

KANSAS FARMER

ESTABLISHED, 1883.
VOL. XXVII, No. 28.

TOPEKA, KANSAS, WEDNESDAY, JULY 10, 1889.

SIXTEEN PAGES.
\$1.00 A YEAR.

TABLE OF CONTENTS.

PAGE 1—AGRICULTURAL MATTERS.—Farm and Field Notes. Making Clover Hay.
PAGE 2—THE STOCK INTEREST.—"Sheepmen, Take Warning." The Big Four. Draft Horses.
PAGE 3—IN THE DAIRY.—The Born Dairyman. The Best Food for Cows....THE BUSY BEE.—How Beeswax is Made.
PAGE 4—ALLIANCE DEPARTMENT.—The Fourth in Butler County. Stafford County Farmers' Alliance. Farmers' Alliance Notes....Douglas County Farmers' Institute. Topeka Weather Report. Gossip About Stock.
PAGE 5—The New Era Exposition.
PAGE 6—THE HOME CIRCLE.—"If I Could See Him Again," poem. Sorrows. The Care of the Sick. Glass Houses and Other Possibilities. Cold Storage. Fashion Notes. Peasant Proprietors in Russia.
PAGE 7—THE YOUNG FOLKS.—Roundup the Stake-Boat. poem. Interesting Facts Concerning Buttons. The Name America.
PAGE 8—EDITORIAL.—Shall We Abandon the Old Parties?
PAGE 9—EDITORIAL.—Co-operation Among Farmers. The Business Situation. Silos and Ensilage. Lectures on Forestry. Honor to Whom Honor is Due. D. M. Osborne & Co. and Binding Twine. The Silk Outlook is Good. To Members of P. of H. Weather-Crop Bulletin. Kansas Fairs for 1889.
PAGE 10—HORTICULTURE.—The Grape Industry in Missouri. New Fruits. Tree Culture in Nebraska. Pruning Shrubs.
PAGE 11—THE POULTRY YARD.—Food for Young Chickens. Poultry Notes.
PAGE 12—Additional Crop Reports. The Markets.

Agricultural Matters.

FARM AND FIELD NOTES.

Like produces like, but in many cases the likeness more nearly resembles the undesirable features of the sire or dam.

Fowls that are kept supplied with gravel, charcoal, and green food are not often troubled with either indigestion, or diarrhea.

Don't allow your hens much time to stand around on one foot, studying up mischief. Keep them so busy that they won't have time to think of eating eggs.

The parasites imported by the California horticulturists from Australia to destroy scale lice, are said to have survived the voyage and in good condition and to be thriving in counties where they have been introduced.

Where one plants potatoes by hand, as the N. E. Farmer, the seed may be started a little and still-dropped without any injury to the little sprout; but when machinery is used to do the dropping, the only safe way is to have the seed unsprouted, as it is stirred around in the potato planter altogether too much for the good of the young sprouts.

In reference to the contamination of wells, soaking or filtering through the earth—the well draws toward the bottom, not the top. Farmers often say: "My well cannot be affected by my barn yard, etc., because the well is the highest;" that is, the ground at the well is the highest; never thinking that the bottom of the well is much lower, and that the draft will be toward that point.

Horses' shoulders sore and galled indicate gross neglect, says a correspondent of the Weekly Tribune. With well fitting collars, not too loose, and snug-fitting hames, which bring the draft squarely on the shoulders; clean, solid, hard, leather lined collars, with no woolen about them and with tug hooks properly placed, there will be no chafing and no necessity for hurting the skin by using oak bark decoctions or brine. The shoulders need washing with cold water and soap every evening, that is all.

Making Clover Hay.

The ideal way to make the best clover hay is to mow the clover when in full bloom, and as soon as it is well wilted rake and put into small but high cocks of about 100 pounds each, cured weight. These should stand three or four days and then be turned bottom up, after the dew is dried off in the morning. Such hay drawn in the heat of the day will

but the clover will not wilt so as to be injured by the dew that night. The next day, when it gets just dry enough, which is usually about 3 o'clock, I rake it into large windrows. After my machine I can rake it in such a way as to turn nearly all the heads in and the butts out to take the dew. About 9 o'clock the next day when the windrows are dry and warm on top, we

but some suggestions may aid beginners. Cut the clover when in full bloom if you want the choicest hay. This is vastly more important than the saving of every individual leaf when you are handling it. If cut when half the blossoms are turned it will cure much easier, but the value will be decidedly injured. I do not say this from analysis, but from long experience in feeding. Those who leave their clover until nearly all the heads are brown simply ruin it.

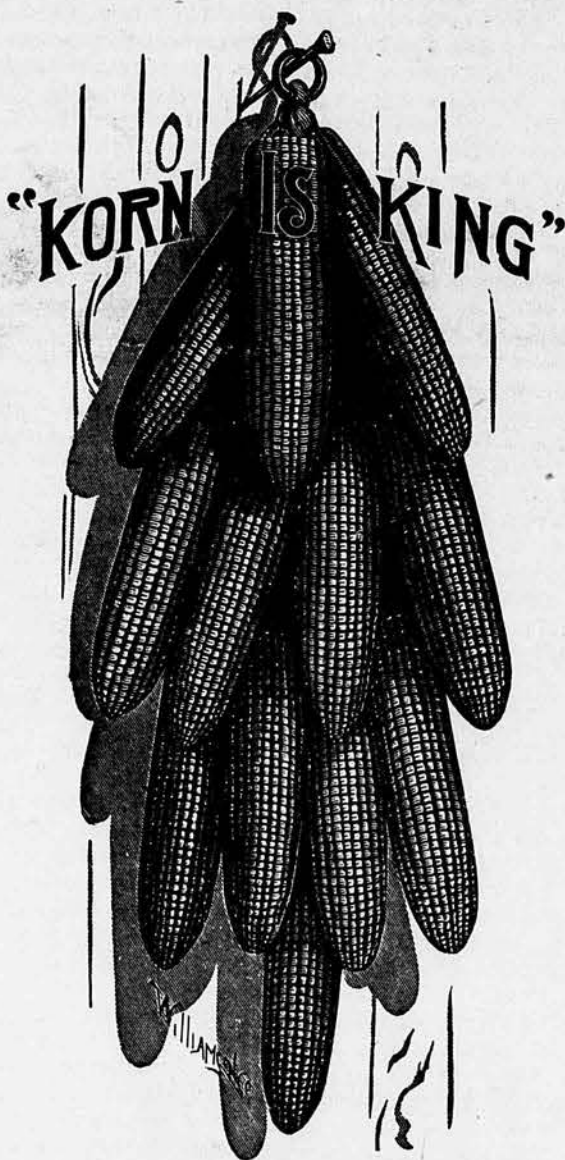
Some friends have written me: "But you are a little farmer; what are we to do with our fifty or 100 acres of clover? We cannot possibly get it all in so soon." Is there a law compelling one to raise more of a crop than he save properly. I would not. I should have a field of timothy to cut later, or make up the shortage in fodder with Hungarian grass or ensilage corn, or possibly a silo for the clover would be the best way out.

