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Agricultural Matters.

OLD TIMES AT FARMERS' INSTITUTES.

At the meeting of Institute Managers, at Rochester, New York, Mr. T. B. Terry, of Ohio, read an interesting paper on the development of the farmers' institute. We give below a portion of his description of old-time methods:

A Hard Struggle.—When the institute work first began in Ohio, it was in a very small way. The State Board of Agriculture appropriated a small sum for this purpose. The speakers received no pay, for a time. Later they were allowed enough to pay a man to do their work at home. They had to board around, too, as the local people paid all local expenses. Once, for example, the speaker was met at the station by a committee just at noon. They took him to a cheap restaurant, although there was a good hotel in town. Something to eat was placed before him, but it was in such shape that he could do little more than look at it. At night he thought surely they would take him to the hotel, and he would get a good supper. But no, he was kept in the hall talking with out-of-town people, who stayed over to the night session, until 6 o'clock. Then all hands repaired to the restaurant again. The waiter asked the speaker if he would have oysters. He said that he would, and some warm water and two or three oysters were soon swallowed, and a regular supper expected, but it never came. He learned that to have soup and a 15-cent supper was too extravagant for farmers, but he got decidedly hungry while learning.

The night session closed about 10 o'clock. The speaker was put in a carriage with a farmer's wife, while the farmer himself got in with some neighbors. After riding an hour or so, he ventured to inquire how far it might be to their home. The answer was: "Nine miles." It was a beautiful moonlight night, and the road ran along the banks of the Muskingum, and with a charming woman tucked in by one's side—it wasn't so bad. Of course, we had to get warm and chat a while after arriving at home, and it was 1 a. m. before I found myself in bed. A short time afterwards, we had breakfast, and then sat and waited an hour or so for daylight, while the wife was getting her work done so we could start early for the institute. All of which was well enough for them for a day or two, but terribly hard on the speakers, who had it six days in the week and sometimes seven.

Self Advertisers.—We were not always met by the committee. More often we had to hunt up a place of meeting, get it opened, and sometimes build the fires. Sometimes no hall had been engaged, and we had to find one. We used to go out on the streets and ask people to come in. Quite often, in one State, a boy was hired to ring a bell through the streets, and cry the meeting. Sometimes we got out little hand-bills ourselves after arriving, and distributed them. Sometimes the sheriff called out the meeting from the courthouse window. Six or eight people might come in. If we got a dozen or two, we were quite well satisfied in some places. These people, gathered in from the town partly, of course were not particularly interested often—old men, perhaps, who dropped in because they hadn't anything else to do. One speaker remarked, after trying his best on a handful of such men: "One might as well try to talk to so many saw-logs." And it did seem then that he was about right. But I have since seen 500 or 600 bright, interested people in an institute in the opera house of the same town, and I know that, in later years, the agriculture of that section was greatly improved through the interest in better methods that was worked up finally in these meetings. The speaker who made the "saw-log" remark has gone to his rest, but his works remain to bless his memory.

Farmers Held Off.—Farmers were very much afraid of the institutes at first. They suspected something was wrong, and did not take stock in book farming, or kid-glove farming, as they sometimes called it. At one meeting in a church, there were two swing doors opening from the vestibule directly into the main aisle. When speaking to a handful of people, I saw a farmer push one door slightly and peep in. Just as he decided that it wasn't a safe place for him, his little dog slipped through the door and came up to the pulpit. The speaker behind me was so much amused that he whispered to me: "Terry, don't you think the dog showed the most sense?" I have been to that place about six times since, and have seen the interest and audience increase, until the largest hall is crowded with enthusiastic men and women. Yes, there are many places where one must go an hour or so ahead of time to be sure of getting in. I have seen hundreds obliged to go home without hearing a word, a number of times. I have even had to get a ladder and climb in a window on

the stage, because every inch of standing room was so packed that one could not possibly get in by the door. Further, I have seen men outside oblige the insiders to open doors and windows on a cold day, so they could hear from the outside. They helped pay for the meeting, and proposed to have some benefit anyway. Still only a few years before, your speaker went over to a meeting at night in the same county, and found only a farmer and his wife present. After chatting with them a while, I said: "We may as well go home, as evidently there will be no audience to-night." "Go home," says the man, "why, wife and I came six miles to hear you on the wife's share." I did not say any more about going home, but got up and talked to them the best I could for an hour. If that husband has not done the proper thing since, it is not my fault.

Sowing the Seed.—This reminds me that one never knows how much good he may be doing, and never will know to any extent. We must sow the best seed possible, and hope for an abundant harvest. One terribly stormy day, I went to an institute. There were only a few men present, and apparently no interest was taken in what was said. It really seemed as though the meeting had been a failure, a waste of time and money. But a few weeks afterwards, a letter full of gratitude came from a farmer who had been there. He said his only son was at the meeting with him. The son did not think much of farming, and was anxious to go to town, and get into some work there. But his eyes were opened a little at the institute, as to what could be done on the farm, and he went home full of enthusiasm, which the father only too gladly seconded, and threw all his youthful energy into improving the old farm, and he has since gradually taken the burden from his father's shoulders and is a very successful farmer.

Local Management.—In some States, the institute is managed by a local organization. Officers are elected each year to serve the following year. They have a president, vice-president, secretary and treasurer. Sometimes a vice-president is elected from each township in the county to work up an interest at home. They have a committee, perhaps, on program, and one on music, and on the entertainment of visitors, etc. Then the State speakers go and help these officers to carry on the meeting. The officers naturally take pride in making their meetings a grand success. Local interest is aroused, and very large audiences are the rule. The State Board in Ohio felt that this was a wise plan, as it was encouraging the farmers to help themselves. The Indiana and Michigan plan is much the same. The home people are expected to take up about half the time, and I assure you many fine papers were read. The tendency of this plan is towards developing institute workers. Prof. W. C. Latta, of Indiana, always instructs the State speakers to report any local person who promises to make a good regular worker. The weak point in this plan at first was the danger of getting a poor chairman. But then a little tact on the part of the State speakers could prevent any serious trouble. One rarely sees a chairman now who does not handle the meeting as well as could be asked for. There is, however, too much of a tendency to make the meeting an entertainment sometimes. So well has this plan of encouraging the farmers to help themselves worked out, that many institutes are now run independently, without State aid. Sometimes the expenses are met by having a drawing evening program, and charging an admission fee. It is always unfortunate when a collection must be taken up to defray local expenses. Far better raise the money privately beforehand. In some States, the local people are allowed some money, by the State, to meet local expenses. This does away with the old passing around of the hat. I remember a collection being taken up once, and they got mostly pennies. The hat was passed the second time with no better success, and they were still short, and the president ordered a third trial. This time the collectors held out their hands for the money. One farmer put in a cent. The collector stood and looked at him curiously, and the farmer went on to explain that he was going out in a minute, and he wouldn't get more than a cent's worth.

Foreigners Supply His Wants.

An Arkansas paper portrays the dependent condition of the farmer of that State as follows:

He gets up in the morning and puts on a pair of socks made in New York, shoes made in Boston, pants made in Ohio, and then slips on a pair of Connecticut suspenders over his shoulders. He dips some water from a Missouri bucket with a Chicago dipper and puts it into an Illinois pan and washes his face, using a cake of St. Louis soap in the operation. He dries his face on a Rhode Island towel and roaches his hair on a Vermont comb. He then drinks Cuban coffee from an Indiana cup and saucer, sweetened with Louisiana sugar and stirred with a New York spoon.

His knife, fork and plate were made in the North, his table-cloth ditto. He eats a piece of Chicago ham fried in Kansas lard, sops his St. Louis biscuit, seasoned with Boston soda and Michigan salt, into Louisiana molasses. He wipes his whiskers on a Vermont napkin, shoves back his Michigan chair and gets up from a table from the same State. His meal was cooked on a St. Louis stove with wood chopped with a St. Louis ax and hauled on an Indiana wagon. The citizen then puts a Boston bridle and harness on a Missouri mule, gets out his Georgia plow and works all day in a field incumbered, in all probability, with a New York mortgage. He returns at night and satisfies his appetite with another imported meal, fills his Indiana lamp with Pennsylvania oil and lights it with a New York match. He then fills his Illinois pipe with North Carolina tobacco and settles down for a comfortable smoke. When bedtime comes he takes down his family Bible which was printed in Massachusetts, reads a chapter, says a prayer composed in Jerusalem, then retires to his imported covers, and is kept awake for two hours by the howls of his Arkansas dog, which is about the only home product he has in the house.

Selection of Seed-Corn.

Editor Kansas Farmer:—Our Kansas farmers may not think this the proper time to select seed-corn. Now is the best time, however, to begin such selections. The farmer should know the characters of the parent plants from which he expects to grow next year's crop. This knowledge can only be acquired by an intimate acquaintance with the individual plants when growing.

My farmer friend, go forth into the corn-field, and mark the best looking stalks in such a manner that you will know them at husking time. Study the corn-stalk until you learn its every defect. You will soon discover that the ideal corn-stalk is, comparatively, of rare occurrence.

If you desire to secure a strain of seed-corn that is suitable to Kansas conditions you will mark the stalks that are leafy, short in stature, thick in diameter at the base, tapering gracefully to the top, and that manifest a tendency to produce 2 ears. Our ideal corn-stalk should have short internodes and, as a consequence, a large number of leaves. The leaves of a plant constitute both its stomach and lungs; consequently the greater the expanse of leaf surface on any plant the more vigorously will it perform the life-functions of respiration and assimilation.

It is best to choose individual corn-stalks from portions of the field where the corn is not crowded. Every farmer knows that missed spaces frequently occur in corn-fields. The stalks that stand adjacent to such missed spaces will have greater opportunity to get an abundance of light and food than stalks in the more crowded portions of the field. Mark the best looking stalks in such favorable localities and when you husk your corn you will find that you have seldom been mistaken in your judgment. A good method of marking promising stalks is to cut off the tassels.

After having gone through the field and marked the individuals presenting characters of promise, the farmer can only wait until the crop is ripe, for a verification of his judgment. At husking time a barrel should be placed in one corner of the wagon-box, and the best ears from the marked stalks should be thrown into this barrel. This corn should then be placed in a dry, well-ventilated garret in shallow boxes, to be used in future for seed-corn. Samples should be analyzed for protein and a record of the analyses should be kept. At planting time the grains should be further selected on a basis of specific gravity. This can be done by any farmer in the following manner: Take about 10 gallons of cheap sorghum-molasses and add 10 gallons of water at a temperature of about 120° F. Mix the solution thoroughly in a barrel holding about 40 gallons. Add water to the solution until a glass tumbler full of the same will float about half the number of grains of corn from a sample of your seed-corn. After the solution has cooled down to about blood-heat throw a half-bushel of your corn into the barrel and stir it thoroughly, allowing it to stand for a few moments; then skim off and discard all floating grains. Repeat the operation until you have a bushel or two of heavy grains at the bottom of the barrel. Pour off the solution into another barrel and fill up the first barrel with fresh water and wash the corn. Refill and wash until the grain is free from the sirup. Now spread the corn out on a sheet to dry and I will guarantee that you have seed-corn of the very best quality possible to select from your field.

Farmer, now is the time to begin the selection of your seed-corn for next year. You can not afford to wait until the frost has killed all the leaves on the plants. At that time of the year, you can not take into consideration many of the most desirable qualities of the corn-stalk. To make



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GEORGE L. CLOTHIER.
Kansas State Agricultural College.

How to Make the Farm Pay.

Ten-dollar prize essay read before the farmers' institute at Ozawie, Kans., December 1, 1898, by John Rogers.

This is a very important subject, one on which I have placed a good deal of thought. In the first place, in order to make the farm yield the greatest profits we must endeavor to grow as much as possible on each acre. To do this, several points are to be considered. First, we should use fertilizers; we can not expect to grow a crop unless there is sufficient plant-food in the soil to give the tender plants proper nourishment. We may as well expect a boy who has been half starved all his life to become a strong, robust man, as to expect a good crop from soil in which the plant-food has been exhausted.

Secondly, the soil must be thoroughly pulverized. It may have plenty of nourishment, but if it is wrapped up in a hard clod the plant can not receive it; for instance, a child may be crying for something to eat and the mother says there is plenty of food in the safe, but it is locked up. The child may die of hunger with plenty of food in reach, but locked up. Just so in regard to the soil; there may be plenty of plant-food, but if it is wrapped up in a dry, hard clod the plant will die for want of nourishment.

Thirdly, the crops must be well cultivated (i. e., those that need cultivation, as corn for instance). It should be cultivated deep the first and second times in order to keep the soil loose and mellow; but when the plant begins to send forth its little fibrous roots care should be taken not to injure them, for they absorb the nourishment from the soil and convey it to the plant. If they are broken off by deep cultivation they can not perform their functions and of course the plant is injured.

Fourthly, it should be kept clear of weeds. We can not expect to grow a full crop if we let half the nourishment in the soil be taken up by the weeds. A great many farmers let the weeds go till they lay their corn by, then go through and cut the weeds, but then it is too late, for the weeds have then absorbed all the nourishment that they will from the soil. It will, therefore, benefit the corn but very little. The weeds should be destroyed as soon as they make their appearance, then the nourishment that otherwise would have been taken up by the weeds will be absorbed by the little fibers of the corn and add strength and vitality to the plant. And last but not least, don't stop cultivating too soon; a very shallow cultivation should be kept up as long as possible without injuring the corn, first, to retain the moisture; second, to prevent a crust from forming over the surface of the soil, which prevents the air from penetrating the soil and thus injures the crop to a certain extent.

I have now given you an idea of how the farm should be cultivated in order to make it pay. I now come to another very important point in the way of making farming a paying business; and that is in raising grasses and stock. The farm should not be confined to the raising of grain entirely, but should be changed to grass of some kind every few years in order to keep up the fertility of the soil, and to give it rest and recreation. There should also be enough stock on the farm to consume all the products of the farm. In this way everything that is taken off returns again to enrich the soil. By raising stock and considering the growth of the same there is much more profit gained than by marketing the products without feeding them. I have not discussed the kind of grasses to be used but clover is preferred because it furnishes the soil with nitrogen, which is very essential to the growing of crops.



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 SEPTEMBER 27—Hamp B. Watts, Herefords, Fayette, Mo.
 OCTOBER 14—Gus Aaron and John Bollin, Leavenworth, Kans., Poland-Chinas.
 OCTOBER 17—George Bothwell, Shorthorns, Kansas City, Mo.
 OCTOBER 18—H. C. Duncan, Shorthorns, Kansas City, Mo.
 OCTOBER 19—Thos. W. Ragsdale, Shorthorns, Kansas City, Mo.
 OCTOBER 20—John Burrus, Shorthorns, Kansas City, Mo.
 OCTOBER 28—E. E. Axline, Poland-Chinas, Oak Grove, Mo.
 NOVEMBER 1—W. T. Clay, Shorthorns, Kansas City, Mo.
 NOVEMBER 2—T. J. Young, Shorthorns, Kansas City, Mo.

THE PURE BREEDS OF SWINE.

BY PROF. THOMAS SHAW.

On the invitation of Professor Craig, of the experiment station, Iowa, the writer spent an afternoon late in November in looking over the dressed carcasses of swine in the packing-houses of Swift & Co., Chicago. The packers were cutting them up, preparatory to shipping them to Europe. The pigs had been grown at the Iowa Experiment Station, and were of the Improved Yorkshire, Tamworth, Poland-China, Berkshire, Duroc-Jersey, and Chester-White breeds. These pigs were pure bred and they had been grown for the purpose of determining the relative amount of growth at a certain age in conjunction with the amount of food consumed. The quality of meat produced is also to be determined by the verdict of the English market. The pigs were fed in the ordinary way that swine are fed in the corn belt. In other words, they were fattened on a carbonaceous diet. No attempt was made to carry out the bacon idea of growing them.

VALUABLE BREEDS.

It is not the intention or desire of the writer to in any way anticipate anything that the Iowa station may have to say on the precise nature of the experiment. But I can not refrain from saying just here, that our farmers will have to quit railing on those two English breeds, the large Yorkshire and the Tamworth. In this experiment they are going to make an excellent showing with reference to their capacity to grow. The average weight of the Improved Yorkshire was 232½ pounds and of the Tamworth 215 pounds. The breed averaging next to these was 200 pounds, and the breed lowest in weight was 175 pounds. There was some difference in their ages in favor of the heavy weighers, but the difference was less than the difference in the weights. A cry has arisen in the land about the long snout of the Tamworth, and his racing qualities, and men poke fun at the long side of the Yorkshire. It has been said that these animals are slow in maturing and that they are hard feeders, but this experiment is going to shake somewhat the faith of men in the correctness of such representation. We have not the figures as to relative consumption of food, and that is, of course, an important missing link. Professor Craig could not supply these figures at the time, but it was on his mind at the time that the difference in the cost of production was not so great as the difference in the gains.

Of course this one experiment must not be taken for more than it is worth, nor even the two experiments now concluded, this one being in a sense the duplicate of the former, but it does in some sense show which way the needle of production points. It does tend to show that the Tamworth and Improved Yorkshires can at least hold their own in growth in competition with the most famous of the dominant breeds in the corn belt. They are not razor-backs, nor are they pigs of primeval types, such as were common before the days of swine improvement began. On the other hand, they are susceptible of making rapid growth proportionate to the food given, and in addition they have in a marked degree the qualities of stamina, prolificacy and milk-production for their young.

GOOD TO CROSS.

The writer is not urging the introduction of these breeds with the view of having them supplant any of our American breeds, but rather for purposes of crossing upon the less prolific grade sows, especially in the corn belt, where their breeding qualities have been much impaired and their stamina shaken by a never-ending diet of corn. I rather urge some modification in the form of the existing breeds. The body should be lengthened and materially so, and the limbs should be strengthened by modifying somewhat the foods that are fed. In other words, our pigs should be made to have more of a resemblance to pigs of the bacon type. These changes can be made within the breeds and I am satisfied that to make them would be in line of increased profit. The objection may be made to this that such a change would require some modifications in the standards. Even so, why should

breed standards be unalterably fixed? I admit they should be but seldom changed, and never without a large majority of the members of the association approving such a change; but change should be possible and the changes which such modifications would render would be but slight; only a few words would need to be amended relative to length and width. Modification in the animal can be made without modification in the standard, and unquestionably such modification will of necessity have to precede modification of standard. But if such modification of form should ever become general without modification of standard, it would be, to say the least, inconsistent.

The difference in the length of the headless carcasses as they hung side by side was very apparent. The Yorkshires and the Tamworths were much longer than the others. In the quality of the meat for the English market the packers expressed the opinion that the Tamworths stood first. The Yorkshires were fat to a degree that was in a sense surprising for a bacon breed. But it is fair to state that as the markets in this country stand to-day the packers expressed the opinion that the Tamworth and Yorkshire meat would not sell for more than the meat of the other breeds.

The Breeders' Meeting.

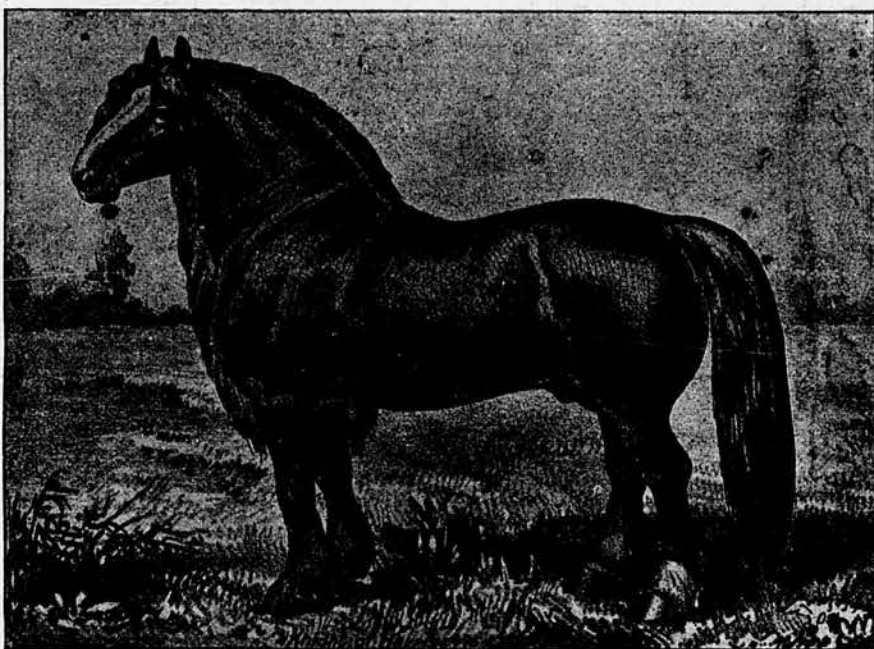
The semi-annual meeting of the Missouri and Kansas Shorthorn Breeders' Association will be held at the assembly room of the Kansas City Live Stock Exchange building on Tuesday and Wednesday, August 22 and 23. The first day's session will open at 1:30 p. m. Tuesday.

It has been deemed best to make this meeting more of a business one than was

registered and pure-bred animals but those of the general farmer, who is doubtless interested at least to that extent that the better class of beef cattle will pay more than does the use of the grade bull or the perpetuation of "the scrub."

PROGRAM.

1. Welcome address.—W. S. Hanna, president Kansas City Live Stock Exchange.
2. Response.—N. H. Gentry, president of Missouri and Kansas Association, Sedalia, Mo.
3. Personal Experience at Breeding Shorthorn Cattle.—Col. W. A. Harris, Linwood, Kans.
4. The Future Outlook for Better Beef Cattle.—B. O. Cowan, New Point, Mo.
5. Personal Experience in Exhibiting Cattle at the Fairs.—W. P. Harned, Vermont, Mo.
6. Which Needs the Attention of the Breeder First—Individuality or Color?—Ex-Gov. Geo. W. Glick, Atchison, Kans.
7. Fitting for the Show Ring—Feed and Management.—H. C. Duncan, Osborn, Mo.
8. My Experience with the Bates, Booth, and Cruickshank Blood in Crossing.—N. H. Gentry, Sedalia, Mo.
9. Care and Management of the Breeding Herd.—Chas. E. Leonard, Bellair, Mo.
10. How Fit Cattle to Secure the Better Prices in the Public Sale Ring?—John McDairmid, Kansas City, Mo.
11. Which is the Better Way to Dispose of the Surplus of the Herds, Public or Private Sales?—R. E. Edmonson, Kansas City, Mo.
12. Is it advisable to Hold a Combination Public Sale Towards the Close of the Year by Members of the Association?—O. H. Southworth, Harris, Mo.
13. What Course Should the Members,



PROSPECT FARM CLYDE STALLION, OWNED BY H. W. McAFEE, TOPEKA, KANS.

the former annual meeting held last February, hence the program that follows will be found shorter than was the former one, and it embraces more features pertaining to the betterment of Shorthorn and beef cattle-growers generally. Each subject for consideration as enumerated in the program will be introduced by a member as indicated and then followed up by the membership as each may determine for himself. There are several hotels adjacent to the place of meeting where good accommodations may be had at \$1 to \$2 per day, leaving those that desire more sumptuous accommodations the preference for the higher-priced hotels up town. Therefore the headquarters of the association will be at the Assembly Hall, where all should come and endeavor to make the meeting more successful than was the last one, which was pronounced the most successful breeders' meeting of any ever held west of the Mississippi. From replies received from notices sent out, and from personal interviews with the members and others interested in the improvement of beef cattle, the result of the gathering can not be other-wise than beneficial to all concerned.

It is especially urged by the executive committee that each member extend a cordial invitation to all interested in the improvement of beef cattle, especially those looking to the future for an improvement whether in the registered herd or on the farm, recognizing the fact that there is room for better beef animals and that the best of any of the several beef breeds always bring the better prices. This idea is rapidly gaining ground, and as our field possesses the facilities for making a class of beef cattle the equal if not the superior of any in the world, let us come together and make the most of it. This invitation extends to all interested outside of our territory, Missouri and Kansas, and it is done with a hope that a more united effort will result not only between the breeders of

Individually and Collectively, of the Association Pursue in Order to Present the Merits of the Shorthorn More Thoroughly to the Attention of the Beef Cattle Breeding Public?—C. S. Hanna, Howard, Kans.

W. P. BRUSH, Secretary.
 Station "A," Kansas City, Mo.

Sheep Throughout the Year.

By J. L. Tolton, Ontario. Second prize article on care and management of breeding sheep.

First get the flock. If it is to be pure bred see that you have the type and characteristics of the breed, and that they have constitutional vigor. There should be no culls nor ewes that are too old, for when an ewe begins to lose her teeth she is getting too old to be profitable. If it is only possible to have a grade flock, they should be as uniform as possible, and possessed of constitutional vigor, for upon these conditions depends success. When the mating season arrives look over the flock and if any are in low condition, or thin, they should be put on better feed, so that they may be gaining in strength and flesh during the breeding season. By attending to this, the offspring will be more vigorous and there will probably be a larger proportion of twin lambs. If the flock should be infested with the tick or louse, some one of the antiseptic non-poisonous sheep-dips that are now obtainable at almost any drug-store should be used.

The selection of sire used is of vital importance. He should be pure bred. He should have the type and characteristics of the breed, be robust, vigorous and of a masculine character. The time of mating depends largely on the locality. It should be regulated so that the lambs may be dropped in comfortable and dry quarters, or else not before the weather has become warm and the fields dry. It is better to apply daily some kind of marking on the sire's breast, so that he may leave his mark of service.

"In Union

There is Strength."

True strength consists in the union, the harmonious working together, of every part of the human organism. This strength can never be obtained if the blood is impure. Hood's Sarsaparilla is the standard prescription for purifying the blood.

Hood's Sarsaparilla
 Never Disappoints

This application can be conveniently put on when giving him his grain ration, which he should have daily while on service. There are two objects in this marking process: First, you will know for certain in two weeks or thereabouts if the service is effectual; second, you can keep a record of service, and if necessary make suitable arrangements for the ewe dropping her offspring. In some parts of America protection against the inclemency of the weather is not necessary, but in others suitable buildings are required. In no case need they be expensive. All that is required is that the flock may be kept dry, protected against draughts and have plenty of pure air and exercise. The flock, particularly if they are long wools, should be protected or under cover during the cold and drenching rains of late fall.

