

KANSAS FARMER



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PLANT-BREEDING.

The importance of plant-breeding is signaled by the appearance of the fourth edition of a book of nearly five hundred pages from the standard publishing house of The MacMillan Company, New York. "Plant-Breeding" consists of a series of lectures by Prof. L. H. Bailey, of Cornell University. In studying these lectures one becomes impressed with the idea that plant-breeding is only at the beginning, both as a science and an art. The great work is yet to be done. The opportunities are open for the ambitious to enter an almost unexplored field. There are some things fairly well settled, however, and these have been formulated in plain language by Professor Bailey. The most salient practical points are stated in fifteen "Cautions and suggestions." The fifth one of these is here reproduced as an example:

"5. When selecting seeds, remember that the character of the whole plant is more important than the character of any one branch or part of the plant; and the more uniform the plant is in all its parts, the greater is the likelihood that it will transmit its characters. If one is striving for larger flowers, for instance, he will secure better results if he choose seeds from plants which bear large flowers throughout, than he will if he choose them from some one large-flowering branch on a plant which bears indifferent flowers on the remaining branches, even though this given branch produce much larger flowers than those borne on the large-flowered plant. Small potatoes from productive hills give a better product than large potatoes from unproductive hills. The practice of selecting large ears from a bin of corn, or large melons from the grocer's wagon, is much less efficient in producing large products the following season than the practice of going into the fields and selecting the most uniformly large-fruited parents would be. A very poor plant may occasionally produce one or two very superior fruits, but the seeds are more likely to perpetuate the characters of the plant than of the fruits.

"The following experiences detailed by Henri L. de Vilmorin illustrate my proposition admirably: 'I tried an experiment with seeds of *Chrysanthemum carinatum* gathered on double, single, and semi-double heads, all growing on one plant, and found no difference whatever in the proportion of single and double-flowered plants. In striped verbenas, an unequal distribution of the color is often noticed; some heads are pure white, some of a self color, and most are marked with colored stripes on white ground. I had seeds taken severally from all and tested alongside one another. The result was the same. All the seeds from one plant, whatever the color of the flower that bore them, gave the same proportion of plain and variegated flowers.'

"The second part of my proposition is equally as important as the first—the fact that a plant which is uniform in all its branches or parts is more likely to transmit its general features than one which varies within itself. It is well known that bean plants often produce beans with various styles of markings on the same plant or even in the same pod, yet these variations rarely ever perpetuate themselves. The same remark may be applied to variations in peas. These illustrations only add emphasis to the fact that intending plant-breeders should give greater heed than they usually do to the entire plant, rather than confine their atten-

tion to the particular part or organ which they desire to improve.

"At first thought, it may look as if these facts are directly opposed to the proposition which I emphasized in my first lecture, that every branch of a plant is a potential autonomy, but it is really a confirmation of it. The variation itself shows that the branch is measurably independent, but it is not until the conditions or causes of the variation are powerful enough to affect the entire plant that they are sufficiently impressed upon the organization of the plant to make their effects hereditary.

"There is an apparent exception to the law that the character of the entire plant is more important than any one organ or part of it, in the case of the seeds themselves. That is, better results usually follow the sowing of large and heavy seeds than of small or unselected seeds from the same plant. This, however, does not affect the main proposition, for the seed is in a measure independent of the plant-body, and is not so directly influenced by environment as the other organs are. And, again, the seed receives a part of its elements from a second or male parent. The good results which follow the use of large seeds are, chiefly, greater uniformity of crop, increased vigor, often a gain in earliness and sometimes in bulk, and generally a greater capacity for the production of seeds. These results are probably associated less with any innate hereditary tendencies than with the mere vegetative strength and uniformness of the large seeds. The large seeds usually germinate more quickly than the small ones, provided both are equally mature, and they push the plantlet on more vigorously. This initial gain, coming at the most critical time in the life of the new individual, is no doubt responsible for very much of the result which follows. The uniformity of crop is the most important advantage which comes of the use of large seeds, and this is obviously the result of the elimination of all seeds of varying degrees of maturity, of incomplete growth and formation, and of low vitality.

"Another important consideration touching the selection of seeds is the fact that very immature seeds give a feeble but precocious progeny. This has long been observed by gardeners, but Sturtevant, Arthur, and Goff have recently made a critical examination of the subject. It is not the slightly unripe seeds that give a noticeable increase in earliness, according to Arthur, 'but very unripe seeds, gathered from fruit [tomatoes] scarcely of full size and still very green. Such seeds do not weigh more than two-thirds as much as those fully ripe. They germinate readily, but the plantlets lack constitutional vigor and are more easily affected by retarding or harmful influences. If they can be brought through the early period of growth and become well established, and the foliage or fruit is not attacked by rots or blights, the grower will usually be rewarded by an earlier and more abundant crop of slightly smaller and less firm fruit. These characters will be more strongly emphasized in subsequent years by continuous seed-propagation.' Goff remarks that the increase in earliness in tomatoes, following the use of markedly immature seeds, 'is accompanied by a marked decrease in the vigor of the plant, and in the size, firmness, and keeping quality of the fruit.' These results are probably closely associated with the chemical constitution and content of the immature seeds. The organic compounds have probably not yet reached a state of stability, and

they therefore respond quickly to external stimuli when placed in conditions suitable to germination; and there is little food for the nourishment of the plantlet. The consequent weakness of the plantlet results in a loss of vegetative vigor, which is earliness."

It will be well for every farmer, especially every farmer who desires to be up with the times on matters concerning the selection and breeding of plants, to secure a copy of Professor Bailey's book. The price is \$1.25. It may be ordered through THE KANSAS FARMER.

POISON THE CUT-WORMS.

The season of the festive cut-worm is rapidly approaching, if not already present, with some of the readers of THE KANSAS FARMER. The Oklahoma Experiment Station directs to poison him, as well as his company, the frisky grasshopper. This is the way to do it:

"Cut-worms and grasshoppers can be destroyed with poisoned bran, by placing the same in small piles on the infested areas, in the afternoon or evening. These insects not only prefer the bran to vegetation, but are attracted for some distance to it.

"The mash is made as follows: Bran 50 pounds; Paris green 1 pound.

"Thoroughly mix dry.

"Moisten the above mixture with sweetened water (this may be sweetened with two quarts of cheap molasses) and stir to a moist mash, but do not make it sloppy.

"The mash should be used fresh and not put out when sour.

"For cut-worms, the piles should be placed from two to three feet apart each way. For grasshoppers, the piles may be more widely scattered. Usually, it is necessary only to put the poison around the edges, or along one side of the field.

"Do not allow the stock or fowls to get the mash on account of the contained poison."

VACATION OF PROPERTY.

EDITOR KANSAS FARMER:—Please answer this for me, and as there are many such cases, the information would be welcome to many.

A sells his farm to B who lives in another State. A gives B contract for deed, reserving use of the land and possession until March 1 next. B is to pay for the place in full on January 1, 1907. Does A have to stay on the place until March 1 in order to hold the insurance valid and to take care of the place? A, having bought another place, finds it more convenient to move in the fall, or at latest January 1. The contract does not say anything about insurance or staying on the place. A only reserved right to retain possession until March 1. B finds it inconvenient to take possession until March 1. XXX.

Marion County. To construe a contract from an abstract statement is rather uncertain business.

Insurance companies are loth to take or to retain risks on unoccupied property. They will usually cancel insurance on the vacation of the buildings. Sometimes it is possible to have some one else occupy the property, and thus keep the insurance good.

The fact that A retained the right of possession until March 1 carries with it a probable reciprocal obligation to care for the property until that date, or until such time as the new owner can provide otherwise for its care. It is doubtful whether under the above statement of the contract A can be legally compelled to retain posses-

sion for the full time of his right of possession, but the Golden Rule, which is the best law ever written, would probably require A to see that the property shall be properly protected during the period contemplated in the contract.

DENATURED ALCOHOL BILL.

The free alcohol bill which passed the House of Representatives by the overwhelming majority of 224 to 7 and which has the unqualified endorsement of the President is now in a critical condition in the Senate. Senator Nelson W. Aldrich, of Rhode Island, chairman of the finance committee of the Senate, which has the bill in charge, has been driven to declare his position. Though there is no limit to this session of Congress except what it chooses to set, he says it is too late for any action by the Senate "based upon wise principles," and he finds it "necessary" to have extensive hearings on the bill on account of the "faulty work done in the House."

No person of intelligence can misunderstand the meaning of this position. The House bill is brief and a model of simplicity and directness. It has a single purpose and it provides for this with certainty. Everybody understands this and knows what it is for, and Senator Aldrich's attitude about "wise principles," "necessary hearings," and "faulty work in the House" means simply that he intends if possible to prevent action at this session.

Why is the Senator opposed to this bill? He is the father-in-law of John D. Rockefeller Jr., and joint grandpa with the elder, of the famous Rockefeller baby, and it is freely hinted around Washington that his personal interests make antagonism to free alcohol a prime necessity. There is no question that he will oppose to the last with all his might any consideration or action of this measure.

The issue is clear cut. There is no mistaking the situation. The question at issue is the liquid-fuel supply of this great country. The American farmer and the Standard Oil monopoly are face to face. The victory must be for one or the other. There can be no compromise.

Senator Nelson W. Aldrich with all the power of the Standard Oil behind him calmly ignores the well nigh universal public demand for immediate action and is determined to defeat the bill.

Farmers, there is only one thing to do. This great measure which means so much to you will be defeated unless you act at once—immediately. You can not reach Aldrich directly, but you can reach the Senators of your own State. Write to them at once, demanding a public statement of where they stand on this question, and demanding that they either compel action in the finance committee or take it out of committee and act upon it in committee of the whole.

There is no middle ground. Your Senators are with you in this matter or they are with the Standard Oil monopoly, and you must know at once which.

The free-seed graft by which members of Congress seek to buy the favorable consideration of certain of their farmer constituents by sending them at Government expense small consignments of common seeds amounts in the aggregate to an enormous raid on the Treasury. It is demoralizing, both to Congressmen and electors. It is a perversion of the useful original purpose of aiding in the introduction and distribution of new

varieties of cultivated plants. How any honorable man can support its continuance is hard to understand.

The reports indicate progress in consideration of the Interstate Commerce bill in the United States Senate. The bill would be passed readily if it could be brought to a vote, for few Senators would dare to go on record against a measure so universally demanded.

The question of late potatoes has been settled to his own satisfaction by Friend W. H. Hinshaw, of Lyon County, who showed in THE KANSAS FARMER office last Friday some beautiful specimens of the Sir Walter Raleigh variety.

The report, just made, on the Standard Oil monopoly and its relations to transportation companies is apparently an able showing of information, carefully and efficiently gathered.

The coal-miners' strike in the Pennsylvania region promises to end quickly. The settlement is for three years on the basis of the recommendations made by the Roosevelt commissioners.

Special attention is directed to the article on "The Production and Care of Pure Milk," by Prof. Oscar Erf, of the dairy husbandry department of the Kansas Agricultural College.

Miscellany

Kansas Politics.

The great parties have held their State conventions in Kansas, and have named their candidates and declared their principles. The Democratic Convention was held first. Its nominations were published in last week's KANSAS FARMER.

THE REPUBLICAN NOMINEES.

- Governor—E. W. Hoch, Marion County. Lieutenant Governor—W. J. Fitzgerald, Ford County. Secretary of State—C. E. Denton, Harper County. State Auditor—J. M. Nation, Neosho County. Superintendent of Public Instruction—E. T. Fairchild, Ellsworth County. Attorney General—Fred T. Jackson, Greenwood County. State Treasurer—Mark Tully, Montgomery County. State Superintendent of Insurance—Chas. Barnes, Osage County. State Printer—T. A. McNeal, Shawnee County. Railroad Commissioners—C. A. Ryker, Reno County; Geo. W. Kanavel, Harvey County; Frank Ryan, Leavenworth County. Justices of the Supreme Court (for six-year term)—W. A. Johnston, Ottawa County; R. A. Burch, Saline County. (For four-year term)—Silas Porter, Wyandotte County; C. B. Graves, Lyon County.

THE REPUBLICAN PLATFORM.

The Republican party in State convention assembled reaffirms its pride in the history and achievements of the National organization and adherence to its principles. The wisdom of its financial policy so fiercely antagonized is now universally conceded, while its protective policy provokes controversy only between revisionists and stand-patters.

Under the magic of these wise policies, the country has vaulted to the

front rank among the nations in finance, manufactories, material development, and general prosperity, while its wage-earners find remuneration twice as great as under any other flag.

The vigorous, able, and wise administration of President Roosevelt commands our enthusiastic approval as it has won the plaudits of our countrymen, regardless of party.

We indorse the recent State administration and commend its splendid achievements to the favorable consideration of every patriotic citizen of the State.

The great calamity which befell San Francisco and its sister cities on the Pacific coast touched the ligature of sympathy which binds all humanity together, and we are proud that Kansas was among the first to respond to this patriotic call upon our common humanity, and that the response has been in harmony with the great heart and abundant resources of this State.

We believe that platform promises are as sacred as business contracts, and should be as faithfully fulfilled, and we point with pardonable pride to the redemption of the numerous promises made in our last State platform. Among the many wise enactments of the last Legislature we call especial attention to the adoption of an improved plan for the management of our State charitable institutions, the selection of a board devoting its whole time to the care of these sacred institutions, with ample headquarters in the State house, a plan which is resulting in an improved condition in all these institutions and a large saving of expenses; to the new State printing law, which within a year has resulted in the erection of a large three-story, fire-proof printing-house, with modern equipment, the cost of all of which has been saved in two years; to the juvenile-court law which is saving countless boys from prison brands; to the State depository law, from which the State is realizing more than \$1,000 per month upon its State deposits; to the fish and game law, which has placed Kansas beside the most advanced States in the protection of game and in the propagation of fish.

The Republican party enacted the first railroad law in Kansas. It has uniformly stood for consistent and efficient regulation of these public corporations. The last Legislature, without any specific platform-promise previously made, enacted a general railroad law, conceded to be the best in the United States. In addition it passed twelve other bills regulating the various relations of the railroads with their employes, passengers, and shippers, constituting altogether the most complete railway legislation ever enacted at a single session by the Legislature of any State. It pledges itself to such amendments and additions to these laws as experience shall justify and demand, to the end that the Board of Railroad Commissioners may become and be maintained an efficient tribunal for the enforcement of exact justice in matters relating to the transportation of passengers and freight.

The Legislature having conferred upon the Board of Railroad Commissioners full power to regulate freight and passenger rates, we pledge the nominees of this convention upon that board to a speedy and conscientious examination and determination of all these questions and the establishment of such maximum rates for passenger and freight traffic as shall be just to the people and the railroads, and we hereby place ourselves in harmony with the policy of President Roosevelt on railroad questions, which policy we heartily indorse.

We are in favor of the passage by Congress of the Hepburn railroad rate bill as it passed the House of Representatives, without amendment that will in any way impair its efficiency or diminish the powers granted by it to the interstate commerce commission.

We again declare our adherence to the principles of a protective tariff and earnestly favor its continuance by the levying of duties on imports to an amount sufficient to prevent ruinous competition with foreign manufacturers who employ cheap labor, but we do not believe that tariff schedules are sacred and we recognize that they should be readjusted from time to time in order to meet changed conditions.

We again express our undying gratitude to the men who fought to maintain the integrity of our Nation and Union and preserve to the world a Government founded upon liberty and equality, as well as to the men who, in later war, carried the flag of liberty to the oppressed of other lands and extended the boundaries of freedom.

We demand strict enforcement of all

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laws giving aid, relief reference to soldiers and sailors their dependents. Where such are not effective, we demand amendments that will make them effective. Forty years having passed since the close of the war for the Union, we demand that, in keeping with the custom established by our Government, surviving soldiers and sailors of that war be now given a full-service pension of not less than \$12 per month.

We endorse the official record of our able and efficient Senator, Chester I. Long, as well as the official conduct of all the members of the Kansas delegation in the Congress of the United States.

We earnestly indorse the policy of the National Government in the reclamation of the arid and semi-arid land areas of the country by means of irrigation, and request our Representatives in Congress to diligently labor for the extension of this beneficent work as rapidly as possible, to the end that new homes may be provided for millions of people, and the wealth of the Nation vastly increased.

The Legislature, by its fearless policy of legislation in relation to the oil and gas interests of Kansas, and by its wise enactments, curbed the power of the oil trust, and established competition in the refining and sale of oil so that we now have prosperous independent refineries; and incited that revolt which, spreading over the entire country, bids fair to end the merciless and unscrupulous reign of Standard Oil oppression. Both oil and gas are the gifts of nature to Kansas, and the development of those industries has added millions of dollars to the taxable property of the State. Their continued prosperity will result in the bringing of many millions more. Under the laws passed by the last Legislature, eight independent oil refineries have been built and eight more are now in process of construction. This unparalleled development of the refining business would have been impossible under any other circumstances. We point to this record to show that the Republican party can be depended upon at all times to protect and foster the upbuilding of every material interest in the State.

We heartily sympathize with the efforts of Oklahoma and Indian Territory to be admitted into the Union as one State. In all the essentials, population...

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Agriculture

Dwarf Milo Maize with African Sumac-Sorghum.

I should be glad to see you demonstrate and report as to the value of an experiment I happened to succeed well with last year and shall repeat again. It consists of planting Dwarf milo maize, one-third mixed in planter with two-thirds African sumac-sorghum. In this way I secured about half a crop of average maize, and just as much sorghum as if no maize had been planted with the cane. The heads of maize were double the average size of maize planted alone and stood up to perfection, while on adjoining land planted in maize only, the heads were small and stalks went down badly. The mixed fodder was better than either alone, and the maize and sorghum did not hybridize in the least. When the cane was 10 inches high the maize was 20 inches, and went on and matured very fine heads, and then the cane overtook and overtopped the maize and matured not in the least hindered or mixed with its brother maize, nor was there the least bother in harvesting on account of the mixture.

I do not think the mixture would hinder in my way of heading for seed. My plan is to take a low wagon with wagon-box on, place 4 by 6 lengthwise, one end resting on each endgate of bed, then fasten chopping block conveniently to scantling so block can be removed, when worn out by hacking of the broadaxe or chopping axe. When so prepared I drive in and straddle a corn row and a man on either side of the wagon holds the heads of one of these partially cured bundles on the block and I chop them off into the box, and the man carries the headless bundle to the rear of the wagon, and by the help of the second man starts a shock, and then hands up another from the ground just where the binder had kicked it off. When the wagon is full the three of us proceed to stack as the condition of the grain would indicate.

