

KANSAS FARMER



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THE STAND OF CORN.

An uneven stand of corn is unsatisfactory from the time of its first appearance through the soil until the crop is in the crib. More troublesome to cultivate, harder to gather, and smaller in yield than a full stand, it ends by bringing less money. There is no wrong time to study remedies for a poor stand.

The season, doubtless, has much to do with the stand, and the seasons are made by a higher power. But much can be done to mitigate the effects of an unfavorable season. In much of Eastern Kansas, dry weather prevailed at and immediately following planting time last spring. The fact that seasonable rains came later and are making a good crop on a poor stand is a piece of good fortune that relieved an anxious situation which all would gladly have avoided. The best stands were obtained on soils that were well supplied with humus; and that had been prepared according to methods adapted to a dry climate and largely adopted in the western portions of the corn belt. The central idea on which dry-weather farming depends for success is the conservation of the moisture that usually goes to waste. This conservation for the 1907 wheat-crop has already commenced. The prudent farmer in the sub-humid regions disks his stubble land directly after the removal of the wheat-crop unless he can immediately plow it. This disking prevents the snow and wind from stealing the remnant of moisture left in the soil. It also checks the growth of weeds which, unchecked, sap the soil of moisture. An incidental effect of the disking is that the plowing, when done, is much easier than if the soil had been allowed to bake. In case of rain before the plowing can be done, it is wise to disk again to prevent the formation of a crust and the consequent theft of moisture; for it is well known that a mulch of loose soil is the best possible protection to the moisture below. After the thrifty conserver of moisture has his land plowed, he immediately harrows it or works it with the sub-surface packer. After every considerable rain until seeding time, he works over the soil again to prevent crusting and baking. This system applied to stubble land that is to be planted with corn would, if continued until plant-

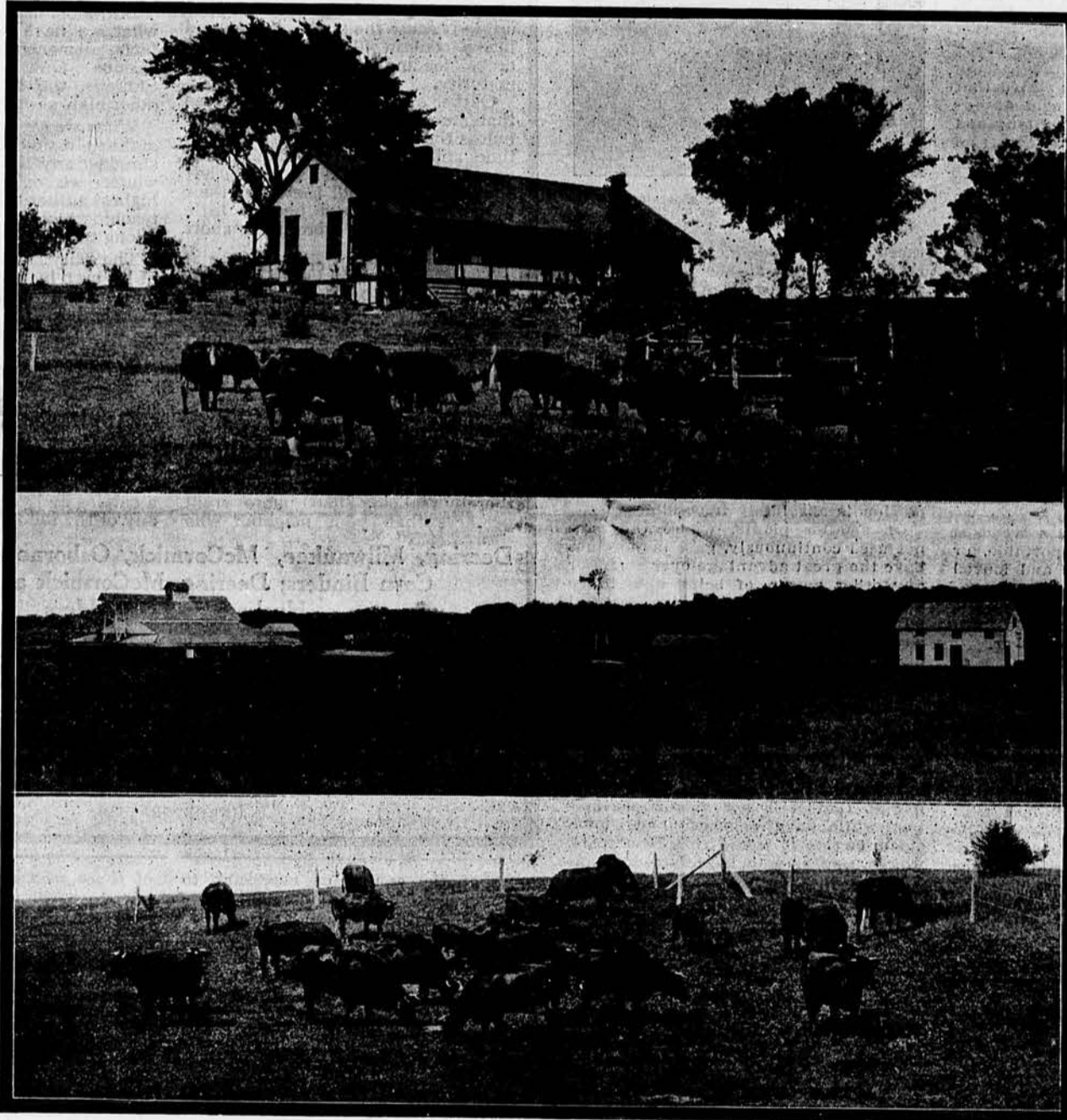
ing time, make certain enough moisture to start a good stand anywhere in what is generally recognized as the corn belt. On other than stubble land the system may be applied, with

does soil that has been drawn upon year after year for crops without recompense or rest.

The writer inquired a few days ago of an up-to-date farmer whether, in

seed-corn is, therefore, apparent. This part of the work is, however, not in season now, but should claim careful attention at the proper time. But, it is not too early to observe that a good stalk of corn at every place where a stalk ought to be would make a considerable difference in the crop at no cost. It is not too early to observe the stalks that stand up well and have other desirable characteristics and bear good ears. A few such stalks may be tagged with a view of considering the ears for seed. Again, it is not too early to plan for gathering the seed before the main crop is gathered, drying the seed carefully and placing it in position to be protected against damage by violent changes of temperature and other incidents of the climate.

It should not be forgotten that in tests of ears of corn for productiveness the variations have been surprisingly great, and that the greatest variations were traceable to variability of the vigor of the seed. It is possible for every farmer to so save and test out his seed as to avoid much of the embarrassment he would now experience were he to attempt to show a model stand of corn on his farm.



Beautiful Aysdale Farm owned by C. W. Merriam, Topeka, Kansas, showing Green Tree Lodge, farmer's home and barn and Alfalfa field, and a few of the registered Shorthorn cattle.

confidence in its efficiency, to as full extent as circumstances will admit. Thus, where corn is to follow corn, the conservation of the soil moisture from late winter until planting time will be found to give surprising results. So, too, the application of the same plan to the cultivation of corn is efficient in saving whatever moisture there is in the soil for use of the crop. Doubtless, this cultivation for the conservation of moisture has had much to do in carrying the corn-crop over the dry weather of the early summer, and in producing a bountiful crop from an uneven stand.

Soil that has been well manured or has been recently in grass or clover, especially soil that has had both grass and manure, is less liable to baking and the loss of moisture and at the same time responds more markedly to modern methods of treatment than

his opinion, a more careful selection of seed-corn and its proper care through the winter would or would not have resulted in a better stand under the adverse conditions of the early part of the season. This farmer was confident that with seed, every grain of which possessed a maximum vitality, almost a perfect stand could have been had this season. In this connection it is well to remember that there is much difference in the vigor of seed-corn. An important fact of this difference is that it is to a large extent characteristic of ears of corn. Thus, if a portion of the grains on a cob produce weakly stalks or fail to germinate, the same is likely to be true of the entire ear. And if a portion of the grains produce vigorous plants, all are likely to produce vigorous plants. The importance of testing some grains from each ear of

Commissioned to return to their tribes certain of the head men of the Osage Nation, who had been to Washington to see the "Great Father," commissioned further to make a treaty with the "Pawnee Republic," transferring the allegiance of this village from Spain to the United States, Lieutenant Zebulon Montgomery Pike with a command of about 20 regulars started in boats up the Missouri River from Saint Louis, then a small trading-post of the wild west. Up the Missouri to the mouth of the Osage River; up the Osage to the land of the Osages the oarsmen toiled. The Osages furnished men and horses to convey the party to the Pawnee Republic, a village situated near the Republican River, a little south of the Nebraska line in what is now Republic County, Kansas.

The location of this Indian settlement. (Continued on Page 852.)

THE EXTINCTION OF SPANISH AUTHORITY FROM THE LOUISIANA PURCHASE.

One hundred years ago at this time of the year, the officer of the United States Army for whom Pike's Peak was named was traversing the prairies of what is now Kansas.

Miscellany

The Gas-Engine for Farm Use.
J. A. CHARTER, M. E.

The modern farmer of to-day, who is abreast of the times, realizes that in order to carry on his daily routine work, such as exists on every up-to-date farm, it is necessary to have power; and as he has read of and studied the different classes of power, his mind is fully made up and he is convinced that there is only one class of power which is best suited for farm use, and that is the gasoline- or kerosene-engine—or, perhaps at no far distant date, an engine burning alcohol.

Even the word kerosene is new to many farmers, as there are but one or two kerosene-engines built in the United States. In recent literature, issued by the largest gasoline-engine manufacturers in the world, Fairbanks, Morse & Co., Chicago, Ill., they are now advertising and are ready to supply an engine burning kerosene direct in the same manner as gasoline has heretofore been used. They also state that this same engine will, without any alteration, burn alcohol. This puts the manufacturing of fuel almost in the hands of the farmer, as cheap alcohol is made from potatoes and sugar-beets, as well as cereals. Since the passing of the free alcohol bill, it is stated that alcohol can be made and sold at approximately 10 cents per gallon; and the farmer produces the products from which alcohol is made.

The amount of power necessary for the farm depends entirely upon the purpose for which it is to be used. There are thousands of farms to-day which are using from 2- to 6-horsepower. Power of this size would be used for pumping water, the grinding of feed for the stock, sawing wood, running cream-separators, and the like; in fact, doing all the work that was previously done by hand and up to the capacity of 4- to 5-horsepower sweep. Then, again, there are farms which require a much larger amount of power, wishing to run a baling-press, ensilage-cutter, separator, large corn-sheller, and feed-mill—the sizes sold ranging from 8- to 32-horsepower.

Referring again to the catalogue, we note that these small engines are used either as stationary, semi-portable, or can be mounted on trucks and moved from point to point. We have reproduced, herewith, two cuts, showing a semi-portable and a portable rig. These are the smaller horse-power.

The company also build a line of portable engines. These outfits are built in sizes from 5- to 32-horsepower, inclusive. With these very modern improvements available, the farmer is independent of any outside source of power.

There are other cases where the larger farms have been equipped with gasoline-engines, driving dynamos. So simple is the mechanism of the engine that after it is once started it can be left running for a period of from five to ten hours without attention. The engine is self-contained, automatic in its governing of speed, it is self-lubricating, and therefore there is nothing to require attention after the engine has been started—save filling of the oil-cup. The dynamos are made and so wound that they are self-regulating, and give out a steady voltage regardless of the number of lights that are operating, and thus the whole plant becomes automatic, and lights can be turned on and off to suit the requirements; and the fuel consumed is in direct proportion to the load applied.

Many modern farms of to-day have a portion of the barn or granary equipped with an engine, belted to a line shaft, and from this shaft numerous machines are operated. Creameries are also fitted up with a gasoline-engine, belted to a line shaft, from which is driven cream-separators, churns, washing-machines, pumps, butter-workers, etc.—all of which can be operated at the same time at a very small cost, probably not to exceed one-eighth of a gallon of gasoline per hour per horse-power.

Engines are built in two types, viz., horizontal and vertical. The vertical engines are desirable on account of being built with an oil-tight tank-case in which are enclosed all of the working-parts, so that these parts are run in an oil bath. This construction also has the advantage of shutting out any possibility of dirt getting into the engine, and an engine so built can be run in the open without any protection with no danger whatever to the fine parts or bearings of the engine. There

are no small, delicate parts on these engines to get out of order or need repairs. The material is of the best. All working parts are made of tool steel and hardened, and, therefore, will last with ordinary care a lifetime. The life of a gasoline-engine is estimated to be about four times that of a steam-engine, and the first cost is but a trifle more; and when one stops to consider that no attendant whatever is required after the engine is started, it will be realized at once that the cost of power is very much less than for steam power—even though wood could be obtained and used for fuel at no expense, as it would require a man to fire it at least, and a man's time would be worth more than the cost of fuel to run a 10-horsepower engine all day under full load.

These engines are ignited by means of an electric ignitor, which receives its current from a battery supplied with the engine, and, therefore, there is not a possible chance for fire, as



The gasoline engine turns the separator and the chur and does most of the other work.

there is no fire outside of the engine—nothing to blow sparks into a nearby stack and thereby burn down an expensive barn or house. Farmers are appreciating this more and more each day. Where there were formerly only a few portable engines used for thrashing in the field, there are to-day perhaps more gasoline-engines used than steam, on account of their safety. We frequently hear of a steam-plant blowing up, and the engineer and a number of innocent bystanders being blown to pieces. With a gasoline-engine an explosion is absolutely impossible.

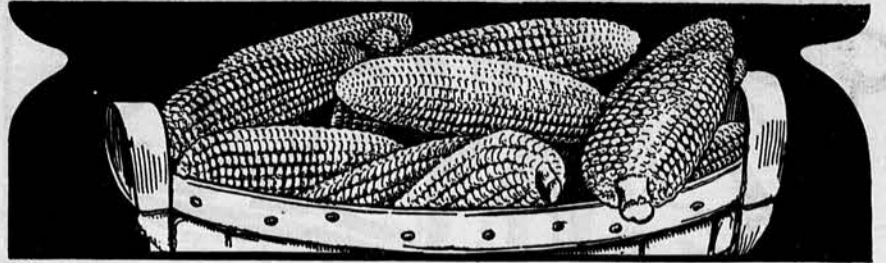
On smaller plants, where they are not used continuously, gasoline-engines have the great advantage over steam or any other power, of being able to be started immediately and give out full power, and when they are ready to be shut down, all expense ceases immediately as soon as the valve is closed. There is no water or coal to be cared for, and a five-gallon can of gasoline will run a moderate-sized engine for a period of from ten to twenty hours. Therefore, the item of fuel for a gasoline-engine is so small and can be transported so easily by hand or by buggy, that it is not worth mentioning, while on the other hand, for a steam-engine it would require a team, wagon, and man to haul fuel and water, and all of this would be charged up to the item of expense.

There are numerous other purposes for which a gasoline-engine is used for farmwork, but these uses suggest themselves to the farmer and are hardly worth mentioning, as they are very



Jack of all Trades—Gasoline Engine.

much on the same line as those above referred to. However, it should be mentioned that the gasoline- and kerosene-engines are well adapted for irrigation-plants, and hundreds of these engines are in daily service in the rice countries and other sections where irrigating is necessary, and there is no doubt but what water can be pumped for less cost per thousand gallons when using this class of power than in any other way. There are various kinds of pumps, and in order to get best results the matter should be referred to the makers of the engine, who also build pumps of the various types, as well as dynamos and other



Now Is The Time

To Investigate Corn Machines.

THESE ARE THE REASONS:

Your corn crop will reach that state of perfect maturity before long—when the ears begin to glaze.

If you have a good reliable corn harvester and binder or harvester and shocker on your place at that time, you are all ready to go over the field rapidly and secure the whole 100 per cent feeding value of that crop.

If you don't have a corn binder or shocker at that time, you will likely snap or husk the corn in the field and leave the stalks standing.

If you do that, you will lose 40 per cent of the feeding value of your crop—because the stalks, leaves and husks contain 40 per cent of the crops' feeding value at the time of maturity.

Gather only the ears and you lose that stover value for good, because, unless the stalks are cut at the right time and cured in the shock, they are practically worthless. When left standing in the field they lose their nutritious juices and become little more than woody fibre in a short time.

Harvest the whole crop, instead of simply gathering the ears, and you will add \$16.00 extra profit to every acre you cut.

The stover will give you that much extra feeding value, because, when the crop is cut at the right time, properly cured and run through a husker and shredder, the stover is nearly equal in feeding value to good timothy hay.

It is worth \$8.00 a ton; you will cut at least two tons from each acre, thereby realizing \$16.00 more profit per acre than your neighbor who

snaps or husks in the field. The hay crop is light this year, and the demand will be so great that you can readily market your entire crop at a good price. If you will cut all of your corn and shred the fodder, you will have enough forage to keep your stock all winter—and you can sell your hay.

