GROVE HERD OF DUROCS
 Herd headed by Choice Goods H. 36471 by Hunt's Model and Corroctor's Model 34381. I have for sale a few choice males of spring and fall farrow that will be priced worth the money.
 Sherman Reedy, Hanover, Kans.

DUROC-JERSEYS

DEER CREEK DUROCS

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

Jackson's Durocs

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

O. L. JACKSON, New Albany, Kans.

SPECIAL!

I have a car of long yearling bulls, a car of bull calves, a car of yearling heifers and a car of heifer calves for sale. These cattle are all in good growing condition and are mostly reds. They were sired mostly by Baron Ury 2d 124970, Bold Knight 179064 and Headlight 2d 343205.

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

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

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

R. L. WILSON, Chester, Neb.

RALPH HARRIS FARM DUROC-JERSEY HERD

ASPARTE 163088, second in class American Royal 1907, farrowed 12 pigs by Red Wonder, Grand Champion Iowa State Fair, 1907, on 22d of April. All are living. Average weight at 13 days old, 7 pounds, 13 ounces. Remember this litter when looking for a boar in a few months. Address:
 RALPH HARRIS, Prop., B. W. WHITE, Mgr., WILLIAMSTOWN, KANS.
 Farm station, Buck Creek, on the U. P., 45 miles west of Kansas City.

CHESTER-WHITES

CLOVER RIDGE CHESTER WHITES
 Choice pigs from the Garnett and Captain families. The large smooth strong boned, easy feeding kind. Correspondence solicited.
 E. S. CANADY, R. R. 2, PERU, NEB.

OHIO IMPROVED CHESTERS
 Ninety pigs of February and March farrow, and sixteen "all boars and gilts. The large deep smooth bodied strong boned easy feeding kind. I pay express, and ship on approval.
 N. W. ROGERS, PERU, NEB.

Closing Out Herd O. I. C.

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

O. I. C. SWINE
 Fall boars and gilts, also spring pigs. They are bred right and will be priced right. Let me know your wants. S. W. ARTZ, Larned, Kas.

O. I. C. BARGAINS
 Bred sows and gilts all sold. Have a fine bunch of spring pigs for which I am booking orders. Write your wants and get prices.
 W. S. GODLOVE, Onaga, Kans.
 Prop. Andrew Carnegie herd O. I. C. swine.

BERKSHIRES

MAPLE HEIGHTS HERD BERKSHIRES
 Kansas Longfellow, champion Nebraska State Fair 1907, and Berrington Boy in service. Have some choice sows and gilts bred for fall litters, for sale. Nice lot of spring pigs to choose from. Write me.
 J. M. NELSON, Marysville, Kans.

Ridgeview Berkshires

One aged and one yearling boar, and spring pigs of both sexes
 MANWARING BROS.,
 Route 1, Lawrence, Kansas

Guthrie Rancho Berkshires

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

Knollwood Berkshires

Headed by Pacific Duke 56691, dam Marjorie 37491 by Baron Duke 23d 50000, a son of Baron Lee 4th, the sire of Lord Premier and Dutchess 120th 29876, grand dam of Premier Longfellow. Stock of all ages for sale. All stock guaranteed as represented.

E. W. MELVILLE, Eudora, Kans.

HORSES AND MULES

ROBISON'S PERCHERONS

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

J. C. ROBISON, Towanda, Kans.

BERKSHIRES

King's Berkshires

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

E. D. KING, Burlington, Kans.

POLAND-CHINAS

CENTER GROVE POLANDS

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

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

Becker's POLAND-CHINAS. Choice fall and spring pigs, either sex, by Dandy Rex 42704, first in class at Kansas and Colorado State Fairs, 1906-8. Prices reasonable.

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

SUNNY SLOPE POLANDS

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

W. T. HAMMOND, Fortia, Kans.

BOARS! BOARS!

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

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

Stalder's Poland-Chinas.

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

O. W. STALDER, Salem, Neb.

KEEP ON PRINCE

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

SUNFLOWER HERD.
 POLAND-CHINAS—Herd boars, Meddler's Defender (119147) by Meddler (99999), dam Excitement (289588) by Corroctor (63379); Allen's Corroctor (128618) by Corroctor (63379), dam Sweet Brier (261780) by Chief Perfection 2d (42569); Kansas Chief (125983) by Chief Perfection 2d (42569), dam Corroctor's Gem (250730) by Corroctor (63379). G. W. Allen, Route 4, Tongonoxie, Kans.

FAIRVIEW STOCK FARM.

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

A. K. Sell, Fredonia, Kans.

JONES' COLLEGE VIEW POLANDS.

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

W. A. JONES & SON, Ottawa, Kas.
 Formerly of VAN METER, Ia., and breeders of CHIEF TECUMSEH 2d.

JOHN BOLLIN,

Route 5, Leavenworth, Kans.

Breeds and Sells Popular Poland-Chinas

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

Highview Breeding Farm

Devoted to the Raising of

Big Boned Spotted Poland-Chinas

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

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

ABERDEEN-ANGUS

Allendale Stock Farm

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

W. A. HOLT, - Savannah, Mo.

HORSES AND MULES

PIKE COUNTY JACK FARM

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

LUKE M. EMERSON, Bowling Green, Mo.