Always draw in clover hay in the hottest part of the day. When it grows cooler toward night your hay grows damper, taking the water from the air which can no longer hold so much in suspension. Under ordinary circumstances do not draw in after 6 p. m. Have your barn tight, also, and as soon as the last load is in shut all windows and doors, so as to keep the cooler night air out. The warm air rising from your hay-mows, if it strikes cooler air, will deposit its moisture on the surface of your hay. I trample clover hay as little as possible when putting it in the bays. The next morning, before drawing in more, we trample solidly. You have doubtless noticed that if there is any poor hay in the bay it is where the man stood who did the pitching back. Avoid standing there as much as you can. Where a horse fork is used put strong planks across the beams, over the center of the mow, and let the fork discharge the hay on these planks; then two men can toss it loosely to either end of the bay, and you will not find the hay ruined in the center of the bay where the heavy forkfuls have fallen.

It is on just the same principle that I avoid as far as possible trampling the hay when it is thrown in.

Some good farmers in southern Ohio and elsewhere cut heavy clover in full bloom and draw it in the same day. I cannot do this in our climate, but in some seasons we can cut one afternoon and draw in the next. In a dry year there is much less sap in the clover. In a dry time it will cure much quicker. Men's ideas of a heavy crop differ. With one of my heavy crops I never want to see it so dry that the under side of the clover ever dries out in the middle of the day, when it is standing. To cure a crop of two loads to the acre and another of four are very different matters. A ton-to-the-acre man, or one who cuts late, may laugh at the idea that clover cannot be cut and put up in the barn the same day safely. Many are using tedders to hasten the curing of heavy clover. With a side-cut machine they are usually needed. With my machine, which leaves the clover about as loose as when standing, neither horses nor machine going on it after it is cut, they are not needed. I can cut and tedder the hay at the same time.

To determine the condition of the partly cured clover I have found much help in taking a half-dozen stalks and twisting them very tightly. The more or less (or none at all) sap that I can twist out shows far better than the looks of the clover how much it is cured. They may be too full of sap to put into the barn, and still the hay appear quite dry. I suspect I cure my clover more than some. I do not care to handle an extra ton of water on each acre, only to have it sweat and steam in the mow. It seems as well to let the air take this water while the hay is in the field as later, and save me useless lifting. But I want the hay green enough so it will heat some so as to settle solidly.—T. B. Terry, in Ohio Farmer.



THE NEW ERA EXPOSITION,

TO BE HELD AT ST. JOSEPH, MO., IN SEPTEMBER. [SEE ARTICLE ON PAGE 5.]

be choice if no rain falls on the cocks. But that little "if" is just where the trouble comes in. There is too much risk in this curing in the cock method, and then it takes a good deal of labor to put the clover up nicely, as it must be done to shed water. One may use caps to cover the cocks. He is then quite independent of the weather, and can make choice hay by this method, if he will build the cocks so they will be no larger at the base after settling than half way up. This plan will do for a fancy farmer who doesn't have to look closely for the profits. For the great majority of farmers it is too costly. They do not get enough out of their hay to warrant the expense.

In late years I have omitted the cocking up almost entirely, but nevertheless I think I have made choice clover hay. This is about my way: When the weather is clearing after a storm, and the prospect is good for several fair days, I mow six acres in the afternoon, beginning about two o'clock. It is so cold and partly cloudy, perhaps, then

turn them over with forks, just roll them over about as fast as we can walk. In an hour or so they will be quite dry and warm clear through, and then we rush the hay into the barn with all the haste possible. While my men are drawing in in the afternoon I mow some more, if the weather prospects are still good, but not so much this time, as there is now more danger of a storm coming. The time to let out is at the beginning of a fair spell.

You will notice that the simple turning over of the windrows is all the hand labor I put on the crop until it is ready to go into the barn, instead of days of hard labor in cocking up, putting on or taking off caps, etc., my man is at work in the potato field, or among the berries, where he can earn me very much more money. Of course if at any time during the days the hay is out the weather becomes threatening, all hands are called to cock up, or save it the best we can, under the circumstances, but we put hand labor on the crop only when necessary. Nothing we can be told to old growers of clover,

The Stock Interest.

THOROUGHbred STOCK SALES.

Dates claimed only for sales which are advertised, or are to be advertised, in this paper.

OCTOBER 8—John Lewis, Short-horns, Miami, Mo.
OCTOBER 9—John Lewis, Poland-Chinas, Miami, Mo.

"SHEEPMEN, TAKE WARNING."