G. S. NUTTER.

Chaves County, New Mexico.
Your experiment in planting Dwarf milo maize and African sumac-sorghum together is an interesting one. I do not understand why you should secure so large a crop both of maize and sorghum when planted together, unless it be due to the fact that the maize stood up better where it was grown with the sorghum. I doubt whether this method of planting could be recommended for general use in this State, where both milo maize and sorghum succeed equally well.

I am pleased to receive your communication, and hope that you may report the results of further trial.

A. M. TENNEYCK.

Cow-Peas Improve the Soil.

Please advise me which is best to sow on thin soil to cut for hay, cow-peas or soy-beans? Would it pay to sow either just before the last cultivation of corn, for fertilizing the land? Neosho County.

E. A. CRALL.

Cow-peas are superior to soy-beans as a forage crop, especially on thin land. At this station on upland soil cow-peas make a ranker growth and appear to be harder than soy-beans. We observe, also, that on land which has not previously been planted to soy-beans, the beans do not thrive well the first season or two, while cow-peas usually succeed fairly well at the first planting. This seems to be partly due to the fact that the bacteria which grow on the roots of the cow-peas are present in the soil, while the bacteria required for the soy-beans are apparently usually lacking. Before soy-beans succeed well it is necessary to inoculate the soil with the bacteria which grow on their roots.

We have been practicing the method of sowing cow-peas in the corn at the last cultivation during the past three seasons with fairly good success. When the season is dry the cow-peas usually make a thin stand and a dwarf growth, but in a favorably moist season a good crop of cow-peas may be grown in corn, planted as described above. Last fall after the corn was cut up on the plots, in which cow-peas were planted in the corn, the vines stood 12 to 15 inches high and covered the ground, and would have made a good crop of green manure, or the peas would have furnished considerable forage or pasture. We left the crop as a cover crop during the winter and will list to corn this spring. These experiments have not been conducted long enough to give definite results.

There is perhaps a tendency for the cow-peas to cause a little lighter crop of corn the year when the cow-peas are grown in the corn, especially when the season is dry, but there is little question that the soil may be improved by plowing under a green growth of peas, which should show its beneficial effect in the succeeding crops grown on such land.

At this station we prefer to sow cow-peas or some other green manuring crop in the grain stubble immediately after harvest, plowing down in the fall, for planting corn the succeeding season. Planted in wheat or oats stubble, the cow-peas usually make a good growth and there can certainly be no injurious effect from growing the crop on the land after the grain crop is removed, while by growing the crop with corn there may be a tendency, as suggested above, to decrease the growth of the corn. Cow-peas planted in wheat stubble the year made a good stand and stood about 15 inches high and were just coming into bloom when they were plowed under September 15.

Other crops which succeed well after wheat, making a good growth for green manuring, are rape, sorghum, and Kafir-corn. Cow-peas, however, should be superior to the others as a green manuring crop, since they actually add fertility to the soil above what is removed in the growing of the plants, due to the action of the bacteria which grow on the roots of the cow-peas, supplying the plants with nitrogen, which the bacteria take from the air. In my judgment there is no better annual crop adapted to Kansas conditions, which may be used in rotation or as a green manuring crop, than cow-peas. The only objection at present is the price of the seed. Every farmer should grow a small patch of cow-peas for seed. The peas may be grown much cheaper than they can be purchased. The New Era and Whip-poorwill varieties are well adapted for growing in Kansas. A. M. TENNEYCK.

The Seed-Bed.

With viable seed planted in the soil, a few simple factors largely determine the strength of germination, the stand and yield of the crop, and the quality of the grain produced. These factors are moisture, heat, and air. Every farmer knows that a dry seed will not germinate, no matter how favorable other conditions may be. Before the processes are begun, which start or renew life and produce growth, the seed must absorb moisture. Again, every seed requires a favorable degree of heat before it will germinate, and the presence of air is necessary in order to supply the "life-giving" oxygen. A seed placed in a vacuum with the proper degree of heat and moisture will not germinate, and the same results often occur when seeds are placed in a very wet or water-logged soil, because the air is largely excluded from a soil in such conditions.

In order to secure the ideal conditions for seed-germination and plant-growth a seed-bed for wheat should not be too deep and mellow, rather the soil should be mellow and not too finely pulverized, only about as deep as the seed is planted. Below the depth at which the seed is planted the soil should be firm (not too compact), making a good connection with the subsoil, so that the soil water may be drawn up into the surface soil. The firm soil below the seed, well connected with the subsoil, supplies moisture to the seed, while the mellow soil above the seed allows a sufficient circulation of air to supply oxygen, and favors the warming of the soil, gathering the heat of the sunshine during the day and acting as a blanket to conserve the soil heat, maintaining a more uniform temperature in the soil during the night. Meanwhile, also, the mellow soil conserves the soil moisture, acting as a mulch to keep the water from reaching the surface, where it would be rapidly lost by evaporation, and the same condition favors the growth of the young shoot upward into the air and sunshine, where in the presence of oxygen, light, and a favorable degree of heat, the green leaves quickly begin the work of assimilation and the soluble plant-food elements, absorbed by the roots, are rapidly transformed into protoplasm, starch, and the various tissues which build up plant structure, and the young plant grows and is soon firmly established upon its own roots.

With a deep, loose seed-bed the conditions are less favorable for seed germination than in the "ideal" seed-bed described. The mellow soil may be warm enough and well aerated, perhaps too well aerated, causing the soil to dry out, but with the deep, mellow seed-bed, the moisture in the subsoil

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

I can not go into a detailed discussion as to methods of preparing a suitable seed-bed. An excellent seed-bed for wheat may be prepared without plowing when wheat follows corn or other cultivated crops, which are removed from the field sufficiently early to prepare a seed-bed by disking and harrowing.

When plowing precedes the sowing by a short interval, it is well to follow the plow with the subsurface packer and harrow in order to pulverize and pack the soil at the bottom of the furrow and leave a mellow surface. This packing and pulverizing of the furrow slice is especially necessary when the soil is plowed dry or when stubble, trash, or manure is plowed under, because if the furrow slice is left loose and unpulverized, the capillary connection of the soil with the subsoil is largely broken off and the water will not rise into the surface soil to supply the germinating seeds and feed the roots of the young plants, hence, the seed falls to germinate well, the stand is often poor, and in such a seed-bed the crop "freezes out" during the winter or "burns out" during the succeeding summer.

The general experience of farmers and the results of experiments are much in favor of early plowing for wheat. At the Kansas Fort Hays Branch Station, trials carried on for the last two seasons gave an average yield of 11.6 bushels per acre for early plowing, August 1 to August 15; 5.4 bushels per acre for medium plowing, September 1 to September 30; and only 2.1 bushels per acre for late plowing and late sowing, October 15 to October 30. The experiments at the above-named station also greatly favor plowing for wheat rather than disking and sowing in the stubble. As an average for three seasons, land which was plowed, packed, and harrowed gave an average yield of 11.3 bushels per acre, while disked stubble land yielded 6.7 bushels per acre. It pays to prepare a seed-bed well. A. M. TENNEYCK, Professor of Agriculture, Kansas State Agricultural College, Manhattan, Kans.

Saving and Handling Manure.

There is no more wanton waste on the farm than the too common waste of barnyard manure. The common practice of throwing the manure from the stables out under the eaves of the barn and leaving it for a long interval in the yards exposed to the leaching of rains or to decomposition by drying and heating results in a great loss of plant-food elements. An experiment in determining the loss of manure by exposure was carried on at the Cornell Experiment Station, in 1890, as reported in Roberts' "Fertility of the Land." In this experiment horse manure, in a loose pile, valued at the beginning at \$2.30 per ton, lost 42.6 per cent in value. Cow manure, valued at \$2.29 per ton, lost 30 per cent in value. In another experiment a ton of fresh manure, valued at \$2.30, lost 42 per cent in value by an exposure of six months in the open yard. In comparison with this, manure which had been kept in a covered yard in 1883-84, being the entire product of the stock for that year, when analyzed was found to be richer in nitrogen, phosphoric acid, and potash than fresh manure, and was valued at \$3.61 per ton.

Probably the most economical way to handle manure when stock is kept in stables is to haul directly from the stables to the field, spreading the manure at once, preferably on grass or alfalfa land, although the manure may be hauled onto any land which is in condition to receive it. It may not be practicable to recommend the use of covered barnyards in the West, but it is practicable to furnish abundant shed room for sheltering stock during the winter-feeding season. It is also essential in order to save the manure, especially the liquid manure, to give a liberal supply of bedding for the stock.

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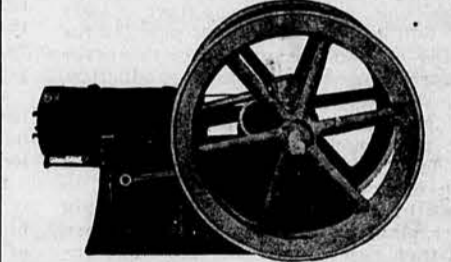
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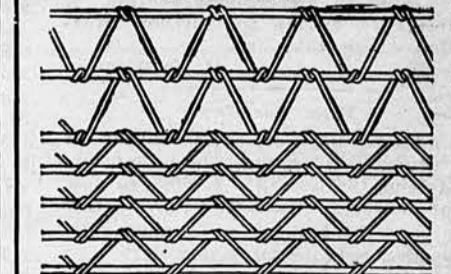
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Usually, farmers in the West have plenty of straw and roughage which may be profitably used for bedding in the stables, sheds, and yards. The barnyard should be well drained; however, there is apt to be a great loss of the soluble elements of plant-food where the drainage water is allowed to run away through natural drainage channels. If possible, such drainage should be turned over grass meadows or pastures, in order that the most available part of the plant-food in manure may not be entirely lost. It is not possible to haul manure daily from the yards and sheds, but the farmer should have a regular time for hauling out the manure and cleaning up the yards; preferably, this work should be done two or three times during the year in order not to allow too great an accumulation and the waste which is sure to take place by decomposition and leaching.

The advantage of spreading manure with the manure-spreader is that the manure can be more evenly and thinly distributed. It is better to spread manure rather than to spread it thickly over a small area. By heavy application there will be not only a waste of manure, but when a heavy coat of manure is plowed under it is apt to injure the crop by "burning out" in a dry season. When the manure can be handled daily or can be hauled from the stables as made and spread on meadow or pasture land, it is very handy and almost necessary to use a manure-spreader. The use of the manure-spreader is not so practical, however, when the manure is hauled out only once or twice a year, as is the common practice. It is usual in such a case to turn all hands and teams to the work of hauling manure, thus making it impracticable to use a single spreader, and several manure-spreaders could not be profitably owned and operated except on very large farms. It would be possible, however, for farmers in a neighborhood, by exchanging work, to cooperate in the hauling of manure, when several manure-spreaders might be economically owned and operated in a single neighborhood.—A. M. TenEyck, in The Industrialist.

Pasture Grasses for Wet Land.

Kindly advise me what kind of grass I should sow for hog pasture. I have five acres of wet land of which I wish to make hog pasture. How many hogs would five acres of grass support along with a little other feed?

HENRY L. VERNON.
Jackson County, Arkansas.

In your section of the country on the land which you describe, the following is a good combination of grasses to sow for hog pasture—English blue-grass 12 pounds, timothy 6 pounds, and Alsike clover 3 pounds per acre. If your purpose is to continue the land in permanent pasture, a little Kentucky blue-grass and white clover might be included with the above-named grasses and clover. Sow 8 to 10 pounds of good Kentucky blue-grass and a pound of white clover with the amount of seed of each of the grasses named above. Kentucky blue-grass and white clover start slowly and will not furnish much pasture for a year or two, but gradually the other grasses will become less productive, and the blue-grass and white clover will spread and take the place of the less permanent grasses. However, if the land may be rotated and planted with other crops, it would be well to break up the pasture every four to six years, planting it for a year or so to corn and then reseeding, since the combination of grasses with Alsike clover will give a greater abundance of pasture than is likely to be secured from Kentucky blue-grass and white clover. With this field well set with grasses and clover, it should furnish pasture for twenty-five to thirty hogs.

It will be advisable for you to write to your State Experiment Station, at Fayetteville, asking for further information along this line.

A. M. TENEYCK.

Millet for Hay.

Kindly advise when to sow millet for the production of hay. Is millet hay good feed for horses? I wish to sow about 5 acres. Is millet hay better than cane for horses? How much millet-seed should be sown per acre?

Franklin County. W. H. B.

It is usual to sow millet rather late in the spring. At this station we sow millet soon after planting corn, about the middle to the last of May, although it is practicable to sow earlier or later if it suits the convenience of the farmer. I have observed, however, that the earlier-sown millet does not make so good a growth as that sown later, and

also the early-sown millet is apt to be weedy, and often makes a poor stand. Again, millet sown late in the season when the weather has become hot does not usually make much growth, although certain varieties may be sown later than other varieties. I have observed at this station that the common fox-tail millets, such as the Siberian, German, and Hungarian varieties, do best when sown rather early in the season, while the broomcorn or hog-millet usually make a better crop when sown as late as the middle of June.

Millet hay is not considered a good feed for horses. The hay seems to act unfavorably on the kidneys, causing ill health, and horses fed exclusively on millet become stiffened in the joints, and some animals have died from the effects of eating the hay. For bulletins discussing the feeding of millet hay to horses I refer you to the North Dakota Experiment Station, Fargo, N. Dak. Millet hay is better feed for cattle than for horses. Cane will probably make a better roughage for horses than millet, although I would advise not to feed cane exclusively. Perhaps Kafir-corn fodder is preferable to cane fodder, or a combination of cane and Kafir-corn makes good roughage for horses or other stock.

It is usual to sow about 2 to 3 pecks of millet-seed per acre. If cane or Kafir-corn is sown broadcast, sow about a bushel of each separately or half a bushel of each in combination.

A. M. TENEYCK.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.

No young animal is profitable that is not growing steadily.

With horses, comfort in the stable means service in the field.

Get all of the manure hauled before cultivation begins.

While hogs should have plenty of water, it should be pure and fresh.

The putting in and culture of the crops has much to do with productiveness.

The management and care of the stock of the farm will decide to a great extent its profitability.

Horses need a change in rations, according to the kind and amount of work they are required to do.

The weeds should be just as carefully kept from occupying the ground when the ground is vacant as when occupied with a crop.

Too much time can not well be spent in making improvements on the farm, when the improvements increase the productiveness and value of the land.

In order to obtain the full value for the wool it must be sent to the market in the best condition possible.

The stability of any industry depends to a great extent on its profitability, and its profitability, as a rule, depends on its management.

There is no work required of any horse, let the duty be ever so menial, where intelligence, honesty, and kindness will not be of material value.

Never sell the yearlings and younger stock while there are older animals that can be disposed of with equal advantage and which will not grow into more money.

A kind disposition is a very important quality in a horse, and should be looked after very carefully in selecting one for practical use.

Charcoal given to animals, especially to poultry and swine, acts upon the blood as a purifier, often being found of benefit when there is no definable disease.

The best horse is the one with a kind and tractable disposition, well broken and above all the one that is the most serviceable.

Feeding, location, and judicious selection of parents on both sides are powerful factors in producing good stock of all descriptions.

Always select smooth and growthy animals to feed, even at greater cost, and the profit will certainly be in proportion to the good judgment exercised in making this selection.

With all crops the early cultivation is the most important, and in nearly all cases the sooner the cultivation is commenced after the crop is planted, the better.

It is not wise to attempt to graze too much stock on a given number of acres nor to plow and crop more than can be kept in the highest state of fertility by suitable fertilization.

Keep up with the work as fully as possible. With all crops the best results are possible only when the necessary work is done in given season. Better hire a little extra help than to get behind.

SAVE HALF THE TIME



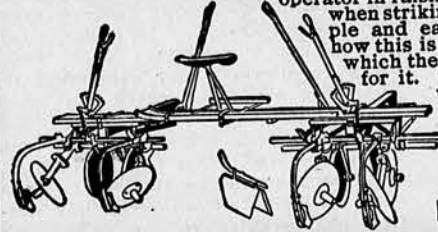
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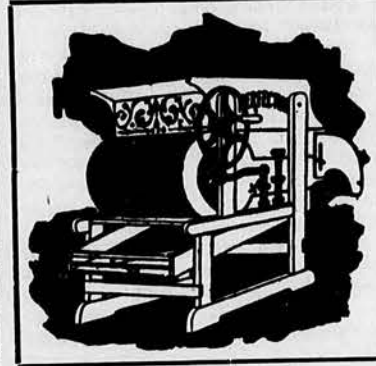
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Stock Interests

PURE-BRED STOCK SALES.
 Dates claimed only for sales which are advertised or are to be advertised in this paper.
 May 17, 1906—Great sale of all beef breeds of cattle at Wichita Kans. D. R. Mills, Des Moines, Iowa, Manager.
 May 18, 1906—Combination sale of Herefords, South Omaha, Neb., W. C. McGavock, Mgr., Springfield, Ill.
 May 17, 1906—Combination sale of Aberdeen-Angus, South Omaha, Neb., W. C. McGavock, Mgr., Springfield, Ill.
 May 23-June 1, 1906—Sale of all beef breeds, Kansas City sale pavilion, D. R. Mills, Mgr., Springfield, Ill.
 June 7, 1906—F. M. Marshall, Blackwater, Mo.
 June 12-14, 1906—Sale of all beef breeds at Sioux Falls, S. D., D. R. Mills, Mgr., Des Moines, Iowa.
 June 19-20-21, 1906—Dispersion of Tebo Lawn Shortorns, E. B. Mitchell, manager, Clinton, Mo., at Kansas City.
 June 26-28, 1906—Sale of all beef breeds at Des Moines, Iowa, D. R. Mills, Mgr., Des Moines, Iowa.
 October 2-3-4-5, 1906—Glasco Live Stock Association sale of pure-bred stock, Glasco, Kans.
 October 10, 1906—H. L. Faulkner, Jamesport, Mo.
 October 17, 1906—W. J. Honeyman, Madison, Kans.
 October 17, 1906—Poland-Chinas, W. A. Pruitt, Asherville, Kans.
 October 18, 1906—Poland-Chinas, W. A. Davidson, Simpson, Kans.
 October 20, 1906—W. R. Dowling, Norcatur, Kans. Poland-Chinas.
 October 23-24, 1906—E. A. Eagle & Sons, Agricola, Kans.
 October 24, 1906—Poland-Chinas, Frank A. Dawley Waldo, Kans.
 October 25, 1906—D. W. Dingman, Clay Center, Kans., Poland-Chinas.
 November 1, 1906—Frank Zimmerman, Centerville, Kans.
 November 6, 7, 8, 1906—Sale of all beef breeds, Kansas City Sale Pavillion, R. A. Ford, Lawson, Mo., Manager.
 November 8, 1906—T. P. Sheehy, Hume, Mo.
 November 13, 1906—Howard Reed, Frankfort, Kans.
 November 16, 1906—G. M. Heberd, Peck, Kans.
 November 20-22, 1906—Blue Ribbon sale of all beef breeds, D. R. Mills, Mgr., Des Moines, Iowa.
 November 27, 1906—L. C. Caldwell, Moran, Kans.
 December 4, 1906—Poland-Chinas, Lemon Ford, Minneapolis, Kans.
 December 11-12, 1906—James A. Funkhouser and Charles W. Armour, sale pavilion, Kansas City.
 Improved Stock Breeders Association of the Wheat Belt—November 13, 14, 15, 1906, at Arkansas City, Kans., I. E. Knox, Nardin, O. T., manager; Dec. 5, 6, 7, 1906, at Anthony, Kans., Chas. M. Johnston, Caldwell, Kans., manager; Dec. 18, 19, 1906, at Wichita, Kans., J. C. Larrimer, Derby, Kans., Manager; Feb. 13, 14, 15, 1907, at Caldwell, Kans., Chas. M. Johnston, Caldwell, Kans., manager.