HOLSTEIN-FRIESIANS

East Side Dairy Farm Holsteins

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

BRAEBURN HOLSTEINS AND BERKSHIRES.

A few bargains in bull calves. Some choicely bred spring pigs and boars ready for service. H. B. Cowles, Topeka, Kans. Ind. Telephone. 1036.

Holstein-Friesian Cattle

Herd headed by Sir Johanna Aggie Lad 34984. His four nearest dams averaged 85.9 lbs. milk one day, 23 6 lbs. butter seven days, 17,324 lbs. milk one year, 727 lbs. butter one year. He is assisted by Calantha Karndike 47877, dam Colantha 4th's Sarcastic, A. R. O., 21.13 lbs. butter in seven days as senior 2-year-old by Sarcastic Lad, out of Colantha 4th, dam of the world's record cow—27,422.5 lbs. milk one year, 1,247.82 lbs. butter one year. Correspondence solicited. S. B. L. Bean, Cameron, Mo.

JERSEYS

JERSEY cattle O. I. C. Swine

One 4-year-old St. Lambert Jersey bull, tracing to Princess 2d, with butter record of 46 lb. 12 1/2 oz. Also choice young stock both sexes. O. I. C.'s, both sexes, all ages, at right prices. T. O. Brown Reading, Kas.

HEREFORDS

Maplewood Herefords

5 bulls, all tops, from 13 to 16 months old; and a few choice females, by the 2400-pound Dale Duplicate 3d son of the great Columbus. Stock guaranteed. Prices reasonable. A. Johnson, Clearwater, Kans.

POLLED DURHAMS

Polled Durhams

FOR SALE.

A choice lot of young Double Standard Polled Durham bulls by Kansas Boy X2585, S-H197989, Senator X5940, 263008 and the grand bull, Belvedere X2712, 195058. Inspection invited.

D. C. VanNice, -:- Richland, Kans.

RED POLLS

COBURN HERD OF RED POLLED CATTLE

Herd now numbers 115 head. Young bulls for sale.

GEO. GROENMILLER & SON,
 Route 1, Pomeroy, Kans.

Foster's Red Polls.

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

CHAS. FOSTER & SON, Eldorado, Kans.

Red Polled Cattle, Poland-China Swine.

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

SHORTHORNS

New York Valley Herds Shorthorn Cattle

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

Stewart & Downs, SHORTHORNS.

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

Stewart & Downs, Hutchinson, Kans.

LET US TELL YOU THE STORY OF Old Caney Valley

THE RICHEST REGION IN THE TEXAS GULF COAST COUNTRY

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

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

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



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

SOIL 20 TO 40 FEET DEEP.

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

CLIMATE UNEXCELLED.

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

DEVELOPMENT HAS BEGUN.

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

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

WHAT CANEY LAND WILL GROW.

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

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

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

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

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

Name

Town State

SHORTHORNS

TENNEHOLM SHORTHORNS.
Herd headed by the Dutchess of Gloster bull, Glad-lator 251035 and Lady 275673, a Cruikshank But-terfly. Cows of Scotch and Scotch topped Bates breeding. 1 yearling Bampton bull (a good one) for sale. Will make tempting prices on a few females. E. B. Myers, Chanute, Kans.

PONY CREEK HERD OF SHORTHORNS.

Herd headed by the Scotch bulls, Sybil Viscount 255889 and Bashful Conqueror 24 251605. The cows in this herd are mostly Scotch or Scotch topped from the popular and well known families such as the Victorias, Phyllis, Cowslip and Young Marys. Young bulls and heifers from this mating for sale. Correspondence solicited. Visitors always welcome, for it is a pleasure to show stock.
E. D. LUDWIG, Sabetha, Kans.

Prospect Farm Shorthorns

The oldest Shorthorn breeders in Kansas. The largest herd of Cruikshanks in Kansas. Herd headed by Violet Prince 145647 and Orange Commander 220690. Young stock of both sexes and some cows for sale. Quality and prices right.

H. W. McAFEE,
Bell Phone 59-2. Topeka, Kansas

SHORTHORNS

Greendale Stock Farm

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

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

SELDEN STOCK FARM.

Scotch and Scotch topped Shorthorns for sale. 8 young bulls from 8 to 24 months old, all reds and good quality. Sired by Baronet of Maine Valley 178876 and Secret Empress 232647. Prices reasonable. Inspection invited.

HOADLEY & SIGMUND, Selden, Kans.

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Twenty Years selling all breeds.

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A specialty of Pure Bred Live Stock sales. My charges are moderate. Dates upon application.

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My life work has been breeding and selling pure-bred stock.

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I am making a study of your herd and best interests from a public sale standpoint. I am conducting sales for many of the best breeders in Northern Kansas and want to make your next sale. Selling pure-bred live stock at auction is my business.

AUCTIONEERS

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Brookfield, - - - - Missouri
Am now booking dates for the coming season. Write or wire me for same. Also a breeder of Du-roc Jersey hogs and Hereford cattle.

L. R. Brady,

Live - Stock - Auctioneer
Manhattan, Kansas.

R. L. HARRIMAN

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