Some two or three years since I contributed to the columns of the *Michigan Farmer* an article under the foregoing head, and I would now repeat the warning with increased emphasis. My principal reason for doing this is what I consider the impending danger to our sheep industry from the persistent effort of a few breeders to get up a "boom" in the interest of the Shropshire sheep. Let me premise by stating that I have no quarrel with the Shropshire sheep. I fully indorse the assertion of Mr. Button in a recent issue of the *Farmer*, that "there is plenty of room for both the breeders of Shropshires and Merinos." They are two distinct and very different breeds of sheep; and should each be bred separately, and bred with distinct reference to that purpose for which nature has designed them—the one for wool and the other for mutton. The warning which I desire to enforce in this article is directed against the mixing and mingling of the blood of the two races, so widely different in their nature. It is just as necessary that the world be fed as clothed, and *vice versa*, and while the prime object of the breeders of the Merino sheep should be to clothe the world, the prime object of the breeder of the Shropshire should be to feed the world, and in no case should these objects be lost sight of. So long as these objects are kept in view there will be no rivalry and should be no jealousy between the two classes of breeders. But knowing how natural and easy it is for feelings of rivalry to spring up in the human mind, I desire here to caution the Merino breeders against the folly of attempting to rival the Shropshire as a mutton sheep; and I would with equal emphasis caution the Shropshire breeders against the hopeless attempt to rival the Merinos in the production of wool.

I speak from a disinterested standpoint, as I am in no sense a speculator in pedigrees or blood, and generally purchase my bucks from others, preferring to keep an average farmer's flock, such as any farmer may keep without extra care or expense, and always keeping the weight of my fleeces just below the "docking" line.

Dismissing my Shropshire friends with my best wishes for their success in the breeding of mutton sheep, I now desire to address myself pointedly to the Merino breeders of the State. You have in your hands an important trust, and upon you rests a deep responsibility. Great credit is due to the breeders of the American Merino sheep, and in no States of the American Union have their efforts been crowned with such eminent success as in Vermont, New York and Michigan. So far as I view the subject it would be invidious assumption for either of these three States to assume superiority over the others, for in all these States are to be found the very best sheep, not only of our own country but of the whole inhabited world.

Then I say, don't be guilty of envying the Shropshires for any peculiar merit that belongs to them, or of contaminating the blood of the best race of sheep in the world by the introduction of foreign blood, with the futile hope of improving the American Merino. Think what an effort of time and money and thought and care it has cost for more than forty years, to bring the average weight of fleece from less than three pounds, to more than six, with a corresponding improvement in quality. The last *Michigan Farmer* now before me states in its "Crop Report" that

returns from 928 townships show that the number of sheep shorn in these townships in 1888 was 1,682,260, producing 10,207,791 pounds of wool, and being an average of six pounds and six hundredths to the fleece. But let us glance a little further back. Before me lies a report of the Treasury Department for 1888, entitled "Wool and the Manufactures of Wool." It is a most exhaustive work, containing over 300 pages. Ask your member of Congress to send it to you. From it we learn that in 1810 the sheep of the country were estimated at 10,000,000 and their product in wool at 13,000,000 pounds. In 1840 the number of sheep is given at 19,311,374, and the product in wool at 35,000,000 pounds, still being considerably short of two pounds per fleece. In 1850 the number of sheep had increased to 21,723,220, and the wool clip to 52,516,959 pounds, still being considerably less than two and a half pounds per head, but double that of forty years before.

Now in Michigan we have (approximately) 2,000,000 sheep and 12,000,000 pounds of wool, showing that in less than forty years we have much more than doubled the weight of fleece. I present these landmarks to show what the disciples of Humphrey and Jarvis have done for the country by forty years' persistent effort in the pursuit of one steady course; and I desire here to emphasize the assertion that a departure from that straightforward course for less than a quarter of that time would destroy the character of the best sheep that the world ever saw. It is a lofty eminence that the Merino breeders of the country occupy to-day, nor is it strange that the breeders of other sheep should wish to share the honors with them. It is no doubt amusing to the breeders of our registered Merino flocks, whose ewes' fleeces range from twelve to twenty-six pounds, and bucks from twenty-five to forty, to read the discussion of the Shropshire fleece, where from six to fifteen pounds seems to be the extreme range, and this too upon a carcass that weighs a third more and eats a third more than does the average Merino. It should always be borne in mind that the chief cost of the production of wool is the food consumed by the sheep. Why then, in the name of common sense and reason, should our Merino breeders wish to exchange their stock for one which consumes a third more food to produce a third less wool?

But some have an idea that by crossing the two breeds together they can combine the good qualities of both. And right here lies the danger. It is no new experiment. It has been tried time and again, and the result been found to be exactly opposite to what was expected. It was the good qualities that were bred out, and the faults that were bred in. But there is a plan which has its advocates among our sheepmen, of raising a flock of cross-bred lambs, to be sold to the butcher in the fall; but were this plan generally adopted it would be seen at a glance that it involves the destruction of the offspring of our flocks. Who can doubt for a moment that such a plan generally persisted in would in a very few years prove the destruction of the wool industry of our State? Something has already been done in that direction, and may we not attribute in part, to that fact the decrease of half a million of sheep in Michigan within the last five years? Can we afford to encourage this decrease in the numbers of our flocks?

Every State east of the Mississippi is on the down grade in the number of its flocks, and our only hope of ever being able to produce the wool we consume and render our country independent of the outside world, lies far away upon the great Western plains and upon the foot-hills of our far-off Western mountains. Ohio alone of all the States east of the Mississippi, produces wool enough to clothe its own people. It is a burning shame that Michigan does

not do likewise; but there is a show of excuse in the fact that so large a share of our population is engaged in lumbering and mining occupations.

This article is not written to invite controversy, for I shall not allow myself to be drawn into contention on the subject. It is an unfortunate trait in the human character to underrate the blessings we enjoy, and to overestimate those we do not possess, and it has ruined thousands. "Tis distance lends enchantment to the view." Let the owners and breeders of the American Merino sheep in Michigan cherish an abiding confidence in the treasure they possess, and let them never consent to any contamination of the blood of their flocks, with the fruitless expectation of improving a breed which by common consent stands as champion of the world.—*Old Genesee, in the Michigan Farmer.*

The Big Four.