Swine-Feeding Tests.—Armour's Deodorized Meat-Meal and Alfalfa Hay as Supplementary Feeds to Corn.

The animal husbandry department, Experiment Station, Kansas State Agricultural College, reports in Press Bulletin No. 149 as follows:
 Numerous questions are being received at the Kansas Experiment Station as to the value of the various packing-house by-products recommended for swine-feeding in connection with corn, and during the winter of 1905-'06 an experiment was carried on to secure more data on the subject. The value of alfalfa hay as a means of

Lot II, corn-meal five-sixths, and Armour's deodorized meat-meal, one-sixth.
 Lot III, corn-meal and all the alfalfa hay they would consume.
 A feed-rack was used for the alfalfa hay similar to a sheep-rack without legs. This method kept alfalfa hay before them at all times without waste. The hay was fed uncut.
 The value received per bushel for corn marketed via the pork route is an excellent method of calculating the profit from feeding. In the case of Lot I, figuring the cost of the pigs at the beginning of the experiment at 4 cents per pound, we have the difference between \$51.60 and \$123.54, or \$71.94, to credit to the 13.73 bushels of corn which each pig consumed, returning a value of 52 cents per bushel for the corn. With Lot II, after deducting from the \$169.72 received for the hogs at the market, the cost at 4 cents, or \$51, and the cost of the meat-meal fed, we have \$37.68 to credit to the 14 bushels of corn which each pig consumed, or a value of 62 1/2 cents per bushel. With Lot III we have left \$77.32 to credit to the 14.06 bushels of corn consumed per pig, after deducting \$52.40, the original cost of the ten pigs, and \$5.36, the cost of the hay consumed. This gives a value of 55 cents per bushel for the corn fed. This shows that 20 per cent is added to the value of corn by feeding meat-meal at \$2 per cwt. as a supplementary feed, and 5.8 per cent added to the value of the corn by alfalfa hay at \$8 per ton.

These hogs were shipped direct to the Chas. Wolf packing-house, Topeka, Kans., and slaughter tests were obtained of the different lots. The Government inspector, Dr. De Wolf, pronounced the whole bunch as unusually healthy. The lymphatic glands were large and soft, and only one case of parasitic infection of the liver was found. All had more leaf-lard than the average hog sold on the market. The amounts for the different lots were as follows: Lot I, 90 pounds; lot II, 94 pounds; lot III, 90 pounds. Although lot II seemed much fatter and heavier on foot, the leaf-lard was but slightly greater. The superintendent of the packing-house, J. B. Nicholson, stated that the flesh of lot II seemed firmer than the others in the warm condition. The hogs receiving alfalfa hay showed very fine carcasses.

The results of this experiment serve to emphasize the importance of converting the raw material of the farm into a more finished product in order to secure higher prices on the market, and also to retain a much higher per cent

TABLE I—WEIGHTS AND GAINS.

No. of Lot.	No. of pigs	Days fed	Weight Oct. 9, '05	Weight Jan. 29, '06	Total gain lbs	Av. daily gain per head, lbs
I.	10	112	1,290	2,400	1,110	0.99
II.	10	112	1,275	2,260	1,075	1.76
III.	10	112	1,310	2,630	1,320	1.18

TABLE II—FINANCIAL STATEMENT.

Number of Lot	Weight at beginning	Value at beginning \$4 per cwt.	Wt. on Topeka market lbs.	Selling price per cwt.	Proceeds on market per lot	Av. expense		Net profit per hog
						of mar-ket per lot	Total cost per lot	
I.	1,290	\$51.60	2,320	\$5.32 1/2	\$123.54	\$3.50	\$103.16	\$2.04
II.	1,275	51.00	3,143	5.40	169.72	3.50	134.59	3.51
III.	1,310	52.40	2,525	5.35	135.08	3.50	110.48	2.46

TABLE III—FEED COST AND COST OF GAINS.

No. of lot.	Kind of feed.	Pounds fed.	Value of feed consumed		Total	Pounds of gain per cwt. of feed	Pounds of gain per 100 lbs. of gain.
			Per cwt.	Total			
I.	Corn-meal	7,690	\$0.62 1/2	\$48.06	\$4.33	692.3	
	Corn-meal	7,848	.62 1/2	49.05	4.13	397.3	
	Meat-meal	1,552	2.00	31.04			
Total			\$80.09				
II.	Corn-meal	7,875	.62 1/2	\$49.22	4.05	596.5	
	Alfalfa hay	1,340	.40	5.36			
	Total			\$54.58			

increasing the value of corn in pork production was also made the subject of one test in this experiment. Its value for growing swine and breeding stock has been recognized for some time, but its value in the fattening pen is still a subject of inquiry. Thirty strong, thrifty shoats were available for this experiment, and they were divided as equally as possible into three lots of ten pigs each. The pigs were all cross-bred, and in the division an equal number of each particular cross were placed in each of the three lots as follows: Three Berkshire X Yorkshire pigs, three Berkshire X Tamworth pigs, two Poland-China X Berkshire pigs, and two Poland-China X Duroc-Jersey pigs. The average weights of these three lots on October 9, 1905, when the experiment began, were as follows:
 Lot I, 129 pounds; lot II, 127.5 pounds; and lot III, 131 pounds.
 The rations were as follows:
 Lot I, corn-meal.

of the fertilizing value of the grain. For this purpose no farm animal is better fitted than the well-bred, thrifty hog when fed and cared for in a rational manner.
 R. J. KINZLER,
 G. C. WHEELER.

Last Call—Herefords at Wichita Sale Next Thursday, May 17.
 Apropos of the great Wichita, Kans., sale of Herefords, next Thursday, May 17, beginning at 10 a. m., at G. O. Morgan's Riverside Barn, West Douglas Ave., the catalogue reveals the fact that in many respects it is the greatest array of this great breed that has been offered at auction the present season, and all interested in really good cattle should address D. R. Mills, manager, Des Moines, Iowa, for catalogue, now ready. Among this array is a magnificent offering from Frank Rockefeller's Belvidere, Kans., ranch, embracing the highest types of the breed, mostly thick-set 2-year-olds of much finish and quality. Of the six bulls in this consignment, lot 31, Soldier Creek Columbus 2d 177362, a November 2-year-old by Columbus 17th 91364, dam by Beau Brummel, second dam by The Grove 2d is a sample of the excellent breeding of this rare of-

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We Sell Premium Machine Oil at Less Than Half the Price You Now Pay.

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Every barrel guaranteed, and you be the judge. Other oil costs \$5.00 to 40¢ per gal.; ours costs \$3.50 per barrel. Freight rate is 32¢ per barrel all points within 100 miles of Benedict, Kans. For each additional 25 miles add 2¢.

After receiving and using 5 gal., if not satisfactory, return the balance, with bill of lading, and I will refund full price paid for said oil.

We Can Save You Money on Cylinder Oil. Write for Particulars.

T. C. Davis, Benedict, Kansas

\$31,500,000.00 at Risks 30,000 Members

The Farmer's Alliance Insurance Company of McPherson, Kansas

We furnish insurance at cost; 13 years of successful business. Why carry your insurance with others when you can get it in this company at much less cost? Write for full particulars of our plan.

C. F. Mingenback, Sec., McPherson, Kansas

Destroy the Gophers

In Your Alfalfa Fields by Using

Saunders' Gopher Exterminator

It is a machine which forces a deadly gas through their-runways and is warranted to kill gophers within 100 feet of operation. With it a man can clear from five to six acres of gopher-infested land in a day at a cost of twenty cents per acre. The poison we use can be gotten at any drug store. Satisfaction guaranteed or money refunded. Complete outfit for \$5.

Flint Saunders, Lincoln, Kansas
 Mention The Kansas Farmer.

type, and bred in the purple. Another good one, listed by Mr. Swain, is the February yearling by Orange Lad 17270, out of Miss Graceful by Red Royal 12913, a thick-fleshed fellow of 2-year-old Cruickshank-topped Young Mary "Success" is another attractive offering, by the choicely bred Lovely Gloster 184123, dam by the Bellows bred Scottish King 100743. As space forbids, it is impossible to describe the entire consignment, 75 head of both breeds being listed. Catalogues will be cheerfully forwarded upon application to D. R. Mills, sale manager, Des Moines, Iowa.

Darling Brothers' Shorthorn Sale. Last Saturday Darling Brothers, of Stella, Ohio, who rank among the foremost breeders of the East, sold at public auction, at Mankato, Kans., a consignment of Shorthorn cattle, consisting of nine bulls and seven heifers. The sale was something in the nature of an experiment as there was some doubt as to how the breeders of Kansas would appreciate an offering of this kind. The cattle were shipped by freight from Stella, Ohio, to Randall, Kans., arriving there ten days ago. From Randall they were driven to Mankato the day before the sale, a distance of sixteen miles, and in spite of all rough handling and the long drive, they were as fresh as though they had just been taken from the feed-barns, and it was the opinion of every breeder present that a finer lot of thoroughbreds had never before been offered to Kansas buyers. Had these cattle been earlier in the season the average prices would have been much higher, but being so late many breeders had made previous arrangements for their herd-headers, but in spite of the adverse conditions the stock sold well. The top price was paid for the 2-year-old bull, Duke of Evergreen 34th 252726, which went to J. M. Baker, the well-known Shorthorn breeder of Narka, Kans., for \$165. The following is a complete list of the purchases at the sale:

Table with 2 columns: Item description and Price. Includes entries like 'Three-year-old heifer, August Good, Esbon, Kans.' for \$65.00, 'Two-year-old bull, Jno. Kemmer, Mankato, Kans.' for \$117.50, and a 'Total' of \$907.50.

Where the Grand Champion Grew. On the little farm of John W. Baker, in the hills northeast of Strong, Kans., the stage is being set for the closing act of a most interesting chapter in Shorthorn history. The man that bought, developed, and first showed the grand champion bull, Master of the Grove, goes out of business May 16, and on that day will hold his first and last public sale—a dispersion. Ill health—the only thing that could separate him from his loved Shorthorns—is the cause. In this sale, to which Mr. Baker invites his neighbors and his friends, the breeders from everywhere, will be mature cows, heifers with their first calves, heifers unbred, and a few young bulls, some ready for service and some too young. About half the offerings will be by Master of the Grove. Several of them and some of the calves out of Master of the Grove cows are suitable material for the fall shows. Some of the best very young things are by Lopez 231291, a son of Mr. Babst's famous Lord Mayor, that promises to be as great a sire and show animal as Master of the Grove proved to be. Here is truly a select little herd of cattle, and its dispersion will be one of the most interesting events in Kansas fine-stock history. Remember the date—May 16—and send to Mr. Baker for any particulars desired.—Telegram.

Dipping the Armour Herefords. The annual dipping of the Armour Herefords in Car-Sul Dip is now in progress at the Meadow Park Farm just south of Kansas City. In speaking of the benefits to be derived from the regular dipping of cattle and other live stock, Mr. W. J. Cummings, manager of the Armour herd, recently remarked that he thought the dipping of live stock would continue to increase in popularity because of the benefits to be derived from the use of efficient disinfectant dip such as Car-Sul. The annual dipping of the Armour Herefords is not done because of mange, or anything of that character, but because Mr. Cummings believes that dipping is beneficial to the general health and condition of the animals. They have made it a practice for several years and use only Car-Sul.—Telegram.

M. C. Vansell, of Muscotah, Kans., makes a change in his advertisement this week and offers his herd-bull for sale. This bull is 3 years old and weighs a little over a ton in good breeding condition. He is not fat. He is not sold for any fault, but because Mr. Vansell must make a change in his herd. The bull is just the right age, and in just the right condition to do good hard service. Somebody will get a bargain in this bull. Write at once and mention THE KANSAS FARMER.

The Grange

"For the good of our Order, our Country and Mankind."
Conducted by George Black, Olathe, Secretary Kansas State Grange, to whom all correspondence for this department should be addressed.
News from Kansas Granges is especially solicited.

- NATIONAL GRANGE. Master.....N. J. Bachelder, Concord, N. H. Lecturer.....Geo. W. F. Gaunt, Mullica Hill, N. J. Secretary.....C. M. Freeman, Tippecanoe City, Ohio
- KANSAS STATE GRANGE. Master.....E. W. Westgate, Manhattan Overseer.....A. P. Beardon, McLouth Lecturer.....Ole Hibner, Olathe Stewart.....E. C. Post, Spring Hill Assistant Stewart.....Frank Wiswell, Ochlirree Chaplain.....Mrs. M. J. Ramage, Arkansas City Treasurer.....Wm. Henry, Olathe Secretary.....George Black, Olathe Gatekeeper.....J. H. Smith, Lone Elm Ceres.....Mrs. M. L. Allison, Lyndon Pomona.....Mrs. S. M. Phinney, McLouth Flora.....Mrs. S. J. Lovett, Larned L. A. S.....Mrs. Lola Radcliffe, Overbrook
- EXECUTIVE COMMITTEE. O. F. Whitney, Chairman.....Topeka, Station A E. W. Westgate.....Manhattan George Black, Secretary.....Olathe Henry Rhoades.....Gardner J. C. Lovett.....Bucyrus
- STATE ORGANIZER. W. J. B. Obyrhlm.....Overbrook

Osage County Pomona Grange. The Pomona Grange, of Osage County, met in Hurricane Grange hall in Overbrook at 1.30 o'clock, April 7. The weather was very rainy and the roads extremely bad, so the meeting was not as well attended as usual. There were twenty delegates present, and probably about that many visitors. Trustees elected for this year were as follows: O. L. Tabor, of Burlingame Grange; A. L. Ovessen, of Highland Grange; and Jos. Bulmer, of Junction Grange. There was some informal discussion in regard to ways and means of increasing Grange work and influence throughout this county, also concerning Grange property insurance.

The question for discussion, "The Initiative and Referendum," was placed before the meeting, but it was getting so late and was so rainy that some of the members were obliged to leave, so the discussion was cut short. However, our Pomona secretary, Lester Pierce, of Richview Grange, has agreed to prepare an article on the same topic for the next meeting, which will be followed by a discussion in which it is hoped many will take part. The referendum has been endorsed by the State Granges of at least eighteen States, among them being the Kansas State Grange. This is a non-partisan movement for the establishment of the people's sovereignty in place of machine rule, and in some States has made much progress.

The question of Grange life insurance will be brought up at the next meeting, which will be at Melvern, July 28. At the last meeting of Hurricane Grange, a suggestion was offered by W. T. Dickson that an effort be made to get enough Osage County patrons to fill a car to attend the next meeting of the National Grange, which will be held in November at Denver, Col. This plan will probably be brought up at the next meeting of Pomona Grange. Remember the date, July 28, Melvern, and come prepared to say or do something to help make an interesting meeting. JENNIE E. HEBERLING, Lecturer, Pomona Grange, Osage Co.

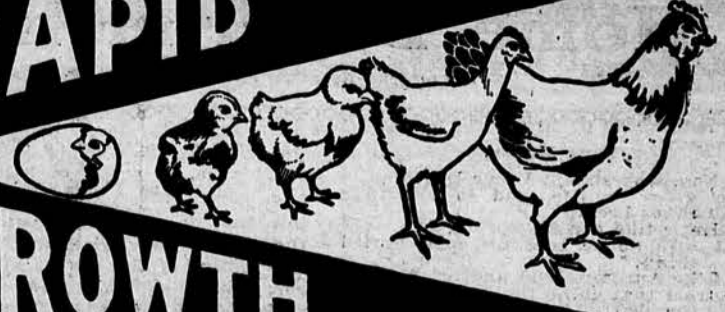
The Grange in Osage County. EDITOR GRANGE DEPARTMENT:—Carbondale Grange No. 754 is in a prosperous condition. We have recently received five new members by initiation, and have four new applicants ready for the ceremony at our next meeting. Every one of our members seems to take an active part to make our meetings interesting.

We have had under consideration the question of good roads until we have got it in action. Every neighborhood has a King split-log drag, and after each rain the roads are dragged, and in this way we are succeeding in having good roads. We think those neighborhoods that have no drags yet will soon fall into line, and we will eventually have good roads all over the county.

Osage County Pomona Grange met at Overbrook in April, but owing to rain and heavy roads the attendance was small. The next meeting will be held at Olivet on the fourth Saturday in July.

Carbondale Grange meets every Wednesday night, and the meetings are interesting and profitable. We extend a cordial invitation to the members of other granges to visit us. A. P. STANUM, Lecturer.

RAPID GROWTH



Dr. Hess Poultry Pan-a-ce-a is the best aid for growing poultry—a tonic that helps a fowl eat more food and thoroughly digest it, forcing a rapid, healthy growth. It tones the egg-producing organs, so hens lay in all seasons. It quickly builds flesh on market poultry. It cures all poultry disorders—gapes, roup, cholera, indigestion, leg weakness, diarrhoea; makes it possible to keep the whole flock in perfect health all the year round.

DR. HESS Poultry Pan-a-ce-a

is the prescription of Dr. Hess (M. D., D. V. S.), containing the ingredients recommended by science for increasing digestion and assimilation, also supplying iron for the blood and toning up the entire system. It has special germicidal principles which destroy all minute bacteria to which fowls are so subjected. Poultry Pan-a-ce-a is the greatest tonic for the young, makes them grow fast, healthy and strong. It bears the indorsement of leading poultry associations in the United States and Canada. Costs but a penny a day for about 30 fowls, and is sold on a written guarantee.

1 1/2 lbs. 25c, mail or express, 40c; 5 lbs 60c; { Except in Canada and 12 lbs. \$1.25; 25 lb. pall \$2.50. } extreme West and South.

Send 2 cents for Dr. Hess 48-page Poultry Book, free.