If you didn't know the value of the corn plant when properly cared for, you might think we put the case this way simply because we want to sell you a corn binder or shocker.

But, most likely, you do know that what we have said are undisputed facts, demonstrated and taught by various Government Experiment Stations, the best farm papers and other high authorities.

When we say, cut your whole crop at the right time and run it through a shredder any time during the fall or winter—we only repeat what the highest authorities in the country are teaching and have been teaching for a long time.

The dairyman gets the full value of his crop by using a corn harvester and making ensilage. You can do even better than the dairyman if you invest in the right corn machines. You can feed the stover and market the grain separately.

This proposition must appeal to you, and as you cannot handle the whole crop successfully and economically without a first class corn binder or shocker and shredder, we urge you to call on the nearest dealer and get a catalog and examine the merits of any of the following makes:

Deering, Milwaukee, McCormick, Osborne and Champion Corn Binders; Deering, McCormick and Plano Huskers and Shredders

In each of these machines you have all the advantages made possible by the unequalled manufacturing facilities of the International Harvester Company.

The International Harvester Company owns its own timber lands and saw mills, its own iron and coal mines, its own coke plants and rolling mills, from which it produces a large percentage of all raw materials used, selecting in every instance only the best material and working it out in the best way in the above great manufacturing plants. These are advantages which no buyer can afford to overlook.

The International lines are represented by different dealers in your town. Call on them for catalogues and investigate their machines.

International Harvester Company of America, Chicago, Ill. (INCORPORATED)

parts of the equipment necessary to make complete installation as above described.

As to the best size of engine and the amount of work it will do, this question can always be readily answered by consulting the engine-builders, or, in this case, the catalogue which gives a very complete line of machines and engines for operating them, together with other very useful information, relative to farming and farm machinery. For further information write to Fairbanks, Morse & Co., Chicago, Ill.

THE VOICE OF THE PEOPLE.

Mr. Franklin Elliott, of Columbus, Cherokee County, writes: "The 'Old Reliable' is a most appropriate designation for THE KANSAS FARMER. When I first settled in Kansas, I began taking it and, although not farming now, I can't stop. I consider THE KANSAS FARMER the most ably edited and the most valuable farm journal in existence for all Kansas, though I sometimes think it is in closer touch and gives a little more attention to other parts of the State than it does to Cherokee County. If I am wrong, call it jealousy on my part.

"May you continue in the van of the wonderful advancement of Kansas farming interests."

[Let our Cherokee County friends try us by sending for publication accounts of their experience and what they have learned from it. THE KANSAS FARMER is for all Kansas. Its ambition is to be "The Old Reliable Prosperity Promoter" for every farmer in the State, and for a good many

of those who are standing around the outside wishing they were in Kansas. —EDITOR.]

SUMMER VACATIONS IN COLORADO.

Low Rates via Rock Island Lines. Colorado, as a place for recreation, is the choice of many thousands of summer tourists.

Colorado is a land of clear, pure air and golden sunshine. It is a land of sparkling mountain streams and grassy-surfaced lakes. There are more enjoyable things to do, more grand sights to see in Colorado than any other place under the sun.

From June 1 to September 30 Rock Island lines will sell summer tourist tickets at rate of \$17.50 from Topeka to Denver, Colorado Springs, or Pueblo and return. Return limit October 31.

Very low rates will also be in effect to Glenwood Springs, Colo., Salt Lake City and Ogden, Utah, Yellowstone National Park, and to the Pacific Coast, with cheap rates for side trips to nearby points of interest en route.

New and improved train service via the Rock Island is an important feature for the Colorado traveler to consider.

Full details of rates, routes, service and any information desired will be gladly furnished by Rock Island ticket agents. A. M. FULLER, C. P. A., Topeka, Kans.

Denver, Colorado Springs, Pueblo and Return, \$17.50. Santa Fe.

Tickets on sale daily, good returning as late as October 31, liberal stop-over privileges allowed. Fast Colorado Flyer from Topeka 10.35 p. m., arrives Colorado early next morning. Rock ballast track and Harvey eating houses. T. L. KING, C. P. & T. A., Topeka, Kans.

Send to A. L. Sponsler, secretary, Hutchinson, Kans., for a copy of the Kansas State Fair Premium Catalogue.

Agriculture

Questions About Broom-Corn.

Will you kindly give me the address or send me some good authority on the care of broom-corn? I have 70 acres. Would it be economical to buy a bolt or two of cotton-batting to spread over the corn when it is stored in piles before seeding?

Roy O. COPPOCK.

Beaver County, Oklahoma.

One of the best publications on the culture and handling of broom-corn is Farmers' Bulletin No. 174 by Chas. P. Hartley, published by the U. S. Department of Agriculture, a copy of which you may secure upon application. Another good treatise on this subject is Bulletin No. 83, of the Arkansas Experiment Station, written by Prof. C. L. Newman. You may doubtless secure a copy of this bulletin by addressing the director of Experiment Station, Fayetteville, Ark.

I can give little information regarding the growing and handling of broom-corn, never having had much experience with the crop. I can not answer your question as to the economical use of cotton-batting for covering the corn after it is placed in piles; in fact, I do not understand just what use you intend to make of the batting. From what I can learn of the handling of broom-corn, it is usual to cut it, haul it from the field, and strip or thrash it the same day, placing the brush in sheds to cure. The bulletins referred to describe the methods of harvesting and curing and will, I am sure, be of great aid in giving you the necessary information for properly handling your crop.

Perhaps some of the readers of THE KANSAS FARMER who have had experience in the growing of broom-corn may be willing to write for publication.

A. M. TENEYCK.

Questions Concerning Flax.

Can you give me any information regarding the prospects for flax in Kansas, Nebraska, and other parts of the United States where it is raised? What is the present price of flax? Do you think there are prospects of an advance in price towards winter?

Woodson County, R. A. BROWN.

I have practically no information regarding the flax-crop of this State or of the other States. At this station our flax has done well; we are at present harvesting the crop and I believe it will yield better than any crop of flax which we have previously grown. Our usual crop yields 8 to 10 bushels per acre. At the Fort Hays Branch Station flax also looks well compared with other grain-crops. The price of flax is determined largely by the crop in the Northwest. North Dakota grows more flax than any other State in the Union. The crop in the Northwest has hardly reached that stage of growth as yet where it can be estimated what the yield will be.

Judging from past experiences, I am inclined to believe that the price of flax will be higher in the winter than in the fall when the crop is thrashed. With some exceptions this is true not only of flax, but of almost all grains which the farmer sells. At thrashing time a large part of the crop is rushed on the market, creating a surplus, which reduces prices. Also, the dealers tend to reduce the price at this time when the farmer markets the larger part of his grain. Whether it will be best to hold the flax-crop this season or not I could not say, but usually the price would be greater late in the winter than it would be in the fall. There is this objection to storing and holding flax: unless it is thrashed dry and carefully kept in dry bins or stored in sacks, there is some danger of its heating or molding. Flax is a grain which is somewhat difficult to store and save in large quantities on account of the ravages of vermin and also because of the small size and slippery character of the seed.

A. M. TENEYCK.

Seed-Wheat and Seed-Rye—Timothy and Clover.

We have recently purchased a ranch near Howard and wish to sow fall wheat, rye, and grass-seeds. Have you bulletins in regard to such work, and where may good seed-wheat and seed-rye be purchased? There is no seed here that seems good, and we want as good as we can get. Will clover and timothy do well sown with rye or with wheat, or will they do better without a nurse-crop?

Would like to have you enter my

name on your books for the bulletins as they are issued. H. E. SCHAFFER, Elk County.

I have requested Prof. J. T. Willard, director of the station, to place your name on our bulletin mailing list and to send you copies of such bulletins as we may have in print discussing the subjects in which you are interested.

Seed-wheat and seed-rye are sold by a number of Kansas seed-firms. I have the addresses of the following: F. Barteldes & Co., Lawrence; Geo. T. Fielding & Sons, Manhattan; Ross Brothers, Wichita; Zimmerman Seed Co., Topeka; McBeth & Kinneson, Garden City; M. G. Blackman, Hoxie; and Manglesdorf Bros., Atchison.

We have a considerable supply of seed-wheat for sale at this college. I have mailed a copy of Circular No. 1 giving list of best-producing varieties according to the tests up to and including the season of 1905.

I believe timothy and clover grow successfully in your section of the State, and it is a common practice to sow timothy with wheat or rye, although, as a rule, I would advise to sow clover with some spring grain, or the clover could be seeded in the rye or wheat early in the spring, the timothy having been seeded in the fall. It is not a good plan to sow clover in the fall, since it is very apt to winter-kill when seeded at that time. Oats or barley make very good crops with which to sow timothy and clover in the spring, or timothy and clover may be seeded in the spring with wheat or rye, harrowing the ground after seeding, in order to cover the clover- and grass-seed. Doubtless, the surest way to secure a stand of timothy is to seed alone without a nurse-crop, on a clean piece of land and seed early in the spring.

A. M. TENEYCK.

Lack of Bacteria on Alfalfa Plants.

This spring I seeded ten acres of alfalfa in Franklin County, Kansas, and am unable to understand the cause of its not doing better. I would appreciate any information you could give me. The conditions are as follows: The land seeded was in clover three years ago; it has since then raised two corn-crops, last year's crop producing about 40 bushels per acre. The land is what might be called second bottom, it is about 30 feet to water (the water on the place is semi-soft), and the land is inclined to be thin. The corn-crop was well tilled last year and the ground was fairly free from weeds. This spring, in April, we ran a cultivator over the ground both ways, following with a harrow. We then sowed 18 pounds of the best seed broadcast, and dragged it in with a harrow. The ground was full of moisture at the time. The second day after seeding we had a shower, and the alfalfa came up fine and was a good stand. It continued to do well for about four or five weeks, when it was noticed that it was not getting along well. There were also some weeds in the field. The bar of the mower was set high and the alfalfa was mowed. We had some good rains after this and the alfalfa came up again, but when it was about three to five inches high the top set of leaves began to turn yellow and the plants seemed to stop growing. The new leaves near the ground are green and healthy looking. There are spots in the field where for a yard square the alfalfa is twelve inches high, but taking the field as a whole, the yellow-leaf condition describes it. The land is well drained. I took a spade and dug up some of the roots and found them to be about eight or twelve inches long, but failed to find where any tubercles were setting on the roots. Joining this field is a fine stand of clover, the roots of which are full of tubercles, and I consider the land in the clover-field similar to the alfalfa land.

W. H. LOWE.

Douglas County.

The yellow leaves might indicate that your alfalfa is infected with the leaf-spot, a fungous disease which attacks alfalfa, especially in the eastern part of the State. However, I am more inclined to believe that the feeble growth of the alfalfa is due more to a lack of fertility in the soil and the non-presence of the tubercle-forming bacteria which grow on the roots of alfalfa-plants. In order for alfalfa to thrive well, it is necessary that the tubercle-forming bacteria be present in the soil. On fertile land alfalfa may succeed well for a year or two without the presence of the bacteria, but the less fertile the land the more necessary does the presence of the bacteria become.

It would have been a good plan if you had secured some soil from an old alfalfa-field, which was known to be

infected with the alfalfa bacteria, and spread it on the land in which you seeded alfalfa, previous to or immediately after sowing the alfalfa. I would recommend that you carry out such a plan even now, at least on a part of the field, harrowing the alfalfa after spreading the infected soil, in order to mix the infected soil with the soil of the field. Two or three hundred pounds of the infected soil evenly spread by hand, as you would sow seed, is sufficient to begin the inoculation. The bacteria will rapidly multiply and spread throughout the soil.

You are in a part of the State where alfalfa is started with some difficulty and has not succeeded so well as in the counties further West. It would appear that your soil is adapted for growing alfalfa; perhaps it is a lack of the bacteria more than any other factor which has prevented the successful culture of alfalfa in Eastern and Southeastern Kansas. The bacteria which live on the roots of the clover do not grow on alfalfa, at least not the same variety or species. It is possible that the clover-root-tubercle bacteria may in time become adapted to growing on the roots of the alfalfa, but if this is true it requires several years before the bacteria become fully adapted to the new crop. Better infect the soil with the true alfalfa bacteria, and in this way improve the chances of securing a good stand and profitable crop of alfalfa the next year after seeding.

I would advise also that you mow this field at once, cutting close to the ground, raking while the alfalfa is still green, and removing the crop from the field. If the leaf-spot fungus is present, its ravages may be largely decreased by such treatment. As soon as the alfalfa begins to bloom, it may be cut close, when the plants will start again vigorously from the crowns. Early in the season, when the alfalfa-plants are small and feeble, the weeds should be cut high, following the plan which you have described in your letter. This general rule may be stated for cutting alfalfa: when the plants have ceased growth or the crop has begun to mature, better mow at once and give the most favorable conditions for starting the new growth.

A. M. TENEYCK.

Seed-Wheat for Eastern Kansas.

There seems to be considerable inquiry for seed-wheat best adapted to this section of the country, and I have been requested to write you in regard to the matter. Please give me names of the varieties best adapted to this locality together with any other information on the subject which you may consider advisable.


J. W. BRYAN.

Miami County.

The agronomy department of this college has probably a thousand bushels of seed-wheat which will be sold and distributed to Kansas farmers this fall. I have as yet not limited the amount of wheat which will be sold to any one farmer, but we prefer to sell in rather small quantities, ten bushels or less, although we have already received and booked single orders for as much as twenty-five bushels of seed-wheat. We are selling the wheat this year at \$1.50 per bushel, f. o. b., Manhattan, making an extra charge of 15 cents each for two-bushel sacks. Our seed-wheat is well cleaned and graded and the grain is of good quality. Most of the wheat which we are offering for sale this year yielded more than forty bushels of grain per acre, and some of the best-producing plots on the college farm yielded nearly sixty bushels of good wheat per acre.

We have for sale seed-wheat of the following varieties: Kharkof, Malakoff, Red Turkey, Defiance, Bearded Five, Minnesota No. 529, Ghirka, and Zimmerman. All the varieties named except the last are the hard red type of wheat. The Zimmerman is a semi-soft wheat, grown quite extensively throughout Eastern Kansas, and is one of the best-producing varieties tested at this station. We have no pure seed of a good variety of soft red wheat. The Fultz variety which we were growing for seed became a little mixed and the grain was not saved for seed. We have a larger supply of the Kharkof wheat than of any of the other varieties named, some 600 bushels. This is one of the best-producing varieties of hard red wheat which has been tested at this station, and it has also proved to be among the best producers at the United States Kansas Cooperative Station, at McPherson, and at the Fort Hays Branch Station, in Ellis County. The other varieties named have produced large yields at Manhat-

Let Us Send You Our Book.
about good wheels and good wagons that will save you a lot of work and make you a lot of money—the
ELECTRIC STEEL WHEELS
and the
ELECTRIC HANDY WAGON.
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tan, and some of them have yielded well at the other stations in Kansas.

We have not as yet been able to determine the yields which our different varieties made in our trial plots this season, on account of the fact that one or more shocks of grain were reserved from each plot when the grain was thrashed, with the purpose of selecting a pure type of each variety of wheat for future planting.

This large yield of wheat, of course, was not due entirely to the variety of wheat grown, but was due as much to the fertility of the soil, the preparation of the seed-bed, and the favorable conditions for growth and maturity.

From these tests we have been able to select some of the varieties which have produced best, and this grain has been grown in larger plots for the production of seed-wheat, which we are now offering for sale to the farmers of Kansas.

In your section of the State, doubtless the soft red wheat will succeed as well or better than the hard red wheat, and on the bottom-lands I would recommend the planting of the soft red wheats, such as the Fultz, Fulcaster, Lancaster, and Zimmerman, but on the uplands the hard red wheat, such as the Kharkof, Red Turkey, etc., should succeed well with you.

A. M. TENEYCK.

Farm Management.

M. D. SNODGRASS, ASSISTANT IN FIELD CROPS, AGRONOMY DEPARTMENT, KANSAS STATE AGRICULTURAL COLLEGE.

Farm management, in its broadest sense, takes in every experiment, every piece of work, and every business transaction carried out on the farm. There is so much depending upon proper methods of carrying on the work of the farm that a man must have a broad experience and a liberal education to be a successful farmer.

First of all, business methods are called for in running a farm. Farming is a big business and calls for good, sound judgment at all times. Haphazard ways will no longer do for the farmer.

The question of laying out a farm into fields of sufficient size to meet the requirements of the crops to be raised, the animals to be maintained on the farm, and at the same time to keep the soil in the proper fertile and mechanical condition, such that the best results may be obtained in the way of crops, is one worth every man's consideration.

It is necessary to lay out a farm into fields of sufficient number that a system of crop-rotation can be carried on that will increase the productivity of the soil. The size of the fields will depend upon the size of the whole farm, the number of animals to

be kept, and the kind of crops to be raised.

A sixteen-year rotation can be carried out very nicely when 160 acres of land can be divided into twenty-acre fields, when small grains, corn, alfalfa, or clover and grasses are to be grown. Liberal use of manure must be made upon the fields when they are in the kind of crop which will stand the application. It is of importance that the soil condition be studied before deciding just what kind of crop should be put in.