Armour & Co., Swift & Co., Nelson Morris & Co., and Hammond & Co., are the four large firms included in the title "Big Four," given to them by the public. The *Drovers' Journal*, the organ of the Chicago stock yards, gives an account of these firms, from which we select the following facts:

Nelson Morris began the shipment of dressed beef from Chicago to the Atlantic seaboard cities late in the fall of 1865. He bought cattle that were bony and rough looking on foot, but which were fat and heavy enough to make good New York cattle, as they were then called. These when hung up dressed would be wonderfully improved in appearance and were shipped in common box cars when the weather was supposed to be cold enough to keep the beef in good order, and such cattle when treated in this way made plenty of money when the weather was favorable. About the year 1870, Geo. W. Plummer began the shipment of dressed beef in refrigerator cars, as a matter of fact introducing the system as it stands to-day. Plummer formed a partnership with Geo. H. Hammond, of Detroit, and the firm of Hammond & Co. was set on foot. In 1877, G. F. Swift came to the Union stock yards as a cattle buyer from Massachusetts, where he had full experience in the fresh meat trade, and it did not take him long to take in the whole situation and prospects as to the dressed beef situation, and he promptly went into the business. In 1882 Armour & Co. went into the business, and Nelson Morris has done a heavy business in the dressed beef trade and canning business. All these parties worked openly upon common business principles. The business is open to all the world, to any one that chooses to take it up and carry it on; no patent or secret about it in any way, and there is no just ground of complaint against the system in any way. Messrs. Swift & Co. can slaughter at the Union stock yards 1,600 or 1,800 cattle daily if need be, and as many hogs and sheep in proportion, and can ship daily as many carcasses to any consuming point east of here in refrigerator cars of their own, doing this in any kind of weather and at all seasons. This establishment, also Armour & Co., have their own glue factory, so that every scrap of offal that comes from any animal they slaughter is utilized and made to count, and herein lies one great advantage in the system as they drive it.

Nelson Morris & Co. report their business of last year as follows:

Cattle killed, of which 40 per cent. went into canned goods.....	468,000
Value of plant in this city.....	\$2,000,000
Plants in other cities.....	\$400,000
Number of refrigerator cars.....	500
Value of refrigerator cars.....	\$100,000
Number of employees.....	2,700
Yearly pay-roll.....	\$2,000,000
Value of product.....	\$28,000,000

The items of G. F. Swift & Co.'s business were:

Refrigerator cars.....	1,600
Dressed beef cattle killed.....	483,065
Number of employees.....	3,000
For canning killed.....	136,135
Value of local plant.....	\$1,250,000
Value of refrigerator cars.....	\$1,500,000
Plants in other cities.....	\$1,500,000
Yearly pay-roll.....	\$1,720,000

Annual product.....\$35,000,000
Their Kansas City and Omaha houses do an annual business of about \$20,000,000.

The statistics of Hammond & Co. are:

Cattle killed.....	220,121
Refrigerator cars.....	1,800
Number of employees.....	1,200
Value of plant.....	\$800,000
Value.....	\$700,000
Outside plant.....	\$500,000
Yearly pay-roll.....	\$1,500,000
Value of product.....	\$15,000,000

The statistics herewith given of the beef business of Armour & Co. do not include the canned goods department, and the estimate of the value of the local plant only covers that portion of the packing house devoted to the slaughter of cattle:

Number of cattle slaughtered.....	300,000
Number of refrigerator cars.....	1,100
Number of employees.....	1,500
Value of plant.....	\$250,000
Value of cars.....	\$1,000,000
Outside plant.....	\$500,000
Pay-roll.....	\$800,000
Value of product.....	\$14,400,000

The four beef houses here have invested in slaughter house property, refrigerator cars and distributing warehouses almost \$11,000,000. They give employment directly to 8,400 persons, and last year turned out a product valued at \$92,000,000.

Draft Horses.

Taking all things into consideration one of the animals of most importance to mankind is the draft horse. Not any especial breed of horses, but horses used for draft purposes, as many are so used that do not belong to any of the especial draft breeds.

The horse used for draft purposes furnishes the motive power to supply almost all human wants. He plows the fields of the world and carries the crops of the world to market. The product of farm, factory, workshop and mines are moved by horse-power, and without this, man's most faithful friend, the wheels of commerce would stop.

Such being the importance of the draft horse, it follows, or should follow as a matter of course, that great interest be taken to breed the best suited animals for this purpose.

It is here that the farmer is especially interested, for to him does the world look for its supply of horses, and to him that it is ready to pay a liberal price if he has what is wanted.

In saying that many horses are used for draft purposes that are not of draft breeds it is not meant in any way to approve a continuance of that system further than necessity requires. Any man who keeps his eyes open can see every day many light horses put to draft purposes for which they are utterly unsuited, simply because their owners cannot find good draft animals for their use. No man who wishes to buy a team for draft purposes takes a small team of choice. He only does so because he cannot find the large ones, and there is no farmer who has them to sell but knows how difficult it is to find a market for his under-sized horses. They are looked over and bid down until he is discouraged and his profits melt into thin air, while the big grades that his neighbor raised are snapped up at prices that seem almost fabulous.

It is not possible, and indeed not desirable, for every farmer to raise pure-blood draft horses, but it is possible and eminently desirable that he raise grade drafts instead of the little undersized scrubs that are now such a drug on the market, and which must of necessity become more and more so from year to year. How can this be done? Simply by breeding your common mares to pure-blood stallions of any of the draft breeds. If this is done the colts will be large and salable. They are as easily and as cheaply raised as are the scrubs and worth twice as much when three years old.

These are good reasons for not using any but a pure-blood sire. A good stallion of pure blood may be depended upon to get colts which resemble him. This is because of the fact that being of a long line of continuous breeding of the same unmixed strain of blood, he is more prepotent, that is, has more power to imprint himself upon his offspring, than an animal of mixed blood, and this

quality in the sire overcomes the weaker blood of the mare and brings a colt closely resembling its pure and stronger blooded parent.

A grade, or cross-bred sire cannot be depended upon to do this. He may be individually an almost perfect animal, but there is no dependence upon his being a uniform getter of colts resembling himself; for, having impure blood in his veins, his get may resemble his maternal ancestors more than his paternal, and while he would unquestionably get some good colts, they would not be a uniform lot, and the farmer breeding his mares to such a sire could not be sure that he would be the lucky man in this equine.

On the other hand, it will not do to breed to a horse just because he has a good pedigree, but insist that he be born a good individual of his breed and also to show that he is a pure-blood.