DR. HESS & CLARK, Ashland, Ohio.
Makers of Dr. Hess Stock Food.
INSTANT LOUSE KILLER KILLS LICE

A Square Deal Wanted.

Iowa cries for a square deal in the interstate commerce law situation, and the remarks of A. B. Judson, master, are pertinent. They follow: "Nearly twenty years ago, when the farmers secured the enactment of the interstate commerce law with a commission that was supposed to have power to enforce the law, there was general acquiescence in the result as a moderate exercise of the constitutional powers of the Government. The law went into effect and remained in full force for several years without injury to the railroad corporations and to the general satisfaction of the public. I have wondered why a measure so just and moderate and so thoroughly tested and fortified by experience should evoke so much opposition from certain quarters. All that the people want is a 'square deal,' and that they are going to have, and the quicker the corporations realize that fact and withdraw their opposition to President Roosevelt's plan, the better it will be for them."

More Happiness and Prosperity

Is the result of the work of that great fraternal organization, the Grange, says the master of the Iowa State Grange. "It is the purpose of this great fraternal organization to increase happiness in all our farm-homes and to make agriculture more prosperous in all parts of our glorious country. This organization teaches, among other things, that honesty, integrity, fair dealing, giving value received in all exchanges, industry, frugality, and thrift, and observing the Golden Rule are essential characteristics of good citizenship, setting its seal of condemnation on all forms of fraudulent practices, extortion, or robbery, whether done under the form of law, combination, monopoly, or trust methods, or by the more vulgar practice of common stealing, thus building up a public sentiment that the man or corporation that amasses millions of dollars in any other way than honorable methods, based on the principle of always giving value received. This organization places its seal of condemnation on all forms of modern graft, whether in high places or low. Let the guilty be punished, whether they are millionaires or paupers, public officials or private citizens."

Indian Creek Grange will hold its regular open meeting on Tuesday evening, May 15. A good program has been prepared for this meeting, which will be followed with strawberries and cake. All are invited to attend.

Gossip About Stock.

Volume 64 of the American Shorthorn Herd-Book is just off the press. It contains pedigrees of bulls numbered from 242180 to 247190, and an unusual number of females. Volume 65 is in course of preparation. These volumes may be had of Secretary John W. Groves, Live Stock Record Building, Chicago, Ill.

H. J. Hinckley, of Milo, Kans., is one of the younger breeders of Poland-China hogs that we believe will make good. He is a young man of good character, who believes in representing his stuff just as it is. He has been buying his foundation stock during the past winter from some of the best breeders in the State and will have some good stuff to offer this fall. Watch for his advertisement in this paper.

Chas. Morrison, owner of the Phillips County herds of Red Polled cattle and Poland-China swine, writes as follows: "The Poland-Chinas are out of sight in the alfalfa. We have a few choice boars ready for service. The Red Polled bulls are all sold that are ready for service. I have some fine young bull calves and heifers bred and open for sale. Cattle are in fine condition. We have 72 head in herd now, with two of the finest herd-bulls that money would buy."

John Black, of Barnard, Kans., has one of the finest crops of Poland-China spring pigs that we have seen this season. Mr. Black raises the big-boned, thrifty fellows that the farmers like to buy. He will have some fine boars for sale this fall and you can make no mistake in buying from him. His brood sows were sired by Tecumseh Chief 2d 44531, dam, Lady Trott 127938, she by Tecumseh Best by Black Pat out of Lady Queen by Kansas Chief 14667. Mention THE KANSAS FARMER and write him your wants.

McLaughlin Bros., of Kansas City, Columbus, and St. Paul, have this to say about their importations of Percheron stallions: "Our regular importations take place each year in July and November. Those are the months in which we expect to receive most of our horses; but our business has been so large, and the demand upon us has been so great during recent years that we have been obliged to make many more frequent importations. Although our stables were all full and we had an overflow of about 20 stallions on the first of January of this year, yet we have already received one importation of 42 stallions, and we received a cable message this morning from Mr. James McLaughlin, in which he says that he is sending 48 more stallions on the Atlantic Transport Steamship 'Minnetonka.' Mr. McLaughlin will bring over his largest importation in July, most of which are already bought, to be delivered after the breeding season will be over. The 42 stallions that came last month are nearly all sold. The 48 that are coming will hardly supply the demand until our regular July importation will arrive."

Every Tuesday, balance of the year, the Chicago Great Western Railway will sell homeseekers' tickets to Minnesota, North Dakota, and Canadian Northwest at about half rate; to other territory first and third Tuesdays. Write G. W. Lincoln, G. P. A., 7 West 9th St., Kansas City, Mo. State number in party and when going.

Home Departments

CONDUCTED BY RUTH COWGILL.

Laus Mortis.

Nay, why should I fear Death,
Who gives us life, and in exchange
takes breath?
He is like cordial Spring,
That lifts above the soil each buried
thing;
Like Autumn, kind and brief—
The frost that chills the branches frees
the leaf;
Like Winter's stormy hours
That spread their fleece of snow to
save the flowers;
The lordliest of all things—
Life lends us only feet, Death gives us
wings.
Fearing no covert thrust,
Let me walk onward, armed in valliant
trust—
Dreading no unshen knife,
Across Death's threshold step from life
to life!
Oh, all ye frightened folk,
Whether ye wear a crown or bear a
yoke,
Laid in one equal bed,
When once your coverlet of grass is
spread,
What daybreak need you fear?
The Love will rule you there that
guides you here.
Where Life, the sower, stands,
Scattering the ages from his swinging
hands,
Thou waitest, Reaper, lone,
Until the multitudinous grain hath
grown.
Scythebearer, when thy blade
Harvests my flesh, let me be unafraid.
God's husbandman thou art,
In His unwithering sheaves, oh, bind
my heart!
—Frederic Lawrence Knowles, in
"Love Triumphant."

The Resurrection.

FLORENCE SHAW KELLOGG, FAY, KANS.

"But yesterday all life in bud was hid;
But yesterday the grass was gray and
sear,
To-day the whole world decks itself
anew
In all the glorious beauty of the year."
To-day our hearts thrill with life
and hope, and we have each one our
share in the glad new life and beauty
—in the springtime resurrection. We
want all the world to be good and
glad; we want every one to have a part
in the sunshine, a chance for each to
come to his or her own of life and work
and joy. When we look out over the
wide stretching fields and notice how
each plant, be it large or small, beau-
tiful or not beautiful, has yet its place
and room to come to its best of fruit
and seed, when we see how nature
cares for her own, how "Spring shall
plant—and autumn garner to the end
of time," and we know nothing shall
be lost or fall of its purpose, then
turning from nature to man, how it
hurts us to think of the "submerged
lives," myriads of people who are
downtrodden and oppressed and have
small chance to know how good and
beautiful life can be made. Then we
think with joy and gratitude of the
brave men and noble women in all
parts of the world who have given up
their lives, all of their money, time,
and strength for the improvement of
the lives of others, those who have
gone down from life's pleasant places,
out of ease and luxury, that they
might make a light to shine in the
dark places, and so to help the weak
and erring, the sin sick and desolate
to become strong, true, happy, and use-
ful. We think of beautiful Jane Ad-
dams, who John Burns calls "The only
saint America has produced," but we
know there are others just as earnest
and sincere, just as helpful as she is,
and would do justice to them while
taking nothing from her. We recall
how the "little seed thought," from
which Hull House and all its beautiful
activities, all its helpfulness has
grown, fell into the good soil of her
Soul when she was but six years old,
there to be guarded and nourished un-
til, "in the fullness of time" it bore
beneficent fruit to which many, not
only of Chicago's poor, but those of
other great cities can bear witness.
The uplifting, virifying influence of
Hull House, and all such houses
spreads like the sunshine into the far
places out and out we know not where,
nor to whom. We only know it is for
good wherever it goes, and we thank
God and take courage for our kind.
Among the most helpful influences
of this kind, where the work done
brings a resurrection of life and all
that makes it worth living—love, hope,
and joy, is the old "Jerry McAuley
Mission," in New York. It is inspir-
ing only to read of the work being
done there. What must it be to see
it, to share in it, and so to know of
our own observation of the redeemed
lives there? There, under the first
span of the great Brooklyn Bridge on
Water Street, is the mission house that

has been to so many as the open gate
to Heaven, to a life of hope and love
and purity after they have sunk so
low that it seemed almost impossible
they could ever rise again. Once it
was a dive of the lowest kind kept by
Jerry McAuley, who at that time was
styled "the wickedest man in New
York." Some earnest young women
missionaries entered there one day
thirty years ago and asked to be al-
lowed to sing and pray. The permis-
sion was given, and despite the jeers
and ribald jokes cast upon them, they
came again, until in time McAuley felt
the stirrings of better impulses within
him, and yielding to the good that
never wholly dies in any man's soul,
because it is of God and can not die,
he threw off the yoke of his past life,
changed his dive to a mission house,
and worked as earnestly to redeem his
kind as he had before worked to drag
them down. Because he was so thor-
oughly one of them, because he knew
by his own experiences "What strength
must be set against a sin," because he
had felt all the power of temptation,
he knew just how best to meet and
help those who came to him. His
methods and his work were unique, but
it all told mightily for righteousness,
and the lowest and the vilest took
"heart of hope" and struggled slowly
upward and though they fell again and
again many times over, as many times
did he forgive and forget and sought
again to help them. He never let go
of one on whom he had "laid hold," as
he would say. Only recently I have
been reading of Rev. Samuel Hopkins
Hadley, who became McAuley's suc-
cessor and went on with his work af-
ter he was called higher. Of a fine
family directly descended from Jona-
than Edwards, Samuel H. Hadley,
wealthy, educated, and honored, yet
fell a victim to drink, fell to the lowest
depths of degradation. His last penny
was gone, but he was too weak and
unerved to drag himself to the river
and drown himself, as he had resolved
to do when he should reach this point
in his downward way. He tells us how
while he was sitting in this condition
in a miserable saloon he "suddenly be-
came aware of a great presence" with
him, and under the influence of that
presence he vowed "never to touch an-
other drop of intoxicating liquor," and
to make it possible for him to keep
this vow he "dragged" himself to a
police station and begged to be locked
up for the night. He says "All the
demons in hell were locked in with me
and I fought all night long for my
soul," but the power of the good was
stronger than the power of the evil,
and Hadley kept his vow. Soon after
he was induced "by a fellow sinner" to
go to the mission house on Water
Street. He found it so crowded and
packed with those who, like himself,
were seeking the better way, that he
could hardly make his way to the
front. Men and women of every type
of degradation were there. He knelt
with a crowd of drunkards. Jerry Mc-
Auley's prayer was simple and direct.
"Dear Savior," he said, "won't you look
down in pity upon these poor souls?
They need your help, Lord, they can
not get along without it. Blessed Je-
sus, these poor sinners have got them-
selves in a bad hole, won't you help
them out? Speak to them Lord, do for
Jesus' sake, Amen." Then he told them
to "pray for themselves," and "tell the
Lord what you want Him to do for
you." He put his hand on Hadley's
head and said, "Pray, brother." "I can
not, you pray for me," was the answer.
McAuley showed his wisdom by reply-
ing, "All the prayers in the world won't
help you unless you pray for yourself,"
and "with a breaking heart," Hadley
said, even as a child might say, "Dear
Jesus, can you help me?" "Although
up to that time," he said in telling of
it all afterwards, "my soul had been
filled with unutterable gloom. I felt
I was a free man, that Christ with all
His love power had come into my life.
Oh, the precious feeling of safety, of
freedom, or resting in Jesus!" So he
was saved to himself and to God, saved
to become a mighty power for good
among these lowly people. He never
again wanted whisky, so complete and
radical was the change in him. When
in time McAuley "slept in death," Mr.
Hadley became the head of the mission
and gave all he had, all he was to the
work there. Being richly gifted by na-
ture, of a family of wealth and culture,

Mayer Working Shoes

For Farmers, Miners, Lum-
bermen, Mechanics and
Working Men

are expressly adapted to the needs of
working people of all classes.

The leather for these shoes is care-
fully selected and the soles made of tough,
pliable sole leather that wears like iron.
Honest stock and high grade workman-
ship have placed Mayer working
shoes above all others in strength and
wearing quality. Insist on getting Mayer
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For a Sunday or dress shoe wear the
"Honorbilt" for men.

F. Mayer Boot & Shoe Co.,
Milwaukee, Wis.

Her Majesty's Sewing Cabinet

"Enclosed find check for Sewing Cabinet. It is fully up to expectation and my wife is greatly pleased with my purchase." F. M. BUSHNELL, Cashier, Richland Savings Bank, Mansfield, O.

We receive such letters daily. There are no disappointments—it pleases them all. This graceful, handsome piece of furniture is produced by the hands of careful, painstaking craftsmen in our own little workshop. Each Cabinet is completely equipped with everything a woman needs to sew with, and here are fourteen pockets that hold all of her unfinished work—keeps all the sewing together. It's a perfect delight—"makes real pleasure out of real work"—and is just the thing any Kansas Farmer reader will enjoy. Write for our free descriptive booklet with prices for the different styles, and also please tell us the color scheme of your sewing room that we may suggest a cabinet that will harmonize with its furniture, fittings and decorations. We pay the freight.

It makes a splendid present
Send for free booklet to-day—it's so easy to forget it—and please mention Kansas Farmer

ART CRAFT WORKSHOP, 342 Dearborn Street, CHICAGO, ILLINOIS

he might have ranked high in the world of men and affairs, but dearer to him than all else was this mission located there "Where trains banged and thundered day and night over head, and all around were the grinding, discordant noises of machine-shops." He "would rather live there than in any other place on earth," he said, and there he lived and worked until just recently, when he was called to his reward. Called to his reward I say, but did he not have his reward daily, hourly in witnessing the improved lives of those around him? In seeing them give up all evil ways and live clean, strong lives? Each one a help and a power to incite others to greater effort and more earnest striving for all that was good and pure? The mission was, and is, a place where the lowest could come in the sure hope of help and encouragement. No matter how it is elsewhere, though he may be watched and distrusted everywhere else, here he is left perfectly free, here not a breath of suspicion meets him, here is no watching, no restraint. He is met as a brother, given food and clothing, warmed and cheered and cared for as by a band of loving brothers. Here Mr. Hadley said, "If a man cheats me nineteen times, I shame him out by trusting him the twentieth time." Here, however often he might fall, strong hands were never lacking to help him up, and all the atmosphere was that of love and trust and helpfulness. Hadley's faith in human nature was boundless and his spirit as truly the spirit of Jesus as man's ever was. His methods were so wise and so successful that leaders of religious thought and sociological workers came from all parts of the world to learn of him, and oh, how his people, those for whom he gave him life, how they loved him. Truly he made the sinful to become pure, the weak strong, and the desolate to rejoice. He lived his creed and made it easy for men to believe in a God of infinite love and patience. The grief at his death is great and sincere. His going has indeed left a great void there, and though good men may be plenty, it will be long ere a leader be found to take his place and fill it. It is impossible to measure the

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Clothes Wringers, new, \$1
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Wade & Butcher Razor Strap and Bone, \$1.00
\$1.00 box Medicated Toilet Soap, \$1.00
Headquarter for Watches, 75 cts. to \$15.00
Black Gloss Buggy Paint, gallon, \$1.50
Gasoline Stoves, 2 burners, \$1.50
Poultry and Stock Foods, packets, \$1.50
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good he has done. We can not number the lives of men and women he has helped. As well might we try to compute the good of the sunshine or count the flowers that each day are hearing the call of the springtime and are lifting glad faces to the glad sky. We only know the good work will go on and on, and generations yet unborn will know and love the names of these earnest men and women who have given themselves in love to the work of bettering human lives, of bringing a beautiful resurrection after the winter of sin has past.

There are others of whom I would tell you, but they must wait until another week, as I would not encroach too much upon the space in the dear old FARMER.

The Young Folks

Just Like a Woman.

When pa came home the other night he had a happy smile
And said to ma that we would soon be livin' in great style,
Because a man had been around that day to let him in,
Just as a favor, on a thing that couldn't fail to win,
"He'll let me have the stock," says pa, "at fifty cents a share
If I'll subscribe to-morrow, for there's little left to spare.

"He'll let us in at fifty cents for every share we buy,"
Says pa, while ma she didn't seem to hardly bat an eye,
"And in six weeks from now if we've a mind to let it go
We'll get ten dollars for each share—that's estimated low—
I've seen his papers and they're straight; there ain't a chance to lose—
Say, what's the trouble with you, ma? You don't seem to enthuse."

"If it's as good as that," says ma, "I can't quite understand
What makes him want to let it go. Of course it would be grand
To get the money, but I'd feel as though it wasn't fair
To rob him, as we would if we should take a single share."
"Confound a woman, anyway," says pa, "she always seems
To want to wake a person when he's having pleasant dreams."
—Chicago Record-Herald.

Fleetfoot; the Autobiography of a Pony.

MARION SEWELL.

CHAPTER IX.—BAD MAN'S LANE.

The day after school was out I frisked in the big pasture with the colts, but the following morning Lyall brought me home and turned me loose in the front yard. This gave me a feeling of great importance, for the lawn was a beautiful one, full of flowers and shrubs, and if I was not trusted and esteemed I would not have been put there, because any awkward stumbling or nipping of buds would have proven fatal to the looks of the place.

One time when I was roving happily about quite near the house a prim old lady, who had been spending the afternoon with Mrs. Dearcot, came out of the parlor and seeing me threw up her hands in horror, exclaiming, "Why, you let the horses run in your lovely yard!" Not the horses," smiled Mrs. Dearcot, "only the children's pony. He nips the grass so neatly they sometimes call him their little lawnmower."

The visitor laughed knowingly and shook her head. "It's all right for a while, but you will forget to watch him by and by and all those flowers which you value so much will be swept out of existence."

"How full of despair you are to-day, Mrs. Brahm," pleasantly rejoined Mrs. Dearcot, as she led her friend out among her plants, and picking a few blossoms from every flowering shrub she soon had a mammoth bouquet which she presented to Mrs. Brahm, who accepted it with many protestations. I began to think that this good woman envied me my place in the midst of so much beauty, and wishing to prove that I bore no ill will, I reached over to smell and admire the bunch of modest violets in her bonnet, but when she felt my warm breath on her neck she gave a smothered scream and walked with agility through the open gate. Then Mrs. Dearcot said, "Why, Pony!" in a reproachful tone, and I turned away and began to graze, being convinced that there were people in this world who could never view things in the right spirit.

Of course, Mrs. Brahm's prejudice had nothing to do with my history; I merely wish to hint that it was a real honor to be allowed several days in the week to roam unfettered and unwatched in the near vicinity of one of the finest dwellings in the neighborhood.

When Lyall was bringing me home from the pasture that morning in June

which I have before referred to, he sang blithely all the way. I knew that some treat was in store for him and was hardly surprised when he told me the particulars.