The elements most likely to become deficient in a soil are nitrogen, potash, phosphoric acid, and sometimes calcium. It sometimes becomes necessary to supply one or more forms of these elements by buying upon the market the commercial fertilizers. The results from such application should be such as to warrant the extra expense and work.

Farm accounts must be considered under the subject of farm management. There is not, as yet, a form of bookkeeping adapted to all kinds of general farming. Special accounts for crops grown extensively can be easily kept, but the general business of the farm is so varied that it is almost impossible to keep a form of books that will be accurate in every detail.

Accounts with each field, teams, cattle, hogs, poultry, etc., may be opened, and it will be possible to determine very closely just what net profit a field returns, or how much profit accrues from the animals kept. It is very necessary to follow some such plan if one would know just what crop or what class of animals makes or loses money for him.

The selection and care of breeding stock is a very important factor of farm management. The best breeds adapted to one's particular purpose must be selected, and the best of care and feed must be given in order to get the most profitable returns. Catering to special markets is often profitable both in growing crops or animals. Studying market conditions will often aid one to make good, clear profits.

Selection and care of farm-machinery very often determines the success or failure of a farmer. The cost of machinery is so great that it is very important to use only such as is practical and which will do the work economically and well. Keeping all machinery in good repair often saves days of extra labor and great loss in grain.

Last, but not least, farm-buildings and improvements must receive some of our consideration when treating this subject. It is of the utmost importance to have well-arranged and sanitary farm-buildings.

A house should be of such size as to easily accommodate the family and all hired help about the farm. The rooms should be large, well lighted, ventilated, and supplied with modern conveniences in plumbing. Every house should have a well-equipped bathroom, located where the sunshine can get into it and where it will be easily accessible from the sleeping-rooms. The kitchen should be large and well equipped, affording the best facilities to do housekeeping. Outbuildings, barns, and sheds should be substantial and so arranged as to aid in the despatch of all work quickly and easily.

When a farm is so well regulated that all the lines of work are carried on economically, it may be said that that sort of farming is business, conducted on business principles, and as noble an occupation as can be found in life.

Barns should be of sufficient size to afford shelter for all animals kept on the farm, to store all hay and grain necessary to maintain the stock for the year or until a subsequent crop may be raised.

Machine-sheds and tool-houses should be so arranged that all space may be handily utilized.

Fences should be built of such materials as will hold any and all kind of animals.

When the whole field of agricultural industries is looked over and all the requirements are determined, it will

readily appear that the one great subject confronting the farmer of to-day is farm management. It requires more study and careful consideration than any one of the sciences, upon which successful agricultural pursuits depend.

Horticulture

Blister-Beetles on Potato-Vines.

E. S. TUCKER, MUSEUM ASSISTANT IN SYSTEMATIC ENTOMOLOGY, UNIVERSITY OF KANSAS, LAWRENCE.

Persons who fail to get successful results from the use of prepared insecticides, such as are sold under various trade names, are apt to jump at the conclusion that the preparation under trial was worthless to begin with. A case of this kind came to notice a year ago when a farmer complained to a Lawrence storekeeper, of whom he had purchased a certain remedy which is widely advertised as an effective poison for gnawing insects, that its use on his potato-vines failed absolutely to check the ravages of an army of beetles which were stripping the leaves. Whether the fault lay with the preparation itself, or in the application of it, was not known. He saved his crop, however, by going through the field again and drenching the plants with weak lye-water. This method, although simple, was a risky procedure, since lye is quite liable to destroy any kind of foliage that is brought under subjection to its powerful action; but the proportion which he used, a teaspoonful of lye to a gallon of water, was strong enough to kill the pests eating the vines on which the solution was sprinkled without causing any injury to the plants by its application.

The insects were gray blister-beetles, specifically known as Epicauta conerea, Forster, being identified from specimens brought to the store, August 5. They appeared in the field in their characteristic manner—invading it all of a sudden.

So far this year a complaint of injury done by so-called "potato-bugs" was received from Hammond, Bourbon County, Kansas, under date of July 23. Although the writer neglected to describe or send specimens, the pests were evidently blister-beetles, judging from the information given that "they have appeared in great numbers in this section of the country and are doing considerable damage to late gardens, cabbage, tomatoes, and such vegetables being completely stripped of their leaves."

Several kinds of blister-beetles agree in similar habits and life-histories, hence for a brief account which also tells how to combat them in time of their attacks, the reader is referred to a recent work that has been prepared for farmers under the title of "Insects Injurious to Staple Crops." In this book, the author, Prof. E. D. Sanderson, whose ability to instruct the farmer in lucid terms will at once be perceived, says:

"One of the most common forms is the striped blister-beetle, or 'old-fashioned potato-bug.' . . . Three or four other forms are common throughout the country, but are especially numerous in the West, where grasshoppers are more abundant. The reason for this is apparent when we come to consider the life-history of the pest, for the blister-beetles are not an unmixed evil.

"Life-History.—In a small cavity in the earth the female beetle lays some four or five hundred eggs, these being deposited from July to October. About ten days later the eggs hatch, and from them emerge some small but very active larvae, with long legs, large heads, and strong jaws.

"They at once commence running about in search of the pod-like masses of grasshoppers' eggs, and as soon as one is found the larva enters it and commences a hearty meal. As soon as his appetite has been somewhat satisfied he sheds his skin, and now being surrounded by food and no longer needing his long, running legs, they are changed for very short, aborted legs, and the larva is soft and sluggish. In another week a second molt takes place, after which the legs and even the mouth-parts are still more atrophied. After another molt and after consuming all the eggs in the pod, the larva now goes deeper in the soil, and inside a small oval cavity again sheds its skin, and hibernates over winter as a sort of semi-pupa. In the spring the larva appears again much like the second stage, but does not eat much, and soon goes into the pupal

Make More Money on Fruit Crops

Everyone who grows fruit, whether a large commercial grower, or one who has only a few fruit trees, a berry patch or a garden, should be interested in knowing how to get the most profit from his crops.

THE FRUIT-GROWER

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GIVEN AWAY For the names and addresses of ten good farmers likely to be in need of grain seeding machinery and sets in stamps, to cover postage, we'll send FOUNTAIN PEN FREE. We do this so that we can explain to these farmers how they can buy a seeding machine that cannot be clogged in mud, gumbo, adobe, cornstalk or trashy ground; that is 1-3 lighter draught than any other; that takes 1-5 less seed; that increases the yield of wheat from 3 to 7 bu. per acre over others. Ask for 1905 catalog B and mention this paper. MONITOR DRILL CO., Minneapolis, Minn.

The Waterloo Gasoline Engine A popular engine at the right price. Also Power and Sweep Feed Grinders Write for illustrated catalogue. WATERLOO GASOLINE ENGINE CO. 1014 Cedar Street, Waterloo, Iowa.

stage from which it emerges the adult beetle. Altogether, the life-history is one of the most peculiar and complicated among insects. Thus the blister-beetles are one of the most important factors in holding the grasshoppers in check.

Remedies.—However, when they swarm into the beet-fields, potato- or garden-patches, one can not afford to allow them to consume one crop for the good they may do in saving another from still another insect scourge. 'A bird in the hand is worth two in the bush,' is equally true of insects. So be ready for them on their first appearance; give the plants a thorough spraying with Paris green, at the rate of one pound and one pound of lime to 125 gallons of water, and when sprayed, it would be well to spray it with Bordeaux mixture, which will prevent various fungous diseases, and with which Paris green can be used much stronger without danger of burning the foliage; or it may be applied dry by mixing with from ten to twenty parts of flour or plaster, dusting it on in early morning, while the dew is still on the plants. Any other arsenical poison will prove equally effective, if used at the proper strength."

Many books are now offered to the farmer that are especially adapted to his needs, and their ready reception proves that a practical purpose is being extensively served through their agency in conveying helpful instruction. Every phase of farming has its own problems to be confronted, which fact is true in regard to insect pests as well as in other respects. Most of the injurious insects of the field differ from those attacking the garden or orchard, still the various enemies in each case present formidable examples of a complex nature. To mention the foes of a single product is quite often a considerable task, but in treating of the harmful insects all together, a book of no small proportions must be expected. For many reasons a complete work is not always required as much as a special work. For instance, the farmer who depends exclusively on field-crops will appreciate a treatise on subjects of direct concern to him, and not on other matters in which he has no part of interest. Such appears to be the object of the book, "Insects Injurious to Staple Crops," in which due consideration is given to the insect enemies of the most important crops, including those that make the renown of Kansas—grains and grasses, potatoes and sugar-beets. It is finely illustrated and neatly bound in cloth, being published by John Wiley & Sons, New York.

(The publishers of THE KANSAS FARMER can supply the book for \$1.50, postpaid.)

Picking, Packing, and Marketing Apples.

If apples are produced of leading varieties, being of first quality, large size, good color, and fully matured when harvested, the picking, packing, and marketing will be little to consider. In picking apples some prefer the use of baskets, while others prefer sacks. However, they both have their advantages and disadvantages. The advantage of using a basket lies largely in the fact that if the apples are carefully placed in same they are not bruised and the blooms, if there be any, are not rubbed off. The objections to the baskets are that they are not so handy as the sacks, and that careless pickers are disposed to toss apples into them as they hang on a limb or set upon the ground several feet away.

The advantage of using the sack is that it can be slung over the shoulder with a strap, and the mouth kept open with a part of a barrel hoop sewed into the edge of the mouth and partly around the opening, allowing the picker to easily carry it and use both hands. The objections are that the blooms are likely to be rubbed from the fruit and the shifting of the sack puts many small bruises on the apples where they rub against each other, which, with light-colored or delicate skinned varieties, is quickly noticed.

As for me I prefer the baskets. My baskets are the round half-bushel kind with drop handles. I had an iron hook made for each one, which is attached to the handle to suspend the basket from the limbs, thus enabling the picker to use both hands. In picking apples every specimen should be handled as carefully as if it were an egg. I usually have my apples picked and piled under the trees in the shade, and take the barrels to the apples in the orchard and pack as fast as possible, and when the barrels are filled and headed up, I haul to the shed and stow

away in as cool a place as possible, until I get enough to fill a car.

There should always be two grades made, one a strictly No. 1 or fancy grade, and another which will take apples that are slightly defective, but good for immediate use, usually termed No. 2 in the market. I seldom ship any No. 2's, as I can realize a greater profit by selling them in bulk to the cider-mill at twenty cents per bushel than to put them on the market in an expensive barrel, adding on the freight and commission charges.

The packing should be done by an experienced hand, as this is of great importance and is always the danger point. A layer of uniform apples, even in size and color, should be placed on the inside of the barrel and another layer of similar fruit put on top of the facers and the barrel filled with fruit free from defects of any kind. It is very important that the barrel be well shaken each time a basketful of fruit is put in, as the fruit will be tight in the barrel and require less pressing of the head and consequently less bruising of the fruit.

After the barrel is full and the fruit well shaken down, the apples should be adjusted on the top so that they are as nearly level as it is possible to have them. Then the press should be applied, first seeing that the barrel is on a level and the head gently pressed in. The head-liners should be placed in their proper place, and with a light use of the hammer the head nailed secure. The name of apples and also number of grade should be stamped on the faced end of the barrel.

The marketing problem is one that we must solve ourselves. A common shoe-cobbler can bring about as good results in selling fruit as an expert apple salesman, provided he is furnished with first-class fruit and not a dozen different kinds of inferior stuff. The markets are not killed with an over-production of good fruit. It is the over-production of poor fruit that knocks down the price of good fruit.

There is never a time that a large, well-colored and well-matured apple will not bring a fancy price in any market. And when nothing but this class is put into a barrel, a handsome profit can be realized. Retailers buy fruit from its outward appearance, and when they purchase a package of seemingly nice fruit and find when they open it that inferior stuff is packed between, that package does him, and he doesn't come back any more.—J. S. Underwood, Johnson County, Ill., in The Farmers' Review.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.

Cleanliness prevents scratches and other skin diseases.

Early and thorough training makes gentle, safe, and tractable horses.

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The cheapest meat the farmer makes is the pork he makes on clover.

With all classes of stock, mixing breeds promiscuously does not work well.

Before any animal can transmit better qualities it must have those qualities.

Excessive sweating indicates weakness, and hot weather is hard on a weak horse.

Anything less than full feeding at any period is a sacrifice of net profit.

Pastures can not be continually cropped without something being returned to prevent loss of fertility.

Horses should always be watered a short time before being fed and never immediately after.

The most economical man is the one who spends the most money to the best purpose.

Feed the sow after farrowing upon foods calculated to produce a large flow of rich milk.

No animal, however well bred, should be used for breeding purposes unless it possesses individual merit.

Good stock must have good care and attention, and then they will make a most liberal return.

The horses that are best able to stand hard strains are those which work steadily every day in the week.

Plants have greater need for their leaves and can be more easily killed in the growing season than when partially dormant.

The cattle that produce the most meat and not fat and bone are the ones that will bring the big price in market.

Good care and abundant rations of healthful, wholesome food are essential to the retaining and perpetuating of fine qualities, however long established.

A

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When you buy farm tools do you ever stop to consider the reputation and years of experience that are back of the tools you select? If you don't, you ought to—it's the best guarantee you can get.

When you buy a Buckeye Grain Drill you get a machine with 50 years of experience in drill making and 50 years of success in the field back of it.

That means you get a machine that is not an experiment. It also means you get a drill which not only does the very best work, but is built to give lasting service. That proves it is the cheapest drill you can buy. Back of

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is a reputation and a skill in drill making of over half a century, and each year has added to the perfecting of a machine that has no equal.

It is penny wise and pound foolish to take chances on farm tools that have no such record as the Buckeye because a few cents may be saved (?) in first cost. It's in the long run—the long wear—the ease, convenience in operating; the saving of time and trouble that the Buckeye proves its real worth.

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Don't buy until you have called at the local Buckeye dealer's store and examined the Buckeye Disc Drill or the Buckeye Combined Grain and Fertilizer Drill. They tell their own story better than we can. If there is no dealer handy—write to us for our 1907 drill book, but do it today.



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In the swine department. Poland-Chinas, Berkshires, and Duroc-Jerseys were all shown together, and the classification as to age was not the best. John Mingle, of Anthony, Kans., had Poland-Chinas on exhibition. T. M. Lyman, Anthony, Kans., had Duroc-Jerseys, and J. I. Roy, Wauketa, O. T., had Duroc-Jerseys and Berkshires. To these breeders were awarded the prizes. It was a difficult task for the judges to place the awards, on account of the different types to be considered in awarding a prize when the different breeds are in competition, and the admirers of each breed, of course, prefer the ideal type of their favorite. Under the circumstances, the criticism of some of the awards was not to be wondered at. It is to be hoped that the management will see fit another year to give each breed a separate classification, so that the competition will be for individual superiority of animals of different breeders, rather than breed preference. This association has splendid grounds, nicely improved, good agricultural hall, amphitheatre, swine barn, horse and cattle barns, good agricultural country surrounding, and an appreciative people, as the attendance evidenced.

Beautiful Alysedale.

A great many laudatory descriptive notices and articles have been written about Alysedale Farm, owned by C. W. Merriam, of Topeka, but the graphic words of the newspaper field men can not properly depict the natural beauties of this famous establishment. It requires the artist to fitly present things as they are to be seen, such as shown on our first page this week.

Gossip About Stock.

J. J. Thorne, owner of the Valley Stock Farm herd of Shorthorns, Kinsley, Kans., has a number of fine Scotch yearling bulls for sale on favorable terms.

H. B. Waters, proprietor of the East Creek stock farm at Wayne, Kansas, has some Poland-China spring pigs which he is offering at reasonable prices. Mr. Walters is a popular and successful breeder, and the pigs he has from such sows as Surprise I Am 81061, Alice B. 89509, Choice Goods 69771, Surprise 3d. 92998, and Gibson's Model 85206 should not go begging. Mr. Walters' brood sows are as good a lot of animals as we have seen this year. Write him for prices.

F. H. Schrepel, Ellinwood, Kans., has probably sold more Percheron and coach horses the last year than in any one year's business before and can still supply customers with either Percheron stallions from yearlings to mature stallions. A five-year-old stallion, the largest we know of in the state, is in the bunch. He also has a nice lot of Percheron mares and some coach stallions that can be bought, that are worth the money. Write or see Mr. Schrepel for bargains and kindly mention THE KANSAS FARMER.

Parrish and Miller, at Hudson, Kan., who are known as the largest Aberdeen-Angus breeders in the State and in all probability in the world, who own beyond any doubt some of the best individual specimens of the breed, are fitting another show-herd that will be as hard to reckon with as any that ever put out before. Their crop of young calves are especially good. A bunch of eighty cows and calves in one pasture was a most pleasing sight, and presented more uniform quality than is usually found in small herds. These gentlemen can always supply customers with herd-bulls. They now have on hand some excellent yearlings that are being priced right. Call on or address them at Hudson, Kan.