If this line of policy is followed there is no business in which any common farmer can engage with a better show of being handsomely paid for his labor. —Colman's Rural World.

In the Dairy.

THE BORN DAIRYMAN.

There are two ways of giving advice on the subject of the adaptability of a man for the dairy business. One is to paint everything about it in a rose color, and thus encourage all to enter it with a total disregard to the fitness of the man to the occupation he proposes to follow. That such advice, as a general thing, is utterly worthless, may wickedly unfair, to the average class who would be influenced by it, is evident to the most careless observer.

The other line of advice is apt to take the other extreme and tell only of the trials and tribulations that naturally beset the man who once becomes the owner of a herd of cows. It is easy to sit down and conjure up all the troubles that may have overtaken the writer in his early days of enthusiasm in trying to run a dairy, especially if he undertook the job without the necessary preparatory course of experience or schooling. The above are the two ways of looking at dairy work that are the most attractive to writers who want to say something striking and that will draw the attention of indolent readers. There is, however, a middle course that comes very much nearer the truth than either of the above extremes. In the first place it must be remembered that the successful dairyman has a higher and more exacting field of labor than the general farmer. If a man is of an indifferent, easy-going nature, without the spur of a driving ambition, then he had better confine himself to mixed crops, mixed stock, and a low average all around. Such a man may raise a little of this and a little of that, have bad luck here and good luck there, and if at the end of ten years he has been able to support his family and keep out of debt, he may be thankful for all the blessings that a kind Providence has bestowed upon him.

Such a man we never would advise to worry himself about a dairy. He is not the man to enjoy even success in the business, for he would always be counting the cost in worry and labor, and he would find plenty of it to put on the debit side of the account.

This country, however, contains a large number of men who possess what is vulgarly called "sand," that is pluck and staying qualities, who are ambitious to hew out their own fortune without regard to the labor and care it may cost. This class is above the average, and they are the men who have made America what it is and who will push it still forward in the grand march of mighty deeds.

To such men we say the farm presents no grander field for great results, whether it be in money-making or a

natural reputation, than the dairy. What other rural pursuit contains one-half the men whose names are familiar to every reader of farm papers. What class of breeders have made more money or secured higher honors than those engaged in breeding dairy cattle. If money is the sole result desired how can this be compassed better than with a well-regulated dairy. We could give dozens of names of men who have amassed splendid fortunes out of the dairy. While we venture the opinion based on facts that have come under our own observation that at least three farms have been paid for by the dairy to one that has got out of debt by any other line of farm industry. Every dairy district in the country is covered with farms that have been paid for from the products of the cows they feed. That there have been failures, and lots of them, is equally true, as it is of every other human occupation, and this means that every man cannot succeed in this business any more than they can in any other. It also means that the man who will succeed in the dairy must be born right. He must first have a head on his shoulders—that is, at least a little above the average head. He must also have a heart in his body that beats in sympathy with the gentle and motherly nature of the cow. Any coarse or brutal nature will never succeed with her. Such a man may get on very well with field crops and hogs, but when it comes to the cow that has to be handled, and that in a way to secure her confidence, then your rough nature will simply defeat the ends you have in view.

Another enemy of the dairy is ignorance. If you have a natural dislike of books and newspapers or hate to study out the reason of things, then your occupation does not lie in this direction. To succeed in a way that will be a credit to you it is absolutely necessary that you should understand, at least tolerably well, the principles that underlie dairying and feeding cattle. Dairying has taken such rapid strides to the front in farm science of late that it would seem foolish in any man to attempt to surpass his neighbors in it without making himself master of all that has been accomplished in the past fifteen years. This, at least, is the case in butter-making and feeding dairy cattle. We are sorry the same words cannot be used in relation to cheese-making. Here, at least, is a fine field for the beginner if he is anxious that no one should know more about the principles of the business than he does. —American Dairyman.

The Best Food for Cows.

Possibly and even probably a June pasture on an old sod is the very best feed for milch cows. If the pasture be rich enough not even grain is needed to increase either the flow or quality of milk. But how small a proportion of cows, and they for how short a time, receive this ideal treatment? It is not creditable to farmers that even for those who have the best June pastures so little effort is given to maintain a large and rich flow of milk through the year. It must be remembered that for at least eleven months in the year June pasture cannot be had. Grass in May is green, watery and innutritious. After June it gradually grows poorer by drouths until the yield becomes half or less what it was earlier in the season.

There is a remedy for this, and as it relates to the well-being of the cow for eleven months in the year, it may be well regarded as the most important fact connected with dairy farming. Any man who has June pasture does not need advice from agricultural journals about feeding. If he turns the cows out to pasture, milks regularly and cares for it properly, he need not care for anything else. But after June comes the rub. July is hot and August drouthy. After fall rains begin there is usually a spell of good grass weather before frost withers and injures the pastures. After that a long period when extra feeding

must be resorted to, or the cows and their owners also will suffer.

In winter, of course, reliance must be had on grains, combined with hay, roots and silage, to keep up the milk flow. But it is a long time after June pastures until winter. If at that time the milk flow is allowed materially to decrease it means a lessened winter product, and probably so much less that a large proportion of the extra winter feeding, whatever its quality, will go to making fat and cow beef rather than milk. It is thus absolutely necessary, even for profitable winter feeding, that the milk flow be maintained during the previous fall.

June, when the pasture is so good that the slothful farmer thinks he need give it no care or thought, is exactly the time when the wide-awake, energetic farmer is busy preparing for the months that are to follow. July may be brought to something as nearly as possible to the June standard. This is the month for sowing millet and Hungarian grass. Corn and sorghum for fodder should be got in the ground in May, but later planting may be made all through June. Until these are large enough to cut it is well for farmers who have pasture to divide it, turning on fields alternately, and thus securing better feed than could be possible if cows were allowed to roam over the entire lot.