"I do wish you and Marcella might come also," he began in an assumed voice of apology. "But neither of you would enjoy it much I'm afraid. You see I'm off to Grandpa's, and a lot of us fellows are going to fish, boat-ride, and climb trees, and a whole bushel of other things that you could never learn to do." Here he snickered unnecessarily. "So you'd better stay at home and enjoy a quiet life," he added gaily as he stroked my neck. I didn't want to go, and Lyall did not need to get funny because I was left behind, but then the lad was so happy that I suppose he hardly knew what he was saying. After some more talk about Grandpa's shady trees, tender grass, and juicy apples, Master Dearcot pinched my chin and started off to be on hand for his train.

The time passed quickly, and a little while before the regular noon hour Marcella's head appeared above the little blue gate, and I knew from the way she called me that my dinner was ready. I hurried and we both went to the wood-shed where my meal of oats, corn, hay, and apples was awaiting me. A pail of cold water was there also, and while I drank Marcella ate one of my apples.

It must have been one o'clock when Daisy Floyd came. Marcella had been trying to do fancy-work, but I could see that although she held her needle gracefully in her hand, her eyes roved over the hills and far away. Yet who could work on a day like that? I'm sure I could not, and of course Marcella shared my feelings. The sky was too blue, the air too warm, the songs of the birds too piercingly sweet to allow joyous youth to take up a task and finish it. Even the bees with their reputation of always being busy seemed to do nothing but hum, and so long did they keep it up that I grew drowsy, and all the energy which I possessed deserted me.

Marcella suddenly dropping her work clapped her hands and exclaimed, "Hurrah!" Looking up I saw Daisy Floyd coming into the yard.

"Hurrah yourself," she responded, as she tripped up the steps.

"I was so afraid you wouldn't come," said my little mistress, "and I see you've brought your box."

"I have," returned the small maid, "and where is your box?"

"It's ready. Everything is all fixed but Pony, and I can harness him in a minute." My heart sank. This, then, was my dream of idleness in the shade; but since Marcella wished it I could run the risk of getting overheated.

We started down the road and I was willing to show my best paces, but Marcella encouraged me to take my time and I did. Meanwhile, I could not help overhearing the conversation of the two lassies behind me.

"I am going to have a party before long," announced Daisy triumphantly. "Oh splendid!" cried Marcella, and in her excitement she gave a tweak at the lines.

"It is to be a wild-flower social," continued Daisy. "I thought it out a long time ago."

"Will the invitations be printed?" asked Marcella in an awed tone.

"They'll be typewritten. Cousin Gilbert has a typewriter, you know, and he has promised to do my work." Daisy made this statement with such an air of importance that I nearly stepped off an old bridge, so greatly was I amused.

"There's one now!"

"Where?"

"Right up against the fence." And with this startling announcement both girls tumbled out of the buggy, and bringing two small wooden boxes, fell to work digging at the roots of a dyspeptic-looking plant.

In a short time, but not before the botanists were perspiring freely, the roots began to show themselves, and the next moment they were receiving a vigorous shaking to remove all traces of soil.

"Won't Miss Benton be s'prised?" queried Daisy repeatedly, but Marcella seemed to have lost confidence.

"I'm so 'fraid," said she, "that they are not the right kind. Miss Benton showed us some the other day, and they were worlds thicker than these. These are so thready."

"Pshaw!" exclaimed Daisy. "They'll press out the same as those Miss Benton had. Very likely what we found are young."

"I hope so," returned Marcella, as they again climbed into the buggy.

"Every one that comes to my party

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must be a wild flower," Daisy remarked as if there had been no interruption. "and I'm going to invite the whole school except the Howler girls. They stay at home."

"Oh Daisy! why would you do that?" I could easily imagine Marcella's shocked face as she asked the question. "A dozen reasons," responded Daisy in an impressive voice that caused me to stumble, being so interested and amused. Then she went on: "They are not very rich, nor very smart, nor in the least pretty, and they have such horrid names, and I'm not going to invite them. So there!"

Marcella unsteadily pulled one line and then the other, and as I did not know where to go I started down a narrow side lane.

"Daisy Floyd," she said with a quaver in her voice, "I never knew you were so mean. I'm sure, though, your mama will make you invite Hester and Georgie and Prissy. Hester beats you and me in g'ography, and you all to pieces in r'ithmetic, and that's why you want to slight 'em."

For a little while there was no response; then Daisy gave a guilty snicker. "Cousin Gilbert would think I was crazy if I asked him to write me an invitation to Hester Howler," she said. "Oh, it's all right, Miss Floyd," returned my little mistress, and added provokingly, "What does j-e-a-l-o-u-s spell?"

A sound of smothered sobs came faintly to my ears. Then a shrill little voice piped up, "Marcella Dearcot, you have no right to dickstate to me. Mama said I could do as I pleased about the party, and now I'm going to walk all the way back home."

No sooner had this direful threat been made than Marcella gave a frightened scream. "Oh, see!" she cried, "we've taken the wrong road and are half-way down 'Bad Man's Lane.'"

"Such a driver!" exclaimed Daisy, in a tone of mingled disgust and fear.

"It's not my fault," declared Marcella, "the bad fairies turned Pony this way because you were so mean about the Howler girls. We'll be murdered to death, for the lane is so narrow we must keep on forever."

When my little mistress started out with, "It's not my fault," Daisy began to advance a contradiction, but at the mention of fairies, in the existence of which she was a firm believer, she was silenced for awhile and her next remark showed the humble state of her mind.

"I don't think anybody lives here at all, Marcella. I believe they call it 'Bad Man's Lane' because there are so many stumps and hills and the road is so fearful rough, just like this, bump, bump, bump."

"Maybe that's it," returned Marcella, "but I've heard folks tell how there's a man who lives all by himself at the end of the lane, and he steals and fights and does everything that's awful. They say he hides in the woods sometimes so he won't be caught and punished."

Affected by the stirring tale, I trotted on briskly over the wretched road, hoping in a blind fashion to outrun possible danger.

"I wish we could turn," complained Daisy after a period of silence. "Surely the lane will get wider after awhile." Almost as she spoke I was forced to come to a standstill, having suddenly encountered a wide, green bank which stretched across the middle of the road.

A great many yards above us perched on a hill was a little black house with one tiny window and a sagging door, through which was emerging a wild-looking man, the sight of whom made me catch my breath in fear. His clothes were old and torn, his black hair long and uncombed, and as he put his hand over his eyes and peered across the neighboring treetops, I felt that he was planning, or had just completed some horrible crime. A little spotted dog came running out and stood beside. The fact that the dog had neither ears nor tail was a final proof of the man's cruelty.

The sharp eyes of the small terrier spied us almost at once, and with excited yelps came bounding towards us. Half-way down the hill he lost his footing and fell headlong over the steep embankment, at the bottom of which he lay and howled out his fright and pain.

The "bad man," not knowing of our presence nor casting a glance in our direction, hurried to the prostrate dog, and gathering the miserable creature up in his arms began soothing and pitying it with all his might.

"Master will fix it up with salve," he assured it over and over again, and then all at once he saw us. With the dog (now whimpering with pleasure) still in his arms he came toward us.

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Marcella and Daisy could stand no more, and neither being willing to await her turn, both jumped out of the buggy at the same time and with quaking voices began to implore mercy. The "bad man" with much surprise pictured in his peculiar countenance, took hold of my bridle and without a great deal of difficulty turned the whole outfit in a homeward direction. Then as the little girls climbed to their seats he delivered himself of the following, in a singsong voice:

"Little daughters do not fear,
I would not harm you in a hundred year.

My life is but"—

I heard no more, for I was now going at my fastest gait, and in a wonderfully short time was clear of the lane and out on the wide, smooth road.

We met some people in a carriage and they seemed greatly distressed on our account. "A runaway!" exclaimed a benevolent old lady, and as I dashed past them I heard pitying murmurs about "two poor little children."

The girls did not enter into conversation until I had slowed up some and we were going through the back gate at home.

"I don't think he was so bad, after all," remarked Marcella, reflectively.

"Why?" asked Daisy, who was always on the search for reasons.

"Because he was so good to his little dog."

"Yes," assented Daisy, "and he was good to us, too."

The Little Ones

A Grow-Up Girl.

I've grown to be a great big girl,
My hair is in a braid,
Tho' mama says 'twill take the curl
All out, she is afraid.

And nowadays I dress myself
And that is lots of fun,
And spread my little nightie out
And air it in the sun.

I tug and pull my stockings on,
And then you ought to see
My little 'lastics open wide
As if to bite at me.

They stick their little shining teeth
Into the stocking top
And nip it so it can not slip
For all I jump and hop.

My petticoats are pretty hard
(They button in the back),
Then comes my little morning dress
And, when it's cool, a sack.

And so it's plain how big I am
And how it makes me cross
To have my grown-up brother, Sam,
Say, "Here's our little Floss."
—Rose Warren Campbell, in Good Housekeeping.

The Bungler.

MRS. A. D. GRAY.

I was sitting on the steps in the twilight, waiting for Ruth and Helen to come. They had gone for a walk before dark.

"I think we need a walk to rest us, mother," said Ruth. "Besides, we might meet that bug I told you about. You can't seem to think what it is, and I certainly thought you knew every single bug."

"Well, I'm sorry, my dear; but when you say that it has six legs and two eyes, and can tell me so little else about it, the description would do for hundreds of other bugs. You must learn to be more observing."

"I said it banged right into my face, and kept on banging around. And, oh, now I remember more—it has heavy wings on top and thin, fine ones under them."

"You did look closely, only you forgot to tell me all you saw. Go for the walk now, and when you come back I will tell you about it."

Presently they came running, breathless and eager.

"Isn't it funny, mother? When we got most here, this same old bug banged into Helen's face. I shoved him off, and he came again, and then tumbled right onto the ground. I put my handkerchief over him quick, and he's there now! A boy going by said he was a 'June-bug' but it's only May now. Shall I open the handkerchief? Are you 'fraid'?"

"Not the least little bit," I said. "He is quite harmless now. But, oh my, he wasn't a few weeks ago."

"Why, what did he do?" asked Helen.

"To begin with," I said, "'June-bug' isn't his real name at all, though most people call him that. He is a May insect, for he comes the last of April or first of May. Don't you remember the beetles I told you about, and how before they became beetles they were white baby grub-worms? There are over sixty varieties of his family, differing a little from each other."

"Goodness!" said Ruth, "Sixty relations?"

"Oh, as for relations," I said, "there are about 70,000 beetles of various kinds—it's a big family. This one belongs to that family that digs down and cuts off strawberry roots and the green, tender roots of grass. That's when he is a white grub, you know, before his wings and legs grow. He hunts the richest earth and is often found when boys are digging fish-worms. When he becomes a beetle his name is the 'Bungler' or 'May-beetle.' 'June-bug' is only a nickname.

"Under these thick, dark upper wings are two fine gauze wings, folded like a fan. They are a lighter brown. He goes banging around into people's faces, and seems to have no idea of flying, as some insects do."

"Perhaps he's blind like that May-fly," said Helen. "No, here are his eyes; he can see, I am sure."

"The banging about is only one of his habits, caused not from poor sight, but from a weakness of the wings, which makes it hard for him to alter his course quickly, and causes him to strike any object in his way, instead of avoiding it."

"And so people are making a mistake

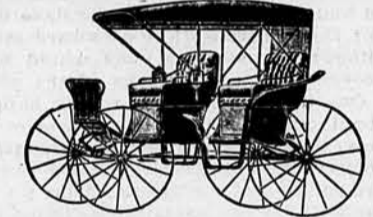


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when they say, 'As blind as a beetle,' said Ruth.
 "Yes, that saying and the name 'Bungler' both come from the way he flies."
 "Oh, mercy me, but I'm getting to know a lot!" said Helen, "and the more I learn, the more there seems to be."

Club Department

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Our Club Roll.

Women's Literary Club, Osborne, Osborne County (1902).
 Women's Club, Logan, Phillips County (1902).
 Domestic Science Club, Osage, Osage County (1888).
 Ladies' Crescent Club, Tully, Rawlins County, (1902).
 Ladies' Social Society No. 1, Minneapolis, Ottawa County (1888).
 Chautau Club, Highland Park, Shawnee County (1902).
 Cultus Club, Phillipsburg, Phillips County (1902).
 Literature Club, Ford, Ford County (1903).
 Sabean Club, Mission Center, Shawnee County Route 2 (1899).
 Star Valley Women's Club, Iola, Allen County (1902).
 West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
 Fortnight Club, Grant Township, Reno County, (1908).
 Progressive Society, Rosalia, Butler County (1908).
 Pleasant Hour Club, Wakarusa Township, Douglas County (1899).
 The Lady Farmer's Institute, Marysville, Marshall County (1902).
 Women's Country Club, Anthony, Harper County.
 Taka Embroidery Club, Madison, Greenwood County (1902).
 The West Side Study Club, Delphos, (1902).
 Prentiss Reading Club, Cawker City, Mitchell County (1908).
 Cosmos Club, Russel, Kans.
 The Sunflower Club, Perry, Jefferson County (1908).
 Chaldean Club, Sterling, Rice County (1904).
 Jewell Reading Club, Osage County.
 The Mutual Helpers, Madison, Kans. (1906).
 West Side Study Club, Delphos (1906).
 Domestic Science Club, Berryton, Shawnee County (1906).
 Mutual Improvement Club, Vermillion, Marshall County (1906).
 (All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

MISCELLANEOUS PROGRAM.

Immigrants to the United States.

Roll call.
 I. The arrival and inspection of the immigrants.
 II. Their effect on our country.
 III. The problem of educating the children of the immigrants.
 I. The immigrants are pouring into our country by the thousands every day. On one day a few weeks ago over eighteen thousand entered the New York harbor. All of these had to be closely examined to see that no insane person, idiot, or pauper, or any one with any contagious disease should come into our country. The immigrants are all examined at one office on Ellis Island which is not adequate for examining more than five thousand a day, and when the number exceeds this the homeseekers have to remain on the ship until the officers can inspect them. Many humorous and pathetic stories about these poor homeless people are current, and if the writer of this paper knows any, they will live up her article.
 II. The next subject is one which is being discussed widely and earnestly. A great influx of people, such as come into our harbors daily, can not but have its effect. Many think that as these people have a lower standard of

living than our working people, and so will work for less wages, the result will be a lowering of the American standard of living. Another fear is that they will undermine the strength of our nation, for they soon acquire as much power by vote as any educated and thoughtful citizen. This topic is a much used but none the less interesting question for debate, and if two or four members would write on it, half taking the negative and half the affirmative, more points would probably be brought out and it would lend variety to the program.
 III. The problem of educating the children of these immigrants is a puzzling one. The parents, as a rule, do not wish their children to attend school, but prefer that they should either beg or work, and both parents and children rebel against the truant law. When they are thus forced into the school from families where self-control and honor are seldom taught, they make it hard for the teacher. Having so many different nationalities under one instructor adds to the difficulties. Material for this program is so plentiful in magazines and papers that the writers should have no difficulty in preparing interesting and instructive papers.

Forestry Club's Visit to Manhattan.

The West Side Forestry Club had a very delightful visit on Thursday, April 26, to the State Agricultural College at Manhattan, Kans. The club has been planning for this trip for some time, and the members who were unable to attend missed one of the most instructive meetings since its organization.
 About eighteen of the club members went up on an early morning Union Pacific train. The trip of fifty miles up the Kansas River valley along which the orchards were in full bloom will be long remembered. The visitors were met at the station in Manhattan by a number of the faculty of the college, also by women from the Domestic Science and Tuesday Afternoon Clubs, of Manhattan, who assisted in entertaining them during the day. Carriages were furnished by the Commercial Club, which were at the disposal of the visitors all day. The first point of interest was the Domestic Science building where specimens of the year's work in the sewing department were seen. Later, the visitors were shown the kitchen, where the senior girls were preparing luncheon, most of the cooking being done by electricity. President E. R. Nichols and wife and Prof. E. A. Popenoe, together with other members of the faculty, entertained them at luncheon, which was daintily served by the girls of the senior class. Many of the guests said they never saw a luncheon more artistically served. This was a compliment to Prof. Henrietta Calvin, the instructress. Several departments were visited. In the forestry classroom Professor Popenoe, of the forestry department, explained to them about the original plans of the college campus. These plans were the work of Mr. Currew, of St. Louis. It has been the practice of the faculty to carry out the ideas of the original plan, so far as is practicable, in all later improvements and additions. Prof. Albert Dickens, of the horticultural department, then conducted the ladies in a walk through the campus, showing them the different trees and shrubs, explaining their habits, secrets of their culture, etc. The walk continued through the orchard where the trees were in blossom. One of the most beautiful spots on the campus was the long hedges of lilacs, which were in full bloom. The Professor invited the ladies to help themselves, an opportunity which they accepted.
 The carriages called for them after their jaunt and they visited the stock-barns, where they saw horses, cattle, sheep, hogs, and chickens of the finest breeds. Then they were taken to the large greenhouse where each lady was presented with a carnation. From there they went to the college library and museum, Science Hall, and other buildings. This concluded the afternoon visit to the college. Then the visitors were taken back to Manhattan, where an invitation was extended to them by E. H. Greely, Mrs. J. T. Willard, of the Domestic Science Club, Mr. F. W. McGarrot, and Mrs. O. H. Halstead, of the Tuesday Afternoon Club, to visit the Carnegie Library, where they spent the remaining hour of the day before returning to their homes. The invitation was extended to the West Side Forestry Club by the college faculty, because of its interest in forestry and gardening.
 Mrs. GEORGE W. TINCHER,
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DESCRIPTION—Selected second growth hickory wheels and gears; Norway iron clips and bolts; inch axle double collars, full length body loops, long body, any width. Solid spring bellows back; sanitary spring cushions. Trimmed in dark green, tan or maroon leather, cloth or plush. Ideal spring cross bar in place of wooden cross bar if preferred. All wool top lining, leather quarters and back stays, curved top joints if desired, complete with storm apron, side curtains, boot and full length carpet. Nickel dash rail, hand rail and lazy back rail. Send for Big Free Catalogue of Vehicles and Harness in colors. A buggy factory selling direct must pay all of their expenses, salaries, etc., out of a few thousand buggies. Our expenses are all paid out of our agricultural implement factory. A buggy factory would starve to death on the small profit we get on a buggy. Write us before buying. The only plow factory in the world selling direct to the consumer at wholesale prices.

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Of Topeka, Kansas.

The cost is the same whether you take out hail insurance early or late in the season. Why not let our agent write it early and take advantage of all the protection your premium will pay for? Hail insurance is more of a necessity than fire insurance; by being very careful you may avoid a fire, but you cannot be careful enough to avoid a hail storm when it comes your way. In twenty minutes you may have the work and care of months destroyed. In 1905 the farmers of Kansas lost over sixty times as much by hail as they did by fire.