Our advertiser, M. C. Vansell, Muscotah, Kans., now offers for sale his herd-bull, Victor Archer 223102, sired by Golden Archer and he by Mystic Archer. The dam is Pleasant View Victoria, a straight-bred Guickshank Victoria with only three removes from Imp. Victoria 73d by Roan Gauntlet, probably the best Victoria-bred bull in the United States, as well as a model of individual merit, being very low down, wide and deep and massive, with an ideal head and horn, rich red color and fine disposition. He has proven a splendid sire as his calves show. He is only 3 years old and weighs about 2,050 pounds in fair condition. Mr. Vansell is desirous of closing out his entire herd of Short-horns at private sale, and offers attractive inducements to intending purchasers. He will hold his annual sale of Poland-China pigs and Shorthorn bulls on October 2, 1906.

With four hundred acres of land, a beautiful farmhouse, a magnificent stone barn that is known for miles around as "Vick's big barn," and a barnyard and corrals covered with beautiful timber and watered by two inexhaustible springs, nature seems to have intended W. L. Vick's farm, at Junction City, for a stock ranch, and Mr. Vick, quick to discern the natural facilities which he possesses, has been making the most of his opportunities.

For several years he was engaged in raising Poland-China hogs, but about two years ago he decided that the Durocs offered him a better field, and he commenced to lay the foundation for the herd which now numbers about 150 head. During this time Mr. Vick visited many of the prominent herds of Kansas and Nebraska, and purchased some of the best stuff. Last week we visited his herd and were shown about 100 pigs of spring farrow among which we saw some good ones. We also saw a lot of good sows. Dusky Maiden 106908 is probably Mr. Vick's best sow individually. She is sired by Auction Boy 3d and had a fine litter this spring by Parker Mac, but Mr. Vick had bad luck with her and has only one left. But you can not buy it, not because Mr. Vick thinks she is too good to sell, for he only



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Kendall's Spavin Cure

has never had an equal in the world for curing common horse ailments, such as Spavin, Ringbone, Curb, Splint and Lameness.

A Cure for Spavin, Washington Gulch, Mont., June 5, 1906.
 Dr. B. J. Kendall Co., Dear Sirs:—Enclosed find a 5 cent stamp for your book, "A Treatise on the Horse and his Diseases." I have used your Spavin Cure and found it a sure cure for Spavin. Yours respectfully, W. James Fitzpatrick.

Price \$1.00 per 60. Greatest known liniment for family use. All druggists. Accept no substitutes. "Treatise on the Horse," free from druggists or on the Horse." Free from druggists or on the Horse.

DR. B. J. KENDALL COMPANY, Enosburg Falls, Vermont.

Cures Nine Cripples Out of Ten. Zolfo, Fla., February 2, 1906. Dear Sirs:—Find enclosed two-cent stamp for your "Treatise on the Horse and His Diseases." I am a user of Kendall's Spavin Cure, and it will cure any nine cripples out of ten, and do the other one good. Yours, H. G. MURPHY.

Send to A. L. Sponsler, secretary, Hutchinson, Kans., for a copy of the Kansas State Fair Premium Catalogue.

Harper County Fair.
 The Anthony fair, August 8, 9, and 10, can be recorded as a successful event. Weather conditions were particularly favorable until the evening of the last day, when the closing attractions were shortened by a nice rain.

A splendid show of Galloway cattle was made by the well-known breeders, S. M. Croft & Sons, of Bluff City, Kans., and Herfords were shown by B. D. & George Miller, Wauketa, O. T. Between these herds were divided the premiums, the classification being such that all beef brands had to be shown together. The herd prize was awarded to Messrs. Croft. The same condition prevailed in the classification

Home Departments

CONDUCTED BY RUTH COWGILL.

God's Way.

God never would send you the dark-ness
If He felt you could bear the light;
But you would not cling to the guiding hand
If the way were always bright.
And you would not care to walk by faith
Could you always walk by sight.

'Tis true, He has many an anguish
For your sorrowful heart to bear;
And many a cruel thorn-crown
For your tired head to wear.
He knows how few would reach heav-
en at all,
If pain did not guide them there.

So He sends you the blinding dark-ness,
And the furnace of seven-fold heat;
'Tis the only way, believe me,
'To keep you close to His feet.
For 'tis always so easy to wander
When our lives are glad and sweet.

Then nestle your hand in the Father's,
And sing, if you can, as you go;
Your song may cheer some one behind you.

Whose courage is sinking low.
And—well—if your lips do quiver,
God will love you the better so.
—Selected.

The Dignity of Labor.

There is no labor that can not be dignified, no occupation so low or humble that can rob one of self-respect and proper self-esteem; and it is possible to perform one's allotted work in such a way as to elevate and dignify the work itself. There are some who refuse to do this or that because they consider it below their dignity, as though by doing so humble or menial a task they would be unfitted for higher work. Some would rather be dependent upon others for aid, and sit in idleness waiting for what they consider suitable occupation, than work with those below their station or do what they consider undignified labor. Such a position only shows the true character and lack of common sense and forethought. To "do what the hand finds to do," however humble, strengthens one in character and in physical power, thus enabling him to do the next thing better, and fits him for something higher. It is right and wise to aspire to whatever one is best suited for and can do the best, and it is also well to seek the occupation one enjoys the most, whether it be lowly or otherwise. Our work is what we make it. We may elevate it and make it desirable by the way we do it and the character we give it. Christ, our example, not only dignified labor, but He glorified it.

Mrs. James A. Garfield found the secret of using labor for her own advancement, and by so doing she dignified it. I will tell her how in her own beautiful way, as she did in a letter to her husband. It is as follows:

"I am glad to tell you, that out of all the toil and disappointments of the summer just ended, I have risen up to a victory; that silence of thought, since you have been away, has won for my spirit a triumph. I read something like this the other day: 'There is no healthy thought without labor, and thought makes the labor happy.' Perhaps this is the way I have been able to climb up higher. It came to me this morning when I was making bread. I said to myself, 'Here I am compelled by an inevitable necessity, to make our bread this summer. Why not consider it a pleasant occupation, and make it so, by trying to see what perfect bread I can make?' It seemed like an inspiration, and the whole of my life grew brighter. The very sunshine seems flowing down through my spirit into the white loaves, and now I believe that my table is furnished with better bread than ever before; and this truth, old as creation, seems just now to have become fully mine, that I need not be the shrinking slave of toil, but its regal master, making whatever I do yield its best fruits."

In the experience of a housekeeper, who had kept various kinds of help in her home, were more examples of those who failed to dignify their work than otherwise. The majority of them allowed it to lower their self-respect, and instead of elevating their work, they allowed it to pull them down.

She tells of one who was mistaken in her methods. This one, instead of doing the work in the very best way and manner, thought the way to dignify the work was to assert that she was as good as any one—that she did not have to work—and insisted upon

being received into the family as one of them. She did not conduct herself in a way that would make her wanted in the family. She did not keep herself neat and tidy, and when she went away her room which she found in the best of order was unfit to be occupied until the lady put it in order again. Her work showed that it had been done merely to get a little money to buy some things to suit her fancy that "papa" thought superfluous. She failed utterly to dignify her work. She tells of another who respected herself—and thus merited the respect of the household and the neighbors. Her wardrobe was very limited, but she was always clean and dressed in the best of taste was done in the best manner possible, to entitle her to respect. Her work and order. Her demeanor was such as and she never let it drop her an inch in the scale of humanity.

I know of another instance which will bear relating. A young woman came to work in a home of wealth and refinement, in which were two daughters. This young woman was intent on getting an education and determined to finish her education at the Kansas University, but had no way other than to earn the money herself. She decided to work as servant girl, and found employment through the Young Woman's Christian Association. She came to this home as a servant and exacted no different treatment other than that accorded to such help, and she received what she merited—the respect of all—and the young ladies in the home enjoyed her intelligent conversation and were not ashamed to be seen upon the street with her. Many a young lady has carried herself through college by doing what some think belittling work, and while she used it as a means to an end, that class of work was respected and made more desirable by her having done it.

In Eastern colleges young men—who could not have a college education otherwise—are not ashamed to earn their board and room by waiting on the tables in boarding-houses and caring for furnaces or even acting in the capacity of hostler. These same young men generally make the strongest students and leave the college with highest honors, and, with all, lose none of their self-respect nor the respect of their fellow students.

To dignify labor is to do it better than it has ever been done before, and in a manner that will make it more desirable to be done by some one else.

Parents and Children.

L. A. WELD, CLYDE, OKLA.

Every father and mother desire their children to develop into honest, virtuous men and women. No matter what position in society parents may occupy, there is an inherent good which prompts them to desire their offspring to be better than they are; to be more honest and virtuous and to command more respect. A mother may sink to the lowest depths of degradation, yet she will use every means in her power to keep her daughter unsullied. Many have parted with them as babes to save them. So the maternal instinct is strong not only to guard and develop the physical being, but also to bequeath to society a better being, both mentally and physically.

The proper training of children is one of the greatest and most difficult problems which ever confronts the father and mother. Every member of society is also interested, because if the future is to be made better and the conception of manhood and womanhood elevated, we must as people be better; we must contain within our individual being desires which uplift us and our neighbors too. So, then, the peopling of the earth with honest virtuous men and women depends upon us to-day, and especially on those who have children. What those children will be depends on what they have been taught to do and believe and the numerous examples presented to them.

When a child is old enough to distinguish between objects and understand what is said, you should begin the lesson of obedience. Talk kindly at all times; but when you desire something done, speak firmly but not angrily. Use this method from the start. Another thing: Father should always obey mother and mother obey father before the children, and each should be particular not to ask something which would be unwise or use-

less to do. Always agree before the children at least.

Don't complain and whine.
Don't swear, or use tobacco, or liquor.

Never promise the child something as a reward for doing what it should as a duty.

If you do promise, be sure and keep it. I have known women who were continually bribing their children to do those little things they should do through love. By and by you will pay big wages for poor service.

Then again, some mothers slap the little ones for each little offense, until it is one continual round of light punishment every day. This removes fear of punishment and also confidence and love. Some mothers are addicted to the habit of telling their children they will get a whipping if they don't stop. Now this is absolutely lying and it teaches the child to lie. The child should understand what it shall or shall not do, but seldom is a threat necessary. Need of chastisement is often caused by loss of love and confidence, and we usually are to blame. Never promise a child anything, even a whipping, without fulfillment. Always tell the truth and act it too, for remember the child's mind is in the receptive stage, where all things are noticed and incorporated into mental warp and woof to influence life's action in later years. No child can be properly raised unless there is a bond of sympathy and love between husband and wife, and each should manifest, day by day, loving tokens and kind deeds to each other which the children will imitate.

Never give a child a task beyond its strength or of too long duration. To do so often means loss of ambition and develops a hatred toward the parent and an aversion to labor. Encouragement should be given at all times and judicious praise bestowed when a duty is well done. Whenever a child is given a thing, it should be his or hers to do as pleased with, but, of course, appropriate advice should be given too. Don't be afraid to reward your child, but be careful it is not a bribe.

In conclusion will say, the main thing is for parents to love and be loved in the home, and to practice all the things they want the child to make use of and to avoid that which is harmful. In other words, be a living example of what you wish the child to develop into. Take the little one right into your confidence; share with it its sorrows and joys; be a guide to its actions; a refuge for its troubles; be a fountain of all that is good and true to it. This course will elevate humanity and make us blessed of our children.

Summer Cooking.

Veal Loaf.—Chop together four pounds of raw veal and a pound of ham; chop very fine, then mix with a pint of bread crumbs. Add a teaspoonful of salt, half a teaspoonful each of pepper, cloves, allspice, and powdered sage, a teaspoonful of finely chopped onion, and two well-beaten eggs. Mix well, then put in a tin pan and press. Mold, turn out in a baking-pan and glaze with the white of an egg. Bake two hours and a half in a slow oven. When ready to serve cut in thin slices.

Salmon Loaf With Sauce.—Drain the juice from one can of salmon, pick out the bones and skin, and chop it fine. Add the yolks of four eggs beaten very light, one-half cup of stale bread crumbs, one-quarter cup of melted butter, one-half teaspoonful of salt, a dust of pepper, and a teaspoonful of minced parsley. When all is well mixed add the whites of the four eggs beaten stiff, turn into a buttered pan and bake half an hour. Turn into a plate and serve with a sauce. For the sauce, melt a rounding tablespoonful of butter, add the same of flour, and stir until smooth; then turn in one cup of hot milk and the liquor drained from the fish. Cook three minutes, add one beaten egg and cook one minute and turn over the loaf.

Stuffed Eggs.—A variation of stuffed eggs, so delightful for picnic lunches, is made with deviled chicken or game. Boil the eggs and mash the yolk, afterwards mixing with the chicken and a little mayonnaise. Return to the white halves and serve with mayonnaise in a nest of lettuce leaves.

Beef Salad.—A teacupful of cold beef finely cut or chopped, three chopped hard-boiled eggs, teaspoonful each of prepared mustard and butter, little salt, dash of pepper and vinegar to moisten. Mix and keep cold until served. Garnish with lettuce in its season, or alternate slices of beet and carrot.

Swedish Jelly.—Cover a musketeer of



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veal with water, add a small onion and carrot, and let it boil until the meat is ready to fall off the bone. Take the meat and hash it fine and return it to liquor after it is strained, and give it another boil until it jellies. Add salt, pepper, the juice and rind of a lemon cut fine, then pour into a mold. Put it into a cold place. It makes a nice dish for lunch or tea. If the knuckle of veal is large, use three quarts of water, if small two quarts and let it boil slowly three or four hours, or until it is reduced, to about half the quantity of water put in.

Crumbed Potatoes.—Required: Potatoes, bread-crumbs, eggs for coating, salt, pepper. Choose large, well-shaped potatoes. Wash, scrape, and boil them in salted water with a sprig or two of mint in it and a little salt. When cooked, lift them out and dry them in a clean cloth. With a sharp knife cut each in half lengthways, and dust them over with salt and pepper. Dip each piece in beaten egg, then cover with bread-crumbs which have been browned in the oven. Put the potatoes on a greased baking-tin and bake about ten minutes. Serve on a lace paper. Garnish with fresh or fried parsley.

Ham Salad.—Chop some ham very fine and slice twice as much cold potatoes very thin. Arrange the ham and potatoes in a salad dish in layers and sprinkle each double layer with chopped celery, then pour French dressing over all. Garnish with hard-boiled eggs, cut in slices or in fancy shapes.

Salad of Beef's Tongue.—Cook a small beef's tongue, chop, add half quantity of chopped celery, chopped whites of two or more eggs, and add any of the above dressings. Garnish with a little of the mashed yolks on lettuce leaves, or sliced, and alternated with beets.

Bacon Dressing.—Heat two tablespoonfuls of bacon fat, stir in smoothly a tablespoonful of flour, and half a teacupful of hot water, stirring until the mixture boils, then add half a teacupful of vinegar, half a teaspoonful of salt or less if the fat is salty, teaspoonful each of sugar and dry mustard, tablespoonful of lemon juice may be omitted, cook slowly four or five minutes. Can or bottle.

Kitchen Conveniences.

An Ice-Box.—Where one does not keep a refrigerator, yet would like to keep ice, here is a home-made ice-chest, described by a farm wife in The Toledo Blade: "It was a very primitive affair—simply a small box inside of one that was two sizes larger. The inner box was raised an inch or two at one end, and the lower end fitted with an old piece of hose placed tightly in an augur-hole; this was continued through the outer box, and carried away the water from the melted ice. The space between the two boxes was stuffed as full as could be packed with old newspapers, and a cover made for each box. The ice was put in one end of the inner box, and the articles to be kept cool placed about the ice, the lids closed, and the box kept in a shed adjoining the kitchen. Over the outer end of the piece of hose a fine wire netting, or piece of cheese cloth, was tied to prevent insects crawling inside. The water from the ice was carried away by a piece of tiling, and the box set a few inches above the floor to admit of circulating air under it.

The Kitchen Floor.—There is nothing better than a hardwood floor for the kitchen. The most satisfactory finish is raw linseed-oil. Put the oil in a kettle, place over the fire, and heat until it bubbles. Take out a little at a time and apply to the floor hot. Apply with a small soft cloth fastened in the kitchen mop. After the floor has been gone over, fasten a large woolen cloth in the mop and wipe off all the surface oil. Rub hard until the floor is smooth. The floor should be clean and perfectly dry when the oil is applied. This treatment once in three months will keep the floor in excellent condition.

Warming Oven.—To make this oven, take a box about three feet long, one foot high, and one foot deep; remove the top and fasten the box to the wall behind your stove pipe, about two feet up from the top of the stove. Cover inside and out with oilcloth. The open side of the box must face the stove pipe. Over this hang a curtain of some loosely woven material, something that will exclude the flies but not the heat. You will be surprised to find what a warm place this makes. Besides being excellent for keeping victuals warm, it is unequalled for raising light bread.