Unless the pasture is very rich, even it may be profitably supplemented at its best. On a great deal of long cultivated land both mineral and nitrogenous fertility has decreased, until not only is the quantity but also the quality of its gross product affected. In June only on the very best soil, and those seeded two or more years, is the quality what can be justly termed best. The cow will almost always relish, and if she will eat she will be benefited by a grain ration even during June on a new seeding of any kind of grass or clover. And if she wants better feed, even in June, on pasture, the dairyman acts unwisely if he does not give it.

The present profit from good feeding is by no means the whole of its advantages, great as this is. A cow kept to her best through the whole year increases her milk-producing capacity, both for herself and her offspring. The original wild cows undoubtedly gave milk only a few weeks after calving. The greater part of the gain from this has undoubtedly been made originally by stimulating individuals up to a higher level, and perpetuating this peculiarity by breeding. In just so far as the dairyman allows his cows to decrease their milk flow he counteracts the benefits of improved breeding. It is thus that even pedigrees are deceptive, and the worst scrubs in the dairy are those made so by bad management, either of themselves or their immediate progenitors. —American Cultivator.

The Busy Bee.

How Beeswax is Made.

It is no mere extraneous substance which needs only to be collected for use; it is a bit of individual organic home manufacture. If you examine the under surface of a cell building worker you will find beneath the abdomen four pairs of white plates projecting from as many pockets in the incasing rings of this part of the body. These are the wax plates, made from the life blood of the worker. Examine now with a lens one of the hinder legs. You will find that the stoutest joints are very square shouldered at the hinge, and that the hinge is well over to one side, so that the shoulders form a pair of jaws, which open when a limb is bent, and close when it is straightened. The upper jaw has a row of spines which bite on a plate on the upper jaw. With this apparatus, piercing it with these spines, the worker withdraws a wax plate from his pocket, transfers it to the front legs, and thence to the mouth, where it is

laboriously masticated with a salivary secretion. Unless it undergoes this process it lacks the difficulty requisite for cell making. —Ex.

California Excursions.

Are you going to California? If so, read the following, and find out how much it will cost you, and what you can get for your money: The Santa Fe Route runs weekly excursions (every Friday) from Kansas City and points west to San Francisco, Los Angeles, San Diego and other Pacific Coast points. The ticket rates are the regular second-class rates—\$35—from the Missouri River the principal California points. Pullman Tourist Sleeping-Cars are furnished. These cars run through, without change, from Kansas City to destination. The charge for berths is remarkably low, being \$3.00 for a double berth from Kansas City to California. The Pullman Company furnish mattresses, bedding, curtains and all sleeping-car accessories, including the services of a porter with each car. The parties are personally conducted by experienced excursion managers, who give every attention to passengers, insuring their comfort and convenience. For more complete information regarding these excursions, rates, tickets, sleeping-car accommodations, dates, etc., address

GEO. T. NICHOLSON, G. P. & T. A.,
A. T. & S. F. R. R.,
Topeka, Kansas.

A Summer Vacation.

At this time of year nearly every one begins to think of a summer vacation, or an outing of some kind for a little recreation. For those who desire to visit the summer resorts of the East—Niagara Falls, the White Mountains, Old Point Comfort, and numbers of others, there is no line which offers better facilities or lower rates than the Burlington Route. If the trip is to be by way of Chicago, the Hannibal & St. Joseph's fast vestibule train, "Elle," has no peer; leaving Kansas City in the evening, the traveler takes supper and breakfast on the dining car, arriving in Chicago in time for all connections east. If he desires to go by the way of St. Louis, he leaves Kansas City after supper and arrives in St. Louis for an early breakfast and eastern connections. Both of these trains are luxurious in every respect and equipped with Pullman Palace sleeping cars and free reclining chair cars.

For a short trip there is probably no more delightful summer resort than Spirit Lake, Iowa, or one of the other countless lakes in northern Iowa and Minnesota. Here again the traveler finds he cannot do better than take the morning train of the K. C., St. J. & C.B. R. R., leaving Kansas City at 11:15 a. m. and arriving in St. Paul and Minneapolis next morning for breakfast. From these points he can make direct connections for summer resorts in all directions. This train has one of Pullman's finest buffet sleeping cars through between Kansas City and St. Paul. This also is the train to take for Spirit Lake, but one change being made, and that early in the evening into a through sleeper to the Lake, arriving at destination at 7:15 in the morning. The above trains run daily.

Write for all information, tourist circulars, etc., to H. C. Orr, General Southwestern Passenger Agent, 900 Main street, Kansas City, or A. C. DAWES, General Passenger and Ticket Agent, St. Joseph, Mo.

The splendor of the "American Alps" are beginning to be appreciated by our people, and a visit to Switzerland for gorgeous scenery is unnecessary. The picturesque mountain resorts on the South Park Division of the Union Pacific in Colorado are absolutely unrivalled on this continent.

It is un-American in the higher sense for our people to prate about Europe so glibly when so many of them are profoundly ignorant of the wondrous beauties of their native land. As a matter of fact there are hundreds of thousands of American citizens who are thoroughly familiar with Switzerland; who have idled away weeks at Lucerne, done Chamouni, and attempted the Matterhorn, and yet have never feasted on the lovely beauty, the wild weird majesty of any one of the Colorado Peaks. "More than Alpine glory" rewards visitors along the South Park Division of the Union Pacific in Colorado. There is no scenery like it in the new world.

"The peerless empire of form and color is found in Colorado," says a great artist. So are there many other wonderful effects. There is that grand triumph of engineering skill, the Bow-Knot Loop, famed all over the world; the pretty town of Graymont nestled against the base of Gray's Peak, the giant prince of the range; sunrise on Gray's Peak—a sight once witnessed never to be forgotten; Idaho Springs the beautiful, a restful spot blessed with the healing waters for all who come, within two hours ride of young levithian Denver; the storied gold camp of Georgetown perched in the upper air of the mountains, ever fresh and cool and clear—these are a few of the delightful spots in the "American Alps" reached by the Colorado Central Division of the Union Pacific railway in Colorado.

Alliance Department.

This Department of the KANSAS FARMER has been designated as the authorized official State organ of the Farmers' Alliance and Co-operative Union for the State of Kansas.

It is also the official department of the District Alliance of Shawnee, Jefferson and Jackson counties.