This is the only hail company in Kansas whose applications take effect as soon as you settle with the agent.

This is the only hail company in Kansas that does not ask the farmer to pay five per cent of his own loss.

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JUST ISSUED

Farm Grasses of the United States

By W. J. SPILLMAN
 Agrostologist, U. S. Department of Agriculture

An intensely practical discussion of the farm grasses of the United States of America is presented in this volume. It is essentially a resume of the experience of American farmers with grasses, and it is safe to say that no other work has covered the ground so thoroughly. No attempt has been made to give a connected account of all the grasses known in this country, but the aim has been rather to give just the information which a farmer wants about all those grasses that have an actual standing on American farms. The whole subject is considered entirely from the standpoint of the farmer. One of the most valuable features of the book is the maps showing, at a glance, the distribution of every important grass in the United States; and the reasons for the peculiarities in this distribution are fully brought out. The principal chapters treat on the grass crop as a whole and the relation of grass culture to agricultural prosperity, meadows and pastures, the seed and its impurities; the bluegrasses; millets; southern grasses; redtop and orchard grass; brome grasses; grasses for special conditions; hay-making machinery and implements; insects and fungi injurious to grasses, etc., etc. The methods followed on some pre-eminently successful farms are described in detail, and their application to grass lands throughout the country is discussed. The discussion of each grass is proportional to its importance on American farms.

This book represents the judgment of a farmer of long experience and wide observations regarding the plan in agriculture of every grass of any importance in American farming. In its preparation its use as a text book in schools as well as a manual of reference for the actual farmer has constantly been kept in mind. The book is most conveniently arranged and splendidly indexed, so that the reader may find any subject at a glance.

Illustrated, 6x7 inches. 248 pages. Cloth. Price, postpaid, \$1.00.

KANSAS FARMER COMPANY

TOPEKA, KANSAS

Kansas Politics.

(Continued from page 506.)

lation, extent of territory, wealth, and intelligent citizenship, these Territories abundantly meet all the requirements of Statehood. Every consideration of justice towards the 1,500,000 people residing within their boundaries demands the immediate admission of the Territories into the Union. We hereby request all our Representatives in the Congress of the United States to use their best efforts to accomplish this much-desired result at the present session of Congress.

The foundation of good Government is the will of the majority, fairly expressed and honestly recorded. To that end the selection of a candidate is as important as his election and the primaries should be as sacred as the polls. We demand that every safeguard that now surrounds the general election shall be established for the primaries where candidates are selected, and such additional provisions as shall preserve to each party control by its own members, freedom of choice, and an honest record of the results.

Whereas, the Supreme Court of the State of Kansas, and the Supreme Court of the United States have held the anti-trust laws of Kansas constitutional, and said laws have been demonstrated to be efficient for the punishment of offenses, we demand that said laws shall be rigorously enforced by the Attorney General and every county attorney of this State, and we demand that the Legislature shall make liberal and sufficient appropriations to conduct investigations and prosecutions against all trusts and combinations in restraint of trade, to the end that such unlawful combination may receive such exposure, prosecution, and punishment as their enormities deserve. The Republican party stands for the supremacy of law and demands of the executive, prosecuting, and police officers the rigid enforcement of all laws, regardless of personal opinions as to their wisdom or expediency."

THE DEMOCRATIC NOMINATIONS.

- Governor—Wm. A. Harris, Leavenworth County.
- Lieutenant Governor—Hugh P. Farrelly, Neosho County.
- Secretary of State—Hugh C. Ahlborn, Smith County.
- State Auditor—W. F. Bowman, Atchison County.
- State Treasurer—Patrick Gorman, Bourbon County.
- Attorney General—David Overmyer, Shawnee County.
- State Superintendent of Public Instruction—A. B. Carney, Cloud County.
- Railroad Commissioners—Harry McMillan, Ottawa County; C. A. Cooper, Rice County; Jas. Humphrey, Geary County.
- Insurance Commissioner—J. W. Morphy, Russell County.
- State Printer—W. F. Feder, Barton County.
- Associate Justices (for six-year term)—A. M. Jackson, Cowley County; D. M. Dale, Sedgwick County; (for four-year term)—W. S. Glass, Marshall County; Lorenz Hawn, Leavenworth County.

THE DEMOCRATIC PLATFORM.

We indorse and reaffirm the Democratic National platforms of 1896, 1900, and 1904, as presenting in unbroken succession the principles of the Democratic party of the United States. We adhere to the great Democratic doctrine of equal rights for all and special privileges for none, and we once more declare that the true end of all good government is the greatest good to the greatest number. Cherishing the Constitution as the supreme law, we declare that wherever

that immortal document declares or suggests the policy of our Government, we make it our guide. We stand for constitutional money, for constitutional taxation, for constitutional control of interstate and foreign commerce, and for a constitutional foreign policy; at the same time favoring all such changes in the Constitution as may from time to time become necessary for the protection and preservation of the rights of the people.

Time and events have justified every contention and fulfilled every prophecy of the Democratic party.

We congratulate the Democratic party and the country upon the triumphant vindication of the quantitative theory of finance, a Democratic doctrine; and urge upon the benefits of an expanded currency, a Democratic demand.

We remind the public of the fact that the late President McKinley was preparing to abandon, if he had not actually abandoned, the extreme doctrine of protection; that the present occupant of the White House has made so much progress in the knowledge of the truth as to declare that "the tariff is not sacred," and that the most intellectual and conscientious elements of the Republican party now agree with the Democracy that the tariff is a shelter for trusts, enabling the tariff barons to collect enormous tribute from the American people, while selling the same wares to foreigners at a much lower rate it gives the lie to the pretense that such protection is necessary, and constitutes a crime against the American people. We, therefore, renew our oft-repeated demand that all tariff legislation be restricted to laying duties for revenue only.

Railways are public highways. Railway companies are common carriers and public servants. They are given franchises and great powers, with the implied agreement on their part that they will serve the public impartially for just compensation. This they should be required by law and compelled by public authority to do.

We declare that we are not enemies, but friends, of the railroad companies. We are proud of their efficiency as mediums of transportation, and rejoice in their mechanical and scientific development, and their improved facilities for the transportation of persons and property; and we pledge ourselves to defend their every right and redress their every wrong. Yet, we can not shut our eyes to plain facts nor submit to the rules of the State and Nation by railroad influence. We, therefore, demand of the Board of Railroad Commissioners an honest and earnest enforcement of all provisions of existing laws against rebates and all manner of discriminations; and of the Legislature, intelligent, fair supplementary legislation to the end that both the railroads and the public may have justice.

Of all the evils of railroad discrimination, none are so insidious, so constant, and so powerful for evil as the free and complimentary pass. It muzzles the press, silences discussion, stifles and perverts legislation, corrupts justice, dominates and directs public conventional opinion, determines business and social success, and, in a great measure, controls public affairs. In principle, it is as unjust as unequal taxation, and in practice, much more unjust; and it is affiliated with every other economic evil of the age. It is estimated that more than one-third of the passenger mileage upon railroads in Kansas is now free, so that at the rate of 3 cents per mile the railroads now realize upon their total mileage less than 2 cents per mile. We, therefore, demand the immediate abolition of the free pass, and all other like devices, and the establishment of a passenger rate of 2 cents per mile for adults, with proportionate reductions for children, as now.

The subject of the trusts has become stale, but these criminal combinations are not only still with us, but they rule the markets as with a rod of iron. The price of every staple is arbitrarily fixed in utter defiance of the law of the land. And this will go on until the prisons that are yawning for the high-grown scoundrels, who manage the trusts, are filled with them and they are arrayed in the branded garb of felons.

To every honorably discharged sailor and soldier of the Republic we owe a debt of gratitude which we can never repay. They, especially the survivors of the great Civil War, were promised honors and offices, lands, bounties, and pensions; and it behooves a patriotic and honorable people to faithfully perform the pledges made. And as the remorseless reaper thins their ranks and their influence in affairs is diminished,

the obligation resting upon us is increased. We pledge the candidates on the Democratic ticket a rigid enforcement of the old soldier preference law.

Prohibition in Kansas has reached the stage of chronic malady. For years the Republican politicians have dealt deceitfully with the people respecting this question. The party, being hopelessly divided along the line that divides wet from dry, and realizing that the votes of both factions are necessary to constitute a partisan majority, they have deliberately attempted to fool, and have generally succeeded in fooling both; putting wet candidates on dry platforms, assuring the dries that the law would be vigorously enforced, while whispering and winking at the wets, supplying and plying them with free liquors on the eve of elections, and wholly ceasing to prosecute on the near approach of elections, making spasmodic spurts of prosecution between elections, and at all times extending immunity to favorites in the liquor trade, thus playing fast and loose and blowing hot and cold; each faction being made to believe that it was getting the best of the other in this game of duplicity, hypocrisy, falsehood, and deception, and each joining hands with the other until the political union for base partisan purposes of the wet with the dry, of the saint with the sinner, of the temperance-howler with the liquor-seller, of "the puritan" with the black-leg, has become a fixed condition against which it is impossible for honest men longer to contend.

It was in the year 1883 and under the first Democratic administration this State has ever had, that of Hon. George W. Gilck, that the law was enacted reducing passenger fares on railroads to a maximum of 3 cents per mile, and the first railroad commission was then created by law, and we pledge our candidates for Railroad Commissioners to take such action as may be warranted by existing conditions. In these days of corporate encroachment and of evasion and defiance of the law by the laws' corporate creations, we deem it wise to make plain the attitude of democracy towards this situation by declaring that we are, as our party has always been, in favor of the enforcement of all laws, particularly those enactments passed to circumscribe and control the exercise of corporate power, and for such new legislation as may be necessary to make such the supremacy of the people's law over all its subjects, both natural and artificial.

We make no war upon material prosperity nor the beneficiaries thereof, so long as they recognize the dominion of the people's Government, but we do declare for the rigid, rigorous, faithful, and efficient exercise of Governmental powers to the end that the dominion of the mighty over the many shall cease, and that the feeble as well as the forceful, the poor as well as the powerful, shall be equal before the law.

We declare in favor of the initiative and referendum to the end that local self-government may be realized and the Government brought close to the people in all matters of importance.

Wherever there is a gross disparity between the assessed taxable valuations of railroad, telephone, and telegraph properties and private properties, we specifically insist upon the property of railroads, telephones, and telegraph corporations in Kansas paying its fair proportion of the burden of public expenses.

We insist that it is not only the duty of the individual, but of the official as well to obey the law. We demand the enforcement of all laws, not only those prohibiting the sale of intoxicating liquors, but the law making it a felony to commit larceny from the State Treasury and all other laws on the State statute books, and we demand that the law requiring the Governor to inspect and count the funds in the State Treasury, and report its condition, be complied with.

At the State Agricultural College.

Professor Eyer, of the electrical engineering department of the Kansas State Agricultural College, is making a test of gasoline engines to determine their availability for electric lighting as well as various mechanical purposes of the farm or business establishments. In a recent test a two-horsepower engine ran eighteen electric lights for ten hours without any attention.

Over twenty varieties of corn are being planted at the Hays Branch Experiment Station this year with a view to finding the varieties best adapted for Western Kansas. It is felt that with more care in selecting for seed, and with better cultivation, it will be possible to greatly improve the corn crops in the western part of the State; not

Buy Dodd & Struthers' Lightning Rods

HERE has been a good deal of discussion as to the real merits of a Lightning Rod, and authorities have all decided that Dodd & Struthers' Pure Copper Cable Rod would absolutely protect any building upon which it is placed in a scientific manner, and they have agreed that the system of placing the rods on has as much to do with the efficiency of the rod as does the rod itself.

This fact partly accounts for the phenomenal growth of our business in the last few years, as the system we are using is given a great deal of thought. Professor Dodd, who is known throughout the entire country, gives his entire attention to the scientific part of our Lightning Rod business. He gives each of our salesmen instructions in properly rodding buildings. These salesmen in turn instruct our local dealers, so that in buying a Lightning Rod of one of our authorized agents you run absolutely no risk, as each man is schooled in the business and is thoroughly competent to put on Lightning Rods before we allow him to issue our guarantee.

By this guarantee we mean that when he rods your buildings our agent furnishes you a written agreement whereby we say that if you ever have a dollar's worth of damage to your buildings while our rods are on them that we will refund you the money paid for the rods or make good the damage.

Professor Dodd has appeared before every National Mutual Fire Insurance Convention for the last six years and has received many endorsements from them, recommending the firm of Dodd & Struthers and their Pure Copper Cable Lightning Rod.

No other Lightning Rod Firm has the backing of the farm papers like Dodd & Struthers.

At the World's Fair at St. Louis the superior jury awarded Dodd & Struthers the Highest Award, where our rods were in competition with those from five different nations.

There are many imitations of Dodd & Struthers' Rods on the market. Many little concerns are bobbing up trying to sell a cable that looks like the genuine Dodd & Struthers, but as a rule people can not be fooled. They will not accept the substitute, as they know the genuine article is better than any substitute made.

When you are considering the Lightning Rod Proposition, be sure that you have read our booklet, "Laws and Nature of Lightning, and How to Control It," before you decide the matter. If you do not have one of these booklets, write us and we will mail it to you free of charge. When you buy a Lightning Rod be sure the spool is marked with our registered trade mark, D. & S., and the man who puts them on for you has our agent's certificate, and also be sure that you get a guarantee when the job is finished.

Do not accept a substitute.

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DES MOINES, IOWA



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Here is a school in its own home, costing \$40,000. Steam heat, electric lights thoroughly modern equipment. Our Employment Bureau places all competent graduates. We send stenographers, bookkeepers, and commercial teachers to all parts of the world. Business, Stenographic, preparatory, Civil Service and Special Pen Art Department. Tuition low, good board cheap, advantages unsurpassed. Special summer rates. Write Kansas Farmer for particulars. T. W. Roach, Supt., Box D, Salina, Kans.

GOLD GOLD GOLD

Investors who wish large profits should write for prospectus of the Hazel Mines Company at Bullfrog Nev., located on the same vein with Original Bullfrog Mine, which produced \$70,000 from 20 tons of ore. Active development work now progressing. Railroads, cheap smelting, 62 acres best mineral land. Treasury stock offered at 25 cents per share for development work only. Don't miss this chance to make money, write to Fiscal Agents, 1735 Curtis St., Denver, Col.

MIXED FARMING
Wheat Raising
Ranching

Three great pursuits have again shown wonderful results on the
FREE HOMESTEAD LANDS

of
WESTERN CANADA

Magnificent Climate—Farmers plowing in their shirt sleeves in the middle of November.
"All are bound to be more than pleased with the final results of the past season's harvests."—Extract.
Coal, wood, water, hay in abundance—schools, churches, markets convenient. This is the era of \$1.00 wheat.
Apply for information to Superintendent of Immigration, Ottawa, Canada; or to the following authorized Canadian Government Agent

J. S. CRAWFORD, 125 W. 9th Street, KANSAS CITY, MO.
Mention this paper.

meeting the yields of Eastern Kansas, but getting enough to make it profitable to have a small acreage of early-maturing corn.

Only thirty-six Kansas counties have not had farmers' institutes this year. The Agricultural College will be glad to aid in reducing this number. Requests have come from many of these counties, but it has not been possible to reach them all this year.

Prof. E. A. Popenoe has begun to plan an energetic campaign against the San Jose scale, found recently on many fruit-trees in and around Dodge City. The Agricultural College and Experiment Station Council has authorized Professor Popenoe to give great attention to the trees about Dodge City, and also to visit many other localities in the State to see if this most dangerous pest is at work elsewhere.

The Kansas Agricultural College and Summer Picnics.

The college believes in summer picnics, and has for many years been responding favorably to most calls made upon it for speakers for picnics, summer institutes, old settlers' meetings, etc. Much of the service contributed by the college has been helpful to the cause of agriculture, but for the most part it has had little value because the educational and the amusement features were not kept distinct and separate.

This year, therefore, the college will be disposed to decline invitations to send speakers to summer meetings unless the educational and amusement features be treated exactly alike. It does not tend to raise the dignity of agriculture in the minds of young people to let the merry-go-round and striking-machine and the lemonade-sellers work in opposition to a lecture on agriculture.

Let these features begin as early as the managers desire, but have them stop absolutely from 10.30 to 11.30 a. m. for the educational program. Then they should have all the time from 11.30 to 2.30, when they should stop again for one hour. The young people, and the old folks too, are thus given ample time for the social side of the day, and all should be urged to attend the lectures. Then the speakers, whether from the college or elsewhere, should prepare lectures that would interest the young people in life on the farm.

The college is willing to help, but the picnic people should give the cause of agriculture its proper place and a "square deal." Correspondence rela-

tive to all summer meetings is now in order. J. H. MILLER, Field Sec., Kansas State Agricultural College, Manhattan, Kans., April 30, 1906.

The Agricultural College Y. M. C. A. Building Fund.

The following letter was received by General Secretary McLean recently: "Mr. W. W. McLean,

General Secretary, Y. M. C. A., Manhattan, Kans.

"Dear Mr. McLean:—Your favor referring to the Y. M. C. A. at the Agricultural College duly received. I take pleasure in handing you, herewith, my personal check for \$100 on this account. I regard the Y. M. C. A. as one of the greatest and most valuable institutions that has ever been organized in the interests of the young men of our State and Nation. It improves the mental, moral, spiritual, and physical condition of men, and reaches all classes. I have never been associated in any way with any work which was so interesting and attractive to me as the Y. M. C. A. Yours very respectfully, W. R. STUBBS."

The following contributions have been made:

Table with 2 columns: Name and Amount. Includes entries like 'Previously acknowledged... \$22,935.00', 'F. A. Prague, Claffin, Kans... 5.00', etc.

Total... \$22,954.00

Hall Insurance.

If you raise any kind of small grain you are probably interested in having it protected from hail by some good company. The Grain Growers' Hall Insurance Company, with headquarters in Topeka, Kans., is offering a strong mutual policy again this year at its very reasonable rates.

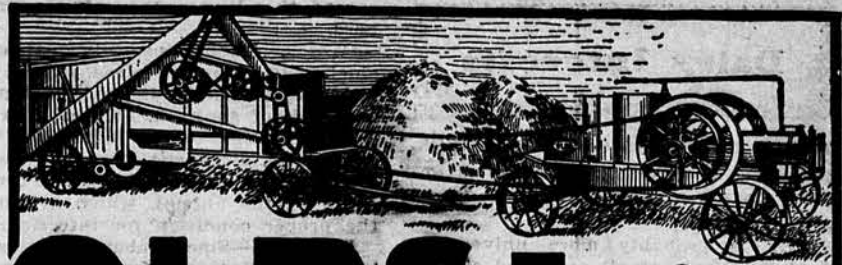
Gopher Exterminator Put to a Successful Test.