An apple-corer, a cherry-stoner, a fruit, or jelly press, a combination-

dipper are all conveniences which amount to almost necessities where much fruit is used or put up for family consumption. Most of them are inexpensive, and can be had at any store dealing in such things. Do not, however, buy one of the "cheap," bargain-counter or "ten-cent-store" kinds, as the knives or wheels of such are usually made of iron, and must soon go to the scrap pile.

An apple-parer costs about fifty to seventy-five cents, and is of service to the housewife all the year round, not only in "apple-butter time," but whenever pies, puddings, dumplings, and sauces are in order.

The Young Folks

The Elder Brother.

The sun was set, The twilight dim had gathered,
And, 'gainst the window-pane
The fierce north wind sent sudden,
Spiteful furies
Of mingled sleet and rain.

My easy-chair was drawn before the fire,
Benny was on my knee,
When low he whispered, "I don't see,
Aunt Dolly,
When folks are small like me,

"How they get on without a nice big brother.
Why, even Tommy Stead—
Who bullies all my mates—don't dare
to touch me;
He's afraid, you see, of Ned."

Just then he shyly pointed o'er his shoulder,
With such a proud, fond look,
At his tall brother Edward sitting near us,
Intent upon a book.

"He carries the umbrella when 'tis raining,
And gives the most to me;
And helps me find the very far off places
In the geography;

"And 'splains the sums, and makes the fractions easy."
Here Benny heaved a sigh.
"I don't like rithmetic; but Ned says,
"Benny,
Be brave, my lad, and try."

"He has long patience, and he's very clever.
Why, once he made a cart,
And once he made a trap that caught a sparrow;
And 'cause it hurt my heart

"To see the wild thing flutter, he soon freed it,
And smiled when off it fled;
And when I'm scared because it's dark,
Or lightens,
He takes me in his bed.

"Our pastor said, last Sunday, that Lord Jesus,
Up in the heavenly host,
Our elder brother is. It made me love him
Like my dear Ned—a'most."

The blue eyes closed. Perhaps the gentle sand-man
Had touched the golden head;
For low it drooped. But smiles still curved the sweet lips;
He dreamed, perhaps, of "Ned."
—Elizabeth Cumings.

"Way Out West."

RUTH COWGILL.

THROUGH KANSAS TO THE MOUNTAINS.

I suppose it is useless to point out the beauties of Kansas to those who live there and see her day after day. Yet, whenever I take a trip through the State, I think again how lovely she is and wish all the world could see her as she is, trim and prosperous, and it must be admitted—self-satisfied.

For one who loves color in all its variations, the fields of Western Kansas are a constant delight, green and brown in every shade and combination, from the cool, dark verdure of that loveliest thing that grows, a field of alfalfa, to the pure gold of the sun-burnt prairie-grass and the clean, soft, deep sky with its lightest of summer clouds shifting magically—can any State show me skies bluer or more serene? And in the evening, when the dusk fell, how cool and fragrant it was! And the fireflies dancing over the shadowy fields were like glimmering reflections of the deeper light in the far-off skies.

In the morning I opened my eyes on Western Kansas, and—well, perhaps it is because I am a Jayhawker and can't help loving everything in the State, but to me the great plains, unbroken in their silent simplicity, have a great and lasting charm. There is indeed a majesty in those immense prairies which even the bigness of the mountains can not surpass. And I have thought since, as I traveled a thousand miles along mountains, that to live in them in under their shadow would be oppressive, like a prison. I want to see out, and I want no limit to my vision. I remarked something to this effect to a chance acquaintance in the

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train, which brought a smile and the response, "Yes, that is Kansas for you." But how can I tell you of the mountains? Truly they are wonderful beyond description. Many who will read this have themselves seen them and to them whatever I can say will seem—as in truth it is—pitifully inadequate. Some have never seen a mountain and them my words will leave as bereft as they were before. For Nature, as she shows herself in Colorado, is so great that my pen can give no faintest idea of her power. The mighty rocks and parks and cliffs and precipices must be seen before they can be realized. Pictures fail entirely to convey a conception of their grand immensity.

As we neared Colorado Springs, people began poking their heads out of the window to see Pike's Peak. As I had never seen a mountain, you may imagine the eagerness and excitement with which I looked out. But I saw nothing of it, till suddenly I exclaimed to whoever might chance to hear, "Why I thought that was a cloud!" There it stood, mystic, wonderful, unreal yet immensely substantial, the advance guard of the mountains. I never will forget that, my first sight of Pike's Peak. It was veiled in a purple mist, and its beauty was as of another world than this. The train whirled us along, and we could not take our eyes from this great and beautiful thing, so near to us, now on this side of the track, now on the other. Near! It was miles away. We plowed along for hours, going always toward it, but we never did reach it. It seemed to step back with majestic dignity as we advanced. I am filled with wonder to think of

those who have scaled it. How did they dare? It is so kingly, so tremendous, standing there, draped in its purple veil that I am humbled with reverence for it. Yet an impertinent little locomotive puffs importantly over it every day. We could see its little white wreath of smoke, here and then further, as it tolled along. Civilization is very wonderful and very daring in the presence of this giant nature. It is a great struggle, this, between civilization and the natural forces of the world, and the outcome is not always certain. In the end, of course, civilization will win out, nature will be the servant of man, and yield all her resources for his use and pleasure. But in the struggle already many a brave man has gone down, many a mighty enterprise has been strangled; and will not the conquest be always doubtful? You will think of this when I tell you about San Francisco as I saw it. Nature may be in chains at man's bidding, yet never can he be certain that his slave may not break his chains and turn and murder him.

At Colorado Springs we changed from the Rock Island to the Denver and Rio Grande, which took us to Oden. Colorado Springs, strange to say, was the hottest place we struck in all the long journey. We were there long enough to see a creamery can of cream topple off from the truck upon which it was being hauled and spill its yellow contents over the track, a rather expensive lubricant.

SOMETHING OF THE PEOPLE WE SAW.

From Colorado Springs we went down to Pueblo, a rather uninteresting two hours' travel, the glorious Peak fading from our view as we went

along. Pueblo is a dirty, flat, oily town, given to manufactures, or so it seemed as viewed from the car window. Here a much-fixed-up young woman and a speckle-faced man got on and enacted a highly interesting scene in the seat across from me. She hung on his neck and wept crocodile tears on his collar, imploring him to forgive her, which he assured her he did, but he wanted her to be good now. This she vehemently promised, with tears running down her cheeks. As soon as he had left, however, she went cheerfully to eating fruit and chatting confidentially with a nice old Dutch lady who sat down by her sympathetically. She informed the public, in a voice which she with difficulty kept tearful, that her "husband's best chum was frin' this ingin." I was interested in this chum, though not in her, for we who travel owe much to the men to whom we trust our lives, the black and grimy firemen and engineers.

The newsboy on this train was an Irish boy who took a great fancy to my chaperon, a good old woman who had taken me under her wing. He was very attentive to her, and incidentally sold her some ten dollars' worth of stuff which by now she probably wishes were in the bottom of the sea. But he was very good to us and found us good seats in the observation-car, where he looked after our comfort and pleasure quite vigilantly. But soon we forgot all about people and discomfort and everything incidental in the overwhelming beauty of the scenes we were traversing.

THE ROYAL GORGE.

The railroad is laid along the rushing Arkansas River, at the bottom of the Grand Canon, and all afternoon we were carried along beside that torrent of mad water and under the straight brows of monstrous mountains, in the shadow of overhanging cliffs and threatening peaks. Sometimes we would strain our necks to look straight up to the awful summits shutting out the sky on either side, and again our eyes would follow some stern, tremendous pile receding till it looked lovely and gentle in the distance. Now we would be shut in by immovable prison walls, looking in vain for our way of entrance or path of exit, then suddenly an opening would show us the loveliest, peaceful, sunny slope, which all too soon would be snatched away from us and the wonderful mountains would shut us in again.

And thus it was all day! scenes of indescribable grandeur bursting upon us, changing, shifting, fading, dying away to be replaced by others, new, strange, and equally beautiful and terrifying. Over all and in all and through it all and around it was the most wonderful variation of color, soft and shimmering, and changing, fading and glowing and dying, reborn in a moment in new and unearthly loveliness. The large rocks of the mountains were reds and browns and blues, the pines were dark and somberly green, the rushing river had a thousand shades, and the great peaks towering above one another, crowding out the sunlight or now letting it in, cast shadows of varying intensity and darkness. All these things, and others deeper and farther to seek, worked that wonderful magic of color. I wish everybody in the world could see it, for I can not tell it to you. I only know that its beauty stunned me and made me speechless, and I was truly glad when the dark settled over it and shut it out from my sight.

After a while there were mines, here and there, and miners' huts, and once in a while a ranch looking green and cool. I remember thinking how terrible to live in that vast loneliness with the stern beauty of the mountains always about one. Could one ever learn to feel at home there, to know the mountains, and to be in sympathy with them? Could one's mind ever grow big enough to take it all in and understand it? I am afraid a daughter of the plains would always feel herself a stranger, perhaps a prisoner. I think she would want to climb the first summit that shut her in and then the next, till she could overlook the highest and then she would not be satisfied, but must fly down to the blessed prairies, where she could breathe her native air.

You know how large a locomotive looks out on the prairies or at some railway station. How mighty it seems and what a wonderful power it has! In the mountains we had two to pull us up the steep grades and around the sharp curves. We would look at them tugging along ahead of us, working with all their little mights, and they seemed so small and near to us that we acquired a tenderness for them. We would exclaim with pleasure where a bend in the road brought them into

view, "Ah, see! There are our little engines!" They were dwarfed by the mountains, till they seemed about of our own kind.

THE DESERT.

We opened our eyes in the morning upon the desert, another lonely section of country, lonely without the compensation of beauty. Sandy plains and sandy mountains, hot and parched and barren! A very interesting thing here, through Nevada, is the Government ditch, which is nearing completion. It is for irrigation, a long, costly, beneficent stream across the desert. The water is taken from the Truckee River, an abundant, swift stream that comes down from the mountains. There are tracts in Nevada which are rich and fertile, lacking only moisture to make them fine, productive farming lands. This lack the Government ditch is expected to supply. These lands are selling at \$26 per acre, with easy terms of payment. People are taking these farms, expecting to make fortunes in a short time and then move out. Many, however, are doubtless doomed to disappointment, and many, it is said, lose their minds. I should think they would, with that horror of sand and desert about them, with no companionship save the few bony cattle, no breath from the outside world save the shrieking train once or twice a day, in the distance. As we passed one lonely shack, I saw a woman standing in the door, dressed cleanly in white. There was something graceful in the attitude and the tilt of the head against the shaky door, and I wondered at her courage.

The Little Ones

My Little Doll.

I once had a sweet little doll, dears,
The prettiest doll in the world;
Her cheeks were so red and so white,
dears,
And her hair was so charmingly
curled.
But I lost my poor little doll, dears,
As I played in the heath one day;
And I cried for more than a week,
dears,
But I never could find where she lay.

I found my poor little doll, dears,
As I played in the heath one day;
Folks say she is terribly changed,
dears,
For her paint is all washed away,
And her arms trodden off by the cows,
dears,
And her hair not the least bit curled;
Yet for old sake's sake she is still,
dears,
The prettiest doll in the world.
—Charles Kingsley.

The Praying Mantis.

As I leaned over to pull up a weed, I noticed one of the leaves moving. It widened out on one side, and then stretched up to a point. No, it was not the leaf moving, but a large insect clinging to the leaf and matching it in color so closely that it seemed a part of the plant.

At that moment a fly alighted on the blossom. Raising up the whole fore part of her body, and holding up her first pair of legs, like arms in readiness for striking, the large insect walked cautiously on her other four legs to the edge of the leaf. Then with a rapid movement she reached forward, caught the luckless fly in her arms and held him aloft in triumph. Turning him over and beginning at the head, she slowly ate her victim, legs, wings, and all.

I knew this large insect well. She was a mantis—mantis religiosus, the naturalists call her, a hard name which corresponds to the common name of praying mantis, given her in allusion to her usual attitude, body erect, arms raised and folded, as if in supplication, but in reality ready to seize her prey.

Her short, stubby wings were too small to be of much use in flying. Her abdomen was large, as if she lived high; the anterior portion of her body was long and slender and her eyes were so large and prominent that they gave her head a three-cornered look. As she turned her queerly shaped head around on her short, thin neck these great eyes gave her an appearance of wisdom which accorded well with the sagacity she had displayed in hiding on the green leaf in easy reach of the red flower, which acted as a lure to attract victims.

After eating the fly she licked her arms all over and took her spines in her mouth as if sucking them clean. Her toilet thus made, she again approached the edge of the leaf, and began to watch for another victim.

She had not long to wait. A white, woolly caterpillar ascended to the coxcomb stalk, crawling rapidly, as if on important business, and was soon with-

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in easy reach. Mrs. Mantis immediately pounced upon him, held him aloft, wriggling, in her arms, and proceeded to devour him.

Desiring to cultivate her acquaintance, I cut off the leaf, carried it into the house and laid it on the window-sill, the mantis still clinging to it and eating her caterpillar.

When her meal was finished, she began to ascend to the window to examine her surroundings. This was easy enough as she kept on the sash, but when she tried to cross one of the panes she seemed to find it hard work, for it was evident that she was not fitted for walking on glass. Putting down her long arms she reached about, feeling for something that her hooks would cling to, but in vain. Putting her "hands" to her mouth she moistened them with saliva to make them sticky, and then successfully walked upon the pane. Reaching the top of the window she found a few flies buzzing about in the corner and at once caught and ate one.

She seemed to appreciate the advantages which that corner offered as a hunting-ground, and showed no inclination to leave it, but made herself perfectly at home there. Even when I raised the lower sash of the window and kept it open, she did not leave.

Her appetite seemed perfectly insatiable; she would catch and eat flies all day long. My work-table was just inside the window, and whenever I looked up I could see her either holding a fly and eating it, or making her toilet after her meal, very much as a tidy cat would.

My work-room, where the mantis stayed, was also my bed-room, yet I rarely lighted my lamp there on summer evenings. One evening when I did so I noticed that my insect was missing. I at once concluded that she had wandered out through the open window and that I would never see her again. Next morning, to my surprise, I found her in her usual place; that night I lighted my lamp to look for her again, and again found her missing, but when I awoke next morning I found that she had returned.

This was repeated, until at last I instituted a search to ascertain where she spent her nights, and found her clinging to the under side of my table. The corner of my window was her favorite hunting-ground, and she never left the sash, except to go to her strange bed-room beneath the table, and in these two places she spent the rest of her life.

One day I found another mantis, and, feeling my pet would like to have a companion of her own kind, brought it in and placed it in the window near her. The two great insects, either of them as long as my middle finger, eyed each other suspiciously and began to sidle up together.

Coming quite close, they suddenly spread out their funny little wings and dashed at each other. Closing, like two wrestlers, they struggled for a moment, locked in each other's arms; then my old mantis, being the larger, gained the advantage, overpowered her enemy, and began to eat its head. I was amazed at such ferocity, and turned away from the scene of cannibalism in disgust. I do not know just how long it took her, but in the course of the day the gluttonous insect ate all of her fallen foe.

This is the trouble with mantises. They are the friends of man, but cannibalism prevents them from becoming numerous. The female is the larger, and family quarrels are generally terminated by Mrs. Mantis eating her unfortunate husband.

I do not often destroy even insect life, yet I felt but little compunction in assisting my mantis to catch flies and caterpillars; and from the very first she would take food from my fingers without hesitation. When I placed my hand before her and moved it up against her, she would step upon it and eat on undisturbed while being carried about.

In hot countries the mantises grow large enough to eat small birds. In former times they were regarded with superstitious feelings and never harmed.—Frank H. Sweet, in Pets and Animals.

"Bonny Prince."

The readers of THE KANSAS FARMER remember the charming serial story, "Bonny Prince," by Marion Sewell, which was published two years ago in the Young Folks' Department. A number wrote at the time inquiring if it would be put into book form. It is a pleasure to me to announce that the book is just published by A. Flanagan Co., Chicago. It is in a neat cloth binding of green and gilt and is well illustrated. Marion Sewell is the author also of "Fleetfoot," which is just

completed, and which I am sure not only the young folks but the old folks as well have enjoyed reading.

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(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

Kansas Authors.

READ BEFORE THE DOMESTIC SCIENCE CLUB, NEAR OSAGE CITY, AUGUST 2, BY NETTIE SMITH.

We love to tell the wonders of this great State of ours; to talk of Kansas cattle and Kansas hogs; of Kansas wheat and Kansas corn; of Kansas oil and Kansas gas; but to-day we talk of Kansas brains. And long after these material things have perished with the using, the thoughts that have been penned by the men and women of Kansas will live on and on forever, so much greater is mind than matter.

Kansas authors! Where shall we begin!