I have already observed that the ewe should have generous treatment during the fall months. This may be done by having good pastures of clover or other grasses, or providing some rape. Then during the winter give plenty of good, sweet clover hay. In localities where peas and beans are grown the straw of these crops can take the place of the hay to some extent by alternating the hay and straw, and the sheep will do better, as they like a change of feed. But in addition to this a breeding ewe should have 2 or 3 pounds of roots fed in 1 or 2 rations, increasing this quantity as parturition draws near, and after that period as much as she cares to eat. Where roots are not available, wheat bran will take their place to good advantage. In fact for increasing the flow of milk no food will excel wheat bran. It is also desirable to feed the ewe some grain for about two months before dropping her lambs. One ration of about two pounds per head is sufficient. Oats are as suitable as any, or oats mixed with peas or corn. Sometimes before the ewe is shorn she will be put on fresh and succulent grass. Before doing so, she should be what is called tagged, that is, the wool should be clipped from the hind legs, to prevent her getting dirty and nasty for the lamb to get its food. Then sheep require salt. It is better to attend to this matter regularly once a week, or what is better, to have rock salt at all times within their reach.

There is but little more to be said, only while the ewe is suckling her young, she requires generous treatment, so that the lamb may not be stunted in its growth for the want of its dam's milk. In about a week or ten days after the ewes are shorn, if any ticks are on the flock they will be on the lambs; the lambs should be dipped in some sheep-dip that will insure their destruction. Give them all the exercise convenient.

Angora Goats.

Editor Kansas Farmer:—Please publish in your paper the name and address of all parties in Kansas who have the Angora goats for sale.
 E. E. HARTLEY.

Stillwell, Kans.

This is a sample of numerous inquiries recently received. The Angora breeders will do well to take space in the Kansas Farmer's breeders' directory. C. P. Bailey, San Jose, Cal., is secretary of the Angora Goat Breeders' Association, and should be able to give information as to addresses of breeders.

\$100 Reward, \$100.

The readers of this paper will be pleased to learn that there is at least one dreaded disease that science has been able to cure in all its stages and that is Catarrh. Hall's Catarrh Cure is the only positive cure now known to the medical fraternity. Catarrh being a constitutional disease, requires a constitutional treatment. Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system, thereby destroying the foundation of the disease and giving the patient strength by building up the constitution and assisting nature in doing its work. The proprietors have so much faith in its curative powers that they offer One Hundred Dollars for any case that it fails to cure. Send for list of testimonials.

Address, F. J. CHENEY & CO.,
 Toledo, O.

Sold by Druggists, 75c.

The Farmer and the Flax.

By S. H. Stevens, Flaxseed Inspector of Chicago Board of Trade.

The testimony of the ages of the possibilities of flax has come down to us in this wise: Its adaptability to soil and climate; its clothing with equal facility wealth and poverty; its giving more and wider scope to labor to utilize than any other plant; its wealth of nutritious and fattening ingredients; its value to the arts and architecture; its place and record in materia medica; and its self-contained capacity to restore the fertility of its impoverished acres.

The fiber and the seed of flaxseed should conjointly compensate the American farmer for his labor. But trade having gained the ear of our statesmen in the matter of tariff protection by encouraging the importation of Asiatic substitutes, the fiber adjunct has passed to a state of desuetude.

The flax plant of America, no less than the buffalo and the Indian at different periods, has migrated, at the demand of appetite and suggestion of the white man, to the West and Northwest.

The cravings of the buffalo were appeased by the flora, and that of the Indian by the fauna of the plain's teeming surface.

The flax plant, with subtle instinct, sought food in the mold, where nature during silent ages had deposited its choicest mineral manures. It is the same constituents of the soil which satisfy the appetency of flax that made both the vegetable and the animal life of the Western wilds possible.

The head of the moving flax column now rests in the Upper Mississippi and Missouri valleys, "where the earth is so kind that just tickle it with a hoe (Sulky Plow), she laughs with a harvest." In that land the growth of the plant is so sure that it gives the farmer no solicitude. Neither does the rotation of crops interest him.

Men have written volumes to encourage the cultivation of the flax plant, and while they wrote it passed on to pastures new, where it could not have taken more kindly to the soil and climate had it been indigenous.

The National Government came to the aid of State and corporate organizations with science, literature, art, and millions to promote an American fiber industry which has proved to its advocates that it is a "will o' the wisp," with all its ancient alluring characteristics.

In all the years of enterprise and advancement no one has entered the field to champion the care or protection of the seed, which is the only part of the flax plant which has any practical value.

No farm crop is so in danger of loss or injury in harvesting as flax. The annual output approximates 16,000,000 bushels and the value is distributed to the hardy hands of toil. Therefore the cause appears worthy of the support of the ablest economic writers.

To put flax in a new thatched stack or barn mow (the farmer's great natural laboratory) as soon after cutting as possible, is to preserve, perfect, toughen, increase and eliminate the heating principles from the seed.

The sweat incidental to the stack or mow passes the seed to that indispensable condition necessary to safe storage. It also imparts a toughness to the seed covering and straw, which protects them from breakage and facilitates the threshing. As the fleece gains after shearing, so the seed, properly cared for, increases after being reaped.

If flax remains in the field to be threshed and droughty weather ensues, the seed will become brittle and liable to be much broken and pulverized by the machine, and when so treated it frequently sweats and heats in car or bin.

The most common and unwelcome visitor to a down-field of flax is rain. A slight shower causes the seed to lose weight. Should sunshine come and dry out the water, the seed is dark and rough and is known as more or less depreciated, field-damaged seed.

Should rains continue during harvest until the mucilage of the seed is set free, the flax should be spread on the field as thinly as practicable and remain until dry, or reasonably so.

It should be threshed from the field. No field or part of field should be considered a total loss. The very hulls of the seeds have a value and should be recovered after they have passed the "gang sieves" of the thresher or the fanning-mill. No attempt should be made to dry or store the seed—it should reach the consumer as soon as possible.

Before shipping, the seed should be brought to a uniform consistency by mixing the wet and light-weight seed with dry and weighty seed. The grade sought should be rejected, it being damaged or damp or both, and weighing from 47 to 49 pounds to the measured bushel.

At such times let no one try to ship number one seed, as he might meet with serious disappointment.

When the steer, the hog, or the poultry

ripen they should be sent to market; not so the well-protected flaxseed, as it costs nothing to feed and is earning interest and storage.

There is another matter to be considered. Most industries have been organized into "trusts," that they may more readily get the people's money, and then the people, within their grasp. The unprotected farmer is an easy mark, and will be milked as dry as possible. He should call to his aid all legitimate means and stand on the defensive.

With a two-million-acre flax crop under cover there would be no cause to throw one-half of it, largely unfit for storage, on the market, as heretofore, within ninety days and thereby court a depreciation in the price of the producers' own hard-earned property.

A Tamworth Tale.

From the Dublin Irish Field: The largest hog ever raised was slaughtered at Paddock Wood Farm, Norwich. The animal was a Tamworth boar, belonging to Mr. James Harris of the Sausage Grill restaurant, St. John's street road, Islington, the well-known pig-breeder. This huge swine was 2 years old, weighing alive 1,607 pounds, and dressed, 1,330 pounds, being 8 feet from the tip of its nose to the end of its tail. It measured 2½ feet across the loin, 2½ feet across the hams, and 5½ feet in girth. The carcass spread across the perspective of the store looks like a Titanic statue of pork personified. It also looks like the body of the great hog god embalmed and reposing in its gigantic majesty. From hip-bone to toe it measured 3½ feet, and about the same from the crest of the shoulder-blade to the bottom of the foot. The great fat jowls extend nearly two feet across. From between the ears to the tail is over seven feet. The tail itself is the smallest thing in the big proportions. It is a mere point in the air. The face of the hog is also small for the size of the animal. It is only 15½ inches long. The hams are monstrous in size, and the vast stretch of pork in the long waist is borne just above the ground by 4 comparatively small feet. The usual porker is a mere pigmy by its side.

Henry Clews on the Crop Situation.

Wheat has been the chief subject of anxiety, because of early injuries both at home and abroad. The most conservative estimates indicate a yield this year of not less than 560,000,000 bushels, possibly more, compared with 675,000,000 last year. In view, however, of the surplus left over from previous crop, it is expected that we shall have available for export at least 200,000,000 bushels against 222,000,000 bushels last year, which was next to the largest year of wheat exports in our history. It is questionable, therefore, if a larger wheat crop would be an advantage; for there is no prospect of serious scarcity in the world's supply, and a second bumper crop might be disastrous to farmers if low prices followed. As to corn, much depends upon the next few weeks, the present outlook being for a crop of over 2,000,000,000 bushels compared with 1,924,000,000 bushels in 1898. Cotton, according to an average estimate, promises a crop of 11¼ million bales, or about the same as last year. Thus, while the crop situation affords no basis for extravagant expectations, it certainly promises the farmers over a large section of the country results above the average, particularly when the better prices now realized are taken into consideration. We are at least sure of a good foreign demand for our wheat for the second year in succession. This is all that can be said of the agricultural situation.

Breeders' Annual Report.

The Kansas Improved Stock Breeders' Association has just issued from the press of the Kansas Farmer its first published Annual Report in book form. It contains an introduction by Secretary Coburn, of the State Board of Agriculture, a history of the live stock organizations in Kansas by Secretary H. A. Heath, the full proceedings of the ninth annual meeting of the Kansas Improved Stock Breeders' Association, and the consolidation of the other live stock organizations of the State with it, together with the addresses, papers, and discussions as to the various branches of the animal industry of Kansas and live stock husbandry in general.

It is the first distinctive live stock report ever issued for Kansas and is a veritable live stock manual for the State. The Report also contains the Association's Kansas Breeders' Directory for 1899. As the Association receives no State aid, but is supported entirely by its membership fee of \$1 per year, it has been decided to charge a nominal price for the annual report, as follows: Single copy, 25 cents; 10 copies, \$1.50; or 100 copies, \$10. Address all orders, or applications for membership to H. A. Heath, Secretary Kansas Improved Stock Breeders' Association, Topeka, Kans.

Berkshire Record-Breaker.

On Thursday, August 10, 1899, at Wood Dale Farm, N. H. Gentry, Sedalia, Mo., held his fourth annual sale of Berkshires and broke the record for averages of Berkshire swine at public sales, making an average of \$80.46, which, according to Col. B. F. Mills, secretary of the American Berkshire Association, is the highest average ever made at public sale.

The stock offered were exactly as described in the catalogue and were noble specimens of the breed. The attendance was splendid and consisted of representative breeders of the country. A large number of bids were sent by mail but were too low to secure a single animal. After the sale a few animals changed hands at quite an advance. Nebraska topped the sale in the purchase of the choicest sow of the litter of Charmer LIII 44526, by Baron Lee IV 33446. Four sows of this same litter brought at this sale \$591. Another litter of four sows out of Lady Lee LXII 40729, by Baron Lee IV 33446, sold for \$277. The following comprise a complete list of the sales:

BOARS.

Lord Victor 51181, S. G. Hollingsworth, Couchatta, La., \$135.
Baron Duke XXVII 50013, C. A. Stannard, Sunny Slope, Emporia, Kans., \$100.
Baron Duke XXVIII 50014, June K. King, Marshall, Mo., \$35.
Baron Duke XXX 50017, J. J. Achenbach, Washington, Kans., \$42.
Boar pig by Wood Dale Star 44500, Menzies & Henderson, Newbern, Tenn., \$35.

SOWS.

Duchess CLXXXIX 50018, Jas. Houk, Hartwell, Mo., \$55.
Lee's Artful III 36386, J. C. Walker, Smithville, Mo., \$30.
Lady Lee LXXXV 51026, S. G. Hollingsworth, \$75.
Charmer LVI 51011, M. W. Chappell, Minden, Neb., \$201.
Charmer LVI 51012, S. G. Hollingsworth, \$80.
Charmer LVII 51013, Mrs. Larry Ginter, Sedalia, Mo., \$200.
Charmer LVIII 51014, Biltmore Farm, Biltmore, N. C., \$110.
Charmer LIX 51015, Biltmore Farm, \$75.
Lady Lee LXXXIII 51024, Jas. Riley, Thorntown, Ind., \$200.
Lady Lee LXXXIV 51025, Jas. Riley, \$160.
Black Girl XXXVIII 33447, J. W. German, Wymore, Neb., \$30.
Artful Belle XXII 50021, M. W. Chappell, Minden, Neb., \$35.
Artful Belle XXIII 50022, M. B. Guthrie, Mexico, Mo., \$50.
Black Girl LIV 51006, M. B. Guthrie, \$35.
Duchess CLXXXVII 50011, B. F. Ridge, Higginsville, Mo., \$45.
Duchess CLXXXVIII 50012, C. A. Stannard, \$51.
Duchess CXCVI 50036, J. W. German, \$38.
Duchess CCI 51406, S. G. Hollingsworth, \$50.
Duchess CXCIII 50037, Biltmore Farm, \$170.
Lady Lee LXXIX 51020, Jas. Riley, \$100.
Lady Lee LXXX 51021, M. B. Guthrie, \$60.
Lady Lee LXXXI 51022, C. A. Stannard, \$67.
Lady Lee LXXXII 51023, M. B. Guthrie, \$50.
Duchess CC 51180, Thos. W. Ragsdale, Paris, Mo., \$50.
Snell's Highclere XIV 48950, M. W. Chappell, \$75.
Snell's Highclere XV 48951, Jas. Riley, \$62.

Five boars averaged \$69.40.
Twenty-six sows averaged \$80.54.

Gossip About Stock.

B. W. Gowdy, Garnett, Kans., reports that his Shorthorns are doing unusually well, and that he has a very fine lot of young calves for fall trade.

Mr. Sealy L. Brown, Coffeyville, Kans., is one of the leading and successful breeders of Barred Plymouth Rock chickens of southern Kansas. He sold over \$400 worth of eggs this season.

Wm. Rea, jr., the sheep-buyer from St. Paul, has already contracted for 50,000 head of 2- and 3-year-old wethers for September and October delivery. The price paid was from \$3 to \$3.50. The sheep will be fed this winter at St. Paul and put on the market later.

The premium list of the National Exhibition of Hereford cattle, to be held at Kansas City, Mo., October 23 to 28, 1899, is now ready for distribution by the secretary, C. R. Thomas, Independence, Mo. All entries for the show must be in not later than October 1, 1899. Further particulars will be given in the Farmer.

W. N. Winn & Son, of Kansas City, and E. H. Ware, Douglass, Ill., held a joint sale August 9, 1899, at Douglass, Ill., and sold 40 Poland-China sows at an average of \$40. Ed. Borroughs, El Paso, Ill., paid \$300 for a boar, a full brother of Winn's Perfection 2d. The 2-year-old boar, Wood-lawn Chief, was purchased by O. N. Anderson, Troy Grove, Ill., for \$110.

The Greenwood County Live Stock Protective Association, representing 40,000 head of cattle, has entered a protest against the abolishment of the feed-in-transit rate. This association claims it has increased the cost of marketing all cattle shipped in from the West and South and fed there \$22 per car over the rates of 1897 and 1898. A committee was appointed to confer with other live stock associations and with the railroads in order to secure a reduction.

"The recent rains in Kansas extended to the Colorado line and there will be corn to burn in Kansas this year," said a cattleman who has just returned from a business trip through the State to the St. Joseph Journal man. "Ears of corn will be long enough to pile up like cord wood and there is a concerted movement of farmers and feeders already to lay in their supply of stock cattle, but the most of them are conservative and are buying only where they can obtain bargains. The consensus of opinion among these cattlemen is that

prices will go no higher than at present and the probabilities are that values will show some depreciation as soon as the full movement commences. None of them are calculating that prices will exceed \$4.00 to \$4.50 for fair to good qualities on the markets and they believe that \$4.75 will be the outside figure for fancy grade steers."

With a big corn crop in the States of Kansas, Nebraska, Iowa, and Missouri, Colorado cattle and sheep will be in demand this fall, especially cattle, remarks the Colorado Range Ledger. Good 2- and 3-year-old Colorado native steers ought to bring not less than 4 cents a pound as feeders, and we would not be surprised to hear of 4½ cents being paid in many instances before the season is over. If these prices are obtained the cattlemen will have no reason to complain, for, as an old-time cattleman remarked to us recently: "If a cattleman can get 3½ cents a pound or better for his steers he has one of the most profitable businesses in the State."

The feeders of northeast Kansas are coming very numerous to Abilene to buy cattle to put in the yards as soon as the big corn crop is harvested. They are taking options on all that are suitable and find the supply too scarce. The feeders of central Kansas are arranging to ship many from the Territory and the Panhandle. Several will feed in the Territory. President White, of the State Cattlemen's Association, says that corn in Oklahoma is so abundant that it is likely to go as low as 12½ cents a bushel, and that feeders will shove in thousands of cattle to feed it. The feeding in the vicinity of Abilene will be the most extensive ever known there, and there will be plenty of grain for the purpose. Rains have put the soil in fine condition, and the corn is considered out of possible danger by the farmers. It is conceded to be the best crop ever grown in this county.

The Snoddy Remedy, as a cure and preventive of hog cholera, recently tested in Missouri, made a still more wonderful showing than the test made in Nebraska and noticed in this paper. It was made on the farm of Lee Cary, Bird's Point, who says: "I had about 100 head of hogs, all sizes and ages, to take a very malignant type of cholera. I had them in a backwoods lot and did not know that they were seriously sick until I had lost 30 or more and all the others were sick—many of them very sick. On the 15th of July I telegraphed Dr. J. H. Snoddy, of Alton, Ill., to come at once and treat the herd for cholera. Dr. Snoddy got here the next day. He pronounced 23 in a hopeless condition, and beyond the stage of the disease that he claims to cure. We began the treatment on the 17th and have cured every hog that was able to take the medicine. We only lost 11 of the hopeless lot and saved all of the others. There were sows with young suckling litters. The sows got sick first and their milk dried up, and the the pigs took the disease. Their eyes got sore and mattered so badly that at least one-half of them went stone blind. We cured every one of them and put them in thrift."

IMPORTANT HEREFORD SALE.—All beef cattle-growers, especially Hereford breeders, will doubtless be interested in the public sale announcement of high-class registered Hereford cattle, that will appear later in the Kansas Farmer, by the well-known breeders, K. B. Armour, Kansas City, Mo., Jas. A. Funkhouser, Plattsburg, Mo., and John Sparks, of Reno, Nev. The Armour draft will consist of 50 head, several of which, both males and females, will be imported animals. Mr. Funkhouser will send in 30 head and Mr. Sparks 20 head, making an aggregation of 100 especially selected animals. The excellence both in breeding and individuality of the Missouri bred cattle needs no introduction to the Hereford public and on the other hand the cattle bred and owned by Mr. Sparks have won a first-place record in the far West and they strongly attest what the Hereford can do in Nevada. All three of these gentlemen will have representatives in the October show and sale at Kansas City, affording the prospective buyer an opportunity to judge something concerning the merits of the cattle that will go in the December sale. Consult the announcement and govern yourselves accordingly.

Price of Chester Whites.

Mr. D. L. Button, North Topeka, Kans., writes to the Farmer as follows: "I have a letter from a party at Hiawatha, Kans., under date of August 8, inquiring the price of a pair of Chester White pigs, but the writer neglected to sign his name. He says he saw the advertisement in Kansas Farmer. If you will call attention to this matter I will be much obliged."

Central College at Fayette, Missouri, was founded in 1857. Its standard of scholarship is unsurpassed. A young man who took the A. B. degree at Central in June, 1898, took the M. A. degree at the University of Chicago the following year. At Yale and other great universities of the East, Central men have won distinction. The college has in buildings and endowment, four hundred thousand dollars. It has well equipped libraries, laboratories, gymnasium and athletic grounds. The Cupples Hall, now being erected at a cost of twenty-five thousand dollars, will be the finest college dormitory in the State. Here young men may obtain board at about two dollars a week. Central College has also an excellent business course. Full information in regard to the college may be obtained by sending to President E. B. Craighead for catalogue.

WEEKLY WEATHER-CROP BULLETIN.

Weekly Weather-Crop Bulletin of the Kansas Weather Service, for week ending August 15, 1899, prepared by T. B. Jennings, Section Director:

Topeka, Kans., Tuesday, August 15, 1899.

GENERAL CONDITIONS.

A hot, dry week. Fair showers fell in Haskell and Kearney and northeastward to the Nebraska line; in the southern counties from Harper to Labette; in Kingman, Sedgwick and Reno, thence northeastward into Dickinson, Shawnee and Jefferson; and in Jackson, Marshall, Nemaha, Brown and the northern parts of Pottawatomie and Doniphan. Light showers scattered through many of the other counties.

RESULTS.

EASTERN DIVISION.

Early corn is made and being cut in Chautauqua and Woodson, is ready to cut in Labette, is hard in Wilson, is beginning to dent in Morris, and is hardening in Leavenworth; Atchison, Chautauqua and Jackson give very flattering reports. Late corn is needing rain in Coffey and Douglas. Threshing progresses, Doniphan and Douglas reporting the wheat crop as poor, and Bourbon and Doniphan the oats crop as good. Prairie haying continues, Douglas and Jackson reporting the crop as very heavy, while Shawnee reports it not so heavy as last year in the northern part.

Atchison County.—Hot week; corn promises to give one of the heaviest yields the county has ever had; grapes are ripe, promising better than expected; plowing hindered by heat.

Bourbon.—Late corn will be out of frost's way by September 15; corn crop is liable to be reduced by this heat and dry weather; good yield of oats of heavy weight.

Chautauqua.—The rain greatly benefited late corn; early corn is heavily eared with well-filled ears and is now being cut; late corn will be safe from frost September 1; a fair average yield is now assured.

Coffey.—Threshing, haying, and plowing being pushed as fast as the heat will admit; corn maturing finely; late corn needs more rain soon, it will be out of frost's way by September 10.

Crawford.—Corn suffering for rain; too dry to plow for wheat.

Doniphan.—Hot all week; corn is looking fine; oats a good crop; small crop of wheat, and that of poor quality.

Douglas.—A dry week; early corn good, late corn needing rain badly; threshing

September 15; ground still has ample moisture; potatoes ripening and promise heavy yield; tomatoes, cabbage and other vegetables good yield; prairie hay being cut, a good crop; millet a heavy crop, and largely on the ground.

Osage.—A very hot week; hay mostly in stack; plowing for fall seeding; corn will be safe from frost September 15.

Pottawatomie.—Hot week with very little rain, but closing with good prospects of rain; pastures and stock water hold out well; new grapes in market, very light crop; corn about out of danger from frost.

Riley.—Hot, dry week with local showers; late corn has all to make, early corn will be fair crop; forage crops are very good.

Shawnee.—Corn still looking well, but would be benefited by rain; prairie haying in progress, not turning out as well as last year; grapes ripening.

Wilson.—Fine growing weather; all early corn is out of danger from frost, late corn by September 1; much of the early corn will do to cut for feed now; hay crop is heavy, both native and tame; honey crop is large.

Woodson.—Good week for haying; early corn being cut; Kaffir-corn and sorghum fine and promise a large yield.

MIDDLE DIVISION.

Early corn is made in Cowley and McPherson, is suffering for rain in Barber, Kingman and Pratt, damaged in Harper, and is drying up in Ottawa and Sumner, in the rest of the counties it is generally in fine condition. Late corn has been hurt in Cowley, and is needing rain in Edwards, Harper, Ottawa and the northern part of Dickinson, but is in very good condition in the other counties. Corn cutting has begun in Barber and Ottawa to save the fodder. Plowing continues in Cloud and Cowley, has been suspended by dry weather in Harper, Kingman, and Rush, and is getting too dry for it in Saline. Haying continues. Early apples did fairly well in Pratt, late ones not so well.

Barber.—Continued hot and dry winds; corn suffering badly; corn-cutting general; chinch-bugs still ravaging cane and Kaffir; pastures getting dry; stock-water plentiful; cattle doing well; corn in Barber never sustains injury from frost.

Butler.—A very hot week, haying being pushed; corn looking well, better than last year; grapes about one-half crop; local showers this week.

Cloud.—All corn will be safe from frost by September 10; threshing and fall plowing continue; this corn crop promises to break all records.

Cowley.—Early corn is made; late corn

Washburn College

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of danger from frost by September 2; Kaffir will not.

Reno.—Grain stacks damaged by wind and rain and corn badly blown down night of 9-10th; threshing still in progress but delayed some by rain; plowing continues with ground in fine condition; corn very fine, with prospect for a large crop; third crop of alfalfa growing well; prairie grass very fine, some being cut.

Republic.—Warm and dry; no rain in measurable quantities this week; corn needing rain; plowing for wheat being pushed.

Rush.—Rain badly needed for corn and for plowing; corn in good condition; threshing continues but much of the wheat is in bad condition; plowing suspended by dry weather; some complaint of grasshoppers, and fear that they will interfere with early sowing of wheat; forage crops good.

Russell.—Threshing and plowing being pushed; prairie haying begun; rain needed for corn, also for plowing.

Saline.—A hot, dry week; early corn ripening; late corn needing rain; corn will generally be safe from frost by September; wheat threshing is in full progress; getting too dry for plowing.

Sedgwick.—Corn somewhat damaged by the hot sultry weather in the western part, and plowing interfered with; no damage to crops in central part.

Stafford.—All corn will be safe from frost by September 15.

Sumner.—Corn drying up; pastures failing; favorable for threshing and stacking; thunder-storms Tuesday night helped plowing.

Washington.—Corn doing finely, will be safe from frost by September 20; past few days weather still and hot, hard on teams at work.

WESTERN DIVISION.

Corn is in good condition, well advanced, maturing finely, and generally too far advanced to be seriously affected by unfavorable weather, except some late corn in the northern part. Forage crops are heavy and cutting has begun. Harvest is over and the wheat is not turning out well. Melons are large, abundant, and ripe. Potatoes unusually fine. Flies are very bad on stock, especially in the central and southern counties.

Decatur.—First half of week good for stacking and threshing, latter part too wet; most of the corn is beyond danger, except by hail, and in good condition; fall pasture is very good.

Finney.—Hot, dry week; forage crops doing finely.

Ford.—Warm, dry week; late and early corn can not be injured by dry weather, too far advanced; very favorable week for threshing wheat; watermelons large and very abundant.

Gray.—Beginning to get dry but crops have not suffered; cutting cane has begun. Crop very heavy; corn doing finely; second crop alfalfa nearly all in stack; threshing alfalfa seed light yield.

Greeley.—Hot, dry week; crops doing finely, but begin to feel the need of rain; cattle in good condition.

Haskell.—Crops growing; harvesting about finished; local showers; crops and stock in fine condition; very warm.

Kearney.—Good growing weather all week; very little wind, warm and sultry. Motion.—A week of dry, hot weather and not enough wind to pump the water needed for stock; fodder crops growing rapidly; river bottom meadows improving.

Ness.—A warm, dry week; crops not suffering, but late corn and cane will need more rain; much feed being put up; cane a very heavy crop; weather favorable for putting up feed; wild hay unusually heavy; grass and all kinds of vines doing finely; garden's producing well; sweet potatoes blooming; melons ripe; potatoes ripe and a good crop; wild fruit plentiful.

Norton.—Local showers frequent and helpful; corn maturing finely; late potatoes promise well; some fall plowing; large numbers of cattle being brought into the county.