The Lincoln Republican has this to say about a new and much-needed invention which is now advertised in THE KANSAS FARMER:

Flint Saunders, as previously announced, was in town last Saturday afternoon, and in the presence of about fifty men, demonstrated that his exterminator is all that he claims for it. Armed with an exterminator apparatus, a spade, a piece of plate glass, and a gunny sack containing a cat, he went out to a gopher-infested field in the east part of town, where by the use of the endgate rod to a lumber wagon, he located a runway of the gophers at two points about fifty feet apart.

"At the end of one minute, the cat had become so thoroughly infected with the poisonous matter, that those witnessing the test were satisfied that it would die even if removed from the pit to air. It, however, was allowed to remain four minutes longer under the glass, when it was practically dead. The cat was then removed and a lighted match applied to the open end of the gopher runway. An explosion immediately followed, throwing dirt from the place where the apparatus had been applied, also from points some thirty feet more remote where the operator had been trying to locate the runway, showing that the gas had thoroughly circulated through the connecting gopher passages in the vicinity where the apparatus had been used.

"The test was a very successful one. The farmers who saw it and have gopher-infested fields of their own were greatly pleased with the result and will not be slow in making use of the invention to save their meadows. And as for Mr. Saunders, if he uses only ordinary energy in pushing the thing, he has a fortune within his grasp."



OLDS Engines

There is no gas engine as simple as Olds—compare it with others and this statement is proved. The repairs cost practically nothing. Every adjustment is very simple to make. Exact duplicate of any part can be furnished at once, perfectly machined and ready to put on. This is important in case of accident.

The Most Economical Engine

For threshing, sawing wood, churning, feed grinding, pumping, running cream-separator, etc. The reason why is interestingly told in our catalogue mailed on request. Tell us your requirements and we will help you figure out what you need. Send for our catalogue showing Type A (2-8 h. p.), Type G (8-50 h. p.), Types K and N (12-1200 h. p. used with our Gas Producer it will reduce fuel cost 75 per cent.)

Celebrated Picture Free

For 4c in stamps to pay cost of mailing we will also send you Rosa Bonheur's "Horse Fair," the most celebrated animal picture in the world, size 16 x 20, beautifully colored, suitable for framing.

OLDS GAS POWER WORKS, Lansing, Mich.

(formerly OLDS GASOLINE ENGINE WORKS) 20 Chestnut Street

California Opportunities.

EDITOR KANSAS FARMER:—As I am hearing and seeing daily accounts which are being printed throughout your country by sensational newspapers of disasters which they intimate occurred throughout the State of California, I think it may be well to inform you that the city of Fresno, in common with by far the greater portion of the State, is absolutely unaffected by the disaster which befell San Francisco and, to a limited extent, the smaller cities near the Bay.

There has been absolutely no damage done here by the earthquake, in fact, the damage done in San Francisco by the earthquake was small compared with the result of the terrible conflagration, which was of course directly traceable to the earthquake's breaking the mains and the electric light wires. The writer had the pleasure of being in San Francisco, in charge of the first relief train to reach that city, and found a marvelous condition of affairs existing; great order prevailed and suffering and destitution were relieved in an incredibly short time.

In Golden Gate Park, where 125,000 refugees were camped the night after the fire, relief conditions were so well in hand that one week after the calamity only 6,000 remained in the emergency camps, 119,000 having been shipped to nearby towns or distant homes. A similar condition existed in other refugee camps.

The future of California was never brighter than at present. While business was practically suspended for a week, because of the necessity of sending immediate relief and assistance to San Francisco, the normal peace and health of the city was more than maintained. In the majority of cases the modern structures were undamaged by the earthquake, and San Francisco has already begun to restore to their original conditional nearly all of the steel frame buildings which were burned out. San Francisco, aside from the loss of life, which is much smaller than the papers have stated, being less than 300, will be greatly benefited, and not only that city but the entire State. Plans are practically matured for reconstruction of San Francisco on a broader and more artistic scale, and the old wooden buildings of pioneer days will be replaced by new and modern structures, which will make San Francisco the greatest city of our country.

The sturdy manhood of California, descendants from those pioneers who crossed the plains in 1850, is asserting itself in a manner to command the admiration of the world, by battling with this greatest disaster of modern times and taking hold of the reconstruction of the city in such a manner as to insure prosperity for all.

The action of the banks and insurance companies is making available large amounts of money for the reconstruction of San Francisco. There will be over \$200,000,000 spent in reconstruction work. This money will go to the artisans and skilled mechanics, who in turn will want food, clothing, garden truck, and hay for their teams. This will cause a great demand upon the farmers, and therefore all farm products will find a ready cash market.

The future of California is brighter than ever before. No national calamity or stringency of the money market can affect it as it will take at least ten years to rebuild San Francisco, and during that time the farmer will be one of the first to benefit by the condition. This universal condition, combined with the sunny skies and mild climate of California, causes me to invite you and your friends to come to California.

We want men here—men of brains and courage, who will profit by the greatest opportunity the State has ever known. There is room for you all. Most of the cowards have run away. The drone is not wanted, but the man with good, rich blood in his veins and courage in his heart will find in California to-day a greater opportunity than existed even in the "days of '49," in the "days of gold." A. A. MARTIN, Fresno, Cal.

\$15 to St. Paul and Minneapolis and Return. From Kansas City via Chicago Great Western Railway. Tickets on sale June 1 to September 30. Final return limit October 31. Equally low rates to other points in Minnesota, North Dakota,

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Telling about the three States, and contains a good map of the section. Write for it today, send four cents in postage. :: :: :: ::

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A Great Fountain Pen Offer

Our Best \$1 Fountain Pen and the Kansas Farmer one year, both prepaid \$1.50. Our best \$1.50 Fountain Pen and the Kansas Farmer one year, both prepaid \$2.00. Our best \$3 Fountain Pen and the Kansas Farmer one year, both prepaid \$3.00.

Fitted with solid gold pens, will last 15 years. All pens guaranteed. Our stock is the largest west of Chicago. We refer you to any bank in Topeka or the Kansas Farmer

M. L. Zercher Book and Stationery Co. Topeka, Kansas

PURE BRED White Wyandotte eggs for sale, \$1.00 for 15. Mrs. C. E. Williams, Irving, Kans.

Wisconsin, and Lower Michigan. For further information apply to Geo. W. Lincoln, T. P. A., 7 West 6th St., Kansas City, Mo.

Dairy Interests

The Production and Care of Pure Milk. OSCAR ERF, PROFESSOR OF DAIRY HUSBANDRY, KANSAS STATE AGRICULTURAL COLLEGE.

Milk is probably more universally used by people of all ages and classes the world over than any other human food. It is also true that no other food of such large consumption is handled so extensively under unsanitary conditions.

There are certain fundamentals which should be observed in producing pure milk that are almost entirely overlooked on most of the farms where milk is produced. While these fundamentals are known in some cases, it is, however, true that there is a lack of appreciation of the importance of these principles.

DEFINITION OF PURE MILK.

The meaning of "pure milk" is simply milk having a normal chemical composition, free from all unnecessary contamination. In order to comply with this requirement, certain factors must be taken into consideration.

The health of the cow is another very essential thing to consider. In order to produce pure milk a cow must be free from tuberculosis or any other disease that will contaminate milk.

TUBERCULOSIS.

Much has been said within recent years in regard to the infectious qualities of bovine tuberculosis on the human being. While a great many experiments have been carried on to decide this matter, it has been quite positively demonstrated that bovine tuberculosis can be transmitted to the human being by the use of milk from tuberculous animals.

Theoretically, these germs, it seems, must first adapt themselves to the conditions in which they exist, and it requires several generations for them to grow and thrive well. Since germ life changes so rapidly, the passing of a few generations will not require more than 24 to 48 hours.

HOW TO DETECT TUBERCULOSIS.

The proper way to detect tuberculosis in cattle is by means of the tuberculin test, which is considered reliable if applied by one who has a thorough knowledge of cattle.

spread the disease through the entire herd.

Causes.—Tuberculosis in cattle is chiefly caused by poor feed, impure water, bad ventilation, improper drainage, and lack of sunlight.

Remedies.—Since tuberculosis is an infectious disease, the only thing left for the dairyman and stock-raiser to do is to guard against it. This can be done by keeping every cow, heifer, bull, and calf in the best of condition.

STABLES.

One of the great essentials is the proper kind of a stable. Such a stable need not be of an elaborate type, nor need it be expensive.

It is of great advantage to use land plaster in the manure-gutters of stables or over the manure in the covered yard.

FEEDS.

Feed good, clean feed. The central part of the United States is especially blessed with good dairy feeds. Nothing has proven so cheap and so effective for milk-production with the average cow as alfalfa hay and corn.

Alfalfa Hay.—There is a great variation in the kind of alfalfa hay. Alfalfa hay should be, when fed to cows, bright in color, free from dust, and should contain many leaves.

SOME "DON'TS" ABOUT CREAM SEPARATORS

We "don't" ask you to buy a DE LAVAL machine simply because the supply can is so "low down" that the rest of the construction is entirely impractical.

We "don't" ask you to buy a DE LAVAL machine simply because it has a new "ball" top-bearing which as soon as the balls begin to wear a little must prove a source of endless trouble to you.

We "don't" ask you to pay \$34.85 for a mere combination of tin, cast iron and blue paint that will waste butter-fat every time you put milk through it and the best thing about which is that it can't last very long, and which will probably be worth \$1.85 for "scrap" when you are done with it.

DE LAVAL machines are sold upon a more serious and substantial basis. They skim clean; have big capacity; have the reserve efficiency to meet hard conditions; make the best butter; run with least strain on the operator; are simplest to handle and clean, and last three to ten times longer than any other.

We made a "low down" supply can twenty years ago. We used and abandoned the "ball" top-bearing fifteen years ago. Our supply cans today are at just the right height in proportion to the proper construction of a separator, while our "radical spring" top-bearings are not used in imitating machines simply because they cost much more than the various poorer substitutes.

And above all else DE LAVAL machines not only COST LEAST in proportion to actual capacity and actual life but what is very much more important they SAVE MOST, while if any buyer is unable to take advantage of the cash discount he can buy one on such liberal terms that it will actually pay for itself out of its own savings.

A DE LAVAL catalogue that explains all of these things is to be had for the asking.

The De Laval Separator Co.

RAN DOLPH & CANAL STS., CHICAGO.

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75 & 77 YORK STREET, TORONTO.

9 & 11 DRUMM STREET, SAN FRANCISCO.

NEW YORK.

14 & 16 PRINCESS STREET WINNIPEG.

A large acreage of alfalfa would require considerable expense on the part of the average farmer to build such a curing barn. For this reason we suggest a shed 28 feet long by 16 feet wide, built with a portable roof so as to allow the roof to rest upon the hay and shed the water while it is curing.

WATER.

Provide water in abundance, easy of access, and always pure, fresh, and not too cold. Water pumped directly from the well in winter as well as in summer will give the best result.

FEEDING.

Dry hay or fodder should never be fed while milking, or even in the same room while milking. If necessary, sprinkle the feed before it is fed.

It is not advisable to suddenly change the feed for dairy-cows, for there is always a tendency to produce milk of a great variation in the per cent of solids by so doing.

For the average farm-dairy we advocate the covered-yard system, with a milking stable attached. This stable complies with all the conditions necessary to produce pure milk, and is within the reach of every farmer to build.

Economy in various ways is only possible with the best arrangements in the stabling of cows. Cows must necessarily be stabled in a well-managed dairy for a greater part of the time in winter, and unless an easy and comfortable position is provided for, there will be a vast amount of fretting, which has its results in the diminution of the production of milk, and also in the loss of food.

Don't be Hoodwinked

Advertisement for Omega separator with image of the machine and text: 'Don't let anybody persuade you to buy a cream separator until you have had a FREE TRIAL of the famous OMEGA'.

Direct to You 30 Days Approval Test

Advertisement for Cleveland Cream Separator with text: 'You get a fair, square deal on the only high grade machine made that is sold at a reasonable price. No Money in Advance. The Easy Running Separator.'

Collections made in all parts of the United States No fee charged unless Collection is made

Both Phones No. 1577 The Kansas Collection Agency 415 Kansas Avenue. KANSAS

TOPEKA. Special attention given to stock-breeders account Reference furnished on application.

PATENTS. J. A. ROSEN, PATENT ATTORNEY 415 Kansas Avenue, Topeka, Kansas

Advertisement for Sharples Tubular Cream Separators with text: 'TUBULARS WRING GOLD FROM MILK Tubular butter brings 25 to 35 cents. Cream is worth only one cent for stock food. Yet many farmers have no separator—only half skim their milk by setting—lose 24 cents on cream fed to stock—and wonder why dairying don't pay. Tubulars stop this loss.'

fered with by every discomfort to which it is subjected. There certainly should be room enough to avoid cramping cows. With this in view we consider the covered-yard plan the best scheme. The floor should be covered every evening with a heavy coat of clean, dry straw in which the animal may recline without chafing the skin over the prominent bones, thus making rest easy and pleasant. Another advantage with this method of stabling lies in the fact that the manure can be hauled directly from the stable to the field at such times as is permissible to drive into the field. With a heavy coating of straw it is unnecessary to remove the manure from the stable daily, as is the case with the stall plan, but only requires litter in abundance.

MILKING.

The entire body of the cow should be cleaned occasionally, but she should be cleaned daily in the region of the udder. If the hair is too long, clip this part of the body, for it makes it easier to clean the udder. The milker should be clean and neat. He should wear a clean outer garment, which is only used while milking and kept in a clean place at other times. He should wash and dry his hands just before milking. Wipe the udder with a clean, damp sponge and proceed to milk, which should be done in such a way as not to inconvenience or discomfort the cow. It should be done quickly, cleanly, and thoroughly. No unnecessary noise or unnecessary delay should be allowed. Commence milking at the same hour every morning and evening, and milk the cows in the same order. The first few streams of milk from each teat should not be milked into the pail, for this milk is very watery, is of little value, and is invariably contaminated, which will injure the rest of the milk. Milk with dry hands. Never allow the milker to moisten the hand and teat with milk. If the teats are chafed, use a small amount of vaseline. Be sure and notice that the milk is normal, not bloody or stringy or unnatural in appearance. If this is the case be sure and reject the whole mess.

SELECTING COWS.

From a business standpoint it is always wise to weigh and record the milk from each individual cow by recording and weighing a sample of the night's and morning's milk for seven consecutive days each seven weeks, and at the same time taking a sample to be tested for butter-fat. During this time it is wise to weigh the feed and estimate its value in order to see whether the class of cows that you have is making a profit or not.

TREATMENT OF MILK.

After milking remove the milk into a clean, dry milk-room, where the air is pure and sweet, and here strain the milk through a metal-sterilized gauze and a sterilized flannel cloth or a layer of cotton. (Never use flannel or cotton twice for straining.) Then aerate and cool as soon as it is strained. Milk should be cooled to 50° F. for city delivery. This will preserve the milk for several days, if handled properly. After it is cooled it should be placed in clean, sterilized milk-bottles. These bottles should be placed in a case and should be surrounded with crushed ice, after which it is ready to deliver. If milk is to be stored in cans, it should be placed in a clean, dry, cold room in tanks surrounded by cold water. As soon as it is desired to remove the cream, it should be stirred occasionally with a stirrer to prevent the cream forming a thick layer.

If the evening's and morning's milk is to be delivered at the same time, it is advisable never to mix the warm morning's milk with the cool evening's milk. However, there is no danger in mixing the two providing the morning's milk is equally low in temperature to the evening's milk. All utensils coming directly in contact with the milk should be thoroughly washed, rinsed, and sterilized with steam. If steam is not available, they should be rinsed with a solution of hot water and boracic acid and set up to dry. (See Kansas Experiment Station Bulletin No. 131.)

KEEPING QUALITY OF MILK.

When all of these steps are taken, the milk will be absolutely pure and will keep under ordinary conditions two and one-half to three days from the time it is milked. At this time, if kept at a temperature of 50° to 60° after delivery, milk should sour. If milk does not sour, it indicates abnormal milk, or perhaps some chemical or preservative has been added which has destroyed the bacterial life and has prevented souring. Frequently, milk pro-

duced under filthy conditions, which ordinarily would not remain sweet more than 18 to 24 hours, is preserved by means of preservatives. These preservatives are in a certain measure poisons which are injurious to the health and illegal to use, and some States serve a heavy penalty on the party that uses them. The only preservatives that should be taken into consideration in the production of pure milk are cleanliness and a moderately low temperature. All steps during the whole milking operation must be clean, and if one step is neglected the whole mess of milk is affected. The old saying that "A chain is no stronger than its weakest link," holds true in the production of clean milk. For instance, one can adopt all the steps herein given with the exception of putting milk into filthy bottles, with this operation all the work has been undone that was attempted by the first step.

The cities of Kansas are gradually increasing in population. There is coming to be a greater demand for good milk, and Kansas dairymen ought to be able to supply the market.

Blue-Grass Pasture for Cows.

Does a cow on good blue-grass and white-clover pasture need any grain-ration while in full flow of milk?

Shawnee County. C. F. KINKEAD.
Good blue-grass pasture has no superior for milk-production. Even with the best of winter-feeding, cows will promptly increase their milk-flow when turned out on pasture of this kind.

Of the clovers, there is none better relished as a pasture crop than the small white clover. With a good blue-grass and white-clover pasture, cows will produce milk more cheaply than with any other ration which might be fed, and there is probably no need of feeding any grain unless in exceptional cases to very heavy-producing cows. The worst fault of the blue-grass is that it stops its growth during the hot, dry weather of the summer and must be supplemented by green forage-crops and grain-feeding.

G. C. WHEELER.

Advice for the Creameries.

R. M. WASHBURN, MISSOURI STATE DAIRY COMMISSIONER.

The summer season with its flood of cream is near at hand. This year there will be more difficulty in disposing of poor butter than ever before, and also more difficulty in getting good cream, unless we go at the proposition straight and with vigor. More butter than ever before is going to be made in this Western country this coming year, and it is up to the managers of the several creameries to produce the quality. There is absolutely no use in slandering the farmer for sending in poor cream so long as the poor and the good bring the same price. He will not give that extra work and care to make a good cream when there is no more money in it. Would you? Cream must be graded and graded this coming season or our market will be badly injured for many years to come.

SUGGESTED STANDARD.

First Grade Cream—Test 30 per cent or over and be smooth and free from rancid or stale flavors. It may be slightly sour, if clean.

Second Grade Cream—Everything else. Then make a difference of at least 4 cents per pound fat between first and second. Pay a good price for good stuff, then if your competitor wishes to pick up the old stuff at your top price he will be the loser, not you.