Suppose we head the list with John J. Ingalls. Ingalls, of whom it has been said that no adequate biography of him has yet been written, no satisfactory analysis of his character and achievements. One who knew him well called him an expert in the chemistry of words and the architecture of literary edifices. He was a poet and a lover of nature. I quote a few lines from his "Blue-Grass."

"Grass is the forgiveness of Nature—her constant benediction. Fields, trampled with battle, saturated with blood, torn with the ruts of cannon, grow green again with grass and carnage is forgotten. Streets abandoned by traffic become grass-grown like rural lanes, and are obliterated. Forests decay, harvests perish, flowers vanish, but grass is immortal."

In marked contrast to Ingalls is the one I shall next mention—our beloved Chas. M. Sheldon. Ingalls was great, but Sheldon is good. Ingalls seemed unapproachable—Sheldon is welcome everywhere, from the most splendid home to the one-roomed hovel. And yet Sheldon holds a world-wide reputation, for his books have been translated into many tongues. Of the many stories he has written the one most widely known is "In His Steps." Nor is he unknown as a writer of poetry. Here is a selection entitled "A Choice."

"Had I the power to choose, what would it be?
What would I gain or lose by liberty,
To have just what I willed,
My greatest wish fulfilled?"

"Would it be wealth, or fame, or beauty rare?
Title or vaunted name beyond compare?
Would my choice hesitate,
About what men call great?"

"Lowly my soul would bow, in humble mood,
Praying this prayer: Choose Thou for me, my God;
I am not wise to know,
The path that I should go.

"But if it be thy will to grant me this,
Content, my soul shall still earth's greatness miss,
If I may watch with Thee,
Oh God, eternally.

Next I will mention William A.

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len White, editor of the Emporia Gazette. The readers of McClure's Magazine will recall his character sketches of Folk, Cleveland, Bryan, and Croker.

He is also well known as a writer of stories, among which we find, "The Court of Boyville," "The Real Issue," and his latest, "In Our Town."

I quote the following which will give you a good idea of his ability:

"Combining a delicate humor and a vein of genuine feeling, Mr. White suggests Barrie more than any other living writer, and it may be said of his new book that it does for the daily life of a modern Kansas town just what Barrie has done for a Scotch town in "A Window in Thrums." It is through a window also that Mr. White looks out upon the one street of "Our Town," to observe the current of life that passes and to record its daily humors and tragedies. It is his sympathy that is Mr. White's most striking trait as a humorist, and linking him with Lamb and Dickens, mellows and humanizes his humorous portrayal of village characters and oddities, making them real people with a real hold upon the heart."

But do all the brains in Kansas belong to the sterner sex? Ah, no! First we would mention one not only well known for her literary work, but one dear to every club woman of Kansas—Margaret Hill McCarter. She is editing with marked success that charming monthly journal, "The Club Member." She is the author of many delightful stories, one of which, "The Cottonwood's Story," I reviewed at one of our club meetings last year.

Nor must we forget our State President of Women's Clubs, Mrs. May Belleville Brown. She is a writer of short stories, and the large and established magazines have accepted her work, which is marked by directness of expression and a purity of purpose.

A book warmly welcomed this year is Mrs. J. K. Hudson's "In the Missouri Woods." It is said that her work reveals the polish, the artistic finish of the trained pen.

And still there are many we might add to our list of Kansas authors. "An Odd Little Lass," by Jessie Wright Whitcome; "Blake Redding," by Natalie Rice Clark; "Meg of Valencia," by Myra Williams Jarrell; and the "Rhymes of Ironquill," by Eugene F. Ware.

Nor must I forget that last year we had with us in our club the sister of a Kansas poet. Mrs. Langstaff's brother, Harry Edward Mills, is a writer of merit, his style reminding me of Will Carleton. He was educated at Washburn College, afterward attended a theological seminary in Chicago, and is now a Congregational minister in Spokane, Wash. As I had the privilege of looking over his book of poems entitled, "Select Sunflowers," I copied several of his poems, and I quote one here for the benefit of those not so fortunate as I.

"We are the original settlers,
And this our commonwealth,
We ever shall claim
Both the name
And the fame,
Which the squatter has taken by
stealth.

"We came with the elk and the cactus,
Nor yet was the Indian here,
And still we remain,
Though the grain
Of the plain
Has banished the bison and deer.

"We never would yield to invasion,
Though enemies thickened around,
When corn, wheat, and rye,
Raised their high
Battle cry,
We laughed at their blustering
sound.

"We cheered when the plowman at-
tacked us,
His furrows we hailed with delight.
Wherever he trod
Every rod
Of his sod
We seized as a prize of the fight.

"The sun is our gallant defender.
We thrive in his furious glow,
Then withers the maize
In the blaze
Of his gaze,
But we only flourish and grow.

"They wanted a title for Kansas,
A title resplendent and great,
A name that should shame
Every claim
To her fame,
So they called her the Sunflower
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**THE EXTINCTION OF SPANISH
AUTHORITY FROM THE LOUIS-
IANA PURCHASE.**

(Continued from Page 841.)

ment was long in doubt. Pike's notes placed it near the Republican River, a little south of the 40th parallel, and about as far west as the present east line of Colorado. His accounts of his subsequent journey showed that he went in a southwesterly direction to the great northerly bend of the Arkansas, where he established his camp near the mouth of Walnut Creek. He gave the longitude of this well-defined point as about 200 miles west of its



Lieutenant Zebulon Montgomery Pike,

Who 100 years ago made a mem-
orable treaty with the Pawnee
Indians on soil now included in
the State of Kansas.

real location. The researches of the Smithsonian Institution in subsequently trying to trace Pike's route and to locate the Pawnee Republic disregarded his estimates of longitude, and to some extent his latitude also, and in trying to compromise what appeared to be contradictory data, placed the Pawnee Republic far east of Pike's longitude and also north of Pike's latitude.

This location was unchallenged until the remnants of a once extensive Indian village near Republic City, Kansas attracted the attention of people of Republic County. They organized a society and instituted a thorough investigation. Procuring from the State Historical Society a copy of Pike's record of his trip and description of the location, they examined the point assigned by Captain Elliott Coues, of the Smithsonian Institution. They also examined all other points that had laid claim to the distinction of having been the headquarters of the Pawnee Republic. This examination gave no support to the claim that the location was north of the 40th parallel, there being no remnants of extensive Indian villages near the Republican River north of that parallel.

Having become satisfied that the extensive village on the high lands overlooking the Republican River near Republic City was entitled to the distinction, the local society asked the State Historical Society to send a commission to examine the whole subject, and, if possible, determine where the Pawnee Republic was situated. Such commission was appointed and consisted of Judge F. G. Adams, then Secretary of the Society; Noble L. Prentiss, and E. B. Cowgill. Mr. Prentiss was unable to accompany the party on its tour of inquiry. Judge Adams and Mr. Cowgill wrote separate reports of the matter. They agreed that the location in Republic County, Kansas was correct. Attention was called to the fact that Pike's observations of latitude were dependent only on the accuracy of his use of instruments, while his estimations of longitude were dependent not only upon accuracy in the use of instruments, but also upon the faithfulness of his chronometer. That his longitude was wrong at points certainly identified, placing them too far west, was pointed to as suggesting that his chronometer had gone wrong.

Captain Coues, of the Smithsonian Institution, gladly accepted the evidence presented and conceded the correctness of the Republic County location.

The Kansas Legislature accepted the conclusions of the Historical Society's commission, and caused to be erected a suitable monument marking the site of the village.

Pike arrived at the village in Sep-

tember, 1806. He was received with great ceremony, the details of which are given in his report. September 29 he assembled the chiefs and warriors in one of the lodges and addressed them. A considerable body of Spanish cavalry had been there a few days earlier and had greatly impressed the Indians. The sovereignty of the country had passed from Spain to France and from France to the United States, but neither the Spanish in the southwest nor the Indians cared much about the bargains and sales conducted by cabinets and rulers. Pike's visit with a handful of soldiers was about the first tangible evidence the Indians had of the care of the "Great Father" for them. This young officer explained their changed relations to governments, and assured them of the anxiety of the "Great Father" for their peace and prosperity. He secured their recognition of the authority of the United States, a recognition which the Pawnees ever after faithfully maintained.

Since this is the centennial year of this important historical event, the occasion is to be properly celebrated by a four days' meeting, September 26, 27, 28, and 29, at the site of the village.

This is a celebration which should command the interest of all people residing in the Louisiana Purchase territory as marking the extinction of the last vestige of Spanish authority from this great region.

**GOVERNMENT SURVEY NOT TO BE
CHANGED.**

EDITOR KANSAS FARMER:—Last April some newcomers, wanting a new survey, called the county surveyor, who established corners, which are from 3 to 4 rods from the Government's survey. A number of dissatisfied landowners along the new survey made appeal, and as the county surveyor had not filed his proceedings, it was considered void.

Now there is talk of another survey. In March, 1893, when I settled upon my homestead, the corner-stones were then recognized as Government corners and have been since. In 1896 I began to plant trees, and have been planting both forest- and fruit-trees every year since. I set my fence about one rod from the corner-stones both ways, with forest-trees inside the fence and fruit-trees inside the forest-trees. The survey, above stated, takes in some fruit-trees. The buffalo-grass and sod were left undisturbed around one corner-stone until early in the summer of 1905. One of the neighbors had a third wild horse on the wagon, which scratched it loose. It was partly in the ground. The road on the section line had been traveled a number of years before 1893 and has been in constant use since. What proceedings would be proper for a probable new survey? SUBSCRIBER.

Wallace County.
The monuments or other markings placed upon the land by the Government surveyors where they can be found and identified are conclusive evidence of the location of corners and lines. No county surveyor is authorized to remove or to change the location of these. The fact that by accident a stone marking such a corner was displaced makes no change in the location of such corner. In such case it is well for those interested in lines determined or influenced by such corner to call upon the county surveyor to replace the stone in its original place. The county surveyor will give notice to interested persons. In so replacing the stone, the county surveyor should exercise great care to ascertain the exact location of the corner as originally established.

On the determination of the position of a line, the Kansas Supreme Court said, 28 K. 665: "A boundary line, long recognized and acquiesced in, is generally better evidence of where the line really should be than any survey made after the original monuments have disappeared."

If two or three persons have noticed the hole from which the stone was removed and swear to its identity, showing such knowledge of the facts as to give credence to their evidence, neither the county surveyor nor any court will probably question the correctness of this location of the corner.

When any survey is made or the location of any corner is determined by the county surveyor, it is well for all interested persons to be present, not for the purpose of noisy demonstration, but to see what is done and to give evidence if such is needed and opportunity is presented.

Not all county surveyors realize that lines or corners once established by the Government surveyors are not to be

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Frank Dawley
Waldo, Kansas

changed. The only authority of the county surveyor with reference to these is to find them—i. e., to ascertain where they were placed by the original Government survey. Should any county surveyor undertake to change the position of any such line or corner, an appeal should be taken as provided in sections 27 and 28 of chapter 29, General Statutes of Kansas. Notice of such appeal must be served on the county surveyor within thirty days of the filing of his report. In case of appeal, it will be wise for those dissatisfied with the county surveyor's work to employ an attorney to prepare and attend to the case for them.

SOUTH AFRICA LEARNING AMERICAN METHODS.

William MacDonald, representing the Department of Agriculture of the Transvaal, South Africa, visited Kansas last week. He is on a tour of inquiry for information that may help to solve the problems of farming and stock-raising in a country which presents peculiar difficulties in addition to those with which the frontiersmen in Kansas were confronted. The rainfall in the Transvaal varies from almost nothing to moderately liberal. In most parts the moisture needs to be carefully conserved. There are biting insects, blood-sucking insects, and insects devoted to various peculiar forms of insect industry. Among the most serious insect pests are the ticks, which produce a destructive disease of cattle similar to the Texas fever which prevails in this country. The inferior native cattle are immune, but all well-bred cattle are affected. By fencing large pastures and excluding all cattle from them for fifteen months, the ticks are exterminated from the enclosure. Good cattle may then be introduced to this immune pasture with safety. Another insect produces a deadly disease in horses and mules. The Government bacteriologist has succeeded in making mules immune by inoculation with an attenuated form of the disease. This was a great surprise to the Boer farmers, but they are quick to benefit by the help rendered by science. Horses so die under the immunizing process; so that it is likely that until further advances shall have been made by the scientists, South Africa will have to depend upon foreign sources of supply for mules.

Mr. MacDonald spent considerable of his time with Secretary Coburn and Assistant Secretary Mohler. He was much interested in the subsurface packer manufactured by the Topeka Foundry. His inquiries about the various implements used in the preparation of the soil, the kinds of wheat adapted to a dry climate, and the various farming problems peculiar to the sub-humid regions showed a lively interest in the progress of the recent past in the short-grass country. He went from Topeka to Manhattan and will probably visit the Fort Hays Branch of the Kansas Experiment Station.

We shall expect to hear of good results to South African farming on account of Mr. MacDonald's visit.

A SNAP FOR FARMER BOYS.

Beginning on December 27 and lasting until January 5 next, there will be held at the Kansas State Agricultural College, at Manhattan, a series of the most important meetings ever held in the State. It may be called a nine-days' institute. This institute will include, in its various sessions, the boys' corn contest, stock and stock-judging, corn and corn-judging, and then the annual meetings of the Kansas Corn-Breeders' Association, the Kansas State Dairy Association, the Kansas Good Roads' Association, the Kansas Poland-China Breeders' Association, the Kansas Berkshire Breeders' Association, the Draft-horse breeders, and the Aberdeen-Angus breeders.

What a treat this will be. A visit to the beautiful agricultural college, which is the wonderland of Kansas, with nine whole days in which to see the sights and attend all these meetings; what would you not give for this privilege? It is worth working for, is it not?

Now, THE KANSAS FARMER is very much interested in these meetings and it is also very much interested in you. It proposes to give you a chance to attend these meetings, visit the college, and have the time of your life without costing you a cent. It is this way:

Any farmers' son in Kansas, who will get up a club of new subscribers for THE KANSAS FARMER at the introductory rate of 50 cents for each new subscriber to the aggregate amount of \$20, before December 31, 1906, will be given a free trip to Manhattan and

return to his home, and have his board bill paid in Manhattan during the nine days of the institute.

Write to The Kansas Farmer Company, Topeka, Kans., for full instructions, sample copies, and blanks.

SCHOOLS REOPENED AT SAN FRANCISCO.

One of the great problems at San Francisco has been the reestablishment of the schools. Out of eighty-three school structures, thirty-four lay charred and blackened ruins. The others were occupied as emergency hospitals, Red Cross relief headquarters, police headquarters, food stations, sewing houses, etc. Some schools had been held in tents, but a great opening took place on Monday, July 23, three months and five days after the great catastrophe. One week later the attendance had grown to 29,000.

With the true Western spirit which has been so much in evidence, the summer months, usually devoted to vacation, are being used to make up the time lost from school. Very soon the chasm burned in the history of San Francisco by the earthquake, and burned bigger by the fire, will be as a thing of the past, as a tale that is told, a reminder of the time when the great city took on her truly metropolitan characteristics.

"How to Choose a Farm" is the title of a book just issued from the presses of The Macmillan Company, New York price \$1.75. The author is Thomas F. Hurst, professor of agronomy in Cornell University. The subject is treated in the plain, scientific way for which Cornell professors are justly noted. While persons may disagree with some of the author's positions, none will find difficulty in determining what his teachings are. The book is intensely interesting and will be found valuable to every owner of a farm, as well as to those who are planning to buy.

Bonny Prince For Your Boys and Girls.

Some months ago THE KANSAS FARMER published a serial story called "Bonny Prince, the Autobiography of a Collie Dog." Another story by the same author has just been completed in this office. This talented young lady is able to get into the closest sympathy with animals and trace their experiences with all kinds of people and all kinds of circumstances with rare fidelity. The stories are not only absorbingly interesting, especially to boys and girls, but they are healthy in sentiment and tone.

"Bonny Prince" has just appeared in book form from the presses of the A. Flanagan Company, Chicago. THE KANSAS FARMER has arranged to send this book in handsome cloth binding to any subscriber on receipt of 30 cents at this office. It is good to place such literature in the hands of the boys and girls. The elders, too, will read it with pleasure and profit.