The Fourth in Butler County.

AUGUSTA, KAN., July 5, 1889.

EDITOR KANSAS FARMER:—The "Glorious Fourth" has come and gone for 1889, and Butler County Farmers' Alliance has demonstrated something of what farmers can do at managing celebrations of the anniversary of our national independence, for to say it was a success puts it tame, as it proved a grand success in every respect. Most all the alliances of the county were represented and several came in regular delegations, with flags and banners and songs, wagons handsomely decorated, and ladies neatly and appropriately attired, representing the several States of the Union, and one with little girls so attired, made, while in procession, a most pleasing display; but when all were brought together on the ground and properly arranged by the committee of ladies for the purpose, a scene was presented that will long be remembered by all who beheld it, for it was one that must be seen to be fully appreciated. And notwithstanding the oats crop of the section being struck with rust, and had to be harvested at once, cutting short the attendance by at least one-fourth, there were at least 2,000 people present, and a more orderly and quiet people I think were never together on such an occasion, and more than that, it certainly was the most sociable and enjoyable occasion ever held in the county.

There was the least obscenity, vulgarity and profanity ever known on such an occasion in any section I think; and not the least sign of the presence of that which will intoxicate, came under our notice throughout the entire day.

The whole affair was arranged and carried out by the county alliance; and the proceeds all go into the county alliance treasury, to the amount of about \$100, and will be used for just and righteous purposes, and not into the hands of a certain few individuals and used for selfish ends. The oration was delivered by Rev. Stephen Brink, of M. E. church, Douglass, and was pronounced by all we heard speak of it as a splendid address. After dinner the throng were called together by singing (and by the way there was some excellent singing too, and that by farmers' girls and boys in the main), and Rev. Churchill, of Baptist church, Augusta, took the stand and showed up some of the conditions of the country, causes, and remedies, in a clear, logical, entertaining and effective speech of about one hour; and Rev. O. W. Jones, of U. B. church, took up the Farmers' Alliance cause, and held the throng in perfect attention for at least an hour longer, and then the people were not satisfied, but called for more. Hon. H. A. Albin was called for, but somehow failed to respond and the people were disappointed. I don't believe, Mr. Editor, that Butler county ever celebrated the day of our national independence with as much of the genuine spirit of good will, patriotism and brotherly kindness as on this occasion.

Among the many beautiful banners bearing mottoes were these: "United we Stand, Divided we Fall," "In Union is Strength," with a splendid representation of large sheaf of wheat in gold in center, "Truth is our Anchor," with large gilt anchor in center, "Death to Monopolies," and "God Bless the Right," on another, and "God Bless our Efforts in Liberty, Union and Brotherly Love," on another, and this significant little one, "The Farmer Pays for All." Truly it was a day long to be remembered by all who were present.

Brother farmers of Kansas, let us hasten to get together by organization,

thus bringing together our great strength and power; exercise the same justly and righteously for our own defense against the terrible encroachments of combined capital, and free our homes and loved ones from their bloody hand of oppression, and with our mothers, wives and daughters, lift ourselves and others with us, to higher planes of moral excellence, and intellectual might and social worth, than hitherto known in our beloved country. And how soon can this be accomplished by organizing ourselves for this purpose in some of the forms now in our State, as the two wings of the alliance, and grange, and others, which no doubt will merge into one grand harmonious body very soon; and by the blessing of Him who holds the destiny of nations in his hands we ere long will enjoy in full the fruits of our lands and our labor.

W. H. BIDDLE,
Vice Pres't Kansas State Alliance.

Stafford County Farmers' Alliance.

EDITOR KANSAS FARMER:—On the 19th of April, 1889, we organized the first alliance in this county. We now have sixteen sub-alliances in the county and between three and four hundred members. On the 29th of June we met at Leesburg and organized the county alliance. It was an unfavorable day on account of rain, but we had a good crowd. Brother C. A. Tyler, our State Business Agent, was with us and assisted in organizing. After we were through organizing the brethren were anxious to hear from Brother Tyler, and called on him to make a speech, which was responded to with cheerfulness. After Brother Tyler was through talking he was asked a great many questions, and was ready to give prices on almost everything. Our State officers are working very hard to establish a State exchange. Everybody was satisfied and said they were well paid for coming.

But now we look forward to the Fourth, and to a celebration to be entirely under the supervision of the alliance.

All other efforts were abandoned and towns and country turned out. Several alliances prepared banners which looked very nice, and shows an interest and determination. The American people have cried liberty and freedom until there is no such thing to the agricultural and all laboring classes. About 2,000 people were present, and a number of speakers addressed the throng and good music was furnished by the St. John band. Among the speakers was our worthy State Secretary, J. B. French. Brother French made a very interesting speech and the brethren were all pleased to meet and hear him. We feel he has done an excellent work for us this year. We must consider the great inconveniences under which all of our State officers have had to labor.

A nobler set of men could not have been chosen. Some we have not met personally. But are all looking forward to our State meeting which we confidently hope will bring grand results.

Wishing you success, one and all, both editor and readers, I close.

L. L. SMITH, Organizer.

Farmers' Alliance Notes.

A. E. Dickinson reports the organization of two alliances in Lyon county last week. S. McLallin, of Meriden, organized an alliance in Atchison county on Saturday evening, the 6th inst.

Saturday, July 13, is the day set for a farmers' meeting to organize an alliance at Leesburg, Miami county. Let the farmers turn out.

July 4th was duly observed by alliance celebrations in various parts of the State, and as far as heard from report a good time, and inspiring a fresh impetus to the work of organization.

A very pleasing occasion was the public installation of the officers of Mount Pleasant Alliance last week. The Glee Club, Osawie's band and Miss Puderbaugh, contributed entertaining music, and an address was made by Capt. L. H. Gest.

A meeting of delegates from sub-alliances of Jefferson, Jackson and Shawnee counties was held at Meriden on Saturday, July 6th, for the discussion of questions of general interest. Prominent members of the order were present from various sections of the district. It was decided to hold the next meeting of this district convention at Meriden, on Saturday, July 27.