We must all combine thus far to agree to live up to the grading proposition. If the cream is shipped direct from the farm the matter will be easy; where it is received and shipped in bulk, get 4-ounce glass jars with a tight screw-cap upon which a number is stamped, fill this with the cream to be tested and graded and drop it into the can of cream.

This Custom Is Now General.

It has now become a general and also a safe rule to demand brands of goods that are well known and have a reputation for quality and reliability. Nowadays the manufacturers of good goods inform consumers of this fact and point out that safety lies in buying the brands that bear their names and trade-marks.

In this respect the Mayer brands of shoes are deserving of special mention. Our readers have no doubt become familiar with these shoes and know of their excellent wearing quality by actual use. The Mayer factory turns out shoes suitable for every member of the family and for all uses, Sunday shoes and every day shoes, and they are known throughout the broad expanse of our land as the shoes of style and quality.

The "Honorbilt" are very popular fine shoes for men and "Western Lady" shoes embody the fit and style demanded by well-dressed ladies. Please bear this in mind when next buying shoes.

A Reward

FOR THE

Man Who Milks

The man who ships his cream direct is rewarded for quality. He stands alone. He doesn't have to bear the burdens and suffer for the mistakes and carelessness of his neighbors. If your cream is clean and not too sour and good flavor, you get the highest grade and the best price. If your facilities for handling your cream are better than your neighbor's and you can keep it longer you need not ship so often. Consequently you economize on time.—"Time is money."

Everything favors the individual shipper.
Our system takes care of him. Our factory is his natural home.
Send us your cream and we'll send you the money.

Respectfully,

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

Peerless Cream Separators



- Reasons Why the PEERLESS is the Best**
- 1st—Twice the capacity of any other bowl. That is to say two times smaller than any other bowl of equal capacity.
 - 2d—Compound feature, two bowls in one, hollow bowl, and disk bowl, combining all the features of the tubular and disk machines.
 - 3d—Enclosed frame. Free from dust. Injury resulting from machine impossible.
 - 4th—Perfectly noiseless.
 - 5th—Heavy enough and strong enough to lift a box car, which insures durability.
 - 6th—The bushings made of phosphor bronze—the most serviceable material for the purpose. Fitted and guaranteed to be accurate to 1/1000 of an inch.
 - 7th—Every journal bushed with brass or phosphor bronze. This fact together with the fine adjustment described above, accounts for the light draft of the Peerless machine. Each bushing is made in duplicate and interchangeable and if at any time they show wear they can be replaced at small cost.
 - 8th—At normal temperature the skimmed milk will always show less than 5-100 of 1 per cent of butter-fat and generally less than 1-100 of 1 per cent butter fat. PEERLESS CREAM SEPARATORS are guaranteed to anybody—everybody, anywhere—everywhere.

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are best for general use, are grown in the very heart of the region once known as the Great American Desert, at an altitude of over two thousand feet above sea level and without irrigation. They are time tried and drought tested and have proved producers of profitable crops of both grain and forage. Write for list of specialties and prices.
M. G. Blackman, Grower and Dealer, Hoxie, Kans.

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Asphalt Residium for good roads and streets; crude oil for fuel, lubricating, or painting; gas, fuel-oil and water white kerosene of high-grade. All anti-trust independent products by barrel or carload.
W. F. RIGHTMIRE, 216 The Drive, Topeka, Kansas

Horticulture

Cultivation of the Orchard.

JOE A. BURTON, ORLEANS, IND., BEFORE THE AMERICAN POMOLOGICAL SOCIETY.

In the evolution of improved methods in agriculture from the crude ways of our fathers, the teachers themselves had to learn. With no one to call them down, they frequently went to extremes. Because more culture than our fathers gave proved beneficial, they jumped at the conclusion that the more culture the better. Also, if intensive culture was best for the pumpkin, it was also best for the plum; if best for the plum, also for the apple. They failed to observe that yard-grass does best only where the ground is tramped hardest. Careful observation will show us that some things grow well only by much culture; other things do well with little or no culture. Just how much culture the apple orchards require for best results has not yet been fully determined. It will be found somewhere between the clean culture taught by our agricultural colleges and the no-culture practiced by many farmers.

I have a small orchard planted about twenty years ago in blue-grass sod, and has been so kept ever since. The only cultivation has been a mulching of straw around the trees when we had the straw and time to apply it. This has been about once in two years. On account of the heavy yield of summer varieties, we have found it necessary to apply stable manure to them freely. This year the fruit from two Yellow Transparents sold for \$20; from one Trenton, \$11; two Benoni, \$26.

But I am not here as an advocate for a blue-grass orchard. I am only trying to point out the fact that the high culture necessary for a good grain-crop is not always necessary for a good apple-crop. To be plain, I don't believe clean culture is best for the apple. The amount of culture for best results depends on the fertility of the soil. On very rich soil, apples do best with no culture, save mowing the weeds or grass. Too much, and especially too late, cultivation prevents the proper coloring of the fruit. Whatever detracts from color detracts from quality.

Our apple lands in Southern Indiana are a heavy clay, rich in potash and a goodly amount of phosphoric acid, both largely in unavallable form. Nitrogen is in very moderate quantities. The land is hilly, and clean culture means the washing away of the soil. I don't believe the All-Wise One made this, the best of all apple soils, and then, for the best results, requires the operator to do something that will ruin the soil. True, we may plow the orchard in the spring, cultivate during the summer, and grow a cover crop for winter that will prevent washing during winter, but there is no protection during the summer.

To make the potash and phosphoric available, it is necessary to incorporate humus with the soil. This is done more readily by keeping the vegetable matter on top, or near the surface, than by turning under. With a cover crop on the land, whatever it be, instead of plowing under, we grind it up with the surface soil by use of the rolling harrow. We use two harrows, one throws in, the other out. One follows the other, thus always keeping the land level. We go both ways. If we have one inch of cover crop, and mix it with two inches of soil, we have a mulch of four to five inches. This will effectually prevent any washing and will remain a mulch till we grow another cover crop. It is, in fact, a kind of sponge that will drink up a two-inch or three-inch rain, before there is any surplus water to run off. This harrowing can be done as often as desired, or as the health of the land requires. Our orchard is fairly rich, and we never harrow more than twice, and never later than June 15. For a cover crop, we grow crab-grass, and think it ideal. It is cheap for seed, being already sown, makes a nice carpet to work on, retains moisture, never giving up its dew till in the afternoon. If the land were poor, we would grow some nitrogenous crop.

Now, a word about labor. The hired man loves to ride. This mode of culture pleases him, and he keeps in a good humor. But put him to plowing in the orchard, and it is just the reverse. Is there any other work so disagreeable? He must lift and throw his plow twice every thirty-three feet, and at the same time he must keep the horses and the single-tree off the trees.

He is sure to bark some trees. Then he will get mad and abuse the horses, when they are not to blame at all. They will get mad, and in the excitement skin lots of trees. Then you must keep the children away, lest they hear something not in the Sunday-School lesson. The poor hired man! Will St. Peter charge these ugly words up against him? I rather think not, many of them, but will put a goodly number in the bill of the easily duped orchardist, but by far the larger part will have to be settled for by the professor who taught that such culture was necessary.

That fine apples can be grown by my method is evidenced by my awards at Paris and St. Louis; a silver medal at Paris, a gold medal at St. Louis; and this season's crop. The product of 110 Grimes this season sold for \$1,700, or \$15.50 per tree. I don't claim these results are due to the method of cultivation alone, but it has much to do with it. It is certainly the easiest method of successful cultivation.

The Apiary

The Beginning of the Honey Season.

The watchword with the beekeeper now is the strength of colonies. Every possible means should be used to increase the number of bees in each hive. A good honey-crop depends solely on strong colonies, and all such that are strong at the beginning of the honey harvest, can be depended upon to store a valuable crop of honey.

To work a colony up in strength, it must be constantly gathering honey, or fed. Feeding produces as good results as gathering honey, if fed regularly, in producing young brood, and as large a force of bees will be the result. It is not necessary to feed if the bees are gathering honey from flowers, but if they are not securing enough honey to keep brood-rearing going on, or do not have a surplus in the hive to draw on, it is best to feed them.

It is an important thing to know just how and when to feed bees. Feeding should be done at night, and not during the daytime. Small wooden feeders holding a pint or half a pint may be set at the entrance of the hive after dark each evening, but to be absolutely safe with this manner of feeding, be sure that the bees find the syrup immediately after placing it there. At first they may be slow of finding it, but when once acquainted with it they will promptly attend to it. In the morning early before the bees begin to stir take away all the feeders, and put them securely away some where, so the bees will not find them during the day. Feeders may be placed in an upper story to the hive, and the bees thus fed more safely, but it is inconvenient to thus have to remove the upper story and feeders when we wish to examine the colony, and at this season of year we want to go through them very frequently. Feed only the best of white sugar at all times, as bees often refuse to take the cheap dark grades of sugar. Make a good syrup that has some body to it, and not merely sweetened water.

Get a full equipment of supplies and plenty of them. A lack of even one hive fully equipped, when needed, would cost you almost as much as would pay for all your supplies. All needed hives, surplus honey boxes, and comb foundation are indispensable, and many other things might be added to this list. If you have many bees get an extractor, and even if you have but a half dozen colonies it will pay for itself in one season. We do not keep supplies for sale, but they may be found by looking up the advertisements in THE KANSAS FARMER.

Taking the country over, June is perhaps the best honey month in the year, but in many localities a good surplus may be obtained in May, and also in August. One who has kept bees in any one locality for a number of years can nearly tell just when to look for every important flow of honey, when such and such flowers open, and thus he can be prepared to take advantage in each case.

The secrets of success are first, strong colonies; second, abundance of storage room properly applied. Many small beekeepers underestimate the storage capacity of a strong colony of bees, and do not give them enough surplus room. This is the most fatal mistake we can make. It matters not how well we have managed up to this point, if we fail in this, we fail in all. Usually, at the beginning of the honey

season, we place a 24-pound section crate on the hive to begin with, and if the flow of nectar continues steadily, it is but a very short time until we need to place a second crate of sections on the hive, by lifting the first, and placing the second under it next to the hive. When the bees have worked the first lot of boxes to the extent of being half filled or even less, they are ready for the second, and if they occupy the boxes at once after being placed on, it will be a little less than a week when they are ready for the second. In about two weeks after this, if they are doing well, most of the boxes are ready to take off, being completed. Then take all unfinished sections, make up a crate of them, and a crate of new ones equipped with foundation, of course, placing the crate containing the honey above as before, and the empty ones next to the hive, and proceed as before. At this stage of proceedings we have nothing to fear except swarming, and if we have been very careful to keep the bees busy with plenty of storage room, they are not likely to give us any trouble in swarming, but we have exceptions sometimes, especially with old queens. Old queens are worse about swarming than young ones, and one would scarcely think it, yet it is so nevertheless, and this is one reason why we should supersede all old queens with young ones, but not the principal reason. Old queens are not so prolific as young ones, and oftentimes it is impossible to get a colony bred up strong, that contains an old queen.

If you think of using an extractor, omit the section boxes, of course, and place a set of brood-combs on the hive instead of in an upper story, the same as the lower story or brood-chamber. When the combs are full and the bees begin to seal over the honey, extract. If some of the combs are sealed over, shave the cappings off with a sharp knife. You can control swarming better with the extractor than by the comb-honey method, and you will get a greater number of pounds of honey. You need not be alarmed if you find some brood in the surplus combs above, for the queen often goes above and deposits eggs, and to prevent this some use queen-excluders, but I would not be bothered with them. You can extract honey from a comb that contains brood, with no injury to the same, if you do not turn the extractor too fast. A. H. D.

Pawnee County.

According to a Cherryvale despatch the Uncle Sam Oil Company has just closed a deal of great importance to the people of the State as well as to the entire West. It has secured the right for the United States and Canada to manufacture and sell the "Uncle Sam" oil-burner and will at once build a large plant for the manufacture of the burners. This is the burner patented by R. D. March and Judge W. F. Rightmire, of Topeka. It is the purpose of the Uncle Sam Company to manufacture the burners and not only furnish the consumers with the oil to burn, but the means of burning it as well. The factory will cover the State with burners in the hands of demonstrators. It is claimed that \$3 worth of crude oil will equal \$5.40 worth of coal, producing as much heat as that amount of soft coal. If this be true, then the fuel question is solved. The people of the State will watch with interest this latest effort of the Uncle Sam Company in its fight for a "square deal." If its hopes are realized in this matter, then it means millions of dollars in the pockets of the people.

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"The Wonder City"

Eldorado Springs

Hidden away in the foothills of the Northern Ozark slopes, in the midst of green forests, lies Eldorado Springs, Mo., an ideal health and pleasure resort. Since the discovery of its now famous Springs, thousands have received benefits from the healing waters, and have gone away eloquent testimonials of their curative properties. During the summer season, excursion tickets will be sold to Eldorado Springs at

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To those seeking a quiet, ideal place in which to spend a summer vacation at a minimum expense, Eldorado Springs offers many attractions.

Booklet and full particulars as to train service, rates, etc., may be had of any M., K. & T. Agent or by addressing

W. S. ST. GEORGE Gen'l Passenger Agent, M. K. & T. R'y St. Louis, Missouri



well as a big thing for the stockholders of the company.

Biennial Meeting General Federation of Women's Clubs at St. Paul, May 30-June 7.

The Chicago Great Western Railway will on May 28 to 31 inclusive, sell tickets to St. Paul at one fare plus \$2 good to return June 6, with the extension privileges. For further information apply to any Great Western Agent of J. P. Elmer, G. P. A., St. Paul, Minn.

Weather Bulletin.

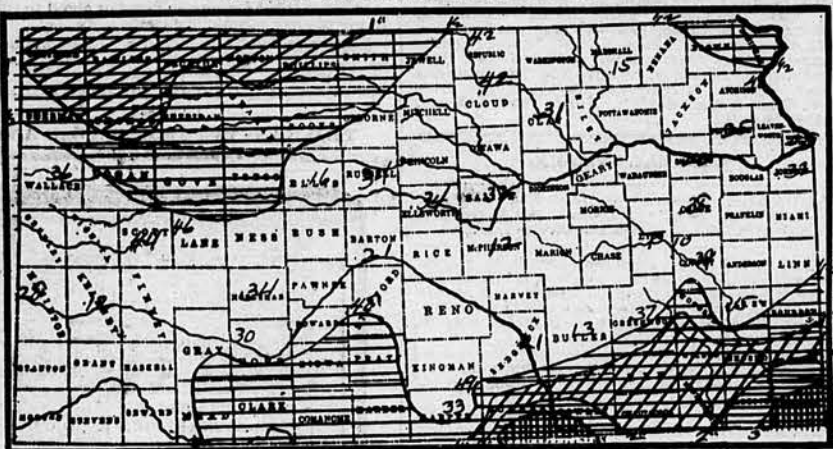
Following is the weekly weather bulletin for the Kansas Weather Service, for the week ending May 7, 1906, prepared by T. B. Jennings, station director:

CLIMATOLOGICAL DATA FOR THE WEEK.

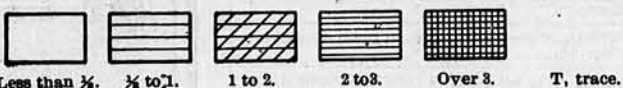
Table with columns for Temperature (Maximum, Minimum, Mean, Departure from normal) and Precipitation (Total, Departure from normal). Rows are categorized by Western, Middle, and Eastern Divisions.

GENERAL CONDITIONS. Excepting Saturday and Sunday the week was warm. In the western division the temperature averaged about normal, and in the middle and eastern divisions slightly above normal.

RAINFALL FOR WEEK ENDING MAY 5, 1906.



SCALE IN INCHES:



tion for the week was above normal in the extreme northwestern and southeastern counties while light to fair showers occurred over the rest of the State.

CONDITIONS IN DETAIL.

EASTERN DIVISION. Anderson.—The week has been cloudy and showery with rain on the last five days. Hail was destructive in parts of the county. An exceptionally heavy rain occurred northeast of Garnett on the 4th.

The temperature was a little lower than the seasonal average.

Cloud.—The first two days and the last day were cloudy but the middle of the week was clear. The temperature was a little above normal the first two days, but below the rest of the week.

Cowley.—A heavy rain of 3.05 inches fell on the 30th and 0.40 of an inch fell on the 2d. The weather was warm. Ellis.—The first two days were cool and showery, the middle of the week was clear and fine, and Saturday was cloudy, cold and damp.

"LAST CALL"

The Great Wichita Sale
Wichita, Kansas, May 17, 1906
At G. D. Morgan's Barn, West Douglas Ave.

HEREFORDS AND SHORTHORNS



75 CHOICE CATTLE ARE LISTED

HEREFORDS. A carload by the great prize-winning Anxiety 4th sire, Brigadier 109729, from W. G. Swinney's Clover Leaf Farm, Boisdarc, Mo. Also a notable consignment from S. L. Stadish, Hume, Mo.

SHORTHORNS. Scotch and Scotch-topped Young Marys. Rose of Sharons, Belinas, Rubys, Carolines, etc. From the herds of Henry Stunkel, Peck, Kans.; F. H. Foster, Lyons, Kans.; Locust Grove Farm; R. W. Swain; Henry Berline; M. D. Crittenden; D. M. Howard, Rossville, Kans.; and others.

BULLS. A superb lot of both breeds bred in the purple and splendidly conditioned. Also high class females. Additional entries, \$15 per head. Send pedigrees at once. Catalogues ready. Address

D. R. Mills, Manager, Des Moines, Iowa
Mention Kansas Farmer.

WALNUT GROVE FARM
...FOR SALE...

Upon the advice of several specialists I am going to New Mexico for my health. On this account I must dispose of all my Kansas property, including the famous Walnut Grove farm, the most complete and profitable stock farm in Kansas.

Smith.—It was a pleasant week with only two cloudy days and a good shower on the 29th. The highest temperature was 80° on the 3d and the lowest was 34° on the 1st. Stafford.—The highest temperature was 83° on the 1st and the lowest was 48° on the same day. The minimum temperatures fell below 50° every night but one. 0.48 of an inch of rain fell on the 30th.

Stevens.—The highest temperature was 86° on the 1st, and the lowest 56° on the same day. Thomas.—Monday and Saturday were very cold for the season but the other days were warm. It rained on four days making the total for the week 1.41 inches. Trego.—The highest temperature was 83° on the 3d and the lowest 33° on the 1st and 2d. Monday and Saturday were very cool days. Rain fell on the 29th, 30th, and 5th, the total for the week being 0.73 of an inch.

H. D. NUTTING, Emporia, Kans.