Scott.—Harvest finished, good quality berry but very light crop; haying in progress, hay crop fine; millet and cane could not be better; corn the best ever raised in county; potatoes and vines of all kinds very fine; grass good.

Thomas.—Too dry to plow; harvest over; wheat does not turn out very well; corn needs another good rain; all grass good; mowing foxtail for hay.

Trego.—Gradually turning drier; light showers tend to keep fodder crops in good growing condition, but creeks are drying up; threshers report wheat running 10 bushels per acre, tests average 57; corn is needing rain; haying the principal work; getting too dry to plow; cattle holding their own.

Farmers' Institutes.

The following institutes in which professors from the agricultural college will take part have been announced:

August 18—Boyle, Jefferson County.

August 19—Valley Falls, Jefferson County.

August 22—Dunavant, Jefferson County.

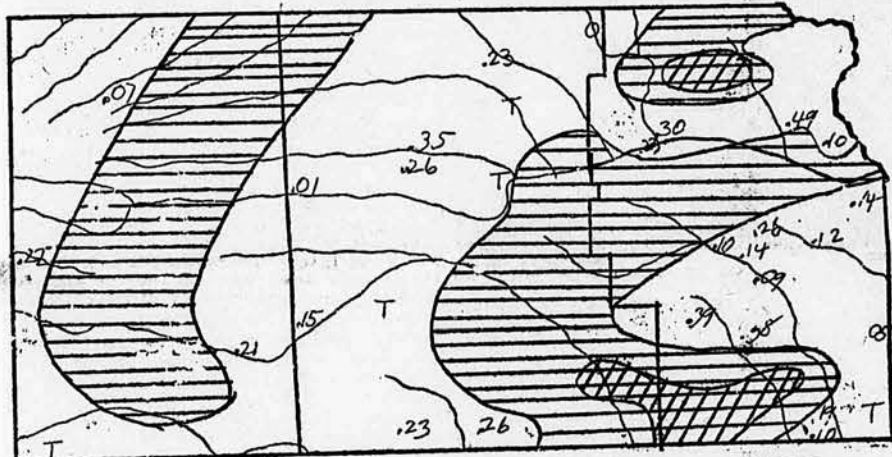
August 23—Winchester, Jefferson County.

August 24—Easton, Leavenworth County.

August 25—McLouth, Jefferson County.

August 26—Meriden, Jefferson County.

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ACTUAL RAINFALL FOR WEEK ENDING AUGUST 12, 1899.

about completed; wheat poor, oats good; prairie hay being cut, a heavy crop; potatoes generally good.

Elk.—A hot week, with hot winds 8th and 9th, but the rains have saved the corn and fodder crops; never any danger from frost in this county.

Franklin.—A hot, dry week, closing with a fair rain; threshing has been pushed; a good week for haying, which is progressing; most of the corn out of frost's way by September 15, all by September 26.

Greenwood.—Rain accompanied by hail Friday morning; a severe wind-storm with much lightning Friday night.

Jackson.—A fine week; best corn prospects in history of county; grain in shock being ruined by so much rain; Kaffir-corn, millet and prairie hay making very heavy crops.

Jefferson.—Good week for haying, which has begun; corn will be safe from frost by September 1 to 20.

Johnson.—Hot, dry week; nothing needing rain yet; corn will be out of the way of frost by October 1.

Labette.—A dry, hot week, with some local showers; early corn about made; late corn needs rain soon or it will be a short crop; corn never has been hurt by frost in this county; early corn is hard now; apples poor; some grapes, but quite a percent rotted.

Leavenworth.—Dry, hot week, hot nights; growing crops needing rain; early corn made; Kaffir-corn heading; grapes rotting some; pastures getting short; stock doing fairly well.

Lyon.—The earlier corn will be out of the way of frost in three weeks.

Marshall.—Corn still making a wonderful growth and promises the largest crop ever grown in the county; early corn hardened, late corn will be out of the way of frost by September 15; most of the millet hay has been cut and gave a large crop; grain not threshed now generally in stack; ground in good condition for growing crops and fall plowing; pastures good and stock doing well; plums turning, a fair crop.

Montgomery.—A warm week; while all crops were growing and had a dark green color the rains that fell were beneficial and will mature the early corn; late corn will need seasonable weather for thirty days yet, will be out of the way of frost by September 25 to October 1.

Morris.—A very good week for all growing crops; fall plowing being pushed; some damage to hay and millet by rain of 7th; Kaffir-corn heading rapidly; all corn beginning to dent, still holding color well; third crop of alfalfa growing well; grapes ripening; plums and apples falling some; tomatoes the best for years.

Nemaha.—Early corn hardening and other well advanced, condition continues good; latest corn will be safe from frost by

hurt by dry weather first of week, although local rains helped out in many places; good shower on 9th revived the corn crop and pastures; plowing for wheat being pushed; no danger of frost hurting corn in Cowley County.

Dickinson.—Late corn has suffered some in the northern part; corn much improved in central and southern part; ground was getting dry and hard for plowing but the rain on the 12th put it in good condition; bulk of the corn will be safe from frost by September 1.

Edwards.—Very hot and dry; late corn needing rain; threshing in full progress; some wheat very poor, other fair; millet hay yielding well; apples dropping badly; grasshoppers doing much damage in some parts.

Harper.—Hot and dry; hot winds have done much damage to corn and pastures; too dry to plow; corn is safe from frost now.

Harvey.—Dry and warm; late corn needing rain; good week for haying and threshing; ground in fair condition for plowing; pastures good; cattle doing well.

Kingman.—Hard week on corn; hot winds on 8th, 9th and 11th; local showers have benefited corn in places; corn will be out of danger from frost by September 1; haying in progress; plowing for wheat stopped except where rains have fallen.

McPherson.—Hot, but corn has not suffered and the early is about made; much plowing being done; good weather for threshing, which is being pushed; no danger to corn anticipated from frost in this county.

Mitchell.—Dry, hot week; corn injured, but revived by rain Saturday night; corn out of frost's road by September 15.

Ottawa.—All corn will be out of danger by frost by the 25th inst.; a great deal of corn is now out of danger of frost, all will be in a few days of the drought that has continued through August and part of July; corn harvesting being pushed at present, much of it being too dry for good fodder; Kaffir-corn and cornwell cultivated will stand it some longer; plowing still continues but no moisture is found in the ground.

Phillips.—A dry, hot week; corn in south central part damaged by hail on the 10th; fine rain over the entire county on 12th, greatly benefiting the corn crop; millet crop is very heavy and nearly all cut; farmers preparing to cut fodder; will be a large amount of feed for cattle; all crops doing nicely; frost would not materially injure our corn.

Pratt.—Corn is fine in all parts where local showers prevailed last week and this, elsewhere the corn and Kaffir are suffering; feed crops are doing nicely over most of the county; early apples did fairly well, late ones are not so good; corn will be out

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CARL SWENSSON, Lindsborg, Kansas.

Kansas Fairs in 1899.

Allen County Agricultural Society—C. H. Wheaton, Secretary, Iola; September 5-8.

Anderson County Fair Association—C. H. Rice, Secretary, Garnett September 26-29.

Brown County Fair Association—Grant W. Harrington, Secretary, Hiawatha; August 29-31.

Butler County Fair Association—Chas. Dillenbeck, secretary, Eldorado; October 3-6.

Clay County Fair Association—E. E. Hoopes, Secretary, Clay Center; September 11-14.

Coffey County Fair Association—J. E. Woodford, Secretary, Burlington; September 11-15.

Cowley County Fair Association—W. J. Kennedy, Secretary, Winfield; September 20-22.

Douglas County—Kaw Valley Fair Association—Tracy Learned, Secretary, Lawrence; September 12-15.

Farmers' and Merchants' District Fair Association—F. G. Welch, secretary, Topeka; September 4-8.

Finney County Agricultural Society—D. A. Mims, Secretary, Garden City; September 12-15.

Franklin County Agricultural Society—E. M. Sheldon, Secretary, Ottawa; September 19-22.

Greeley County Fair Association—J. B. Newman, Secretary, Tribune, October 4-5.

Jackson County Agricultural and Fair Association—S. B. McGrew, Secretary, Holton.

Jefferson County Agricultural and Mechanical Association—Edwin Snyder, Secretary, Oskaloosa; September 5-8.

Jewell County Fair Association—LeRoy Hulse, secretary, Mankato; October 3-6.

Johnson County Co-Operative Fair Association—J. M. Warren, Secretary, Edgerton; September 26-29.

Linn County Fair Association—Ed. R. Smith, Secretary, Mound City.

Marshall County—Frankfort Fair Association—C. W. Brandenburg, Secretary, Frankfort; September 26-29.

Miami County Agricultural and Mechanical Fair Association—W. J. Carpenter, Secretary, Paola; September 12-15.

Montgomery County—Coffeyville Fair and Park Association—R. Y. Kennedy, Secretary, Coffeyville; August 15-19.

Morris County Exposition Company—E. J. Dill, Secretary, Council Grove; September 26-29.

Neosho County Fair Association—H. Lodge, Secretary, Erie; August 28-September 1.

Neosho County—Chanute Agricultural, Fair, Park and Driving Association—Aug. Bareis, Secretary, Chanute; September 6-9.

Ness County Fair Association—Sam G. Sheaffer, Secretary, Ness City; September 14-16.

Osage County Fair Association—C. H. Curtis, Secretary, Burlingame; September 5-8.

Osborne County Fair Association—M. E. Smith, Secretary, Osborne; September 12-15.

Riley County Agricultural Society—Charles Kleiner, Secretary, Riley; September 5-8.

Saline County Agricultural, Horticultural and Mechanical Association—H. B. Wallace, Secretary, Salina; September 25-29.

Sedgwick County—Wichita State Fair Association—H. G. Toler, Secretary, Wichita; September 25-30.

Wilson County—Fredonia Agricultural Association—J. T. Cooper, Secretary, Fredonia; August 22-25.

Rooks County Fair Association—David B. Smith, Secretary, Stockton; September 19-22.

The "Rock Island" Route has cheap rates, liberal stop-over privileges, through cars, etc., to the G. A. R., Philadelphia.

Ask or write "Rock Island" agent for information and one of the Souvenirs, or address, E. W. Thompson, A. G. P. A., Topeka, Kans.

The Home Circle.

BACK THERE IN OL' MISSOURY.

Back in ol' Missouri, when the acorns tumble down,
When the hick'ry nuts are fallin' an' the leaves are turnin' brown,
When the ripe persimmons hang like golden nuggets in the trees,
An' the luscious papaws ripen in the frost-bejeweled breeze,
When the odor of the 'possum tempts the native appetite,
An' the barkin' of the coon dog wakes the echoes of the night—
Tell you what, it makes a feller feel home-sick-like and queer
When he thinks of ol' Missouri an' the rural pleasures there.

Back there in ol' Missouri when the autumn has begun,
When the fat an' sassy pun'kins lie a blushin' in the sun,
When the smell of apple butter livens up the atmosphere,
An' the quails are whis'lin' music mighty ticklin' to the ear,
When the cider-mill is chawin' up the apples in its jaws,
An' the huskin' bees are buzzin' in the golden Cupid cause,
That's the time a feller harbors the opinion mighty flat
That this life is worth a livin', an' is pow'ful cheap at that.

An' the gals back in Missouri, in their frocks of calico—
Used to wonder what sich angels was a doing here below,
Cheeks a bloomin' like the posies in their own dear native woods
With a tint they never gobbled from apothecary's goods—
Never carried no attractions built on fashionable style,
Allus snared the gallant fellers in the network of a smile,
Never needed stays to cinch 'em into shape that will elat—
Natur' with her skill precluded the necessity fur that.

—Denver Post.

KIDNAPPING PRINCES.

We have few details of the reported plot to kidnap Prince George of Greece. The story can not be rejected as incredible, when a Prince of Bulgaria was actually seized in his own palace and carried off, so few years ago. Daring and lawless spirits keep that example before them, no doubt. But we may strongly suspect that such details as are furnished do not convey the real truth—that it was not Moslems who devised the conspiracy, though they may have been tempted to join it. The Turks of Candia, as elsewhere, may be uncommonly stupid, but stupid men avenge themselves by murder. However, the incident may set us thinking upon other plots of the sort. Just now it is asserted that President Loubet was to have been carried off from Auteuil. But history records a good many of them serious enough; they are not very commonly known, because they failed. It is not necessary to go back to the Middle Ages; examples enough can be found in the last century. But one of earlier date recurs to mind which must not be overlooked, seeing that a direct ancestor of the Prince of Wales was concerned.

Kunz von Kaufungen, a desperate soldier of fortune, had a grievance against the Elector of Saxony. Learning that the servants at Altenburg would be absent one evening, he scaled the walls and carried off his enemy's two sons. Thirty ruffians accompanied him. All night they rode for their lives. Before dawn the alarm bell at Altenburg was sounded, and every steeple in Saxony began to clang, one after another. They had to leave the road, but steadily they pushed on through the woods. To make sure of one prize at least, Kaufungen divided his party, taking the younger boy, with three men, while his squire and the main body rode off with the elder. Toward evening the child was worn out with thirst and fatigue, and the Bohemian frontier and safety lay but a mile or so ahead. Kaufungen ventured to dismount and gather some bilberries for him. Suddenly a charcoal-burner stepped out of the bushes. He had heard the bells jangling madly all day—this travel-stained party struggling through the woods with a fainting boy in charge appeared to him suspicious. He wanted to know this and that—finally he shouted for help, and his terrible wife came on the scene, followed by the whole company of charcoal-burners. So one victim was rescued. Presently the squire surrendered the other unhurt. From the younger of these boys descends the present King of Saxony, from the elder our Prince of Wales. The day of their release is still a public holiday.

Very spirited and very nearly successful was the attempt of certain Huguenot refugees, officers in the Dutch service, to carry off the Dauphin in 1708. They stole across France one by one, meeting at Courtrai. Thence they rode at evening to the bridge of Sevrès, at the moment when the Dauphin, always punctual, would be passing. A state carriage arrived to the moment with the royal arms and servants; they made the occupant alight, lifted him upon a horse and galloped off. It was too dark to recognize the captive, probably. He proved to be the Marquis de Beringhen, Premier Ecuyer du Roi; a moment late for

once, the Dauphin reached the bridge in time to hear the gallop of the horses retreating. He had but one servant with him and no escort; if only that luckless marquis had not come in the way, the heir of France must have been killed or captured. We may amuse ourselves with speculating on the consequences.

Kidnapping became a regular business after that period; ministers and generals, obnoxious wives and unaccommodating judges, personal foes and handsome women, heiresses, dancers, and giants—examples could be given in every case, but we are dealing with princes only. When the rebellion of 1715 was mature the old Pretender started to head it. Lord Stair, the English ambassador, sent information to Colonel Douglass, who commanded an Irish regiment in the French service—a traitor, of course. With three soldiers whom he could trust Douglass rode to Nonancourt and waited at the posthouse there for the chaise; what his plans may have been exactly is uncertain. But he committed the same error which ruined Louis XVI's flight at Varennes—like young Count de Bouille, Douglass failed to keep an eye on his men. And the postmistress, Mme. Lospital, who knew that a great personage would be passing soon incognito, conceived suspicions. While the chief sat apart in dignified seclusion she plied his ruffians with drink, and finally locked them up, then stole to his own door and turned the key. Fresh horses being sent to meet "the King," Douglass had the mortification of seeing him pass by at full gallop. Shrewd Mme. Lospital would accept no reward beyond the privilege of kissing "the Queen's" hand, but a portrait of her Majesty was added.

Numberless were the plots for kidnapping the young Pretender. Ambassadors and diplomatic agents all over Europe showed zeal in the cause; if they failed it was because the home government was not in earnest. Unprepared to murder the enemy, they might well hesitate to face the scandal and the risk of abducting him, with the constant danger of keeping him in prison to follow. But to understand the situation of that luckless Prince read a dispatch of Sir Charles Hanbury Williams, Ambassador to Prussia in 1749, addressed to the foreign secretary: "For a small sum I will undertake to find a Pole who will seize his person (the Chevalier's) in any part of Poland and to carry him to any part of the North that his Majesty pleases to appoint." Sir Charles had received many offers of the sort which he "put by, though convinced that they are very feasible." Lord Hynford writes from Moscow in the same year, when, it should be noted, the Chevalier was traveling in Poland: "I believe it would have been a very easy matter to prevail upon this court to catch the young knight and to send him to Siberia, where he had never been heard of." But the Russian troops had been withdrawn from Poland, so that opportunity was lost, through the weakness of the government at home. His lordship assures himself that the Court of Dresden would have entered into the scheme.

But kidnapping is a fair game in its way; if one party can play at it, so can another. Sir Horace Mann reports upon "undoubted information" that a "company or twelve men who meet at the Nag's Head public house have bound themselves by oaths to lay violent hands on the Duke of Cumberland and convey him away." A greater personage even than a royal duke might be threatened. Horace Walpole asserts that Queen Caroline, searching among the late King's papers, found a proposal from the Earl of Berkeley, First Lord of the Admiralty, to kidnap the Prince of Wales and carry him to America, "where he would never be heard of more." The handwriting was that of Charles Stanhope, brother of the Earl of Harrington. Thus the sudden flight of Lord Berkeley was explained; he died abroad ten years afterward. The story is not to be dismissed as impossible; seeing what manner of man was George I, an unscrupulous courtier might make such a proposition and the brutal King might keep it by him.—Pall Mall Gazette.

A German Girl's Education.

"An important part of a girl's education in Germany is her instruction in domestic science," writes Charlotte Bird in the July Ladies' Home Journal. "She is taught how to knit and darn stockings, and how to repair towels and bed- and table-linen skillfully. She crochets lace and other things, and makes all kinds of cross-stitch work. Most German girls of the upper classes have some musical education. As a rule, they play better on the piano than they sing. After the girl has finished her school course she goes to a boarding-house of the better class to learn how to cook and keep house, and to acquire the ways of refined society outside of her own home. Here she remains for several months and watches the process of the cooking and other work, often lending a hand



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herself. It will be seen that her education presupposes that she will marry sometime in her life, and it is in a measure a preparation for that event. Consequently, when she has been confirmed she begins to prepare her trousseau. She crochets lace, makes table-covers, works long tidies in cross-stitch, and by degrees collects a large supply of towels and bed- and table-linen. Everything that is available is put away in the chest holding her treasures."

Enemies of Honey Bees.

To the student of natural history a morning at the apiary seems well spent, not alone in watching the maneuvers of the honey bee, but in observing the various dwellers of the insect world who hover about the home of the bees in the hope of snatching a taste of stolen sweets.

But it is not the stranger insects only who annoy the apiary of bees; the robber honey bees, from other apiaries, and even from hives in the same apiary, are apt not infrequently to cause a skirmish.

These robbers, too lazy to seek among the flowers their lawful booty, dart about the entrances of the hives, striving by art and celerity to enter and bear away to their own hive the pillaged honey.

If the colony which they are trying to rob is a strong one, the marauders are quickly pounced upon by the bees who guard the entrance to the hive, and by these guards they are rolled over and nipped at, and stung if possible.

The robber usually makes a plucky flight, and, as bees are clothed in an armor of scales, a sting must enter between them to be fatal, else the robber, in his valiant struggle for liberty, escapes unharm. But if the colony is weak and its guards are few and listless, the robbers often succeed in destroying it. Frequently in the spring or early summer, when the bees are being fed sugar-syrup in little wooden troughs for the purposes of brood-rearing, less industrious insects and other hymenoptera visit these feeding places, alighting at the troughs whenever they can, and, by swift darting, escaping the vengeance of the bees, succeed in snatching many coveted sips.

Sometimes the bees are so greedily occupied in cramming their little honey sacs that they trouble themselves very little about the intruders, and the latter drink up the sirup side by side with their sharp-tongued little neighbors.

The yellow-jackets fly in great numbers about the apiary at feeding time, but they do not try to gain an entrance to the hive, and many kinds of wasps fly back and forth between their nests and the feeding trough at regular intervals, as described by Sir John Lubbock.

The most beautiful of the wasps was a slim, brilliant dark blue insect, probably one of the solitary wasps seeking for bees to feed to her young, as well as for honey.

The great yellow and black bumblebee frequently visits the apiary, seemingly intent on sociability alone, for it does not alight, but keeps up a noisy booming over and among the hives, and seems to be the most honest of all the insects, a sort of blustering "hail fellow, well met!"

Blue flies and brightgreen ones, and many others less gayly hued, constantly are seen on the porch of the hive trying to fly through the entrance, but the guards dart at them just as constantly, finding them a great nuisance; for the guard bees are seldom quick enough to catch the flies, and so the latter keep them all the time "shooing" them off.

Offtimes a bright-eyed brown toad will

be spied sitting close by a hive, waiting patiently till a bee comes close enough for him to lick him down with his lightning-like tongue.

Kingbirds fly swooping down on the apiary to catch the little honey gatherers, and the cunning spiders spin their webs where the bees will become enmeshed and struggle to death. But most dangerous to the welfare of the colony are the moths and the ants, when they gain a foothold in the apiary.

The moths lay eggs in the combs, and these develop into disgusting large white worms, which tunnel their way through webby galleries in the wax, eating up everything and devastating the colony.

The Italian bees have proved themselves the most efficient in keeping the moth from the hive.

The artful little ant often succeeds in entering a hive, for she is swift and quiet in her movements, and is a nuisance to the beekeeper.

In southern countries, where ants are numerous, all sorts of contrivances are resorted to in the hope of keeping the apiary clear of them.

It is amusing to watch a guard bee seize upon an enemy and conquer him. The bee holds the hostile insect in her front legs, pinching it and rolling it about, and also stinging it if possible. When the invader is made helpless, the conquering bee, still holding her victim in her forelegs, makes strenuous efforts to fly with her heavy burden, and, finally succeeding, she rises with her closely clasped victim and when at a certain distance from the hive drops it.

Sometimes it takes several of the guards to overcome the struggling enemy, and together they push the insect over the porch of the hive.

The bees, if simply wounded, sometimes succeed in getting back to their own hive, but, being incapacitated for work, they are no longer welcome there, and only meet with repulse from their fellow-colonists, and, excluded from their hive, they crawl off somewhere and die. For in the cooperation of the colony of bees, each has her appointed task, either to gather pollen, bring water or honey, or to nurse the young bees or guard the hive, and when unfitted for these tasks, and no longer necessary to the welfare of the colony, she is turned out to perish. For with the bees life means industry, and in a well-regulated colony of about 40,000 bees, and where bees are flying in and out the hive every second, nothing seems to be considered but the perpetuation of the species. The butterfly and other insects appear to enjoy, but the honey bee works night and day, and every labor that it performs speaks for futurity and not the present.—Hartford Courant.

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The Young Folks.

Written for Kansas Farmer.

WERE I AGAIN A KID.

When I look back to the long ago,
When I was just a boy, you know,
This thought will come, although not bid:
Would I all my time employ
And prove, as then, a foolish boy,
Were I again a kid?

When first they'd put me in short pants,
Would I think I'd made a grand advance,
And take long steps, 'cause papa did?
With hands in pockets look as wise
As though I were Demosthenes,
Were I again a kid?

Would I do, as I did of yore,
Wear out those pants on the cellar door
As down that door I swiftly slid,
And make mama put on half-soles
To cover up those ragged holes,
Were I again a kid?

Would I again from school play "hook,"
So foolish be as to neglect my book
(As foolish boys, you know we did),
To let slip by those golden hours,
When in youth alone we can call them ours,
Were I again a kid?

Would I in spring discard my shoes,
And wear instead a big stone-bruise,
(As barefoot boys you know we did),
Then "Uh!" and "Oh!" with wry grimace
When razor hit the tender place,
Were I again a kid?

Would I learn to make vile cigarettes,
To fill the soul with vain regrets,
(As boys will do, as they keep well hid)?
Would I think this just the plan
To make a boy appear a man,
Were I again a kid?

Would I join with boys dark schemes to hatch
To raid neighbor Jones's melon patch,
(As mischievous boys you know we did)?
Would I think it again a mighty feat
To destroy the melons we could not eat,
Were I again a kid?

Ah, me! Who is willing to maintain,
If he were once a boy again,
He'd better do than first he did?
Could we live again each single year,
Would a better record there appear,
Were each again a kid? PENPOINT.
Waveland, Kans., August 12, 1899.

Written for Kansas Farmer.

YOUNG FOLKS IN THE OLD COUNTRY.

BY ANNA MARIE NELLIS.

NUMBER 63.

A VISIT TO AUSTRIA.

As the time drew near for us to say our adieu to Berlin and Germany, it seemed wrong to start on our journey westward without visiting her first cousin, Austria, and Berlin's half-sister, Vienna—the gay and beautiful Wien, the home of the wien-erwurst.

Vienna lies south and east of Berlin about 340 miles. The Germans in pronouncing the name do not sound the V, but use W instead and also omit the last syllable, calling the city Wien.

On July 17 our excursion party started from Anhalter Bahnhof, in the city of Berlin, with high hopes of a very pleasant trip through Saxony and Bohemia to the river Danube; and we were not disappointed for the journey was indeed a delightful one. Our first stop was made at Dresden, but we did not leave the train as we had explored that city a year ago. An hour's ride eastward along the course of the river Elbe, brought us to the Bohemian frontier, and at a little town called Tetschen everything and everybody on the train was inspected by the custom house officials of Austria. None of our party possessed dutiable goods, but my eye was attracted by the pretty "stempel" (stamps) which the official affixed to inspected baggage, and I concluded I must have one. Seeing no indication on the part of the officer to molest us, I took my small traveling satchel to him and opened it for his inspection. He smiled a good-natured smile and sorted out one of his very biggest stamps and fastened it on for me in excellent shape.

It seemed strange to me that in traveling so short a distance, we should come into another country where the people and their manner of dress are different from those we had left. In America one can travel from New York to New Jersey, even, and the people are all alike. While Bohemia is, anciently, a part of the "Fatherland," and the people speak a dialect of the German language, yet they are darker and even handsomer than the Germans of Saxony or Prussia. They are not so stout although the national beverage, beer, seems to flow as freely—as freely as the "milk and honey" which delighted the palates of the Israelites when they entered the "promised land."

Our railway from Berlin belongs to the German Government, so it had to stop at the Austrian boundary, and from Tetschen we had a new set of train officials who were dressed in uniforms decidedly different from those worn by German trainmen. We had come through Saxon Switzerland from Dresden, and now having crossed the valley between the Erzgebirge mountains and the Lusatian range, we were delighted with the beautiful scenery of the "Boehmischen Schweiz." The high rocks and beau-

tiful tree-covered mountains on either side reminded me very much of the Colorado mountains in the Pike's Peak region, though none are half so high in Germany.