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Table of Contents

Alfalfa plants, lack of bacteria on... 843
Apples, picking, packing and marketing... 845
Arkansas State Fair... 846
Blister-beetles on potato-vines... 844
Broom-corn, questions about... 843
Cadmus Grange... 860
Carbondale Grange... 860
Cooking, summer... 848
Corn, the stand of... 841
Doll, my little (poem)... 850
Egg-laying contest, State... 857
Elder brother, the (poem)... 849
Farmers of the country, to the... 860
Farm management... 844
Farm notes... 845
Flax, questions concerning... 843
Gas-engine for farm use, the... 842
God's way (poem)... 848
Government survey not to be changed... 852
Hog-cholera, treatment for... 846
Kansas authors... 851
Kitchen conveniences... 849
Labor, the dignity of... 848
Lice and mites... 857
Memoriam, in... 860
Milk, character, composition and food value of... 854
Parents and children... 848
Poultry pointers... 857
Poultry show, special premiums for... 857
Praying mantis, the... 850
Prevention of transmissible diseases of swine, the... 846
School reopened at San Francisco... 853
Seed-wheat and seed-rye... 843
Seed-wheat for Eastern Kansas... 843
South Africa learning American methods... 853
Spanish authority from the Louisiana Purchase, the extinction of... 841
Timothy and clover... 843
Veterinary department... 856
"Way out West"... 848

The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of The Kansas Farmer. Kindly give the age, color, and sex of the animals, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply all letters for this Department should give the inquirer's postoffice, should be signed with full name and should be addressed to the Veterinary Department of The Kansas Farmer, Topeka, Kans., or to Dr. C. L. Barnes, Veterinary Department, Kansas State Agricultural College, Manhattan, Kans.

If in addition to having the letter answered in The Kansas Farmer, an immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across top of letter: "To be answered in Kansas Farmer."

Poll Evil and Fistulous Withers.—I have a 3-year-old filly that never had been worked. She has a swelling on her withers as big as my hand and another one two inches lower on the left side nearly as large. There is no soft place on either one. We first noticed them about May 1, and the swelling was very light then. In ten days the swelling was as large as now and she did not like to put her head to the ground. I then put her up and fed her grass in a cart and put a coal-tar blister on about twice a week. The blister was prepared by a man who told my uncle that he had experience in the Nebraska Experiment Station. The swelling seemed to go down and then came back again. When the blister was all used, I began using turpentine once a day. She is very uneasy after each treatment. The blister is taking effect but the hair is not coming off. I have used the turpentine about ten days and I think the swelling is not changing. She will stand to let me rub the parts with a cob after pouring on the turpentine. When I turn her loose she wants to roll to rub it. The hair is growing all right. I imagine that the treatment is doing her no good. Otherwise she is in good condition and lively.

Hiawatha, Kans. C. A. B.
 Answer.—We are sending you a press bulletin on poll evil and fistulous withers which I trust you will find will give you the necessary information in successfully treating your animal.

Ruptured Colt.—I have a black mare colt, 3 months old, that is ruptured in the navel. Has an opening about the size of a dollar. Will you please tell me what to do, or shall I get a veterinarian to look after it? O. E. S.
 Norton, Kans.

Answer.—I would advise you to employ a competent veterinarian to look after your colt that is ruptured.

Lumps on Horse's Jaw.—I have a horse, 7 years old, that has a lump on his upper jaw, which was caused from a bad tooth that a veterinarian took out some time ago. I used a blister two different times, which reduced the lump some but not very much. The lump has been on the horse for five years. I also have a brown mare, 3 years old, in good flesh and hair in good order, that is full of lumps. I never have given her anything and wish you would give a remedy if possible. T. J. J.
 Soldier, Kans.

Answer.—The question is whether you will be able to remove the lump from your horse's jaw from the fact that it is of such long standing and that the blisters have failed to remove it. There may be a chronic thickening of the horse's bones which will prevent the lump being reduced.

Thrush in Horses.—Thrush is a disease of the foot which is recognized by an excessive discharge of ill-smelling matter from the cleft of the frog. Thrush is caused most commonly from the filthy condition of the stable in which the animal is kept. Mares are more liable to have the hind feet affected, when filth is the cause, while geldings and stallions develop the disease more readily in the fore feet. Hard work on the stony, hard, and rough road may start the disease, as may also the changing from dryness to moisture. Some animals are simply predisposed to the disease, especially if they have contracted heels, scratches, and navicular disease.

The symptoms of thrush are, at first simply a slight increase in the moisture in the cleft of the frog, the discharge being very offensive. The water discharge changes in a short time to a thick, pus-like material which soon destroys the frog, and the foot becomes extremely sore. The patient becomes lame and the foot feverish.

Treatment.—Thrush is treated best by cleanliness, the removing of any of the above causes so as to return the frog to its healthy condition; the diseased and ragged portions of the horn should be cut away; a pledget of cotton pushed down in between the cleft

of the frog to remove the pus is very beneficial; then the cleft of the frog should be cleaned out with hydrogen peroxide, using it the full strength; after this pack the cleft of the frog with calomel, and if the calomel can not be retained by pushing some cotton in between the cleft of the frog, it may be necessary to put a bandage on the foot.

Preventive treatment consists in keeping the stable clean, free from the accumulation of litter and urine; keep the feet in a healthy condition by packing them from time to time in antiphlogistine or blue clay.

Ailing Steer.—I have a yearling steer that since early in the fall acts as if he had been foundered, but am positive he has not; he walks stiff in fore legs; when the least dirt gets into his hoofs, he can scarcely walk. Has a good appetite and is not losing flesh. What will help him?

Answer.—A poultice of bran put on the affected feet of your steer will, I believe, remove the soreness. There may be a bruise at the heel; if there is, the poultice will soften the parts and allow the pus to escape. You may need to put the poultice on for several days; a gunny-sack is generally the best thing to use. Cut the corners of the sack down toward the center, leaving it intact for the foot to stand on. Then the cut ends must be used to tie around the leg just below the ankle to hold the poultice on.

Pigs Out of Condition.—I have a bunch of shoats (spring pigs), and about two or three weeks ago one of them had something the matter with it. The first noticeable symptoms were signs of uneasiness in its hind legs. While it was standing it would jerk its legs up as if they hurt. It gradually grew worse until it became so weak in its hind legs that it could scarcely stand. It has a good appetite all the time. The pigs have been fed on rich swill and corn and lately I have been feeding them green cane. Another one is starting out just like the first one. What do you think is the matter with my pigs and what would you recommend giving them?
 Iola, Kans. W. C. C.

Answer.—I think you are feeding your pigs too much fattening food. We are sending you a bulletin on Some Trouble in Swine, which I trust will give you an idea of the trouble.

Chronic Indigestion.—I have a 12-year-old black mare that has been troubled with irregular sick spells ever since we bought her four years ago and probably before then. She has every symptom of colic but does not bloat. Will roll, lie down, and get up frequently. Will lay on stomach with feet out, bite at stomach and lay stretched out on one side. Would like to know what ails her, and what to do for her. Have tried a good many remedies. M. J. S.
 Curtis, Okla.

Answer.—I would advise your securing from your druggist 8 ounces eucalyptol. Give 2 ounces of the eucalyptol in 1/2 pint of raw linseed-oil every two hours until you have given two doses when the animal shows these spells, then give every six hours until you have given contents of the bottle. I think the trouble is chronic indigestion. You should feed carefully and at regular intervals. Do not give the horse exertion after a hearty meal.

Fistulous Withers.—I have a mare with fistulous withers that commenced to enlarge about a year ago and broke on one side a few days ago. The other side looks as though it would break any time. I have never used any medicine on it at all. The mare is 14 years old and suckling a mule. Please send me your treatment or bulletin on fistulous withers. N. S. B.
 Kirwin, Kans.

Answer.—We are mailing you a press bulletin on poll evil and fistulous withers, which I trust will give you the desired information in successfully treating your animal.

Horse With Heaves.—As I have a horse just taking the heaves, will you please tell me what is the best to do for him? J. W. C.
 Florence, Kans.

Answer.—I would advise you to feed your horse very little hay, and moist feed should be given three times daily. The feeding will do more toward curing your animal than medicine.

Fistula.—I have two mares with the fistula, one a 3-year-old filly that had a hard lump on her shoulder blade before she had ever been worked. I used caustic balsam on it for a while, but it has broken now. The other horse, a sorrel 9-year-old mare, has been worked all summer and has swollen on top of withers in the last three weeks. Have been using caustic bal-



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Never before have there been such low rates to so many of the desirable resorts as there are this year. The following list contains rates only to a few of the more important of these. If you want rates to other points, give me their names and I'll quote lowest rates to those or the nearest place.

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Chicago, Ill., Aug. 11, 12, and 13. Limit Aug. 22.....	10.40
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St. Louis, Mo., daily to Sept. 30. Limit Oct. 21.....	12.70
Milwaukee, Wis., Aug. 11, 12, and 13. Limit Aug. 23.....	13.40
Minneapolis, Minn., Aug. 11, 12, and 13. Limit Sept. 1.....	10.80
Los Angeles, San Francisco, Cal., daily to Sept. 15. Limit Oct. 31.....	60.00
Grand Canyon of Arizona, daily to Sept. 15. Limit Oct. 31.....	55.00
Denver, Colorado Springs, Pueblo, Colo., daily to Sept. 30. Limit Oct. 31.....	17.50
Asbury Park, N. J., daily to Sept. 30. Limit Oct. 31.....	58.50
Long Branch, N. J., daily to Sept. 30. Limit October 31.....	53.45
Ocean City, N. J., daily to Sept. 30. Limit Oct. 31.....	54.45
Cape May, N. J., daily to Sept. 30. Limit Oct. 31.....	54.45
Kingston, Ontario, daily to Sept. 30. Limit 30 days.....	36.00
Montreal, P. Q., daily to Sept. 30. Limit 30 days.....	36.00
Quebec, P. Q., daily to Sept. 30. Limit 30 days.....	38.65
Toronto, Ontario, daily to Sept. 30. Limit 30 days.....	30.90
Halifax, N. S., daily to Sept. 30. Limit 30 days.....	60.50
Alexandria Bay, N. Y., daily to Sept. 30. Limit 30 days.....	36.05
St. Lawrence, N. Y., daily to Sept. 30. Limit 30 days.....	36.05
Thousand Island Park, N. Y., daily to Sept. 30. Limit 30 days.....	36.05
Bar Harbor, Me., Aug. 8, 22; Sept. 5, 19. Limit 30 days.....	43.05
Bellows Falls, Vt., Aug. 8, 22; Sept. 5, 19. Limit 30 days.....	36.05
Fabyan, N. H., Aug. 8, 22; Sept. 5, 19. Limit 30 days.....	36.50
Old Orchard, Me., Aug. 8, 22; Sept. 5, 19. Limit 30 days.....	39.28
Concord, N. H., Aug. 8, 22; Sept. 5, 19. Limit 30 days.....	36.05
Portland, Me., Aug. 8, 22; Sept. 5, 19. Limit 30 days.....	39.00

*With limit of 15 days, \$2 less.

You may avoid the summer's heat by going to some one of these resorts. Why not let me know your plans? Pullman sleepers, free chair cars, and Harvey meals via Santa Fe.

**T. I. KING, City Passenger Agent,
The Atchison, Topeka & Santa Fe Ry. Co.,
Topeka, Kansas.**

sam on it also, but it has not broken. Please answer through THE KANSAS FARMER or send me press bulletin on fistula and poll evil. O. S. Braymer, Mo.

Answer.—We are sending you by mail a press bulletin on poll evil and fistulous withers, which I trust will be helpful in curing your animal.

Pigs Out of Condition.—Will you kindly inform me what is the matter with my pigs. Have lost seven weighing about 75 pounds. They get sick and won't eat and finally get the thumps and cough. I opened one and found worms in it ten inches long and about the size of a rye straw. The pigs have plenty of pasture and water. I have not been feeding them much corn and give oats often. Please let me know what to do for them.

Hiawatha, Kans.

W. L.

Answer.—We are sending you a press bulletin on "Some Troubles of Swine." You had better have the formula filled, which is advocated by the Government and feed that to your pigs.

Colt's Leg Swollen.—I have a valuable colt about 2½ months old. About six weeks ago a place on his left fore ankle was skinned about the size of a half dollar. It never showed any signs of healing, although it did not seem a serious matter until about ten days ago, when it began to swell and the colt could not use the foot. For about a week the ankle has been swollen very large and is quite hard. Considerable swelling extends up the leg, and the sore has increased in size with a proud-flesh growth on one side about one inch in diameter. This, with other granulations, is raw and bleeding. I have been trying to soften it down and reduce the swelling by hot bran poultices but results, if any, are slow. I opened a point just above the sore this morning and a little thick pus ran out. Each morning I wash the sore with water and a little carbolic acid. The colt is in good flesh and while seeming to suffer considerable pain, nurses from its mother and eats a little. There is no competent veterinarian near enough to call, so will you please give me some advice regarding the best method of treatment? L. M. C.

Answer.—I would advise your reducing the swelling from your colt's leg, first by using a poultice of thermofuge or Denver mud. If there are any pockets containing pus, they will need to be opened before the swelling will be entirely reduced. As soon as the swelling is reasonably gone from the parts, pencil the superficial granulations with silver nitrate and then apply daily to the sore parts 1 ounce each of tannic acid, boracic acid, acetanilid, and iodoform.

Recipe for Hoof-Grower.—I have lost my recipe which you gave us last winter for a hoof-grower, and I am in need of it for my horses' hoofs. Will you please send me the recipe? Dighton, Kans. L. S. M.

Answer.—We are sending you a recipe for hoof-grower which you requested in your letter of the 2d inst., which is as follows: 1 pound Burgundy pitch, 1 pound non-salted butter, 1 pound vaseline, 6 ounces pine tar. Mix together, stir until cool, and apply to hoof daily.

Hog-Cholera.

Hog-cholera is a transmissible disease among swine, caused by a germ, the bacillus cholerae suis. The symptoms of the disease are high fever, diarrhea, spasms, labored breathing, and congestion of the skin. The appearances on post-mortem examination are hemorrhages of the sub-mucous and sub-sirous connective tissue, in the lymphatic glands, and in various organs. There are ulcers formed on the mucous membrane of the intestines. The lungs are usually inflamed.

The bacilli may be found in all of the organs of hogs affected with the disease, and especially in the spleen where they are associated in irregular colonies similar to the typhoid bacillus. The germ is also found in the intestinal discharge of the affected hogs. The germ may be found in the soil and water contaminated by the diseased hogs.

When an outbreak of hog-cholera occurs, the healthy hogs should be separated from the sick and the dead hogs burned. The infected pens should be limed and feed-troughs disinfected with a solution of 10-per-cent carbolic acid. No one should go upon the fields or into the pens where the sick animals are, and then go to another farm where the disease has not appeared. Dr. Salmon believes that a particle of earth the size of a mustard-seed from an infected farm is sufficient to start an outbreak that will destroy a herd of swine. A particle of that size may be carried upon the shoes of a visitor, upon the foot of a dog or other animal,

upon a wagon wheel, or in a multitude of other ways. It is advisable when there is reason to fear hog-cholera to keep healthy hogs in a small enclosure, which should be as dry as possible and disinfected once a week with air-slaked lime or a 5-per-cent solution of carbolic acid. The germ is destroyed by moist heat at 58° C. in fifteen minutes. The germ may live in water for two or four months and in soil for two or three months.

Glanders.


Glanders is a contagious disease of horses, mules, and asses. It is rare that the disease is transmitted to man. The germ causing the disease is the bacterium mallei. The affected animals have ulcers on the mucous membrane of the respiratory tract and an enlargement of the lymphatic glands on the inside of the lower jaw. The glands appear fastened to the bone. Sometimes the skin is affected; the disease is then called farcy. Nodules called farcy buds form on the legs and body. These nodules soften and discharge pus. The germ of glanders is found in the respiratory tract, and also in the discharges from the nose. Recent nodules may contain the germ. In the blood of glandered horses the germ is sometimes found.

Every precaution should be taken to prevent the spread of the disease. Public drinking troughs are fertile sources of transmitting the disease. Harness which has been on glandered horses should not be used on healthy horses until it has been thoroughly disinfected with a 10-per-cent solution of carbolic acid. The stall in which a glandered horse has been should be cleaned thoroughly and all litter burned. Old pieces of boards should be removed and burned, especially any about the manger, which are likely to have been infected from the nasal discharges. The woodwork of the stall should be disinfected with a 1 to 500 solution of corrosive sublimate and repeated in ten days. A week after the second disinfection, the stall should be whitewashed. The floor of the stall should be limed, and healthy animals should not be allowed in the stall for at least a month after it has been whitewashed. If a glandered horse has been drinking from a common trough, the water should be let out and the trough washed with boiling water and then disinfected with a 10-per-cent solution of carbolic acid. Animals suspected of having glanders should be watered from a tub or pail not used by healthy horses. They should be placed in a building by themselves and not allowed with healthy horses. They should remain quarantined until tested with mallein. If they have glanders they should be destroyed immediately as there is no cure for the disease.

Mallein is obtained from cultures of the glanders bacillus grown for a suitable length of time. It is like tuberculin, comprising substances in the bodies of the germs and also soluble products, not destroyed by heat, also some substances derived from the medium. Glycerin bouillon is now generally used for growing the germ. After a culture has been growing for three or four weeks, it is sterilized in an autoclave at 115° C. or by steam at 100° C. on successive days, thus killing all the glanders germs. It is then filtered through a Chamberland filter. The filtrate constitutes the fluid mallein. The dose of mallein for a horse is 1 cubic centimeter. A hypodermic syringe is used to inject the mallein just beneath the skin. The place that is most commonly selected for injecting the mallein is on the neck, just in front of the shoulder.