For ten hours we rode through Bohemia, but did not reach its capital, Prague, which we reserved for a visit on our return. The scenery after the mountain region was left was surely fascinating; the fields seem to be cultivated like gardens, making beautiful pictures with their green and brown tints; the little villages seem to be all of white houses with brown roofs; the peasant women in short skirts, bare feet, dark blouse, shawl tied over the head, working in the fields enlivened the picture. They reminded me of the Russian ladies at work in the wheat fields of Ellis County, Kansas.

One feature of the country showed a decided difference from northern Germany in the religious tendencies of the people, and that was the many crucifixes and shrines by the wayside, at which we saw the peasants stop on their way to work and kneel down before the image of the Virgin Mary and pray. Northern Germany is decidedly Protestant—Lutheran if I must say it—but I don't recollect that I ever saw any of the natives pray there, except the ministers in the churches. Bohemia is Catholic, and I saw probably 100 praying during the first ten hours ride through that country.

After a long and delightful ride through Bohemia we came into Austria proper, and passing through a level country we soon saw the capital, Vienna, on the Danube, with the fringe beyond it formed by the Wienerwald—mountains of the Styrian Alps.

My first view of the Danube was a serious disappointment to me. I had read often of the "beautiful blue Danube," and was expecting something really nice in the line of rivers. If the "Big Muddy" anywhere in the State of Missouri, during the "June rise" can be called beautiful and blue, then the Danube at Vienna is entitled to a red ribbon, the Missouri should have the blue. During my stay in the city I waited for the river to "go down" and get blue, but it failed to do it and was just as muddy when I left as when I first saw it. My disappointment was somewhat lessened when I was told that this was not the main branch of the river, but that about five miles above Vienna, the Danube divides into two branches, and it is the southern branch upon which the city is built, and that arm of the river is called the "Donaukanal." Possibly the Danube is all right and "true blue." I'll find out later. This "Donaukanal" joins the main river below the city.

As in all cities in any part of the world, the portion around the railway station is not the prettiest, we were not surprised at the unhandsome appearance of Vienna when we left the train. We had telegraphed friends to meet us, but our telegram had gone astray, so we found no one waiting for us. As usual our party looked to me to find the way to our stopping place. We were surrounded by a host of "kutschers" and baggage men, all wanting our job. I saw a queer looking carriage like a sort of express car. I asked what it was as it had signs of chocolate, cigars and other merchandise on its sides, and was told that it was an omnibus. It suited my fancy and I soon had our party safely inside. It held about twelve people and was divided into three compartments; first was a platform on which many seem to prefer to stand, next was a place for four who might wish to smoke and then the portion for those who neither stand nor smoke; we were in the latter.

At Tetschen we had succeeded in getting a few marks exchanged for Austrian money, and I had been studying the pieces so as to do the paying for our party. When the conductor came to collect the fare I said: "Wie viel?" He answered in a very hoarse Wiener brogue: "Fifteen." Not knowing whether he meant fifteen dollars or fifteen cents, I gave him the largest piece of Austrian money I had. It was marked, "1 gulden," and he gave me enough small change to fill a small savings bank. I knew our hotel was near St. Stephen's Cathedral, in the center of the city; so I told the conductor to stop there, and while we wound in and out the narrow streets I spent my time with the mint of coppers in one hand and my money table in the other trying to find out how much fare had been charged for three. I could see that one gulden was equal to forty cents, American money, but it did not enlighten me as to its relative value to the coppers I held.

The conductor seeing me still counting the money thought possibly he had not given me the right change, so came back to count again and explain to me that Austrians have the habit of counting their money in "gulden" and "krentzers," but pay in "kronen" and "hellers." It seems that Austria has been having something of a "time" with its money matters and has recently passed a law making the "krone" and "heller" legal tender, while the "gulden" and "krentzer" of former times are only taken at a discount and passed off to unsuspecting strangers—unsophisticated

travelers from the Western Hemisphere like ourselves. After receiving this information I proceeded to impart my imperfect knowledge of money matters to my companions.

ST. STEPHEN'S CATHEDRAL.

Having deposited our light luggage at our hotel we started on our inspecting tour of the city; first visiting St. Stephen's Cathedral, which was the nearest object of interest. This is called by the Viennese, "Stephanskirche," and is one of the most important buildings in the city in point of historical interest as well as beauty of structure. It is located in the very center of Vienna and although a church existed on the same spot more than one thousand years ago, yet the present edifice dates only from the year 1250, but that is nearly 650 years ago. It is not so large in any of its dimensions as the Cologne cathedral but is next in size (I believe) to that wonderful church.

St. Stephen's is 354 feet long, with a breadth of 230 feet, while its highest tower reaches 470 feet from the level of the street. This is forty-one feet shorter than the tallest spire of Cologne. I am thus particular in giving figures, because I have seen some of the grandest church buildings of continental Europe, and hope to see many others during the coming year, whose height and length I wish to compare and keep a memorandum for my own satisfaction.

It is Gothic in style of architecture and its exterior is richly decorated with the handsomest work of the builder's art, but in many places it shows its great age. It has had a score or more of architects who have changed its general appearance and added to it during the many centuries since it was begun, and still there are workmen busy upon it rebuilding certain parts and finishing the newest tower. It is so closely hemmed in by the business portion of the city, and the streets are so narrow that one can not get a fair view of its magnificence at one glance. The thought comes to one that if America could have such an historic church it would devote seven or more blocks of space for its location and surround it with a beautiful lawn from which its grandeur could be accurately inspected.

We were fortunate in arriving at the cathedral just as the chimes were ringing the hour of twelve and the noon mass was in progress. As we entered the portal our view met something unusual to us; here stood a dozen or more beggars—old men and women, mostly cripples. They were saying their prayers with their beads in hand to keep proper tally, while their eyes did not fail to locate any stranger who appeared likely to give alms. Hats and hands were held out to us in mute appeal. We noticed that when one received a gift a blessing was mumbled in thanks. One old woman attracted my attention by her crippled condition and sad looks. I gave her a few kreutzers and she blessed me in the name of five or more saints, but especially prayed in my behalf the protection of "Heilige Marie," and that alone was well worth more kreutzers than I gave her.


On entering the main church room, we found beggars scattered in every part soliciting alms, and we were told that this is common to all churches in Vienna. The nave was half filled with kneeling people and the air was heavy with incense. The altar was beautifully gilded and lighted with hundreds of candles. On either side of the altar are seven carved seats for the bishops and priests, the highest one was the archbishop's throne.

We stood in the center of the nave before the altar, where we could see all the people; at our left was a picture of "the Virgin" attached to a pillar. A wire screen covered the picture and a bowl of holy water was underneath, with many lighted candles at the sides. The most of the people on entering, knelt before the picture and just before leaving it they dipped their finger tips in the holy water and made the sign of the cross on the wire netting and reverently kissed it.

While we were standing, one of the custodians of the church approached us, noting that we were foreigners. He was dressed in large black coat, with a peculiarly shaped head-covering embroidered in gold, and with large staff in hand. He informed us that if we would remain after mass he would show us everything in the church. The chanting of the priests came from somewhere behind the altar and sounded to us as being far away. This with the solemn tones of the heavy organ gave a sacred effect and seemed to fill us with religious awe.

The service over, our self-appointed guide returned and we started on our tour through the church. We were told that there were forty marble altars in the cathedral and the first one we visited was that of the "Weeping Virgin." Over this altar is a painting of the "Mother of Sorrows," and it is bedecked with jewels; the necklace and earrings are said to be those worn by the great empress, Marie Theresa, valued at \$2,000,000. In front of the altar is a stone which closes the burial vaults of the sovereigns of Austria; but for the past 200 years only the royal bowels have


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been entombed there, the hearts in the church of the Augustines while the sundry remnants have been placed in the Church of the Capucians. It is not a nice subject to write about, but if they could stand it, we certainly should not complain.

At the right of this altar is the wonderful sarcophagus and monument of Frederick III. It is of dark red and white marble and has over 200 figures represented in sculpture upon it.

Frederick III was the emperor of all the German nations and was the last one crowned over the "Holy Roman Empire." He died in 1493 and during his life he had adopted as the motto for his coat of arms: "A. E. I. O. U.," representing the words, "Austriae est imperare orbi universo," and that means: Austria is really the very largest pebble on the beach.

Some workmen were polishing certain portions of the old gentleman's receptacle, and two ladders were used to reach the top. I obtained permission to go up to the top of it for inspection and soon I had the very last Roman Emperor under my feet.

At the left of the front entrance (which is used only on special occasions, for royalty or high church dignitary) is the small chapel with the "Black Jesus." I do not mention this irreverently, for that is the name given the figure of the Crucified, which occupies the most prominent position in the chapel. It is represented with a very black beard which our guide said grew daily and often had to be trimmed.

Underneath this figure is a case or cabinet filled with silver hearts, arms, heads, etc.; these were told were brought by people who had been healed after praying for their cure in this chapel. If one had rheumatism in the arms, upon being cured he gave a silver arm, etc. From the vast number of silver souvenirs of deceased suffering in that box I concluded that the efficacy of prayer before this bearded figure was far superior to any Christian science institution in America.

At the left of the altar in this chapel is the entrance to the catacombs underneath the cathedral, which used to be open for inspection, but during the past ten years no one has been allowed to enter as the air is too vile for breathing. Our guide said that the bones of very many hundreds or thousands of religious folks had been placed there during the last six centuries, but that they were scattered about so promiscuously it would be very difficult for any individual one to be located and collected if ever such a process should become necessary.

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Wheat prices are again advancing. Financial writers are predicting that, with a shorter crop than last year, better prices will prevail.

The next annual meeting of the Kansas State Dairy Association will be held at the Kansas State Agricultural College, at Manhattan, November 22, 23 and 24, 1899. A farmers' program is promised.

The semi-annual meeting of the Missouri and Kansas Shorthorn Breeders' Association will be held at the assembly room of the Kansas City Live Stock Exchange, on Tuesday and Wednesday, August 22 and 23. The first day's session will open at 1:30 p. m., Tuesday.

A decision has been rendered by Judge Holt, of the common pleas court in Kansas City, Kans., declaring demurrage charges by railroads illegal, on the ground that there is no law in Kansas authorizing such charges. It has been usual for the railroad companies to allow twenty-four hours for unloading a car of freight, and to charge a demurrage rate of \$1 a day after the expiration of that time. In the case decided the railroad company undertook to hold the freight for demurrage charges. The consignees replevined it and won.

Total exports of apples for season 1898-99 amount to 1,221,087 barrels, against 913,996 barrels in 1897 and 2,919,846 barrels in 1896. Last year's distribution was as follows: Liverpool, 689,036 barrels; London, 271,342 barrels; Glasgow, 180,336 barrels; Hamburg, 22,861 barrels; various ports, 57,512 barrels. Last year Montreal shipped 404,573 barrels; Halifax, 239,834 barrels; Boston, 237,395 barrels; New York, 158,213 barrels; Portland, Me., 143,892 barrels; St. John, New Brunswick, 37,180 barrels. Last season's exports included 181,985 boxes of California apples.

Crop reports indicate a great crop of corn in the United States this season. But if the increase over last year in Kansas were blotted out the aggregate would be no greater than last year's crop. If the increase in Kansas and Nebraska were blotted out the country would be woefully short on corn this year. Cattle are high and going higher. Hogs are improving in price. Much stock will be brought to these two States for fattening, and the effort will be made to cram them with as much corn as they can be made to take. The price for corn may be fairly good.

A ten days' celebration is to be held in Chicago between October 8 and 18. The leading feature to be celebrated will be the laying of the corner-stone of the great Government building, and in addition to President McKinley and his cabinet being present on this occasion, it is expected that a number of the State officials from nearly every State in the Union will take part, and last, but by no means least, our greatest admiral (Dewey), with his staff and a large representation from the Navy Department, are to be present and take an active part in the ceremonies. Chicago is laying plans to have a great crowd of people and will probably not be disappointed. The Kansas Farmer is advised by the Stockman's Trade Bureau, of Union Stock Yards, Chicago, that very large numbers of stockmen and farmers are arranging to visit the city by the lake on this occasion. It will doubtless be advisable to

secure accommodations in advance, and in order to cultivate a closer acquaintance with the stockmen and farmers of the country this bureau has undertaken to find suitable lodging quarters for all who apply in advance. This bureau is one of the well-established institutions of Chicago and can be relied upon for fair treatment. It will charge nothing for its services but hopes by acquaintance and good will to attract business to the Chicago stock yards.

ANGLO-SAXON ALLIANCE.

Editor Kansas Farmer:—I have been a subscriber to the Kansas Farmer for nine years. As a subscriber I want to ask for some information. We are to have a discussion on the question of having an Anglo-Saxon alliance between this country and Great Britain, on August 19. If you could present an article upon the Anglo-Saxon alliance, giving the nature of proposed alliance and the arguments pro and con, it would not only meet with favor by all your educated readers but would be a personal favor to me. I trust that you can favor us with an article on this question in the near future. E. W. SAPP.

Axtell, Kans.

Our correspondent asks a discussion which might easily fill a large book and still leave much to be considered.

An alliance between nations may mean little or much. It may be for one specified or implied purpose or for many purposes. Some alliances of the past have been for defensive purposes only; some have been for trade only; some have been for purposes of aggression; some have been for defense, aggression, and conquest.

An Anglo-Saxon alliance would probably mean some sort of understanding for concert of action by the United States and Great Britain. In the dream of some it may ultimately embrace the various Germanic peoples from whom the English speaking people are chiefly descended.

It may be conceded at the outset that as the powers of the world are now related no one of these three possible parties to an alliance needs help from either of the others for purposes of defense. No nation is likely to willingly make war on any of the three or to attempt to oppress any of them. The proved fighting qualities of each is a strong defense and guaranty against imposition.

There is, however, a restless feeling of aggressiveness in each of these three kindred peoples. The student of history will not have forgotten that the Germanic races swept through Europe as migratory warriors some generations ago. On reaching the west coast they overflooded, conquered, and possessed Great Britain. Later they crossed the Atlantic and entered upon a fierce competition with the Latin races for the possession of America. They obtained all of North America except Mexico and have from generation to generation possessed the land westward from the Atlantic to the Pacific. The instinct of aggressive progress and of acquisition and possession has been bred very deep in the blood of the entire race. It is strong in the patient, toiling, crowding German; it is stronger in the stolid, obstinate, aggressive, capable Englishman, it is strongest in the nervous, pushing, impatient, ambitious, independent, sovereign American.

Just at the time when we had completed the occupation of the arable portions of our North American possessions, humanity cast its eyes upon the outrageous butchery of the struggling Cubans at the hands of Spain. The feeling of uncomfortable restraint, the instinct to do, the inborn impulse to move onward, to right wrongs, to succor the oppressed, found expression and opportunity and drove Spain from the island.

As we entered upon this work diplomats and international lawyers wrote able disquisitions to show that this country had no right to interfere with the domestic affairs of Spain in her colonies. There was fine opportunity for complications with foreign nations. Spain appealed to the powers of Europe to protest against our purposes; to restrain us from despoiling her of her possessions of hundreds of years. But for Great Britain, such a protest would have been served upon our Government as would have, at the least, greatly embarrassed us. But John Bull refused to join in the protest. He even intimated his readiness to hold Uncle Sam's coat and to keep outsiders out of the ring while Spain was getting the thrashing which, in John's opinion, that country had long needed. So, too, when Admiral Dewey had found occasion to place Spain's Asiatic fleet at the bottom of Manila Bay, Great Britain's good offices were ready to the fullest extent compatible with the laws of neutrality.

The United States accepted these good offices from Great Britain, and that acceptance is more or less of an acknowledgment of an obligation to reciprocate should opportunity present.

These kindly offices and their acceptance

with the implied readiness to reciprocate, and with the manifest and semiofficially spoken readiness of Great Britain to repeat her kindness, have been spoken of as an Anglo-Saxon alliance.

But hints have been made of a much closer alliance. It has been suggested that Anglo-Saxon civilization, the highest civilization in the world, "should enlighten the dark corners of the earth." Just what is meant by this grand declaration is a question open to considerable speculation.

There has been much talk on both sides of the Atlantic about the "open door" and an Anglo-Saxon alliance to secure the extension of the open-door policy in Asiatic countries. This open door idea is a purely commercial one and is primarily for gain. It is said that the proposed alliance would make it impracticable for any country to close the ports of its own seaboard or that of any other country to Anglo-Saxon commerce. The open door has sometimes been understood to mean that the ports should be open on practically a "free trade" basis. Great Britain naturally favors this view wherever it can be maintained.

Great Britain's argument in favor of the open door is not new. As to herself she says: "We are a commercial and manufacturing people. We need new avenues for our commerce, new outlets for our manufactures. We are willing to share these with America if she will so cooperate that they can be obtained without war or at most with little fighting." The American open-door argument is: "We are a manufacturing and an agricultural people and we desire to extend our commerce. In any case we need larger markets for our manufactures and our agricultural products. The Asiatic and Pacific island countries are not manufacturing and their agricultural products are only slightly competitive with our own. The three arms of our prosperity—manufacturing, farming and commerce—will be promoted by the open-door policy to result from the proposed Anglo-Saxon alliance."

The open-door alliance is favored by others on the ground that Christianity will also enter at the open door and be protected by the strong arm of the allied powers.

So far as the writer has observed no mercenary argument against the open-door alliance has been produced except in the interest of the sugar, tobacco, and rice planters of the Southern States, and in the hypothetical interest of the sugar-beet growers of some of the Northern States. Sugar, rice, and tobacco are the beneficiaries of heavy protective duties and it is assumed that the open door would lead to such reductions of these duties as would enable the American consumers to obtain their supplies through the open door at prices below those at which they can be produced in this country. It was claimed in a showing by Herbert Myrick made in behalf of the American sugar interests that it costs \$75 per ton to produce sugar in this country, while \$20 per ton was stated as the cost of its production in the East Indies. It is easily seen that if the open-door alliance is to feed us upon sugar at 1 cent a pound we will very soon stop paying 3½ cents for it.

Arguments of sentiment, of tradition, are generally sneered at by those who measure all things by dollars. The dollar argument has been used in favor of the suggested alliance by all important interests except those of sugar, rice, and tobacco. But the traditional arguments, the precepts of the founders of our Government, are against alliances. There is, too, a certain pride which holds that the United States can take care of our interests without the aid or consent of any other nation.

There are also serious, thinking people who hold that the object of the suggested alliance is to trample down weaker peoples, to despoil them of their institutions, their lands and their liberties, and that such course can not be justified in this enlightened age in any part of the world.

The few considerations here alluded to are merely suggestive of the breadth of the subject. It is under discussion in magazines and reviews as well as newspapers, and will doubtless be the theme of writers of books. Whatever the trend of the arguments, there exists both in England and the United States an undefined feeling of Anglo-Saxon superiority over all other peoples, a conviction that Anglo-Saxon civilization is to dominate the world; a restlessness and impatience of restraint by any barriers of land or sea, of climates or peoples; an impulse to possess the earth even though races of mankind must, like the North American Indians, be extinguished in the on-rush. This impulse is stronger in America than in England. England's instinct is to punish, civilize, and use native peoples. America's instinct is to crowd out, to supplant. That the American characteristic being the more aggressive should become the policy of an alliance which is beginning to have a real existence even though it be nominally denied, is a natural result of the ancestral dynamics concerned in present world movements.

GROWING SUGAR-BEETS.

The Kansas Farmer is in receipt of the following letter:

JOEL SHOMAKER.

Journalist and Correspondent.

North Yakima, Wash., 8-8-99.

The Kansas Farmer, Topeka.
Editor:—I see from reports, that several towns in Kansas are wanting sugar factories, and, as the cultivation of beets is the first essential, send you an article on that subject, which you may use, in whole or in part as you desire, sending me a copy of the Farmer in exchange.

Most respectfully yours,

JOEL SHOMAKER.

(Return if not available.)

The first paragraph of Mr. Shomaker's "article on that subject" contains the essential features—the estimates of cost of production and of profits. The other paragraphs are given to details of planting, cultivation, harvesting, etc., all of which would be interesting if the analysis of the first paragraph were more encouraging. This first paragraph is as follows:

"The sugar-beet is a new and valuable farm production coming to the front in many sections of the United States. There are at present 18 factories in operation, and several more are building, to manufacture sugar and molasses from this tuber. It produces from ten to twenty tons per acre, and returns about \$50 above actual expenses. The average price obtained by beet-growers is \$4.50 a ton, and the cost of planting, cultivating and harvesting a good crop, according to estimates of fifty farmers interviewed, reaches \$30 an acre. A factory using 50,000 tons of marketable beets takes the product of 4,000 acres, and furnishes employment for at least 2,000 men, women and children."

The most attractive sentence in this quotation states that the sugar-beet produces from 10 to 20 tons per acre, and returns about \$50 above actual expenses. This is like saying that corn produces from 50 to 100 bushels per acre and figuring profits from the mean of these two amounts or 75 bushels per acre. Sugar-beets have produced 20 tons per acre and even more. But the writer conversed with the weighmaster and with many farmers at the Grand Island factory a few years ago, and was told that the average was about 6 tons per acre.

The next sentence gives \$4.50 per ton as the average price obtained by beet-growers, and \$30 per acre as the cost of "planting, cultivating and harvesting a good crop." The figures now before us are sufficient to determine Mr. Shomaker's estimate of an average crop. Of course one would naturally place the average at half way between 10 and 20 tons, or 15 tons per acre. But that is too slow for a beet-sugar writer. Notice that the profits are to be \$50 an acre, and the cost is to be \$30 an acre, so that the full return is to be \$80 an acre. Now $80 \div 4.50 = 17.77$ +, and this must be the average yield in tons per acre figured in these estimates. It was generous of Mr. Shomaker to give so large a part of the entire proceeds to the farmer for profit. Fifty dollars an acre—five-eighths of the entire return for profits! Who wouldn't raise sugar-beets? But with the reported Grand Island average of 6 tons, at \$4.50, bringing \$27, where will the profit be? Returns, \$27—\$30, cost, —\$3; an unattractive figure. But, of course, every farmer who has never raised beets is going to have 17.7+ tons per acre and clear \$50, just as every farmer who has never raised corn is going to have 75 bushels per acre and have two-thirds of it clear.

But the last sentence quoted deals with thousands of acres, thousands of tons, and thousands of men, women and children at work. Let us look at these figures for a moment. Tons, 50,000 ÷ acres, 4,000 = 12½ tons per acre. Mr. Shomaker's other figures were based on an average of 17.7+ tons per acre and what the writer hereof wants to know is where the other 5.3 tons have gone so soon. But just look at those 4,000 acres which, if worst comes to worst and they pay only the \$30 per acre, will return \$120,000 for the work of 2,000 men, women and children. It is not stated whether this employment lasts through the entire or only part of the year, but surely a generous beet-sugar writer would not fail to provide at least nearly a year's work for those he seeks to induce to engage in the new industry.

Well, $120,000 \div 2,000 = \$60$ for each man woman and child engaged in this work. Does Mr. Shomaker propose board in addition to this "princely" compensation? If so, he forgot to mention it.

Thank you, Joel! Kansas farmers are not anxious to go into sugar-beets until the financial showing can be improved and until there is a prospect that the women and children will not have to be driven to the fields as slaves were driven in antebellum days.

Be it known to our North Yakima "journalist and correspondent" that the Kansas farmer thinks as much of his wife and children as does any man on earth; that he prefers to provide for his wife daintily and to give his children the best possible education with a modicum of field work for the little ones; that he is doing fairly

well with grains, grasses and live stock, and that he is not to be deluded by any such jumbling of figures as is found in the above-quoted paragraph.

POPULATION OF KANSAS TOWNS AND CITIES.

Kansas has 109 cities and towns with 1,000 inhabitants or more. The State Board of Agriculture has compiled the assessors' and county clerks' sworn returns and finds that 87 municipalities belonging to such list have increased 17,538, Topeka leading with a gain of 2,714, while 22 others lost a total of 4,926. La Crosse and Tonganoxie have fallen below the 1,000 mark and Wilson with a gain of 272, Phillipsburg 175, Nickerson 316, Medicine, Lodge 243 and Anthony 220, have been added to the list, along with Seamon, which jumped to 74th place. Some of the cities that have shifted their rank are Hutchinson, which now rises above Emporia, Parsons and Ottawa; Salina climbs over Argentine and Winfield; Independence drops below Chanute, Wellington and Iola; Concordia jumps from 32d to 27th place; Clay Center 28th to 26th; Weir City 34th to 30th; Cherryvale 40th to 34th; Empire City 49th to 35th. Horton falls from 24th to 32d place; Eldorado 25th to 28th; Oswatimie 33d to 37th; Osage City 36th to 30th; Hiawatha 35th to 41st; Eureka 47th to 52d; Girard 39th to 42d; Olathe 31st to 33d, and Oswego 44th to 48th. Columbus now ranks 47th instead of 50th; Garnett 49th instead of 48th; Beloit 50 instead of 51st; Sterling 53d instead of 56th. Wamego now precedes Dodge City; Kingman takes 58th instead of 64th place; Marion 59th instead of 61st; Caldwell 60th instead of 68th. Ellsworth rises from 78th to 63d; Larned 70th to 65th; Lyons 72d to 68th; Hays City 92d to 84th, and Strong City 96th to 86th. Burlingame goes from 65th to 69th; Yates Center, 67th to 70th; Sabetha 69th to 73d, and Fredonia 63d to 76th.

The following table gives the cities and towns having 1,000 or more inhabitants, in the order of their rank, and the population of each, together with the gain or loss in each since one year ago:

Rank.	Name.	Population.	Gain.	Loss.
1	Kansas City	46,219	191	...
2	Topeka	35,365	2,714	...
3	Wichita	22,026	...	719
4	Leavenworth	20,893	236	...
5	Atchison	16,617	351	...
6	Pittsburg	12,347	24	...
7	Lawrence	11,437	46	...
8	Fort Scott	10,892	413	...
9	Hutchinson	9,015	437	...
10	Emporia	9,020	92	...
11	Parsons	8,462	949	...
12	Ottawa	7,462	1,313	...
13	Arkansas City	7,219	279	...
14	Newton	6,687	17	...
15	Salina	6,193	381	...
16	Argentine	6,191	150	...
17	Winfield	5,727	230	...
18	Coffeyville	5,561	427	...
19	Junction City	5,489	518	...
20	Galena	5,143	437	...
21	Chanute	4,290	418	...
22	Wellington	4,159	522	...
23	Iola	4,112	581	...
24	Independence	4,112	99	...
25	Holton	3,808	310	...
26	Clay Center	3,727	244	...
27	Concordia	3,610	350	...
28	Eldorado	3,574	40	...
29	Abilene	3,553	167	...
30	Weir City	3,486	468	...
31	Paola	3,335	10	...
32	Horton	3,334	204	...
33	Olathe	3,325	10	...
34	Cherryvale	3,150	521	...
35	Empire City	3,135	905	...
36	Manhattan	3,076	151	...
37	Oswatimie	3,075	24	...
38	McPherson	3,055	184	...
39	Osage City	2,934	2	...
40	Great Bend	2,928	414	...
41	Hiawatha	2,889	118	...
42	Girard	2,709	5	...
43	Council Grove	2,575	69	...
44	Rosedale	2,528	84	...
45	Burlington	2,475	39	...
46	Chetopa	2,431	92	...
47	Columbus	2,367	170	...
48	Oswego	2,367	92	...
49	Garnett	2,293	42	...
50	Beloit	2,233	147	...
51	Marysville	2,069	10	...
52	Eureka	2,068	193	...
53	Sterling	2,004	250	...
54	Wamego	1,968	52	...
55	Dodge City	1,961	30	...
56	Seneca	1,947	8	...
57	Belleville	1,902	170	...
58	Kingman	1,892	307	...
59	Marion	1,823	160	...
60	Caldwell	1,798	262	...
61	Herington	1,777	82	...
62	Minneapolis	1,705	100	...
63	Ellsworth	1,698	354	...
64	Peabody	1,687	152	...
65	Larned	1,683	150	...
66	Humboldt	1,682	58	...
67	Neodesha	1,670	29	...
68	Lyons	1,649	159	...
69	Burlingame	1,585	38	...
70	Yates Center	1,571	33	...
71	Washington	1,525	10	...
72	St. Marys	1,517	78	...
73	Sabetha	1,515	20	...
74	Scammon	1,514
75	Frontenac	1,513	101	...
76	Fredonia	1,502	96	...
77	Garden City	1,500	79	...
78	Baxter Springs	1,480	83	...
79	Lindsborg	1,418	119	...
80	Erie	1,370	90	...
81	Scranton	1,361	9	...
82	Frankfort	1,290	23	...
83	Cherokee	1,277	117	...
84	Hays City	1,233	182	...
85	Sedan	1,232	49	...
86	Strong City	1,216	181	...
87	Harper	1,202	171	...
88	Florence	1,186	98	...
89	Anthony	1,184	220	...
90	Clyde	1,174	11	...
91	Pratt	1,174	133	...
92	Pleasanton	1,143	1	...
93	Norton	1,138	23	...

Rank.	Name.	Population.	Gain.	Loss.
94	St. Paul	1,137	88	...
95	Valley Falls	1,125	35	...
96	Osborne	1,112	112	...
97	Wilson	1,111	272	...
98	Caney	1,106	75	...
99	Russell	1,093	61	...
100	Augusta	1,080	45	...
101	Alma	1,078	6	...
102	Nickerson	1,070	316	...
103	Oskaloosa	1,034	7	...
104	Medicine Lodge	1,031	243	...
105	Phillipsburg	1,026	175	...
106	Enterprise	1,018	8	...
107	Blue Rapids	1,018	39	...
108	Howard	1,016	64	...
109	Baldwin	1,010	21	...

*Population not returned separate from township in 1898.

KANSAS' POPULATION.

Official figures thoroughly confirm the general belief that Kansas is and has been for some time making a steady, healthy advance in population. The enumeration made by assessors in March, 1899, compiled by the State Board of Agriculture, gives a total of 1,425,112 inhabitants, which is a net increase over 1898 of 34,143, or 2.5 per cent. Of the net increase, 77 per cent has been made in twenty counties.

The enumeration in 1898 showed for that year an increase of 22,988, and in 1897 the gain was 30,130, making a total net gain of 87,261 in the past three years.

Eighty-one counties show an increase of 41,794, Cherokee leading with a gain of 3,421, or 9.4 per cent, followed closely by Shawnee with 3,368, or 6.6 per cent. Among other counties which have made largest population growths are Sumner with an increase of 1,948, Sedgwick 1,674, Montgomery 1,590, Allen 1,578, Atchison 1,482, Barber 1,455, Harper 1,225, Ellsworth 1,183, and Crawford 1,027. Although having the largest number of inhabitants of any county in the State, the smallest gain reported is 6 from Wyandotte. The counties ranking next to Wyandotte in point of population are Shawnee, Sedgwick, Cherokee, Leavenworth, Cowley, and Atchison, in the order named. The county having the smallest number of people is Stanton with 294. The largest per cent of increase in any county was 28.2 in Barber; Harper gained 14.26 per cent, and Ellsworth and Pratt 13.3 each, Chase 11, and Allen 10 per cent.

Twenty-two of the 105 counties lost 7,651, the smallest loss being 1 in Lane County, and the greatest 1,794 in Franklin County.

The following table shows the population by counties, along with the increase or decrease in each, for 1899:

County.	Population.	Gain.	Loss.
Allen	17,483	1,578	...
Anderson	14,227	84	...
Atchison	30,359	1,482	...
Barber	6,614	1,455	...
Barton	13,601	664	...
Bourbon	25,494	432	...
Brown	20,991	433	...
Butler	21,741	312	...
Chase	7,937	786	...
Chautauqua	11,390	223	...
Cherokee	39,768	3,421	...
Cheyenne	2,670	31	...
Clark	1,672	16	...
Clay	16,064	40	...
Cloud	17,511	406	...
Coffey	15,651	325	...
Comanche	1,446	77	...
Cowley	30,555	515	...
Crawford	40,632	1,027	...
Decatur	7,883	566	...
Dickinson	21,268	586	...
Doniphan	15,556	108	...
Douglas	25,425	176	...
Edwards	3,393	259	...
Elk	10,832	62	...
Ellis	7,879	171	...
Ellsworth	10,077	1,183	...
Finney	3,200	40	...
Ford	4,698	197	...
Franklin	21,964	1,794	...
Geary	10,721	628	...
Gove	2,244	151	...
Graham	4,641	163	...
Grant	405	14	...
Gray	1,128	55	...
Greeley	464	38	...
Greenwood	15,409	163	...
Hamilton	1,637	84	...
Harper	10,052	1,255	...
Harvey	17,707	270	...
Haskell	434	19	...
Hodgeman	1,971	244	...
Jackson	18,121	715	...
Jefferson	17,365	5	...
Jewell	17,874	470	...
Johnson	17,763	266	...
Kearny	1,041	11	...
Kingman	10,580	476	...
Kiowa	2,051	173	...
Labette	27,968	901	...
Lane	1,661	1	...
Leavenworth	35,631	122	...
Lincoln	9,275	70	...
Linn	16,054	488	...
Logan	1,899	65	...
Lyon	25,166	281	...
Marion	20,746	641	...
Marshall	24,321	432	...
McPherson	21,301	516	...
Meade	1,541	21	...
Miami	20,542	145	...
Mitchell	13,836	442	...
Montgomery	28,222	1,590	...
Morris	11,408	31	...
Morton	305	50	...
Nemaha	20,326	93	...
Neosho	20,187	565	...
Ness	4,225	186	...
Norton	10,648	603	...
Osage	23,888	1,173	...
Osborne	11,496	481	...
Ottawa	10,662	62	...
Pawnee	4,950	385	...
Phillips	13,406	757	...
Pottawatomie	18,130	277	...
Pratt	6,341	746	...
Rawlins	5,127	361	...
Rebo	27,152	839	...
Republic	17,925	764	...
Rice	13,672	467	...
Riley	12,915	462	...
Rooks	7,593	153	...
Rush	5,677	388	...
Russell	7,681	815	...

County.	Population.	Gain.	Loss.
Saline	16,670	650	...
Scott	1,071	58	...
Sedgwick	40,379	1,674	...
Seward	721	36	...
Shawnee	53,950	3,368	...
Sheridan	3,273	302	...
Sherman	3,381	147	...
Smith	15,543	645	...
Stafford	8,896	665	...
Stanton	294	32	...
Stevens	568	49	...
Sumner	25,369	1,948	...
Thomas	3,864	248	...
Trego	2,443	194	...
Wabaunsee	12,329	157	...
Wallace	1,067	70	...
Washington	21,373	9	...
Wichita	1,195	78	...
Wilson	15,112	395	...
Woodson	9,775	35	...
Wyandotte	65,563	6	...

A FLAG OF DISTRESS—A HOPE.

The Wine and Spirit Gazette raises a flag of distress because "while most branches of trade are enjoying prosperity, the liquor trade is merely struggling along in the lethargic condition which has characterized it for a number of years past." It further declares, "There is no life nor activity in it." In seeking the reason for the depressed condition of the liquor business the Wine and Spirit Gazette says:

"Look at it!
"Beginning with the manufacturer:
"His still is heavily taxed before it can be used.

"He must give a \$5,000 bond as a distiller.
"He must pay a tax ten times greater than the cost of the goods on every gallon produced.

"He must pay tax on a certain minimum production from every bushel of grain used, whether the grain yields that minimum or not.

"He must pay for a host of revenue officers assigned to his distillery to watch, weigh and gauge, and generally control his business.

"Within a year ago he had to pay tax on any goods lost by leakage or evaporation beyond a certain estimate during the years required for ripening.

"The wholesaler who next takes the goods to distribute to the trade is required to pay a license fee.

"Then the smaller wholesaler gets them and pays another license fee for the privilege of selling them to retailers in smaller lots than the general distributor cares to handle.

"Finally the retailer is taxed in most of the States beyond all reason, the average rate being about all that he can make beyond his ordinary expenses and bare living.

"And these various taxes are often duplicated and even triplicated under national, State and municipal laws.

"Is it any wonder that a trade so hampered, vexed, taxed and retaxed, licensed, watched and spied upon is not prosperous? And yet that very trade is the chief or principal reliance of the Government—national, State and municipal—for its support."

The Wine and Spirit Gazette becomes interesting when it comes to consideration of the remedy. It says:

"The remedy? Reduce the ridiculous tax. The Commissioner of Internal Revenue has over and over again recommended this reform. The Secretary of the Treasury has demonstrated that a tax of 70 cents a gallon yields the Government more money than the present absurd imposition. Are all the Congressmen such leatherheads that they can not see this reasoning? Then what are National Distillers' Associations, National Wholesale Liquor Dealers' Associations and Retail Liquor Dealers' Associations existing for? What are they doing? Why do they not go to work and educate their Congressmen? Beat some brains into Congress, and compel a reduction of this outrageous tax. Show the ignorant legislators that so they will increase the revenues of the Government, and at the same time protect and stimulate a revenue paying industry. This done and we may hope for a revival of and prosperity in the liquor trade. Until then the game is not worth the candle."

Temperance people will do well to consider the proposed movement upon Congress. The fact that the latest demand—the "outage" bill—was carried upon demands similar to those above suggested, should be a warning of the activity and possible influence of those who desire to see the liquor trade prosper.

The same number of the Wine and Spirit Gazette contains a clipping from a Chicago paper (name not given) which indicates a plan to capture the influence of the President for the furtherance of the interests of the liquor trade. The Chicago paper is quoted as saying:

"Peoria, July 19.—A strong friendship exists between President McKinley and Mr. J. B. Greenhut, Peoria's leading distiller, and the latter is using his influence to get the President and his wife to pay this city a visit the first week in October."

After some further quotations from the Chicago paper, the Wine and Spirit Gazette says:

"Mr. Greenhut is at present in New

York, but intends to start in a few days for the mountains, where he and his wife will spend the summer. He stated to a representative of the Wine and Spirit Gazette that President McKinley had accepted his invitation and would come to Peoria in October to dedicate the soldiers' monument, at which time he will be the guest of Mr. Greenhut."

It is difficult for people in prohibition Kansas to believe that such a friendship as is here described can be cultivated by the President. That the liquor interests think they are making hay, is evident from the exultant manner in which the whisky organ presents the case to its readers. A large consignment of the same kind of activity on the part of temperance people would be refreshing about now.

BETTER PROSPECTS FOR SWINE.

The reports of public swine sales last week are significant as illustrating the improved prospects for fall and winter sale of pure-bred swine. The Gentry sale of Berkshire swine at Sedalia, Mo., on the 10th inst., making an average of a little over \$80, and the Poland-China sale by Messrs. Winn & Ware, on August 9, with an average of \$40, surely indicate a prosperous season for swine-breeders. The pig crop is short and feed abundant, so that swine-breeders who have experienced a dull trade during the past year may now recoup by taking advantage of present conditions.

A recent letter from Col. J. N. Harshberger, a fine stock salesman, Lawrence, Kans., who has been in correspondence with western breeders, says: "Information received from the breeders throughout Kansas indicate about 65 per cent of a crop, and many report only one-third or a half of the usual crop. The outlook is bright for good sales this year, owing to an immense corn crop and a short pig crop, coupled with the fact that cattle are high and going higher. Higher prices for hogs are certain to obtain."

AFTER YOUR MONEY.

Horticulture.

KANSAS EXPERIENCE IN ORCHARD-ING.

From "The Kansas Apple."

J. F. Hanson, Olsburg, Pottawatomie County: Have lived in Kansas thirty years; have an orchard of 1,500 trees, 10 and 12 years old. Use for commercial purposes Winesap, Jonathan and Missouri Pippin. For family use I add Maiden's Blush and Early Harvest. My land is a black loam, in the bottom, with an east slope. I plow deep, then list a furrow each way, and plant at the crossing. I usually grow millet in the orchard for seven or eight years, and then—if anything—clover or orchard-grass. I believe windbreaks are essential, and would place on the north and west sides Osage orange or mulberry trees. For rabbits I wrap my trees. For the borers, I use whitewash. I do not pasture. I have some insects, but have not sprayed. I pick by hand, and sort in two classes, according to size and quality. I retail my best in the orchard and elsewhere; of the culls I make cider. I store for the winter in barrels in the cellar; am successful in keeping Winesap, Jonathan, and Missouri Pippin, losing only about one-tenth. Prices have run from 20 cents to \$1 per bushel. For picking, I use boys from town.

William J. Henry, Lowmont, Leavenworth County: Been in Kansas twenty-seven years; have 2,500 apple trees; 1,600 bearing and 900 younger. For market varieties I use Ben Davis and Jonathan; for family orchard, Winesap, Rawle's Janet, Maiden's Blush, and Early Harvest. I prefer bottom land for Ben Davis and hill-top for Jonathan; northeast slope is best. The soil preferred for most apples should be clay, while for Ben Davis I prefer black loam. I plant good, healthy 2-year-olds, 24 by 24 feet on the hill, and 30 by 30 feet in the bottom. I have grown root-grafts with great success. I cultivate in corn for six years, with a diamond and shovel plow, with a single horse, and by all means avoid a turning plow. After this I grow weeds or clover, but use a mowing-machine. Windbreaks are essential here, and should be made of a heavy hedge or forest on the northwest. I wrap with brown paper for mice and rabbits. Use a knife on borers, which are the only insects that bother me. I prune to shape the tree when young, and to increase the quality of the fruit when older; it is beneficial, and pays. Winds in Kansas are more than sufficient for thinning purposes, and often thin to excess. I have tried apple trees in blocks of a kind, and also mixed, and can see no difference in fertility. I use stable litter, rotten straw, etc.; it is next to cultivation. I would always use such on thin soil, and on rich soil if it is not cultivated. I turn any and all kinds of stock in after gathering the fruit, and think it pays, but I would not allow any live stock in a young orchard. I am troubled some with canker-worms, flathead borers, and codling-moth. I spray from the shedding of the bloom until of the size of peas, using London purple, to perfect the fruit. I believe I have reduced the codling-moth some. For picking I use good careful hands, with baskets and ladders. We sort on a cull table in the orchard into No. 1 and No. 2. I prefer 11-peck barrels, filled full enough to head without bruising, stencil the end and haul to market in a lumber wagon. I often sell in the orchard my best apples in barrels; the second grade I often sell in the orchard, too; third grade I peddle; culls I make into cider. My best local market is Lowmont; best distant market is Denver, Colo. I never dry any. I store in an out-cellar covered with dirt, in barrels, and find Winesap keep the best. I use about one-tenth. Prices for the last four years have run from 75 cents to \$1.50 per barrel. I use the most careful men, and pay 75 cents and board, or \$1.25 without board.

Chas. Warden, Leonardville, Riley County: I have lived in Kansas twenty-seven years; have an apple orchard of 300 trees, from five to sixteen years planted. For market I prefer Ben Davis, Winesap, and Missouri Pippin; and for family, Maiden's Blush, and some other varieties. I prefer hilltop with black loam and clay subsoil, with an eastern slope. I plant 2- and 3-year-old trees in deep furrows thrown out with a plow. I plant my orchard to potatoes and beans for eight years, using a cultivator, and cease cropping when the trees shade the ground; plant nothing in a bearing orchard. Windbreaks are essential; would make them of soft maple, Russian mulberry, or ash, 2 rows around the orchard 3 rods from the apple-trees. To protect from rabbits, I wrap the trees with stalks and straw. I prune my trees with a saw, so that I can get in to pick the fruit. I think it beneficial. I never thin the fruit while on the trees. I fertilize my or-

chard; think it has been beneficial, and would advise it on all soils. Do not pasture my orchard. Trees are troubled with tent-caterpillar. I spray after the apples have formed, with London purple, to kill the insects. After picking my apples, I leave them in piles in the orchard until cold weather, when I carry them in. Sort into 2 classes—cider, and selling; peddle my best apples, and make cider of the second and third grades. Clay Center is my best market. Never dry any. I store some for winter on shelves 8 inches deep, and am successful. I find Winesap keeps best. We have to repack store apples before marketing, losing about 15 per cent. I do not irrigate. Price has been 75 cents per bushel. I employ men at \$1 per day.

James M. Williams, Home, Nemaha County: I have lived in Kansas nearly eighteen years. I have 400 apple trees, fifteen years planted, and of good size. I prefer bottom land, black soil, with clay and limestone subsoil, sloping a little to the south. I prefer to plant good 3-year-old trees, 24 by 30 feet apart; I cultivate all the time with cultivator and harrow. I grow corn in the orchard from eight to ten years, and oats after that. I think windbreaks essential, and would make them of native timber, planted south of the orchard. I prune with a knife and saw, and believe it makes the fruit larger and better; I never thin on the tree. I like to put plenty of stable litter and old straw at the roots of the tree in winter. I pasture with hogs after the oats come up; they eat all the windfall apples and thus destroy insects. Am troubled some with caterpillars, borers, and codling-moth. Have never sprayed any. I pick by hand in sacks, from step-ladders, and put in piles. We sort by hand into three classes, No. 1's and No. 2's for market, and No. 3's for the hogs. I sell my best by the wagon-load in the orchard; my seconds I sell the same way, but cheaper.

J. F. Cecil, North Topeka, Shawnee County: I have lived in Kansas twenty years. Have an apple orchard of 200 trees, six to eight years planted, 3 to 4 inches in diameter. I prefer for market Winesap, Grimes' Golden Pippin, York Imperial, and Missouri Pippin; and for family orchard Red June, Benoni, Summer Rambo, Grimes' Golden Pippin, Jonathan, Winesap, and Rawle's Janet. My orchard is situated on a hill. I prefer mulatto soil, with red subsoil. I prefer young, thrifty trees planted in furrows made with a plow and subsoiler. I plant my orchard four to six years with any cultivated crop; if it is corn or potatoes I use an ordinary corn cultivator; at other times I use an Acme harrow. I cease cropping when the trees begin to bear, and then plant to clover. Windbreaks are essential; I would make them of Osage orange, evergreens, or any body of timber, placed so remote that the orchard is not deprived of its nourishment. For rabbits I wrap the trees, and use potash for borers. I trim my trees while young with a knife, to encourage low heads; it pays if done moderately. It pays to thin Winesap and Rawle's Janet while on the trees. I fertilize my orchard with stable litter; would advise its use on all soils. Do not pasture my orchard. Trees are troubled with canker-worm, tent-caterpillar, bag-worm, flathead borer, buffalo tree-hopper, fall web-worm, leaf-miner, and leaf-crumpler; and my apples with codling-moth and curculio. I have sprayed with Paris green for the above-mentioned insects; am satisfied that I have checked them.

Phillip Lux, Topeka, Shawnee County: I have lived in Kansas thirty years. Have an apple orchard of 1,200 trees from 6 to 9 years old. For market I prefer Ben Davis, Missouri Pippin, Jonathan, York Imperial, and Grimes' Golden Pippin, and for family would add to the above Benoni, Maiden's Blush, Early Harvest, Red June, Duchess of Oldenburg, Early Ripe, and Yellow Transparent. Have tried and discarded Willow Twig, Smith's Cider, Kansas Keeper, Wagener, Talman Sweet, and White Winter Pearmain on account of blight and other good reasons. I prefer clay upland and subsoil, with northeast aspect. I use only number one 2-year-old trees, planted in furrows opened up with a plow, and deep enough to receive them without the use of a spade. I plant 16 by 32 feet. I cultivate my orchard to corn for four or five years, using a hoe, plow, and five-shovel cultivator with one horse; cease cropping after four or five years; grow clover and weeds in a bearing orchard, mowing twice a year and let lay on the ground. Windbreaks are not absolutely necessary. For rabbits I find wood veneers to be best and cheapest; they come in blocks; turn one end to the sun or fire to dry; then put on coal-tar and stick this end in the ground. I prune a little during the first five years after planting, keeping the heaviest part of top to the southwest. It will always pay if judiciously done. I never thin my apples while on the trees. Do not pasture the or-

chard with anything but chickens; it pays in eggs. My trees are troubled with round-head borer, fall web-worm, leaf-roller, and canker-worm, and my apples with codling-moth. Have not sprayed, but soon intend to, with London purple. I dig borers out with a knife. I pick apples in half-bushel baskets; sort into two classes, putting all fine, sound and good size in first grade. I pack in 3-bushel barrels and send to market as soon as ready, by railroad. I sometimes sell my apples in the orchard. I also wholesale and retail, and sell the second and third grades where I can get the most for them; feed the culls to stock or let rot. Have tried distant markets and found it paid. Do not dry any.

Fayette A. Smith, Belleville, Republic County: I have lived in Kansas thirty-one years; have an orchard of 200 apple trees from 6 to 8 years old. For commercial purposes I prefer Ben Davis, Winesap, and Missouri Pippin; and for family, Winesap, Missouri Pippin, and Rawle's Janet. I have tried and discarded Cooper's Early White; it is too tender. I prefer 2 feet of good soil on a hill; don't care what is below if drainage is good; think a northern slope best. I prefer fresh, vigorous, 2-year-old trees with well-formed top, set in land plowed for two preceding years in deep furrows both ways; open hole with hoe, then tramp dirt well around roots. I cultivate my orchard with corn or potatoes for ten or fifteen years, using a small one-horse stirring plow, wrapping the ends of the singletree. Cease cropping when the trees get too large. Windbreaks are not essential, but think they might be beneficial to some kinds, on the south side, to protect from hot winds. Would make them of Russian mulberry or willows. Any smell of blood or fresh meat will keep the rabbits off; I do not like wrappers, as they harbor vermin. I prune my trees some, cutting out small limbs to let in light; think it beneficial. I thin the fruit on my trees by knocking them off with a pole, if I can't do better, at any time; it pays when over-loaded. I fertilize my orchard with stable litter; do not put it close to trees; think it beneficial if not too coarse; would advise its use on soils where it will not force too rank a growth. I pasture my orchard with growing calves, but do not think it advisable; it does not pay. My trees are troubled with tent-caterpillar, flathead borer, and leaf-roller; and my apples with codling-moth and curculio. I do not spray; but think it would be beneficial. I pick my apples from a common orchard platform ladder. Do not raise any apples for market. Do not dry or store any, or irrigate. Prices have been 25 cents to 60 cents in the fall, 50 cents to \$1 in the winter. Average about 60 cents per bushel for good apples. Dried apples have been 5 to 7 cents per pound.

Photographic Exhibits of Horticultural Subjects.

By Charles R. Dodge, Representative of United States Department of Agriculture and Director.

Where it is desirable to illustrate rural economy, to show buildings, the operations, methods and appliances of American agriculture and horticulture, which include cultivating, harvesting and the marketing of crops, or to illustrate the appliances, machinery and methods employed in the preparation of food products or similar industries (such as factory and mill interiors, etc.), limited space necessitates the use of charts and photographs, these to be exhibited in portfolios each containing 24 sheets or cards, proper shelf space for which will be arranged.

For the guidance of exhibitors who may desire to use such illustrative material, the following regulations are hereby promulgated:

Size and Form of Mounts.—Photographic prints must be mounted on heavy white cardboard, measuring 22 by 28 inches. If small photographs are used several prints may be mounted on one sheet, though margins of not less than two and a half inches must be provided for. Bromide enlargements, one print to the sheet, should measure 16 by 22 inches, which, when mounted, will leave a three-inch margin.

The descriptive lettering under each picture should be plain and the legend concisely and briefly stated. It may be advisable to use a uniform style of portfolio. In this case the portfolios will be furnished at the cost of making and lettering.

Charts, lithographs, heliotypes, etc., may be exhibited in similar portfolios. These must be in the form of detached sheets, and should be prepared or printed on substantial paper, and in every instance must conform to the 22 by 28 size, though two-inch margins will be allowable.

Hints Regarding the Making of Negatives.—Care should be taken to choose the most favorable position when photographing buildings. The photograph of the front of a building is often less satisfactory than one taken from another position. The time of day should be selected which will give the most favorable light. All unsightly objects in the neighborhood of buildings

Make Cows Pay.



If every cow would give half as much more milk as at present without increasing feed or expense, dairying would pay well. A Little Giant Separator could earn such an increase in product almost every time, and will change a losing business into a payin' one. It is so simple that a boy or girl can easily manage it.

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should be removed, and a position should be chosen, if possible, which is unobstructed by telegraph poles and wires and similar objects. In interior views great care should be taken to secure proper lighting, and only such subjects should be chosen as may be readily and satisfactorily photographed.

When photographs are made of machinery or apparatus it is desirable that there should be a proper background. Many photographs of this kind are ruined by using a soiled cloth or figured fabric as a background, while others are spoiled by unsightly objects, windows, etc., in the distance, or immediately back of the objects to be taken. In photographing field work, etc., the same care should be exercised in choosing position and lighting as in case of buildings.

Animals should be photographed, if possible, in proper positions and in favorable surroundings, and care should be taken that the picture is not injured by too sharp contrasts; avoid also the shadows of buildings or fences; and no unsightly objects should appear. No person should be allowed to appear in any photograph unless his presence is necessary. Thus in an interior view of a factory the employees should be at work, as a person standing in the foreground for no obvious reason mars the picture. No person should look at the camera or appear to be posing for his portrait save in group pictures (as the operatives of a factory), where the portrait idea only is considered.

Photographic Material Desirable.—Undoubtedly portfolios of photographs accompanying exhibits will form a very effective presentation of useful data, and afford information to the public that could not be presented in any other way. And such material will also prove invaluable to the jury of awards when passing upon the exhibit it illustrates.