The method of procedure in testing a horse for glanders is as follows: The temperature of the animals to be tested should be taken every two or three hours the day before the test. This is to determine the normal temperature of the animals. At about 10 p. m. of the same day the mallein should be injected. On the following day, beginning at 6 a. m., the temperatures should be taken each hour until 6 p. m. If the animal has glanders, there will be a gradual rise in temperature reaching its maximum from eight to sixteen hours after the injection of the mallein. After the maximum temperature is reached, it gradually falls, reaching the normal about twenty-four hours after the injection. In a glandered animal there is from 1.5° to 2° or more rise in temperature. If the temperature does not rise above 1.5°, the case is considered doubtful. A glandered animal has a painful local swelling at the seat of injection, which reaches a diameter of five or six inches. C. L. BARNES.

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THE KANSAS STATE FAIR HUTCHINSON, SEPT. 17 TO 22, 1906

17 General Department's

This fair is for all the people—this includes the children. A day or two at a big fair is a most valuable experience for children. It promotes the ideal and gives them something to think and talk about, relieving the hum-drum of all-work days. This is also applicable to men and women regardless of their vocation. The 15 great races, with horses representing the best trotting and pacing blood will be worth the days spent in seeing them. The 17 General Departments represent the entire industrial occupation of the people and all is arranged upon an educational system. 700 stalls and pens filled with cattle, horses, sheep and swine will be worth the attention of stockmen and farmers of the entire southwest. The model dairy with the machine milking the cows and the process of butter making from warm milk to the finished product in the refrigerator is worth seeing. Cornet bands will furnish the music every day, carnivals and attractions of all kinds including a fine balloon ascension each day will provide amusement. The new electric railroad will carry the people right to the gates. Grounds open at night and lighted by electricity. This is the great annual social, intellectual and recreational week for the people of Kansas and everybody is invited. Competition is open to all. Send for catalogue and exhibit something. One fare on all railroads to Hutchinson. Ask your agent about it. 22 regular passenger trains daily—also special excursion trains on all roads. The State Fair this year will excel all former successes.

15 Great Races

A. L. SPONSLER, Secretary

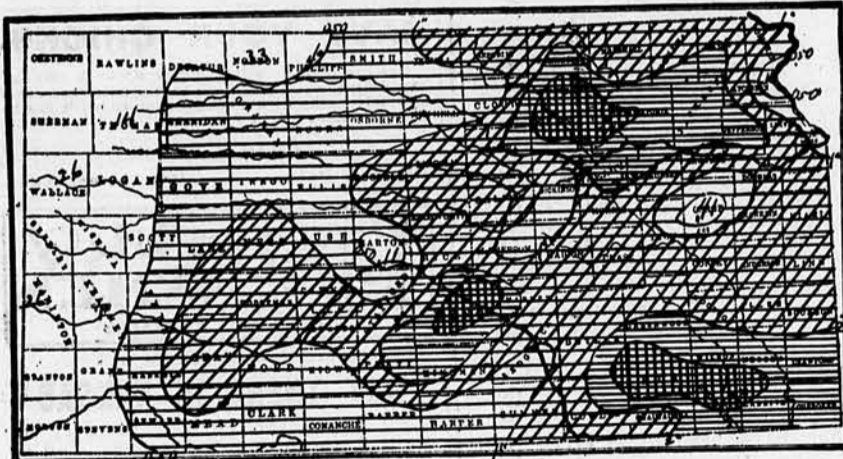
Weather Bulletin.

Following is the weekly weather bulletin for the Kansas Weather Service for the week ending Aug. 14, 1906, prepared by T. B. Jennings, station director:

CLIMATOLOGICAL DATA FOR THE WEEK

	Temperature.			Precipitation	
	Maximum.	Minimum.	Mean.	Departure from normal.	Total.
WESTERN DIVISION.					
Cimarron.	93	56	72	1.43	.....
Colby.	91	52	72	0.14	.....
Coolidge.	95	53	74	0.26	.....
Dodge City.	92	59	75	-1	0.45 -0.25
Dresden.	93	55	73	0.73	.....
Farnsworth.	93	54	74	0.73	.....
Lakin.	90	48	72	T	.....
Norton.	91	58	74	0.33	.....
Scott.	94	55	74	0.50	.....
Wakeeney.	94	56	75	0.83	.....
Wallace.	90	53	72	0.26	.....
Division.	95	48	73	0.53	.....
MIDDLE DIVISION.					
Anthony.	92	62	78	0.85	.....
Chapman.	92	62	78	0.83	.....
Clay Center.	90	61	76	3.31	.....
Coldwater.	94	63	76	0.56	.....
Concordia.	89	63	76	-1	0.54 -0.09
Cunningham.	97	58	77	2.98	.....
Eldorado.	91	62	76	1.82	.....
Ellinwood.	95	57	72	0.11	.....
Ellsworth.	95	57	72	1.61	.....
Hanover.	89	61	76	1.80	.....
Harrison.	89	58	74	1.03	.....
Hays.	91	57	74	0.60	.....
Hutchinson.	94	65	78	3.87	.....
Jewell.	91	60	76	0.69	.....
Larned.	91	62	76	1.54	.....
Macksville.	93	57	75	0.90	.....
McPherson.	93	57	75	0.76	.....
Norwich.	93	59	76	0.85	.....
Phillipsburg.	91	63	74	0.49	.....
Republic.	89	60	74	1.42	.....
Russell.	93	58	75	1.13	.....
Salina.	91	64	78	1.12	.....
Wichita.	94	62	78	-2	0.81 -0.11
Winfield.	93	63	77	1.98	.....
Division.	97	58	76	1.31	.....
EASTERN DIVISION.					
Atchison.	87	65	76	0.16	.....
Baker.	86	62	74	2.01	.....
Burlington.	94	61	76	1.87	.....
Emporia.	88	63	75	2.00	.....
Eureka.	91	63	76	2.38	.....
Fall River.	92	64	76	1.69	.....
Fort Scott.	91	60	76	1.45	.....
Frankfort.	93	64	76	1.41	.....
Fredonia.	93	62	77	0.89	.....
Garnett.	90	64	76	3.80	.....
Grenola.	97	64	78	3.05	.....
Independence.	90	65	75	1.51	.....
Iola.	86	67	76	0.81	-0.30
Kansas City.	93	70	78	1.20	.....
Lawrence.	86	67	76	1.45	.....
Lebo.	89	62	74	2.38	.....
Manhattan.	88	64	75	1.70	.....
Olathe.	93	62	76	0.41	.....
Osage City.	91	65	76	2.46	.....
Oswego.	89	62	76	1.29	.....
Ottawa.	88	64	75	1.14	.....
Pleasanton.	96	65	77	1.07	.....
Sedan.	88	65	77	1.31	+0.88
Topeka.	95	59	76	2.48	.....
Toronto.	85	65	75	2.82	.....
Valley Falls.	97	59	76	1.89	.....
Division.	97	64	78	1.34	.....

RAINFALL FOR WEEK ENDING AUGUST 11, 1906.



SCALE IN INCHES:

GENERAL SUMMARY.

The mean temperature has continued from one to four degrees above normal in the eastern counties but in the central and western portions of the State it has ranged from one to two degrees below the normal. The highest recorded temperature during the week was 97° and occurred at Cunningham and Independence, and the lowest temperature was 48° at Lakin. Fair showers have occurred in the extreme western counties and light showers in Barton County. Over the rest of the State the rainfall has been ample while in Reno County and in the northeastern and southeastern counties it was heavy.

THE INTERNATIONAL SUNDAY-SCHOOL LESSON.

(Copyright, Davis W. Clark.)

Third Quarter. Lesson VIII. Luke XVIII, 1-14. August 19, 1906.

The Judge, the Pharisee, and the Publican.

Two went to pray; or, rather say One went to brag, the other to pray; One stands up close, and treads on high, Where the other dares not send his eye. One nearer to the altar trod, The other to the altar's God.

—Anon.

Most pictorial of parables! On background of temple these antipodal worshippers live and move and have a being. Jesus deals in no abstractions or generalities, no vague ratiocination. He just personifies, incarnates, concretes truth. In the Pharisee one sees the false and fruitless; in the publican the true and successful worshiper.

How true, the Pharisee is to his name, which signifies "separatist!" He stands apart to avoid ceremonial pollution, and to be more conspicuous. He strikes an attitude. He is statuesque. He is in full regalia of talith and phylactery. He "stands up close, and treads on high." He gets as close to the holiest place as a layman dares to tread. With outstretched palms and upturned eyes, he begins his self-laudation before the Deity.

"I thank Thee"—that is a promising prelude. But the next syllable dashes us with disappointment. He does not recognize God as the Author of his good character or happy environment. He does not say, "But for the grace of God I might be an extortioner, unjust, an adulterer, or a publican." De-precation would have followed a sincere confession of grace. He would have cried, "I am not worthy of the least of these Thy benefits," but haughtiness and presumption are his characteristics. He will fain confess the publican's sins for him, as he has none of his own to speak of.

He passes now from the denial of gross sins to the affirmation of his active pieties. Though the Levitical law only required one annual fast, he abstained from food every Monday and Thursday. Though Moses only exacted a tenth of certain items in one's income, he tithes all his annual gains. So, through supererogation, God is his debtor. Superlative audacity! He poses there in absolute complacency be-

fore the holiness of highest heaven.

This publican, this inferior tax-collector, has found his way to the temple with a purpose. It was an uncommon thing to see one of this class on holy ground. Whatever their faults, and however numerous, hypocrisy was not one of them. They did not pose as saints. Here was an awakened sinner. He had come up the holy hill to get clean hands and a pure heart. He had

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The soil is rich alluvial, or made. It produces a bale of cotton per acre, worth \$45 to \$60. This accounts for its high rental value. Other crops, such as corn, small grains, grasses, vegetables and fruits thrive as well.

Alfalfa yields 4 to 6 cuttings, a ton to a cutting, and brings \$10 to \$16 per ton.

In other sections of these States, and in Texas as well, the rolling or hill-land is especially adapted to stock-raising and fruit-growing. Land is very cheap, \$5 to \$10 per acre; improved farms \$10, \$15, to \$25 per acre.

The new White River country offers many opportunities for settlers. High, rolling, fine water—it is naturally adapted to stock- and fruit-raising. Can be bought as low as \$3 per acre. See this great country for yourself and pick out a location. Descriptive literature, with maps, free on request. The Missouri Pacific-Iron Mountain System Lines sell reduced rate round-trip tickets on first and third Tuesdays of each month to points in the West and Southwest, good returning 21 days, with stop-overs. For descriptive literature, maps, time tables, etc., write to

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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.

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 Lecturer.....Geo. W. F. Gaunt, Mullica Hill, N. J.
 Secretary.....C. M. Freeman, Tippecanoe City, Ohio
- KANSAS STATE GRANGE.**
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 W. B. Obryhm.....Overbrook

To the Farmers of the Country.

While we are proud of what the Grange has accomplished in former years, and are encouraged because of its high standing and influence at the present time, our chief interest centers in the work of the future which has before it the possibilities of a record of usefulness for the order which will far surpass any of the achievements of the past. To this end we appeal to farmers in all parts of the country to rally to the standard of the Grange, and use this grand farmer's organization to develop the latent social, intellectual, moral, and political power of the rural population and make it a mighty resistless force in dispelling ignorance, eradicating evil, and by the proper use of the ballot, securing for farmers and their interests a just recognition of the law-making powers of the land.

Farmers, the Order of the Patrons of Husbandry offers you a carefully matured and tried plan of organization, the best that many years of ripened thought and experience has been able to devise. It is already a mighty factor in the affairs of to-day.

On its banners are inscribed many well-earned victories. It has never recognized defeat; when temporarily checked, the lines have been reformed and the assault renewed. In its ranks are many of the earnest men and fairest women who live in the farm homes of the nation—a grand fraternal band. Our order is non-partisan. We do not ask you to abandon your political affiliations nor does our order attempt to control your political action. It only suggests that no farmer should support men for legislative, judicial, or executive positions who are unmindful of the great foundation interest of our country.

Brother farmers, we need your help and we ask you to join hands with us. You will be heartily welcomed by all the members of the order. You shall share in the victories and honors which we have won; and you shall be joint heirs with us of all that has been gained for a struggle for a just recognition of the interests of agriculture. And when, with your help, public burdens have been equalized, when the cost of the administration of the laws shall have been reduced to reasonable proportions, when the righteous solution of the economic questions which now distract and impoverish our country shall have been secured, then will there be an assurance of real prosperity which is so much desired by all classes in this country.

ALPHA MISSER,
Past Lecturer National Grange.

Cadmus Grange No. 350.

Editor Grange Department: I promised to send you a statement of our picnic, but I have been so busy that I postponed it, finishing up our own picnic and attending the one at New Lancaster, July 26.

Our picnic was held in the grove near Cadmus, July 21, in celebration of the 83d anniversary of the organization of Cadmus Grange No. 350. We consider that we had the most successful picnic that we have ever held. The people were better pleased, the attendance was near four thousand, and our financial condition is very satisfactory.

The oldest members of our grange express themselves to the effect that Brother Mortimer Whitehead, who delivered the address of the day, was the finest speaker and made the best address in the history of our grange.

He occupied nearly two hours of time and held that large crowd from the first to the last.

While I have mentioned Brother Whitehead's speech first, it was not the first by any means. We had a very interesting program, consisting of music by the Grange band and orchestra, a thirty-minute flag-drill by twelve young ladies, also speeches and vocal music, making a very lengthy program, beginning at 10:30 a. m. and lasting until 5.00 p. m.

Our people make great account of this annual celebration. The success of this picnic assures the success of the one next year. After the close of the program, it was common to hear the following remarks: "Are you coming to the picnic next year?" "Yes, indeed, I would not miss it for anything. We expect to meet our old friends and associates that we have not seen for years."

On the evening of the day of the celebration, the grange held a private session in its hall which was filled to its utmost capacity. Brother Mortimer Whitehead delivered a lecture on the emblems and symbols of the order and exemplified the unwritten work, which proved very interesting and instructive.

BERT FLOOK,
Secretary.

Carbondale Grange No. 754.

The grange field meeting held at Wakarusa, July 25, was a grand success. We had a table, eighty-five feet long, loaded to its utmost capacity, and every person was invited to partake.

We had a fine day and we could have taken care of many more, but the grocers and butchers held a picnic at Vinewood Park on the same day and naturally drew a number from the north and east.

We had a fine program besides four good speakers who held the crowd until evening.

We are already beginning to reap the beneficial results of that meeting, as we have eight new candidates on the way and more in sight.

We expect to have a field meeting and picnic every year now. It is to be an annual affair, and we expect to make Carbondale Grange No. 754 one of the strongest granges in the county. Osage County Pomona Grange held its regular meeting at Melvern last Saturday, and the next meeting of the Pomona Grange will be held at Lyndon on the third Saturday in October.

We would like to hear from some of our neighboring granges through the grange department in THE KANSAS FARMER....

A. P. STENGER,
Lecturer.

In Memoriam.

Burlingame Grange No. 330, Osage County, is called upon to mourn the loss of one of its ablest members by the death of Sister J. P. Lyons. She was a charter member of Burlingame Grange, was elected secretary of that grange at its organization, and held that office with honor to herself and the grange to the date of her death.

She was a faithful member of the order, attended all its meetings, worked with all her might for the good of the cause, and was highly esteemed and honored by the membership.

She was elected chaplain of the Osage County Pomona Grange at its last election of officers, and will be sadly missed.

The Guaranteed Lice and Mite Destroyer and Roup Cure for Fowls



Is used by being vaporized in the hen house while the fowls are at roost. The VAPOR does the work 100 fowls treated as easily as one. Just set your Vaporizer going and it does the rest. A revelation in louse-fighting methods. The only sure and perfect cure for roup.

If your druggist don't have it, send us \$1 with your druggist's name for full outfit to any address, express prepaid.

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Death of Floral Lawn Cause, Smothered by Dandelions

The dandelion pest has had its day. For one day you can get an instrument that can be used by women and children as well as men that will pull dandelions and other noxious weeds at the rate of one thousand an hour, and leave not a drop of dirt nor a visible tear in the sod. No stooping nor bending and is a pleasure not a task to operate it; delivers automatically the weeds pulled, and your hands are not soiled, nor your back tired, no grunting nor humping around to do your work. Pulls any dandelion or weed when tap root does not exceed 16 inches in length. Send one dollar and we will deliver free at your door.

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on sale Aug. 4-5-6 first limit August 15th also on sale Aug. 11-12-13 first limit Aug. 22nd.

Minneapolis, Minn. and Return \$10.80

Account Grand Army reunion, on sale August 11-12-13 first limit Sept. 1st, can be extended to leave Minneapolis as late as Sept. 30th.

St. Louis and Return \$8.20

On Sale Aug. 4-5-6 first limit August 15th also on sale Aug 11-12-13 first limit Aug. 22nd.

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