Exhibitors desiring to submit charts or photographs, as above, should state the number of sheets, size 22 by 28 inches, that will accompany their exhibits, with a catalogue of subjects, in order that space for the portfolio may be provided. One or more portfolios may be exhibited.

What Ails the Trees?

Editor Kansas Farmer:—Can you, or any of your many readers, tell me what is the matter with my apple and cherry-trees? I bought a bill of trees last fall from a certain nursery not far from here. This spring I got the trees and set them out as soon as possible in fresh plowed, mellow ground, that had been heavily manured during the winter. The trees, with one or two exceptions, started out as though they meant to do wonders, but they only leafed out and stood there. They made no new wood. Now out of 50 trees I have only 10 still alive, that look as though they might make a live of it. These 10 are making new wood. Were not the trees hurt by previous cold winter? O. E. GLOGAN.
Paxico, Kans.

For a Horticultural Exhibit.

Editor Kansas Farmer:—The Kansas State Horticultural Society desires to be informed of parties who can and will furnish for exhibition in its rooms in the capitol of our State, and as a nucleus for exhibition at the Paris Exposition in 1900, and the Kansas Semi-centennial Jubilee in 1904, samples of fruits and vegetables of all kinds, also photographs of orchards, and fruit-trees in full bearing, and of fine vegetables and flowers either taken singly or in groups. All such matters should be accompanied with a plain statement of location, name of exhibitor, exact name of the article and its complete history. These will be labelled so that all credit will be given the exhibitor and his county. A permanent exhibit is desired. Expressage will be paid by the society. Every horticulturist in the State, and every lover of choice horticultural products is asked to contribute or induce some one else to do so.
WILLIAM H. BARNES, Secretary.

Health for 10 cents. Cascarets make the bowels and kidneys act naturally, destroy microbes, cure headache, biliousness and constipation. All druggists.

In the Dairy.

Conducted by D. H. OTIS, Assistant in Dairying, Kansas Experiment Station, Manhattan, Kans., to whom all correspondence with this department should be addressed.

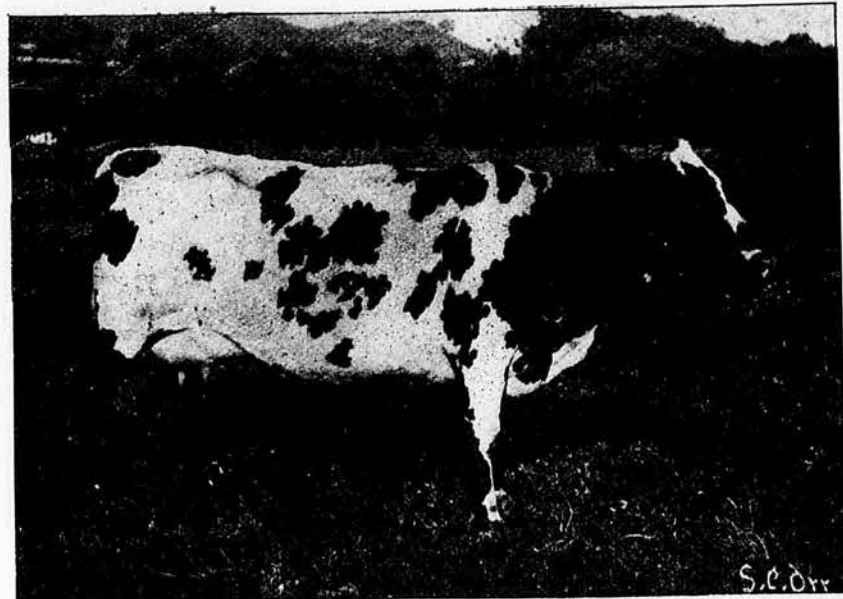
THE SCRUB COW ATTENDING COLLEGE.

We hear a great deal about young men and women going to college, but it is rather seldom that we think about the cow being benefited by an education. We present our readers this week with cuts of the scrub cow, Zacona. The first is from a photograph taken soon after her arrival on the college grounds. The second, after she had been at college one year. The average Kansas cow is said to produce 90 pounds of butter yearly. An investigation by the Kansas Experiment Station of the patrons of one of our leading creamery communities showed that the average cow of 82 herds produced 123 pounds of butter per annum.



ZACONA ENTERING COLLEGE.

The education of Zacona consisted of good feed and good care. On arrival at college she would eat a little whole corn and seemed to relish a straw stack but had to be taught to eat meal and alfalfa. The first month on the college farm Zacona yielded 28.8 pounds butter fat, the second month 32.8 pounds and the third month 37.1 pounds. During the twelve months she produced 383.7 pounds butter fat (451 pounds butter). Valuing skim-milk at 15 cents per 100 pounds she yielded \$73.17 worth of dairy products. But the value of her education does not all show in the first year, for during that time her digestive apparatus, her udder, and her ability to convert feed into milk has undergone a course of development. This is shown by the fact that the first month of the second year's record shows a credit of 44.8 pounds butter fat, an increase of 21 per cent over the best month of last year.



ZACONA AFTER ONE YEAR AT COLLEGE.

The encouraging feature about Zacona's education is that it is the kind that any Kansas farmer can give his cows at home on the farm. Unlike the young men and women at college the cow does not get her training directly from books, but she does get it by her owner having a sufficient knowledge of books to apply scientific principles to practical feeding, and the man who ignores books, bulletines, and papers as a potent factor in increasing the contents of his pocketbook is ignorant of one of the prime elements of success. There is no doubt but that experience is the best

teacher, but the experience of two men is better than one, and likewise the experience of a large number of the most successful men in any industry is worth a thousand-fold more than one self-conceited man who thinks he knows it all. First educate the man; then it will be possible to educate the cow. D. H. O.

Variation in Daily Yield of Milk.

Seven cows milked by one milker at the agricultural college gave totals in pounds per day for the first week of August as follows: 144.4, 136.8, 131.7, 119.7, 126.4, 139.8, 138.1. If you will stop to think you will recall that the weather was moderately warm on the 1st and 2d, hot on the 3rd, 4th, and 5th, and cool on the 6th and 7th. It would seem then that the temperature of the atmosphere and the yield of milk had more or less connection with each other, and in fact they have. On hot days the milk yield goes down. There are several reasons for this; first the cow will not eat so well; second the flies are worse on a hot day. These two are enough to cut down

the yield, but there is another; the hot weather has a depressing effect on the cow the same as on a person. None of us like to work as well on a hot day as we do on a cool one, and the same is equally true of the cow.

The dairyman should try to make it as agreeable as possible for his cows in the hot weather. If possible, provide a pasture with plenty of shade and water and not too far from the place of milking. The long drives back and forth from the pastures are very hard both on the cows and the milk yield. J. A. CONOVER.

Directions for Sampling Milk.

Prepared by Ed. H. Webster, of the Meriden Creamery Company, for use among creamery patrons.

1. Milk the cow perfectly clean.
2. Sample as soon as milked, first pour-

the bottle before putting any milk in the bottle. Always shake the bottle with every sample added.

6. To take a composite sample of your herd pour the milk together and then pour from one can to another and at once take the sample.

Should you have more than one can take a sample from each and put them together.

7. The per cent of butter fat found in each milking from any one cow varies so much that a correct average can not be secured from less than eight consecutive milkings; therefore do not bring samples to be tested expecting an accurate test of your cow or herd containing less than eight consecutive milkings.

8. If you wish to study the variations in per cent of butter fat that occurs from milking to milking, bring in separate samples of each milking for six or eight milkings.

9. Label every bottle with date of month, hour of milking and name or number of cow.

10. Corrosive sublimate is extremely poison. Handle it with great care.

Kansas Dairy School.

COURSE OF STUDY.

	Hours per week.
Principles of agriculture,....	1/4 term
Dairy bookkeeping,.....	1/4 term
Dairying,.....	1/4 term
Creamery butter-making,....	1/4 term
Cheese-making,.....	1/4 term
Private butter-making,....	1/4 term
Feeds and feeding,.....	1/4 term
Breeds and breeding,.....	1/4 term
Bacteriology,.....	3
Diseases of dairy animals,.....	2
Boilers and engines,.....	5
For farmers, milk-testing and private butter-making,.....	20
For creamerymen, milk-testing and creamery butter-making,.....	20
For cheese-makers, milk-testing and factory cheese-making,.....	20

Principles of Agriculture.—Treating of soils, crops, tillage, and manures; the selection, laying out, equipping and management of Kansas dairy farms. Text-book, Bailey's "Principles of Agriculture."

Dairy Bookkeeping.—Practice in bookkeeping that will enable the student to understand the underlying principles, followed by training in keeping books for farm, dairy, and creamery accounts.

Dairying.—Milk—its secretion, nature and composition; causes and conditions influencing the quality and quantity of milk; handling of milk for the market and for butter-making, including milking, straining, aerating, cooling, preserving, and shipping; creaming of milk by the separator; cream-ripening and butter-making. Text-book, Wing's "Milk and Its Products." Lectures.

All students will study dairying together for the first half of the term. This class will then be divided, creamerymen taking lectures on creamery butter-making, the cheese-makers on factory cheese-making and the dairymen on private butter-making.

Feeds and Feeding.—Properties of common feed stuffs, their effect on character and yield of milk and butter and their adaptability to Kansas conditions of dairying. The compounding of dairy rations to secure good yields at least cost with products having desired qualities. Careful study of the feeding of the college dairy herd will also be required. Text-book, Henry's "Feeds and Feeding."

Breeds and Breeding.—Characteristics of leading breeds of cattle and their adaptability to Kansas dairy farming; dairy farm and the selection of animals; care and management of the dairy herd; principles of stock-breeding. Lectures.

Bacteriology.—Relations of bacteria to methods of keeping milk, ripening cream and cheese and flavoring butter; diseases of milk, their relations to the health of man and animals; principles of disinfection. Text-book, Russell's "Bacteriology." Lectures.

Diseases of Dairy Cattle.—The common ailments of calves and dairy cows are discussed and their causes and symptoms ex-

CREAM SEPARATORS.

De Laval "Alpha" and "Baby" Separators. First—Best—Cheapest. All Styles—Sizes.

Prices \$50.- to \$800.-

Save \$10.- per cow per year. Send for Catalogue.

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CHICAGO. NEW YORK.

plained, remedies and preventives suggested; all from a practical farmer's standpoint. During the dairy school the college herd will be tested with tuberculin and the students taught how to make the test. Students will also inoculate hogs against cholera and swine plague. Lectures.

Boilers and Engines.—Lectures and practice in the firing of boilers, care and running of engines, pumps, etc. Care and attendance of refrigerating machinery, practice in shops.

Butter-making and Milk-Testing.—Practice in handling milk and its products from the time it leaves the cow until it is marketed as butter, cheese, or sanitary milk. Students may choose either creamery butter-making, cheese-making, or private dairying. Thorough instruction and practice will be given in all three of these lines. The dairy rooms will be fully equipped with hand and power separators, Babcock tests, churns and butter-workers, aerators, coolers, heaters, sterilizers, refrigerating machinery, milk and cream vats, factory cheese apparatus, Mann's acid tests and other needed apparatus. Many manufacturers have volunteered to loan us machinery so that the dairy students may make tests of the work of the different makes of separators, churns, etc.

New Through Pullman Service Between Denver and St. Louis.

On June 18 the Great Rock Island Route inaugurated through Pullman Sleepers between Denver and St. Louis via Kansas City and the Missouri Pacific R'y. East-bound car leaves Denver daily at 2:35 p. m. on the "Colorado Flyer," arriving in St. Louis 6:15 p. m. the next day. Westbound car leaves Kansas City daily on "Colorado Flyer," at 6:30 p. m., arriving in Denver 11 a. m. next day. This is the fastest through car line between Denver and St. Louis. The cars are broad vestibuled, of the latest pattern and most luxurious type. Advantages in patronizing this service will be: The quickest time, no change of cars, absolute comfort. The best Dining Car Service in the world. For full information see your agent or write

E. W. THOMPSON, A. G. P. A., Topeka.

Fruit Farming Along the Frisco.

An attractive illustrated and thoroughly reliable 64-page booklet, devoted to fruit culture along the Frisco Line in Missouri, Arkansas, Kansas, Oklahoma, and Indian Territory, just issued. A copy will be sent free upon application to Bryan Snyder, G. P. A., Frisco Line, St. Louis, Mo.

Samples copies of Kansas Farmer sent free on application.

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For \$7.

A Cream Separator

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DOES THE WORK

For particulars address

The R. A. C. SEPARATOR CO.,

107 K. & P. Bldg., - - KANSAS CITY, MO
RELIABLE AGENTS WANTED.



Dairymen, Don't You Know

That you are losing cream and doing work
That might be saved if you were using the

IMPROVED U. S. SEPARATOR

It has been proved often that it not only
SKIMS THE CLEANEST,
but is the *Easiest to Operate and Clean*, therefore
IS THE BEST TO BUY.



Write for our free illustrated catalogues for full information.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

Covering Tree Wounds.

Every little while a recipe for making a shellac wash for this purpose appears, and one would think, if he did not know otherwise, that this was the preparation most commonly used. I doubt if one person in 100 who have occasion to use such a wash ever uses shellac. It is troublesome to apply and expensive to make. The shellac must be dissolved with alcohol, which costs too much for any such purpose, and in applying it with a brush the alcohol evaporates so quickly that the brush soon becomes like a stick. Then we sometimes see recommended and often see in use, gas-tar, which has no place and never had for any such purpose. Many are the trees that have been killed by it. It is too penetrating and contains injurious ingredients. Whenever the application of tar reaches clear around the body of a thin-barked tree it may be expected to kill the tree outright.

Grafting-wax is good when it is plastic enough so as not to peel up in cold weather, but this is slow of application. Best of all for all ordinary purposes for a covering for wounds and bare places is common linseed-oil paint. It is easiest of all in application, it lasts for years on the dead wood, and it does not kill the tender bark or check its growing.—N. S. Platt.

Cultivate Your Strawberries.

Many farmers have a small bed of strawberries for family use. After the fruit is picked the patch is too often neglected. This is the time to prepare the bed for the next season. If the plants were set out this spring, they should now be forming runners vigorously. During the summer and early fall they should be given shallow cultivation about every ten days or

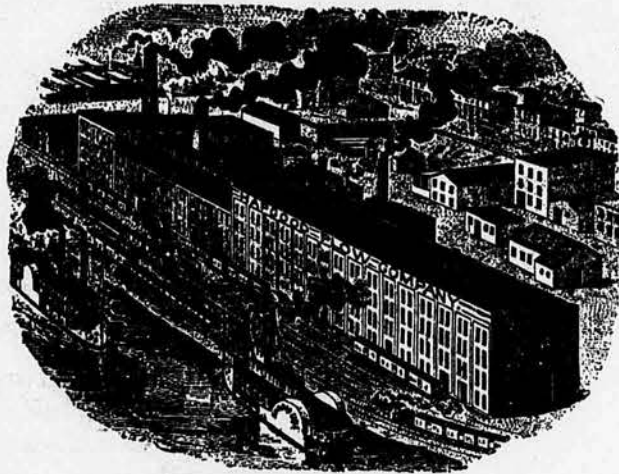
those for labor, lumber, and metals of all kinds. As a result the prices of all manufactured articles must soon follow suit, including the prices of incubators and brooders. This simply can not be helped; there is no way of getting around it. The Cyphers Incubator Co., Wayland, N. Y., therefore hereby give notice to interested persons that as soon as their new catalogue and price list for 1899-1900 is issued, which will be about Nov. 1 to 15, the prices of their incubators and brooders will be increased fully 20 per cent. All who think favorably of buying a strictly first-class incubator this fall or next winter will find it much to their advantage to immediately correspond with the Cyphers Company, in order to obtain what is wanted at the present low prices. The fact is that the Cyphers Company is in a position, just now, to save a limited number of customers from \$7 to \$18, net cash, on machines bought. For full particulars address the Cyphers Incubator Co., box 84, Wayland, N. Y.

Rick the Kaffir-corn.

Editor Kansas Farmer:—I notice "Inquirer's" wish in last week's Farmer. If he will rick his Kaffir in long ricks, say three to four feet at bottom, raised to a peak, say three to four feet high, and as long as desired, let it remain until cured, thresh and bin, it will keep perfectly. We had 400 bushels in bin for four months and I sold it in perfect shape for export. If the Kaffir is left on stalks until perfectly cured—stalks dead—he can cut, thresh, and bin with perfect safety.

Omega, Okla. T. L. SEXTON.

Fortify the body to resist malarial germs by putting the system in perfect order. Prickly Ash Bitters is a wonderful system regulator.



THE FARMERS' FACTORY.

Such, indeed, might be appropriately entitled the great home of the Hapgood Plow Co., of Alton, Ill., illustrated above. Here is the only factory of its kind in the universe; where the farmer can buy direct nearly everything needed on the farm in the way of Machinery, Buggies, Wagons, Harness, Sewing Machines, etc., without paying a profit to agents, salesmen or middlemen of any kind. The policy of the Hapgood people has ever been to give the best bargains obtainable, best goods at lowest manufacturers' prices, and so great has been the appreciation of their efforts by the enterprising farm public that their output of merchandise has far exceeded their expectations. The handsome catalogue of a thousand things a farmer uses is sent free to all who write for it. The responsibility and integrity of the Hapgood Plow Co. is unquestioned, and cash can be sent with orders with perfect assurance that goods will be as represented or money refunded promptly.

two weeks. One horse with 5-tooth cultivator does the work very well. These successive cultivations should be always in the same direction, thus throwing the runners in the direction of the row and keeping the row within definite limits. The object of the cultivation is to provide a dirt mulch. However, no weeds or grass should be allowed in the patch and it may be necessary to go over the bed once or twice by hand during the season.

If the bed is 2 years old, the general treatment should be the same but it is a good plan to renew the bed in some manner. A good method is to cut away a little over half the row, thus removing the original row of old plants. The row is then allowed to spread again to about 20 inches or 2 feet. Sometimes through neglect a patch is allowed to spread until the rows are obliterated and there is a tangled mass of plants. This should now be cultivated in such a manner as to leave the plants in rows and then treated as before mentioned. Unless the bed is renewed from year to year, it usually does not bear a paying crop for more than two or three years.

A. S. HITCHCOCK.

Kansas Experiment Station.

Publishers' Paragraphs.

For description of a patent corn-husker, see advertisement of F. D. Kees, Beatrice, Neb. Mr. Kees' invention has been extensively used in the West for several years. Write him for fuller description.

An ingenious device is being sold by the Bane Mfg. Co., 55 W. Washington St., Chicago, whereby the hardest working pump can be operated by a child. The appliance is of great help to windmills as it enables them to work in a very light wind.

It is well known to readers of the newspapers that prices generally have been advancing steadily here of late, including

HAIR SWITCHES
Finest of Human Hair at about One-third Ordinary Prices.
SPECIAL OFFER THIS MONTH.

Weight	Length	Price
2 ounces	20 inches	\$0.65
2 ounces	22 inches	.90
3 ounces	22 inches	1.25
3 ounces	24 inches	1.50
3 ounces	26 inches	2.25
3 1/2 ounces	26 inches	3.25

Remit five cents extra for postage. The set, which has long stem, the others are short stem. Send sample lock of hair cut near the roots. An immense stock enables us to match perfectly any hair. All orders filled on day received. Money refunded if unsatisfactory. Illustrated catalogue free. Everything in hair goods.

ROBERTS' SPECIALTY CO. 114 Dearborn St. Chicago.

Please mention Kansas Farmer when writing our advertisers.



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We aid those who want Government positions 85,000 places under Civil Service rules. 8,000 yearly appointments.

BUREAU OF CIVIL SERVICE INSTRUCTION,
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It tells you all about best methods and materials for roofing all buildings at reasonable cost. P. & S. Rubberoid roofing has been proven in quality by years of use. Tough, Strong, Flexible and Durable, resists heat, cold, acid, alkali, smoke, rain, etc. P. & S. sheathing papers and Donkey paint are also sold by us as exclusive southwestern agents. Send for catalogue. The Kansas City Roofing and Corrugating Co., Kansas City, Mo.

\$30.55

Philadelphia
and Return, via
Santa Fe Route.

Tickets on sale September 1, 2 and 3. Limited to leave Philadelphia September 12, with provision for extension to September 30, 1899. Stop-overs and privilege of returning via different route accorded on payment of little higher rate. Particulars by applying to

T. L. KING, Agent,
Topeka.

Notice.

All persons interested will take notice that my petition is on file in the office of the Shawnee County, Kansas, Probate Court, asking for authority to sell the following-described real estate situate in Shawnee County, Kansas, belonging to the estate of John S. Firey, deceased, for the purpose of paying the debts of said estate and the expense of administration, to wit: One-eighth interest in lot 115 Kansas avenue; south 7 1/2 feet lot 110 and north 3 1/2 feet lot 112 Kansas avenue; lots 97, 99, 101, 103, 105 and 107 Madison street; lots 194, 196, 198, 200, 202, and 204 First avenue; south 50 feet lot 5 Central avenue, and lots 124, 125, and 126, and lots 133, 134, 135, 136, 137, 138, 139, 140, and 141 Central avenue, North Topeka, Firey's Addition.

Equity in lots 157, 158 and 159 Central avenue, North Topeka; equity in lots 80, 81, 82, 119, 120, and 121 North Jackson street, North Topeka.

Equity in lots 40, 41, and 42 North Van Buren street; lot 101 and north one-half lot 100 Jackson street, North Topeka; lots 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, Jackson street, North Topeka, Firey's Addition.

Said petition is set for hearing at the office of the Probate Judge, in the City of Topeka, said county, on Friday the 25th day of August, 1899, at 9 o'clock a. m., at which time and place you may make known any objections you may have to the granting of such order. Dated August 2, 1899.

J. B. McAFEE,
Administrator of said estate.

ON AGAIN—APRIL 30TH
THE "KATY" FLYER.

THE STRAY LIST.

HOW TO POST A STRAY.

THE FEES, FINES AND PENALTIES FOR NOT POSTING.

BY AN ACT of the Legislature, approved February 27, 1886, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisal, to forward by mail, notice containing complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker-up, to the KANSAS FARMER, together with the sum of 60 cents for each animal contained in said notice. And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper, free of cost, to every County Clerk in the State, to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5 to \$50 is affixed to any failure of a Justice of the Peace, County Clerk, or proprietors of FARMER for a violation of this law.

Broken animals can be taken up at any time in the year.

Unbroken animals can only be taken up between the first day of November and the first day of April, except when found in the lawful enclosure of the taker-up.

No persons, except citizens and householders, can take up a stray.

If an animal liable to be taken up, shall come upon the premises of any person, and he fails for ten days, after being notified in writing of the fact, any other citizen and householder may take up the same.

Any person taking up an estray, must immediately advertise the same by posting three written notices in as many places in the township, giving a correct description of each stray, and he must at the same time deliver a copy of said notice to the County Clerk of his county, who shall post the same on a bill-board in his office thirty days.

If such stray is not proven up at the expiration of ten days, the taker-up shall go before any Justice of the Peace of the township, and file an affidavit stating that such stray was taken up on his premises, that he did not drive nor cause it to be driven there, that he has advertised it for ten days, that the marks and brands have not been altered; also he shall give a full description of the same and its cash value. He shall also give a bond to the State of double the value of such stray.

The Justice of the Peace shall within twenty days from the time such stray was taken up (ten days after posting) make out and return to the County Clerk, a certified copy of the description and value of such stray.

If such stray shall be valued at more than \$10, it shall be advertised in the KANSAS FARMER in three successive numbers.

The owner of any stray may, within twelve months from the time of taking up, prove the same by evidence before any Justice of the Peace of the county having first notified the taker-up of the time when, and the Justice before whom proof will be offered. The stray shall be delivered to the owner, on the order of the Justice, and upon the payment of all charges and costs.

If the owner of a stray fails to prove ownership within twelve months after the time of taking, a complete title shall vest in the taker-up.

At the end of a year after a stray is taken up, the Justice of the Peace shall issue a summons to three householders to appear, and appraise such stray, summons to be served by the taker-up; said appraisers, or two of them, shall in all respects describe and truly value said stray, and make a sworn return of the same to the Justice.

They shall also determine the cost of keeping, and the benefits the taker-up may have had, and report the same on their appraisal.

In all cases where the title vests in the taker-up, he shall pay into the County Treasury, deducting all costs of taking up, posting and taking care of the stray, one-half of the remainder of the value of such stray.

Any person who shall sell or dispose of a stray, or take the same out of the State before the title shall have vested in him, shall be guilty of a misdemeanor and shall forfeit double the value of such stray and be subject to a fine of \$20.

FOR WEEK ENDING AUGUST 3, 1899.

Chase County—M. C. Newton, Clerk.

MARE—Taken up by G. W. Martin, in Bazaar tp., (P. O. Bazaar), July 5, 1899, one bay mare, wire cut on left front foot; valued at \$25.

Wyandotte County—Leonard Daniels, Clerk.

COW—Taken up by John Barry, in Shawnee tp., (P. O. Turner), July 11, 1899, one dark red cow, weight about 700 pounds, blind in left eye, dehorned, stump tail; valued at \$10.

Wilson County—C. W. Isham, Clerk.

MARE—Taken up by S. Swenson, in Colfax tp., (P. O. Chanute), Neosho Co., Kans., one gray mare, about 8 years old, wire cut on left front leg below knee; tip of right ear split; valued at \$30.

Wallace County—O. N. Thorne, Clerk.

HORSE—Taken up by N. N. Rosendahl, in Stockholm tp., July 13, 1899, one gray horse, branded C. K.; valued at \$20.

Greeley County—Robt. Eadie, Clerk.

MARE—Taken up by Frank D. O'Neal, in Tribune tp., July 8, 1899, one sorrel mare, weight about 1,000 pounds, small blaze in face; valued at \$20.

Saline County—A. L. Brown, Clerk.

MULES—Taken up by Frank Robbins, in Bureka tp., (P. O. Kipp), June 14, 1899, one gray horse mule, over 10 years old, 13 1/2 hands high, split in right ear. One brown mare mule, over 10 years old, twelve hands high, scar on right fore knee; total value, \$70.

FOR WEEK ENDING AUGUST 10, 1899.

Cherokee County—S. W. Swinney, Clerk.

MARE—Taken up by Frank Arnold, in Crawford tp., July 15, 1899, one sorrel mare, about 15 years old, sixteen hands high, collar marks on shoulder; valued at \$20.

MARE—Taken up by J. W. Hodson, in Garden tp., July 21, 1899, one bay mare, 16 years old, branded "R" on right shoulder; valued at \$15.

Wallace County—O. N. Thorne, Clerk.

MARES—Taken up by James Yoxall, in Weskan tp., July 12, 1899, two bay mares, 8 years old, with two 1-year-old, bay horse colts by their side, diamond brand on mares and colts; total value \$60.

FOR WEEK ENDING AUGUST 17, 1899.

Pratt County—John Mawdsley, Clerk.

COW—Taken up by E. J. Shepherd, in Center tp., July 15, 1899, one light red cow, 5 or 6 years old, I. L. on right hip, and ear marked; valued at \$28.

Labette County—E. H. Hughes, Clerk.

MARE—Taken up by J. W. Marvel, in Howard tp., (P. O. Valeda), August 4, 1899, one bay mare, 15 hands high, weight about 1,000 pounds, large star in forehead, hind feet white; valued at \$15.

HAVE YOU HAY TO SELL?

You can market it easiest and get the best price for it if it is baled into compact even sized bales.



POSITIVELY THE BEST, most economical way to bale hay is with

A DEDERICK HAY PRESS.

They make the most compact and even sized bales and are the fastest presses made. We make numerous presses for hand, horse and steam power. Also best wire bale ties. Illustrated catalogue free. P. K. DEDERICK'S SONS, 23 Tivoli St., Albany, N. Y.

MARKET REPORTS.

Kansas City Live Stock.

Kansas City, Aug. 14.—Cattle—Receipts since Saturday, 9,889; calves, 602; shipped Saturday, 1,161 cattle; 19 calves. The market was steady. The following are representative sales:

DRESSED BEEF AND SHIPPING STEERS.			
No.	Ave. Price.	No.	Ave. Price.
119.....	1,409 \$5.85	89.....	1,317 \$5.80
87.....	1,317 5.75	21.....	1,199 5.65
28.....	1,250 5.20	21.....	1,217 5.10
34.....	1,231 5.10	2.....	1,080 4.00

WESTERN STEERS.			
No.	Ave. Price.	No.	Ave. Price.
41 T.....	1,144 \$5.10	91.....	1,160 \$4.75
86.....	1,106 4.50	28 stk.....	439 4.25
49.....	1,045 4.20	1 stk.....	740 3.50
1 stk.....	620 3.25	3.....	526 3.00

NATIVE HEIFERS.			
No.	Ave. Price.	No.	Ave. Price.
1.....	700 \$3.65	5.....	812 \$3.25

NATIVE COWS.			
No.	Ave. Price.	No.	Ave. Price.
1.....	1,190 \$3.60	2.....	975 \$3.50
1.....	910 3.40	5.....	1,076 3.25
1.....	1,120 3.00	9.....	913 2.85
2 Jer.....	605 2.75	4.....	897 2.25

NATIVE FEEDERS.			
No.	Ave. Price.	No.	Ave. Price.
19.....	1,128 \$4.70	1.....	1,230 \$4.70
37.....	1,043 4.55	4.....	980 4.50
26.....	926 4.42½	48.....	1,018 4.37½
1.....	900 4.05		

NATIVE STOCKERS.			
No.	Ave. Price.	No.	Ave. Price.
17.....	864 \$4.70	28.....	636 \$4.55
42.....	805 4.50	14.....	623 4.45
62.....	815 4.40	2.....	825 4.30
2.....	555 3.75	2.....	755 3.65

Hogs—Receipts since Saturday, 2,613; shipped Saturday, 155. The market was 5 to 10c higher. The following are representative sales:

The following are representative sales:			Sales: 140		
24... 161 \$4.05	23... 143 \$4.05	18... 140 \$4.02½			
47... 158 4.02½	70... 208 4.55	32... 253 4.55			
10... 218 4.52½	80... 186 4.52½	73... 199 4.50			
91... 212 4.50	52... 181 4.55	82... 223 4.50			
75... 244 4.50	63... 242 4.50	46... 166 4.50			
04... 247 4.47½	76... 247 4.47½	88... 202 4.47½			
80... 238 4.47½	44... 220 4.47½	77... 245 4.47½			
60... 285 4.45	93... 194 4.45	61... 178 4.45			
68... 282 4.45	88... 243 4.45	13... 211 4.45			
58... 288 4.45	80... 255 4.45	65... 285 4.45			
4... 110 4.40	6... 208 4.40	29... 220 4.30			
34... 140 4.10	1... 160 4.00	4... 297 3.90			
1... 210 3.75	1... 190 3.50	3... 83 3.50			
1... 210 3.50	1... 220 2.50				

Sheep—Receipts since Saturday, 2,896; shipped Saturday, 550. The market was steady to weak. The following are representative sales:

9 spg. lbs...	50 \$5.00	18 sw. lbs...	65 \$4.75
22 sw. lb...	95 3.90	28 stk. lbs...	53 3.65
91 sw. stk...	81 3.60	27 stk. sh...	70 3.50
10 stock...	83 3.40	106 stk. lbs...	51 3.30

Chicago Grain and Provisions.

Aug. 14.	Opened	High'st	Lowest	Closing
Wht—Sept....	71½	71½	71½	71½
Dec.....	73	74½	73½	74½
May.....	77	77½	76½	77½
Corn—Sept....	30½	31	30½	30½
Dec.....	28½	28½	28½	28½
May.....	29½	29½	29½	29½
Oats—Sept....	19½	19½	19½	19½
Dec.....	19½	19½	19½	19½
May.....	21½	21½	21½	21½
Pork—Aug....	8 20	8 20	8 20	8 20
Sept....	8 37½	8 37½	8 22½	8 30
Oct....	5 40	8 45	8 30	8 35
Lard—Aug....	5 20	5 20	5 20	5 20
Sept....	5 25	5 27½	5 22½	5 22½
Oct....	5 30	5 32½	5 25	5 25
Ribs—Aug....	5 02½	5 02½	5 02½	5 02½
Sept....	5 07½	5 10	5 02½	5 05
Oct....	5 15	5 15	5 07½	5 10

Chicago Live Stock.

Chicago, Aug. 14.—Cattle—Receipts, 17,500; market strong; beefs, \$4.00@5.20; cows and heifers, \$2.00@5.10; Texas steers, \$3.75@5.25; stockers and feeders, \$3.25@4.90.

Hogs—Receipts, 23,000; market higher; mixed and butchers, \$4.50@4.85; good heavy, \$4.45@4.85; rough heavy, \$4.15@4.30; light, \$4.00@4.95.

Sheep—Receipts, 20,000; market lower; sheep, \$3.00@4.60; lambs, \$4.00@6.85.

St. Louis Live Stock.

St. Louis, Aug. 14.—Cattle—Receipts, 5,000; market steady; native shipping and beef steers, \$3.60@6.15; stockers and feeders, \$2.70@5.00; cows and heifers, \$2.25@5.00; Texas and Indian steers, \$3.20@4.50; cows and heifers, \$2.50@3.75.

Hogs—Receipts, 3,500; market 5 to 10c higher; pigs and lights, \$4.70@4.90; packers, \$4.60@4.75; butchers, \$4.70@4.80.

Sheep—Receipts, 1,000; market steady; native muttons, \$3.90@4.10; lambs, \$4.50@6.40.

Kansas City Grain.

Kansas City, Aug. 14.—Wheat—Receipts here to-day were 248 cars; a week ago, 264 cars; a year ago, 482 cars. Sales by sample on track: Hard, No. 2, 64½@66c; No. 3 hard, 61½@63½c; No. 4 hard, 57½@63c; rejected hard, 56½@61½c; no grade, 60½c. Soft, No. 2, 63½c; No. 3 red, 64@66c; No. 4 red, 60@63c; rejected, 55c. Spring, No. 4, 58½c.

Corn—Receipts here to-day were 62 cars; a week ago, 63 cars; a year ago, 82 cars. Sales by sample on track: Mixed, No. 2, 29c; No. 3 mixed, 28@29c; No. 4 mixed, 27½c; no grade, nominally 24@26c. White, No. 2, 29½c; No. 3 white, nominally 28½c; No. 4 white, nominally 26@27c.

Oats—Receipts here to-day were 13 cars; a week ago, 18 cars; a year ago, 15 cars. Sales by sample on track: Mixed, No. 2, 19½@21c; No. 3 mixed, nominally 18@19c; No. 4 mixed, 18c. White, No. 2, 22½c; No. 3 white, 21c; No. 4 white, nominally 19@20c.

Rye—No. 2, nominally 51c; No. 3, nominally 49@50c; No. 4, nominally 47@48c.

Hay—Receipts to-day were 112 cars; a week ago, 130 cars; a year ago, 116 cars. Quotations are: Choice prairie, \$6.00; No. 1, \$5.50@5.75. Timothy, choice, \$7.50. Clover, pure, \$5.50@6.50. Alfalfa, \$6.00@7.00.

Chicago Cash Grain.

Chicago, Aug. 14.—Wheat—Cash, No. 2 red, 72½@73½c; No. 3 red, 69@71½c; No. 2 hard winter, 69@69½c; No. 3 hard winter, 67½@69c; No. 1 northern spring, 71½@72c; No. 2 northern spring, 71@71½c; No. 3 northern spring, 67@70½c.

Corn—Cash, No. 2, 31½c; No. 3, 31½c. Oats—Cash, No. 2, 21c; No. 3, 20½c.

St. Louis Cash Grain.

St. Louis, Aug. 14.—Wheat—Cash, No. 2 red, elevator, 72c; track, 71½@73½c; No. 2 hard, 69½@70c.

Corn—Cash, No. 2, 31c; track, 32c.

Oats—Cash, No. 2, 21c; track, 22c; No. 2 white, 28½c.

Kansas City Produce.

Kansas City, Aug. 14.—Eggs—Strictly fresh, 10c per doz.

Butter—Extra fancy separator, 17½c; firsts, 16c; seconds, 11c; dairy, fancy, 14c; store packed, 11½c; packing stock, 11c.

Poultry—Hens, 7c; broilers, 9½c; roosters, 15c each; ducks, 5@6c; geese, 5c; turkeys, hens, 7c; toms, 6c; pigeons, 75c per doz.

Vegetables—Pieplant, 10c per doz. bunches. Radishes, 5c per doz. bunches. Green beans, 20@35c per bu. Peas, 40@75c per bu. Sweet corn, 2@5c per doz. Tomatoes, home grown, 10@40c per bu. Cucumbers, 15@35c per bu. Cabbage, home grown, 20@40c per doz.

Grapes—Home grown, 6c per lb.

Potatoes—Home grown, new, 17½@20c per bu.; Kaw valley, sacked, 20@25c per bu. Sweet, 60@75c per bu.

Melons—Watermelons, home grown, \$2.00 per doz. Cantaloupes, home grown, 20@45c per doz.

SEEDS AND POULTRY SUPPLIES.

Seeds, bulbs and poultry supplies, T. Lee Adams, 419 Walnut street, Kansas City, Mo.

Winter Wheat.

Bearded Flie.

Write to us for HOW TO RAISE WINTER WHEAT with description of best varieties to grow, prices, etc. Also Timothy Seed. Address A. A. BERRY SEED CO., Clarinda, Iowa.



Kees' Improved Corn-Husker

The greatest labor and hand saving tool ever made. Sold by hardware and general stores. Sent post paid for 35 cents. Address F. D. KEES, Beatrice, Nebr.



MAKES YOUR PUMP Work Easy

Yankee Pump Governors make the hardest pump work easy as the easiest. Windmills turn in the lightest breeze. Managing agent wanted for each county. Money in this for you. Write to-day. BANE MANUFACTURING CO., (Dept. F) 55 W. Washington St., Chicago. When writing mention Kansas Farmer.

WHITMAN'S AMERICUS



The Best Older and Wine Mill made. Will make 20 per cent. more older than any other. Geared outside. Perfectly Adjustable. Prices as low as any first-class mill. Mfrs. of Hay Presses, Horse Powers, Corn Shellers, Feed Cutters, Feed Mills, etc. Send for circulars. WHITMAN & CO., ST. LOUIS, MO.

American Cider Mill.



Apple Growers who are in want of a first-class cider Mill will do well to look into the merits of "the old reliable" American Cider Mill, which has been on the market for many years. This Mill will more than pay for itself in a single season on the extra amount of cider it will make out of the same quantity of apples over any other make on the market. The American has carried the premiums at all county and state fairs where it has been placed on exhibition with mills of other makes.

For prices and further information, address WM. STAHL, Quincy, Ills.

..HOWE.. STOCK SCALES.



The only scale with ball bearings. Fire and Burglar-Proof SAFES. Foss Gasoline Engines. Write for Catalogue. Borden & Selleck Co 1102 Union Ave., Kansas City, Mo.

1,000 Kansas Farms For Sale.

Farms and pasture lands in nearly every County in Kansas. They have been held for higher prices, but are now ordered to be sold. We have the farm you want. Write us for lists of farms and pasture lands in your County. This is your chance to get a bargain. AMERICAN LAND COMPANY, Topeka, Kansas.

LIVE STOCK AUCTIONEERS.

J. N. HARSHBERGER,

LIVE STOCK AUCTIONEER, LAWRENCE, KAN. 15 Years of experience. Sales made anywhere in the United States. Terms the lowest. Write before claiming date.

S. A. SAWYER, FINE STOCK AUCTIONEER—S. Manhattan, Riley Co., Kas. Have thirteen different sets of stud books and herd books of cattle and hogs. Compile catalogues. Retained by the City Stock Yards, Denver, Col., to make all their large combination sales of horses and cattle. Have sold for nearly every importer and noted breeder of cattle in America. Auction sales of fine horses a specialty. Large acquaintance in California, New Mexico, Texas and Wyoming Territory, where I have made numerous public sales.

THE SHAWNEE FIRE INSURANCE COMPANY,

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Insures Against Fire, Lightning, Windstorms, Cyclones and Tornadoes.

The only company in Kansas with a paid-up capital of \$100,000. It writes more business in Kansas than any other company. It has paid losses amounting to \$493,366.83. Call on your home agent or write the company.

DO YOU WANT A FARM OR A RANCH? 7,000,000 acres Ranch land—1,000,000 acres Farm land, located in NEBRASKA, KANSAS, COLORADO, WYOMING and UTAH. For sale by the UNION PACIFIC RAILROAD COMPANY at greatly REDUCED PRICES on ten years' time and only 6 per cent interest. LIBERAL DISCOUNT FOR CASH. Please refer to this paper when answering advt. B. A. McALLISTER, Land Commissioner, U. P. R. CO., Omaha, Neb.

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IS THE ORIGINAL AND SUCCESSFUL PREVENTIVE REMEDY FOR

BLACK • LEG.

Write for particulars, official endorsements of our Vaccine and testimonials from thousands of stockmen who have used Pasteur Vaccine upon nearly one million head in the United States during the last three and a half years and prevented losses from Black Leg. "Single" Vaccine and "Double" Vaccine, as preferred.

PASTEUR VACCINE CO., 52 Fifth Ave., CHICAGO.

The Kansas City Stock Yards.

FINEST EQUIPPED, MOST MODERN AND BEST FACILITIES.

The Kansas City market, owing to its central location, offers greater advantages than any other.

Twenty-Two Railroads Center at these Yards.

Largest Stocker and Feeder Market in the World.

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Principal Buyers for Export and Domestic Markets in Constant Attendance.

	Cattle and Calves.	Hogs.	Sheep.
Official Receipts for 1898	1,846,233	3,672,909	980,303
Sold in Kansas City 1898	1,757,163	3,596,828	815,580

C. F. MORSE, Vice-Pres. and Gen. Mgr. E. E. RICHARDSON, Secy. and Treas. H. P. CHILD, Asst. Gen. Mgr. EUGENE RUST, Traffic Manager

If You Are Going Save Hogs.

Prevent Hog Cholera by giving occasional doses of a remedy that has saved thousands. You can buy drugs and make it for 10 cents a pound. Fifteen years a success. Recipe and full directions, \$1.00. Sent to any address by H. D. RECORD, Kiowa, Kans.

Gluten Feeds.

The cheapest source of Protein for a Balanced Ration. Will produce richer milk and more of it; a more rapid growth and development of Cattle and Hogs, and better meat for market purposes than any other feed on the market. Highly recommended by Prof. H. M. Cottrell, of Manhattan Agricultural College. For information and prices address N. T. GREEN & CO. Kansas City, Mo.

Successful Dairyman use 1 cent's worth of SHOO-FLY.

Saves 3 quarts milk daily if used in time. NO FLIES, TICKS, VERMIN OR SORES ON COWS. Thousands duplicate 10 gallons. Beware of imitations. "I have used several so-called 'Cattle Comforts', none equal to 'SHOO-FLY'. It is effective and cheap. Used 100 gallons." H. W. COMFORT, Fallingston, Pa., President Pennsylvania Dairy Union. Send 25 cents. Money refunded if cow is not protected. SHOO-FLY MFG. CO., 1005 Fairmount Ave., Philadelphia, Pa.

NOTE NEW SCHEDULE:

Mo. Pac. Ry. Lv. Kansas City.....9:15 p. m. via Mo. Pac. Ry. " Leavenworth.....10:17 p. m. " St. Joseph.....8:05 p. m. " Atchison.....11:10 p. m. Ar. Omaha.....5:50 a. m. Lv. Omaha.....6:10 a. m. via C., St. P., M. & O. Ar. St. Paul.....6:50 p. m.

ELEGANT EQUIPMENT AND QUICK TIME...

Try the New Fast Line.

SEE NEAREST MISSOURI PACIFIC AGENT FOR TICKETS, SLEEPING CAR ACCOMMODATIONS, ETC....

H. C. TOWNSEND, G. P. & T. A., ST. LOUIS.

Mention Farmer to advertisers.

When writing please mention Kansas Farmer.

The Poultry Yard

THE BUSINESS SIDE.

BY PRISCILLA PLUM.

When I first went into poultry in earnest I had a dim idea of doing business. I had not forgotten how to do the sums in mental arithmetic, or reckon the interest on notes, and by an effort could recall from school days enough mental power to estimate the number of rolls of paper needed for my sitting-room, or the yards of carpet required for the floor; but real business, such as a man encounters at every turn, or a woman, if she is the manager of an estate, I knew nothing of.

THE WICKEDNESS OF THE WICKED.

At first I tried shipping broilers to Detroit and Chicago, but the hired man took a half-day in trying to make a crate for twelve. I know now that it weighed three times what it should have weighed and the express rates and the commission were so heavy that I had little remaining, and a number of loads of clover were ruined because of my unlucky crate. Then I sold some live fowls to hucksters, and soon found out that they had cheated in weights; their hook scales were an invention of Ananias himself. I could raise the birds all right, but how to dispose of them profitably was the rub. I tried shipping dressed fowls to commission merchants in cities, and received 21 cents each for large fat pullets in November. That ended the commission business for me. I doubtless would have had a round with incubator and capon branches of the business, but some very good friends of mine tried experiments along that line, and I became convinced that one woman without help, on a farm, could not sit up nights with an incubator, or make a success with capons; if one has plenty of help, not the hired kind, it makes a difference.

WENT INTO THOROUGHBREDS.

Then I tried a new venture. I killed and dressed for the local butcher sixteen big Plymouth Rock hens, and borrowed enough more money to purchase a trio from a famous breeder. I paid double fancy express rates, and one pullet had the roup when she arrived, but without treatment (except isolation) recovered. Then business began in earnest—the selling of eggs from that trio, the disposing of surplus stock to breeders, the ordering of baskets, the arranging of the ever-necessary advertisement, and the paying for it also, sharpened my wits.

THE ADVERTISING THAT PAID.

I soon found that a high-priced advertisement in a poultry paper did not pay unless you had a show record, and that was beyond the reach of a woman who was housekeeper as well as poultry-raiser. The advertisement in the local paper did but little to bring purchasers, but the State agricultural paper was more to the point. I will admit that for a time the balance, with a blue hand pointing to the words, "Please remit," made me feel like having a nervous chill, but I learned that an "ad" that is in every issue for a year is the cheapest in the long run, and that it becomes more valuable the longer it appears; that it increases in value with age, is what medical men call "cumulative" in action, and that after awhile the very fact that you are an old advertiser in the poultry column means to the reader that you are not only ancient, but reliable. The hardest pull was at first. I soon learned to make my own crates and ship my birds and eggs, and learned by a tough experience to let the c. o. d. customer severely alone. I learned how to make out a post-office order or draw money from the bank without having an attack of nervous prostration; how to answer a business letter concisely and courteously, and how to deal with dudes who tried to get my best birds for half price.

LEARNED BUSINESS SENSE.

I found a market among private customers for cull birds; bought a set of scales and did my own weighing; learned that the time of year to market dressed fowls is the first three months of the year, not the last, broilers excepted. All this came little by little, in the hard school of experience, but I am aware that if I should be left as many farmers' wives are—to settle their husband's estates or act as guardian—I should not tremble at the overbearing manners of sundry officials, or have spasms because sharks tried to cheat me. Better by far than a course in a business college is a business experience humbly begun and steadily pushed to a successful issue, and this—as well as a little pin money—is possible to a certain extent to every farmer's wife.



Cream From a Poultry Scrap-Book.

BY W. THEO. WITTMAN.

"All food for little chicks in the form of grain or meat should be cooked.

"Little chicks can be raised on cracked corn alone. But at 4 weeks old they will not be any larger than they should have been at 2 weeks and at maturity will be from one to several pounds under weight.

"And why? Because corn, raw corn particularly, is in no way constituted to supply the wants of a growing chick.

"Would you think of feeding your week-old calves or colts on corn?

"The chicks first meal should be dry oat-flakes or rolled oats; their second meal should be dry oat-flakes or rolled oats; and the first two days nothing else save plenty of fresh water, sweet milk and quiet; then bread and milk; then bread sopped in meat broth; then millet seed and cooked meat; then cooked small grains of all sorts; then dry grain all they will eat kept in a hopper."

"Do not place the coop at this season of the year in the hot sun, a shade is better; and at a big distance from any other coop or fowls."

"Let the old hen out every day it does not rain."

"Look for lice morning, noon, and night."

"Kill off all the weaklings at once as you discover such."

"Don't use any old tin can or pan for a water vessel; tin is no fit thing for a water dish; earthenware fountains, such as can be easily and quickly cleaned, are much better."

"Little chicks will never be subject to gapes if moved at once to ground unfettered with the gape-worm; this usually means ground on which no fowls have ever run. A good and simple preventive is to feed the chicks a full breakfast on food they relish the minute they are let out in the morning and before they have had a chance to pick up any earth-worms. Also prevent, as much as possible, the chicks finding worms, but never coop them; better run the risk of a few gape-worms than to confine your chicks."

"A food that chicks over a week old greatly relish is cooked oat-flakes."

"The brooder is all wrong for summer use and is far inferior to the old hen, but it is far ahead of the hen for winter and spring use."

"Raising chicks early in the spring, especially in large numbers, with hens is always a failure, but always a big success if you can get onto the knack of running a brooder successfully—which means in this climate almost unceasing attention."

"A young chick's necessities are warmth, light, pure air, clean water, a variety of food, and clean quarters."

"The good brooders are those that can be easily and quickly cleaned out and that can be properly ventilated. Almost any of them can be kept warm enough, but I think some of them are harder to clean out than they should be and I am very sure only a few provide proper ventilation."

"Bear in mind that young chickens are forming flesh, muscle, bone, and feathers at one and the same time. No one food will answer for all these requirements, especially corn."

"The diet of young chicks can not be too varied. Feed them liberally but never enough at one time to clog their appetite."

"Keen appetite and good health are boon companions in the poultry-yard."

"Be careful that all chicks get their share. If some fail to get their share they will surely develop into runts. Don't feed the large and the small ones together, anyhow. Have separate coops and separate places for each size."

"Crooked breast-bones are always caused by roosting too early. Crooked backs are sometimes caused by overcrowding but generally by some vicious hen giving the chicks a peck in the back."

"If a cat catches chickens, use the shotgun if she belongs to an outsider. If she happens to be the family pet tie one of her victims very securely about her neck. Fasten it very tight and well for she will make incredible efforts to get rid of it. Be firm and the cat is cured and will never again desire to touch a chicken."

"The weakling chicks make good rat bait in combination with a little arsenic or strychnine. No rat can resist dining on a freshly killed chick and, put in their runs just at dark, they are sure to find it."

The Prairie-Hen.

Among our native wild birds there are a few that seem worthy of domestication, as they possess economic qualities that art of value. Among these there is none that seems more worthy of a systematic attempt at domestication than the pinnated grouse or prairie-hen. Its general color is yellowish red, with black markings. It has a short and rounded tail. The male has two remarkable characteristics—the neck tufts, composed of long, narrow feathers, sometimes measuring five inches in length, and the pouches of wrinkled skin along the neck for two-thirds of its full extent, which

are capable of inflation, and, when filled with air, resemble quite closely medium-sized oranges. This resemblance to oranges extends not only to size, but to the color and peculiar surface of the fruit. In the winter the birds congregate in large flocks; in summer these flocks break up into smaller bodies, dispersed, probably, for the better performance of the operations of hatching and rearing the young. As the breeding season approaches the males strut about like turkey-cocks, dropping their wings to the ground, erecting the feathers on their neck and inflating their orange-like pouches. At this season many meet in certain places in the western part of our country, about daybreak usually, and engage in their displays to attract the females, ending in severe battles. When the sun is up the conquerors and conquered retire from the field. The pinnated grouse was once common in New Jersey and Pennsylvania, as well as on the prairies of the West, but, like the Indian, it has disappeared before the advancing wave of civilization. Its food is not dissimilar to that of domesticated poultry, or what our domesticated poultry would obtain if compelled to shift for themselves. It feeds upon seeds, berries, buds of trees and bushes, insects, and the like. The flesh of this bird is good and in the parts of the country where it is rare is highly prized.

Could it be domesticated—and that is by no means impossible—there would be added to the feathered stock about the farmyard a fowl with excellent flesh, a new figure to please the eye, and probably a fairly good layer. It now lays quite as well as the original bird from which the domesticated fowls are supposed to be descended, and, under domestication, its laying powers might be equally increased. In its wild state it shows more or less variation, and, as variation is increased under domestication, if it were domesticated its size might be enlarged, its color and markings more or less changed, its figure modified and its prolificacy augmented. In this way its economic properties might be greatly improved, and it might be found to be fully as useful and profitable as the fowls that now supply our table with delicate flesh and eggs.—H. S. Babcock, in American Agriculturist.

Poultry Items.

In a majority of cases if a chick is unable to get out of the shell when it is first hatched it has either developed at the wrong end of the shell or lacks vitality. If the latter, it will generally be short lived, but in the other case, sometimes a strong chicken may be saved. Examine and see at which end of the shell the chipping commenced. If at the small end opposite the air-cells, the head is turned the wrong way and has not room to work.

It is largely when the fowls are closely confined and have nothing to do that they are more likely to fall into the habit of feather-picking. If they can have litter or dry dirt to scratch and can occasionally find a grain of some kind there is very little danger of their getting into this habit. Once started the habit is almost incurable, and the better plan is to prevent. A hen caught at the practice should be separated from the rest of the flock immediately or the whole flock will in a short time acquire the habit.

Bones are valuable to feed to poultry, largely for the phosphate of lime they contain. When fresh, they contain a small amount of animal matter, which is useful as food, and it is largely on this account that they are in their best condition when fresh and unburned. Burning, or charring,

destroys this animal matter and to that extent makes them less valuable. It is true that the charcoal obtained from burnt bones aids digestion and is purifying, yet the same can be secured with corn or wood charcoal at a less cost.

While it is only in exceptional cases that it can be considered advisable to set hens for hatching this late in the season yet sometimes it is desirable. When this is the case either the nest should be made upon the ground, or a roll of earth, turned turf-side down, should be placed in the bottom of every nest. The earth holds moisture so much better that it will be found a decided help in securing the best hatches. One of the principal causes of chicks dying in the shell is the too rapid evaporations during incubation, and making the nests in this way will aid materially in avoiding this loss. Then a day before the eggs are expected to hatch the eggs should be immersed for a minute or two in tepid water. Sprinkling with water will help but the surest and safest way is to immerse. When the air is hot and dry, the inside lining of the shell—the outside shell being porous—becomes toughened by drying, and moistening in this way tends to soften and a sure hatch is the result.

"You may bend the sapling but not the tree." When disease has become chronic and deep seated it is often difficult to cure it. That is the reason why it is best to take Hood's Sarsaparilla when disease first shows itself.

Hood's Pills are the favorite family cathartic.

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Chicago or the East?
THE THROUGH EXPRESS FROM
Colorado—Kansas—Nebraska
VIA OMAHA,



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In addition to Pullman Sleepers, Free Chair Cars, and the Best Dining Car Service in the World, are equipped with

Buffet Library Smoking Cars
furnished in club style and supplied with latest periodicals, illustrated papers and a select library of recent fiction.

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TRY THE COLORADO FLYER

Fast, carries Dining Cars and Pullman Sleepers. Leave Omaha, 6:40 p. m.; Kansas City, 6:30 p. m.; St. Joseph, 4:50 p. m. Arrive Denver and Colorado Springs, next morning.

JNO. SEBASTIAN,
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ARE SOLID VESTIBULED.

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the West.



Colorado,
Wyoming, Utah,
California, Oregon.

AND FINELY EQUIPPED WITH
Palace Sleeping Cars, Dining Cars,
Free Reclining Chair Cars,
Ordinary Sleeping Cars. (Pintch Lighted.)

For Time Tables, Folders, Illustrated Books, Pamphlets, descriptive of the territory traversed, call on F. A. Lewis, City Ticket Agent; or, J. C. Fulton, Depot Agent, Topeka, Kans.

The War Department sends instructions to buy 3,000 animals to be sent to the Philippines. The animals must weigh between 900 and 1,000 pounds, be perfectly sound, and under 7 years old. Major J. B. Aleshire, chief quartermaster at Matanzas, Cuba, now in Chicago on leave of absence, has been selected to travel through the adjoining States in search of the animals needed. He expects to secure 1,000 horses in Chicago, and will then go to Louisville, St. Louis, and other cities. The animals will be shipped to San Francisco in lots of 100 and sent from there by transport.

The Kansas City Drovers' Telegram gets off the following cruel roast on the Chicago market: "About twenty years ago Tom O'Day, an eccentric character of Chicago, buried a pot of gold containing \$1,800 to \$2,000 in the stock-yards there. His death occurred a few days ago, and many yard employes and stockmen have been digging around the yards hoping to find the pot of gold. This story sounds something like Captain Kidd tales, but so many have lost money at the Chicago stock-yards that the story of O'Day's loss finds many believers."

PAGE
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find exactly the fence you want, write us. We think we make it, and if we don't, we can try.
PAGE WOVEN WIRE FENCE CO., ADRIAN, MICH.

You Can Save Money
this season, by buying
OSGOOD
SCALES
Write for Special Offer—don't wait.
Osgood Scale Co., 34 Central St., Binghamton, N. Y.

CEM FULL CIRCLE Baler
Warranted the lightest, strongest, cheapest & fastest Full Circle Baler in the market. Made of wrought steel. Can be operated with one or two horses. Will bale 10 to 15 tons of hay a day. Write for description and prices.
GEORGE ETEL CO., QUINCY, ILL.

The Easiest Way
to market a crop of hay is in the bale.
46-IN. FEED OPENING.
The best way to bale hay is with the
"ELI" BALING PRESS.
Made in 33 styles and sizes for either horse or steam power. Made entirely of steel, combining greatest strength, lightness, durability and efficiency. Makes the most compact, even sized bales, packing closely in cars and saving freight. Send for our large illustrated catalogue—mailed FREE.
COLLINS PLOW CO., 1120 Hampshire St., QUINCY, ILL.

THE "HOOVER" DIGGER
By mentioning this paper you can get illustrated book free.
DIGS POTATOES
Rapid, Clean and Cheap.
HOOVER, PROUT & CO. Avery, Ohio.

CLEAN YOUR SEED WHEAT.
For 16 years we have manufactured and placed on the market, our celebrated Cylinder Mills for cleaning Wheat, Oats, Barley, Flax, and Rye for Seed or for Market, removing all foul seed at one operation, such as Cockle, Wild Buckwheat, Chess, Mustard, Pigeon Grass, etc. Indorsed by the Wheat Growers' Convention held at Fargo, N. D. last March, which was the greatest test ever given in interest to the farmer for clean seed. Write for circular and price list. We pay freight. Address
MINNEAPOLIS GRAIN CLEANER CO., 224 Third St., South Minneapolis, Minn.

Here is the Implement That You Want
FOR YOUR LIGHT SOIL.

It is Used by Progressive Farmers Everywhere.

The McColm Clod Crusher and Compress Field Roller.
It crushes and grinds all clods, packs the soil without making a smooth, hard surface, no parts to wear or get out of repair. For particulars, address
THE H. P. DEUSCHER CO., Hamilton, Ohio.

MICA AXLE GREASE
lightens the load—shortens the road.
helps the team. Saves wear and expense. Sold everywhere.
MADE BY
STANDARD OIL CO.

The American Steel Tank Co. is making the same high grade Tanks, all shapes and sizes. If you are interested, write for prices and catalogue "A."
Farmers, Stockmen, Creamery, Dairy and Sheep-Dipping TANKS.
AMERICAN STEEL TANK CO.,
3119 West Eighth St., Kansas City, Mo.

We make Steel Windmills, Steel Towers and Feed Grinders and are selling them cheaper than the cheapest. Our productions are standards; are first-class in every respect and are sold on trial. Send us a postal and we will tell you all about them.
CURRIE WINDMILL CO.,
AGENTS WANTED. Manhattan, Kas.

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IS THE STANDARD
STEAM PUMPS, AIR LIFTS, GASOLINE ENGINES
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THE AMERICAN WELL WORKS
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20th Kansas Attention!!
BINDER TWINE 7½, 8½, 9½ cents per pound.
GET UP CLUBS.
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of the hay market unless your hay is baled. Baled hay finds a market at every little shipping station in the country.
DEDERICK'S PRESSES
Are the Best and Most Economical for baling hay because they make the most compact and even sized bales; you can get much more hay in a car. That means a big saving of freight. They are the fastest presses made. We build them in hand, horse or steam power, both wood and steel case. We also make the best wire baling ties. Send for our book, "Hay Baling Facts." It is FREE.
P. K. DEDERICK'S SONS, 23 Tivoli St., Albany, N. Y.

"A MOLE on the Neck, Money by the Peck."
but there is no money in having a mole in your garden or on your lawn. Don't have them. Catch them with the
"OUT-O-SIGHT" Mole Trap.
Every trap has our guarantee to catch.
Sample trap 85c. by mail or, have your dealer order for you.
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A valuable book for the farmer or breeder. It fully describes Hog Cholera and Swine Plague, and gives a positive and proven

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It is so plainly written that even a child can learn to know the two diseases. Free for the asking. Address the publishers.

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THE FARMERS' ALLIANCE INSURANCE CO.
Established in 1888. Paid \$200,000 in Losses.
The mutual plan is the cheapest and best. You pay for what you get at its actual cost. Every property-owner can and should have the protection we offer. For agency or further information, address
C. F. MIGNENBACK, Secretary, McPherson, Kansas.

Warner "Common Sense" Fence.
Patented November, 1896.
OTHERS GOOD—NONE BETTER.
More sold in Kansas than any other fence.
It is made of heavy endless wire, with or without barbs top and bottom. Hog and pig tight. If your dealer does not sell it, write direct to us for prices and circular.
COMBINATION FENCE CO., Melvern, Kans.

HAY PRESSES HANDSOME CATALOGUE FREE
GET THE OLD RELIABLE Lightning
KANSAS CITY HAY PRESS CO.
129 MILL ST. KANSAS CITY, MO.

ADMIRAL HAY PRESS.
MADE BY THE
COOKSON MFG. CO.
KANSAS CITY, MO.

OUR YOKES SAVE LAWSUITS
BRUISED HEADS AND FAMILY FEUDS,
Because they keep cattle in a wire enclosure where they belong. Price, 75c each; or \$4.50 per dozen. Our Wire Halters only 20c, and the best appliance for the money that can be purchased anywhere; \$1.20 per dozen. Satisfaction guaranteed.
Drop us a postal card for full particulars.
Address **ROGERS MANUFACTURING CO., Harper, Kans.**

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The machine attaches to an ordinary wagon bed, easily operated, and a machine that has been thoroughly tried during the season of 1897-'98, in the Kaffir-corn district. This machine will cut and elevate into a wagon, about 8 acres per day. It cuts one row at a time. This machine is adjustable to the will of the driver; can be raised or lowered to suit the height of uneven corn while in motion. Inquire of your dealer or write for prices to.....
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Positively & Permanently
No cutting, no pain, and no detention from business. You pay no money until cured. Consultation and examination FREE.
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Cancer, Tumor, Catarrh, Piles, Fistula, Ulcers, Eczema and all Skin and Womb Diseases. Write for Illustrated Book. Sent free. Address
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Without knife, syringe, or detention from business. Cure you at home. Circulars free.
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VARICOCELE cured without knife, pain or danger. Illustrated booklet free.
Call or write, **DR. H. J. WHITTIER, Kansas City, Mo.**

Ladies Our Monthly Regulator never fails. Box FREE. Dr. F. May, Bloomington, Ill.
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Original and Only Genuine. Safe, always reliable. Ladies ask Druggist for Chichester's English Diamond Brand in Red and Gold metallic boxes, sealed with blue ribbon. Take no other. Refuse dangerous substitutions and imitations. At Druggists, or send 10 stamps for particulars, testimonials and "Relief for Ladies," in letter, by return Mail. 10,000 Testimonials. Name Paper. Chichester Chemical Co., Medicine Square, PHILADELPHIA, PA.
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100,000 BOTTLES OF DR. SWIFT'S FAMOUS RHEUMATIC AND GOUT CURE.

Dr. Swift, America's great specialist in rheumatic diseases, has decided to distribute 100,000 free bottles of his now famous specific to all who apply at once. If you have been declared incurable by doctors and hospitals, write Dr. Swift, 103 Swift Building, New York, enclosing 10 cents in stamps or silver to prepay cost, and a regular 25-dose bottle will be mailed free. Regular price, \$1 a bottle, 3 bottles \$2.50, guaranteed to cure or money refunded. This is the discovery the Chicago Medical Times says is astonishing physicians everywhere. It is a marvel in medical science and is revolutionizing the treatment of rheumatism—over 3,000 physicians to-day prescribing it.

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GRASS SEEDS.****SEEDS****Special Want Column.**

"Wanted," "For Sale," "For Exchange," and small or special advertisements for short time, will be inserted in this column, without display, for 10 cents per line, of seven words or less, per week. Initials or a number counted as one word. Cash with the order. It will pay. Try it!

SPECIAL.—Until further notice, orders from our subscribers will be received at 1 cent a word or 7 cents a line, cash with order. Stamps taken.

FOR SALE.—Twelve yearling grade Shropshire rams \$12 to \$15. Also breeding ewes. E. W. Melville, Eudora, Kans.

FOR SALE.—Red Polled Cattle. One bull, 2 years old last May; two bull calves, calved in April; two cows, 3 years old this fall. H. C. Bowman, Room 38, Columbian Building, Topeka, Kans.

SHEEP FOR SALE.—15 Delaine Merino ewes \$5 each. 25 Cotswold ewe lambs \$5 each. Five Cotswold ram lambs, \$5, one large 4-year-old ram, breeds twins and triplets \$10. Write soon. A. B. Mull, Iola, Kans.

POLAND-CHINA BOARS.—Large and mellow, broad backs; deep bodies; good ends; bred right and fed right. Prices \$12 and \$15. Gold Bar Sanders 1000 S. and Loch Aerle Teumseh 20253 S. herd boars; they are superb. Wm. S. Powell, Moline, Elk County, Kans.

FOR SALE.—Farm and ranch. One of the best locations in western Kansas. Address Henry Pitts, Modoc, Kans.

WANTED.—To sell Polands and Berkshires; all ages. Very cheap. O. P. Updegraff, North Topeka, Kans.

NICHOLS & SHEPHERD threshing engine for sale cheap. Address R. B. Irwin, Modoc, Kans.

FOR SALE.—A number of fine young registered Jersey bulls. They are richly bred to the famous Stoke Pogis 3d and 5th blood and other noted sires. They are solid color, with rich, soft skins. Address Chas. H. Johnson, Proprietor Lindsey Creek Dairy Farm, Box 170, Minneapolis, Ottawa County, Kansas. Residence two miles east of Minneapolis.

BUCKWHEAT.—Turnip seed, millet, oyster shells and all kinds of poultry supplies. Lee's Lick Kill—A specialty at Topeka Seed House, 306 Kans. Ave.

DURO JERSEY SWINE.—Choice registered stock from best of families. For sale by J. C. LEACH, Carbondale, Kansas.

BARGAIN.—For sale. 640-acre farm in eastern Kansas, Morris County, one mile from Herington where there are four railroads, car shops, mills, elevators, business houses. A modern ten-room house, bay window, good cellar, large elstern, outbuildings, two never-falling wells, two windmills, four large tanks; all fenced; 450 in three p. stures, good grass, fifty in meadow, 140 under cultivation, young orchard, vineyard; other trees. \$19 per acre. If you mean business, will send picture of house and plat. Address Box 346, Herington, Kans.

STRAYED or STOLEN from my pasture, one-half mile north of Carbondale, Osage Co., Kans., about June 20, 1899, one gray mare 3 years old, well bred, trim built, weight between 800 and 900, one black filly, 2 years old, small blocky Norman, one bay filly, 2 years old, fair size, rather heavy built. A reward of \$15 will be paid for information leading to the recovery of the above colts. R. H. McClair, Carbondale, Kans.

FOR RENT.—Fine blue-grass pasture that will accommodate 30 head of stock, with never-falling water, good shelter for stock, 12 miles from Kansas City, located at Whitechurch, Kans., one and a half miles from R. R. Station. Will be at my farm every Sunday. Address C. W. Scheller, 611 North Fourth Street, Kansas City, Kans.

BERKSHIRES.—Five Berkshire boars for sale. Now ready for delivery. Write for prices. John L. Wyatt, Jetmore, Kans.

FLIES! FLIES!—Send 10 cents, and learn how to make tanglefoot fly paper. Holds all that can get on. Inexpensive; no humbug. Box 267, Newton, Kans.

FOR SALE.—10 high-grade Hereford and 10 high-grade Shorthorn bulls, 12 to 20 months old. Address Hugh A. Hodgins, Topeka, Kans.

PURE-BRED Aberdeen-Angus cows and heifers; also bull calves old enough to wean, can be got from Conrad Kruger, Norfolk, Kans.

WE POSITIVELY PAY \$16 a week and expenses, to men with rigs, to introduce Egyptian Lice Killer and Poultry Compound in country. Address with stamp, Egyptian Drug Co., Parsons, Kans.

BREEDERS' ANNUAL REPORT FOR 1899.—The great Kansas Live Stock Manual and proceedings of the Ninth Annual Convention of the Kansas Improved Stock Breeders' Association, contains 125 pages; price 25 cents. Address H. A. Heath, Secretary, Topeka, Kans.

FOR SALE.—Imported English Coach stallion and Galloway bulls. W. Guy McCandless, Cottonwood Falls, Chase Co., Kans.

FOR SALE.—100 cars cottonseed meal. Also corn and feed. Address Western Grain and Storage Co., Wichita, Kas.

WANTED.—Every breeder in Kansas to become a member of the Kansas Improved Stock Breeders' Association. Send membership fee of \$1.00 to H. A. Heath, Secretary, Topeka, Kans., and you will receive the Breeders' Annual Report for 1899.

POLAND-CHINAS.—No better anywhere. Five dollars each. Write for breeding. Hemenway, Hope, Kans.

BLOSSOM HOUSE.—Opposite Union depot, Kansas City, Mo., is the best place for the money, for meals or clean and comfortable lodging, when in Kansas City. We always stop at the Blossom and get our money's worth.

NO EXCHANGE.—A daughter of Hadley Jr., dam by Kiever's Model, for ten bushels of alfalfa seed on track. F. W. Baker, Council Grove, Kans.

If you have timothy, clover, prairie, alfalfa, or millet hay to market, correspond with J. W. Lowe & Co., 1313 W. Eleventh street, Kansas City, Mo. Liberal advances on shipments.

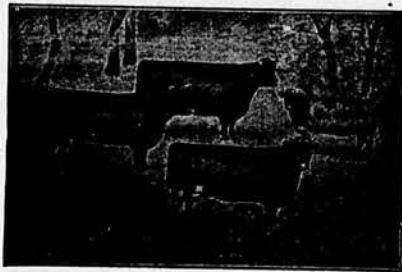
FOR SALE.—Imported and full-blood Percheron, Clydesdale and Coach stallions. Good individuals, colors and ages. For further information address W. H. McMillen, Manager, Box 204, Topeka, Kans.

675-ACRE FARM FOR SALE.—Only ten miles from the State capital; improved; has never-falling water. \$15.50 per acre if taken soon. Address J. Ferguson, Station B., Topeka, Kans.

BERDEEN-ANGUS BULLS.—Twelve extra individuals of serviceable ages; registered. Wm. B. Sutton & Son, Russell, Kas.

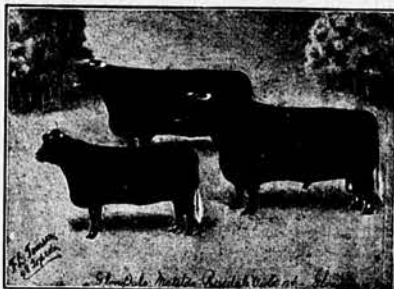
WRITE TO ALEX RICHTER.—Hollyrood, Kas., how to sub-irrigate a garden, etc., and cost of same. Send him the size or dimensions of your garden, and he will give full information.

AGENTS WANTED for the "Little Giant" belt fastener and harness mender. Only successful detachable fasteners made. Simple, durable, quickly applied. Belts can be spliced better in one-tenth the time required with lace leather and at one-fourth the cost. No user of belts or harness can afford to be without them. Quick sellers, exclusive territory given to live men. Send 50 cents for sample package and terms, to P. W. Masten, Postal Telegraph Building, Kansas City, Mo.

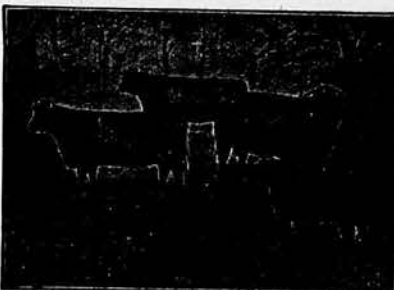
**HERD BULLS FOR SALE**

KANSAS LAD 134085, eighteen months old sired by Duke of Kansas 123126, and tracing to Imp Orlando and Imp Golden Galaxy. Also **CONSTANCE DUKE 134083**, twenty months old, by Duke of Kansas out of 5th Constance of Hillsdale by 60th Duke of Oxford 55734.

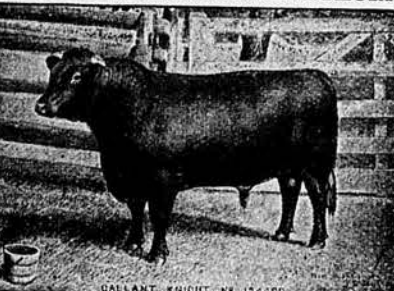
These two grand bulls should be herd-headers. Come and see them or address **B. W. GOWDY, Garnett, Kansas.**

**GLENDAL SHORTHORNS, Ottawa, Kans**

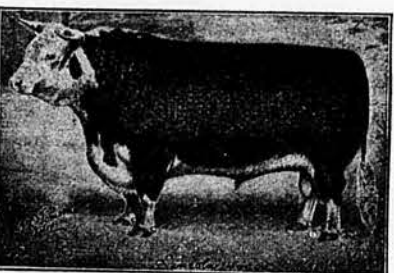
Leading Scotch and Scotch-topped American families compose the herd, headed by the Cruickshank bulls, Glendon 119370, by Ambassador, dam Galanthus, and Scotland's Charm 127264, by Imp. Lavender Lad, dam by Imp. Baron Cruickshank. Young bulls for sale. **C. F. WOLF & SON, Proprietors.**

**CEDAR HILL FARM.**

Golden Knight 108086 by Craven Knight, out of Norton's Gold Drop, and Baron Ury 2d by Godoy, out of Mysie 50th, head the herd, which is composed of the leading families. Young bulls of fine quality for sale. **C. W. TAYLOR, PEARL, DICKINSON CO., KANS.**

ELDER LAWN HERD OF SHORTHORNS.

THE HARRIS-BRED BULL, GALLANT KNIGHT 124466, a son of Gallahad, out of 8th Linwood Golden Drop, heads herd. Females by the Cruickshank bulls, Imp. Thistle Top 53876, Earl of Gloster 74523, etc. Size, color, constitution and feeding qualities the standard. A few good cows for sale now bred to Gallant Knight. A few young bulls of serviceable age for sale. Address **T. K. TOMSON & SONS, DOVER, KANS.**

**SPRING VALLEY HEREFORDS.**

Lincoln 47095 by Beau Real, and Klondike 42001, at the head of the herd. Young stock of fine quality and extra breeding for sale. Personal inspection invited. **ALBERT DILLON, HOPE, KANS.**

Italian Bees.

Full colonies shipped any time during summer and safe arrival guaranteed. It will pay you to try my stock of Italian bees in the Latest Improved Hives. Nothing will double in value quicker. **A. H. DUFF, Larned, Kans.**

1839.

THE "CORRECTORS" ARE HERE.
THE "IMPROVERS" ARE COMING.

1899.

WEAVERGRACE BREEDING ESTABLISHMENT.

The
Weavergrace
Past is
Sealed
With the
Approval
Of
America's
Stockmen.



The
Weavergrace
Future
Promises
A Record
Excelling
All
Previous
Achievements.

The Weavergrace present will bear the closest investigation and comparison. No Hereford is too good for Weavergrace. Neither time, labor, money nor any other factor within our reach will be spared in an open, honest, energetic effort to make the **WEAVERGRACE HEREFORDS** the best herd of beef cattle in the world. Nothing from the herd offered privately. All reserved for annual spring auction. Three hundred and sixty-four days of the year devoted to the general Hereford interests, one day to the sale of the Weavergrace Herefords.

I have an **Unrivaled List** of registered Herefords (both sexes) and of grade Hereford steers and females on file for sale throughout the country, in my office, New York Building, Chillicothe. There are several great bargains. All are invited to inspect this list, and spend a day at Weavergrace.

Hereford literature on application; also a colorotype reproduction (16x22) of an oil painting of **Corrector**, free to all who will frame it.

Sunny Slope Herefords.

**100
HEAD
FOR
SALE.**

CONSISTING of 32 BULLS, from 12 to 18 months old, 21 2-year-old HEIFERS, the get of Wild Tom 51292, Kodax of Rockland 40731 and Stone Mason 13th 42397, and bred to such bulls as Wild Tom, Archibald V 54433, Imported Keep On 76015 and Sentinel 76063, Java 64046.

40 1-year-old HEIFERS and 7 COWS.

These cattle are as good individuals and as well bred as can be bought in this country. Finding that 400 head and the prospective increase of my 240 breeding cows is beyond the capacity of my farm, I have decided to sell the above-mentioned cattle at private sale, and will make prices an object to prospective buyers.

Address **C. A. STANNARD, Emporia, Kans.**

VALLEY GROVE SHORT-HORNS.

THE SCOTCH BRED BULLS

Lord Mayor 112727 and

Laird of Linwood 127149

HEAD OF THE HERD.



LORD MAYOR was by the Baron Victor bull Baron Lavender 2d, out of Imp. Lady of the Meadow and is one of the greatest breeding bulls of the age. Laird of Linwood was by Gallahad out of 11th Linwood Golden Drop. **Lord Mayor** heifers bred to Laird of Linwood for sale. Also breed Shetland ponies. Inspection invited. Correspondence solicited. A few young bulls sired by Lord Mayor for sale.

Address **T. P. BABST, PROP., DOVER, SHAWNEE CO., KAS.**

Nelson & Doyle

Room 220, Stock Yards Exchange Building, KANSAS CITY, MO.,

Have for sale at all times, singly or in car lots...

Registered Herefords and Shorthorns.

Cross-bred Hereford Short-horns and grades of other breeds. Bulls and females of all ages

Stock on Sale at Stock Yards Sale Barn, also at Farm Adjoining City.

N. B.—We have secured the services of John Gosling, well and favorably known as a practical and expert judge of beef cattle, who will in the future assist us in this branch of our business.

FOR SALE.**Ten Shropshire Ram Lambs,**

80 to 100 pounds each, well marked, low and blocky, and with magnificent quality of fleece. These ram lambs are the result of the eighth top cross of registered Shropshire rams on ewes from a Merino topped Cotswold cross. Price, \$10 and \$12 crated and delivered at Moran, Kans. Missouri Pacific and M., K. & T. Cash must accompany order.

**J. Clarence Norton,
Moran, Allen Co., Kans.**

**200
Shropshire
Rams.**

Extra Choice Registered Rams to Head Pure-bred Flocks

Car Lots of pure-bred and high-grade yearlings, large, strong, well-wooled rams for range trade, all at prices to meet hardest competition. Come and see them or write wants.

KIRKPATRICK & SON, Connor, Wyandotte Co., Kansas.

GALLOWAYS ARE THE ORIGINAL POLLED BEEF BREED!

For full particulars write to **FRANK B. HEARNE**, Secretary American Galloway Cattle Breeders' Association, Independence, Mo. If you want to buy a Galloway he can give you the address of breeders.

PLEASE MENTION KANSAS FARMER WHEN WRITING ANY OF OUR ADVERTISERS.