Wheat is all harvested, and the harvesting of oats is far advanced in Jefferson county. Wheat is a fair crop and the quality good. Oats have been damaged very much in the last four days by bugs and rust, and the crops will fall far short of the estimate of two weeks ago. The yield will be small and the grain light.

The Farmers' Alliance and Co-operative Association at Girard, Crawford county, was incorporated last week. Capital stock, \$3,000. Directors: I. H. Shannon, Wm.

Andrew, A. M. Smith, C. P. Peterson, Girard; W. S. White, Mulberry Grove; A. J. Cory, Hadley; L. D. Herlocker, Farlington; Jacob Winterbower, Hepler.

W. W. Hudkins, who attended the alliance celebration at Thompsonville, Jefferson county, reports a grand time. There were two thousand people present. Different organizations came in delegations with flying banners and music. Major Wm. Sims and others orated. Barring the disappointment of the Nashville orator the celebration was a happy success.

Douglas County Farmers' Institute.

EDITOR KANSAS FARMER:—The Douglas County Farmers' Institute met last Saturday at the residence of Gov. Robinson, four miles northeast of Lawrence. Gov. Robinson made the address of welcome in his happiest mood, closing with a tribute to the Haskell Institute band present. Reid Winner, a youth of the Senecas, responded to the Governor's address on the part of the band, of which he is a member. Prof. Snow, of the State University, was present with a bunch of wheat and chess, demonstrating to the farmers that these are entirely different plants, and that no metamorphosis takes place as some credulous farmers had heretofore believed. Rev. Gibbons, of Denver, one of the first white men who came to this county, was present, and spoke of the early troubles times, and of the peace and plenty now. Misses Ella and May Bleakly favored the audience with a duet, which was followed by two recitations by Misses Mamie Strong and Lizzie Simmons. Miss Susie Hastie sang a very impressive song. The young boys and girls present were favored with a poetical recitation by Miss Marshland, an elocutionist, of Iowa, who is visiting with Mrs. W. J. Gilmore. Wheat culture will be the programme for the next meeting, followed by a paper from W. L. Tuttle, of St. Louis. The next meeting will be at the residence of Barclay Thomas, near Harper, the first Saturday in August. The discussions were participated in by but a few, not many farmers having their knowledge available to speak in public. The farmers' meetings are the means of doing much good, bringing the farmers and their families together, exchanging thoughts, gathering new ideas, and may ere long be the means of bringing them to see that if they ever insist to be more than mere ciphers in politics, they must unite, in order to bring about changes so much needed.

All around us the Farmers' Alliance is gaining strength, new societies springing up everywhere, but in this county nothing has been done. Let us hope that the day may not be far distant when the farmers will unite, arise in their dignity, and become factors in shaping the affairs of this country and nation. I forgot to mention that Mr. Lovels, President of the institute, is the man for the place. I will add that Gov. Robinson will henceforth read the KANSAS FARMER. I was happy to add the Governor's name to your list of subscribers, and don't doubt that ere long his trenchant pen will take part in the great questions of vital interest and importance now being discussed in the KANSAS FARMER.

S. W. S.

Lawrence, Kas., July.

Topeka Weather Report.

For week ending Saturday, July 6, 1889:			
Date.	Thermometer.	Max.	Rainfall.
June 30.....	90.0	82.0	..
July 1.....	88.9	80.0	.15
" 2.....	82.4	69.6	.27
" 3.....	80.8	63.8	..
" 4.....	84.4	61.4	..
" 5.....	84.8	56.0	..
" 6.....	90.0	67.6	..

How to Select a Wife.

Good health, good morals, good sense and good temper, are the four essentials for a good wife. These are the indispensable. After them come the minor advantages of good looks, accomplishments, family position, etc. With the first four, married life will be comfortable and happy. Lacking either, it will be in more or less degree a failure. Upon good health depends largely good temper and good looks, and to some extent good sense also, as the best mind must be affected more or less by the weaknesses and whims attendant on frail health. Young man, if your wife is falling into a state of invalidism, first of all things try to restore her health. If she is troubled with debilitating female weaknesses, buy Dr. Pierce's Favorite Prescription. It will cure her.

"Rally Round the Flag, Boys!"

The Grand Army Reunion to be held at Milwaukee (August 26 to 31, inclusive,) will, in many respects, be one of the most noteworthy of commemorative events. There will be no lack of distinguished speakers. But the most attractive features will be the "tie that binds" men who have fought, starved and bled for a sacred cause, the renewal of old-time associations, the rehearsal of war experiences, and the rekindling upon the altar of patriotism of undying devotion to "one flag and one country." Veterans and their friends will be pleased to know that from all stations on the Chicago, Rock Island & Pacific Railway, on its main lines and branches both east and west of the Missouri river, the price of tickets has been placed for this occasion at one fare for the round trip, while children under 12 and over 5 years of age will be charged only one-half this excursion rate, or one-quarter the regular fare for the round trip. Tickets will be for sale at all principal stations on the Rock Island Route, August 21 to August 23, 1889, inclusive, good for continuous passage to Milwaukee at any time between these dates, and good for return passage, leaving Milwaukee on any date between August 27 and September 5, 1889, inclusive. Holders of such tickets who desire to make side excursions from Milwaukee to points beyond, in any direction, can, by surrendering their return coupon tickets for safe keeping to the Joint Agent at Milwaukee, have them honored to original starting point where ticket was purchased (by proper indorsement), on any date not later than September 30, 1889.

Gossip About Stock.

J. C. Dwelle, Cedar Point, Kas., writes that 500 sheep advertised only three weeks has resulted in a purchaser at Emporia. If you wish to do business, advertise.

Our advertiser, M. H. Alberty, Cherokee, Kas., writes: "I have a fine lot of pigs and a number of orders booked. Have disposed of all my bulls old enough for service."

Readers will not forget the important auction sale advertised this week by Wm. J. Miller, Belleville, Ill., consisting of 25 Percheron horses and 35 Crickshank Short-horn cattle.

Wm. Plummer, proprietor of Maple Grove Herd of Poland-Chinas, Osage City, in remitting for his adv., states that his stock is doing finely, and trade is good and "am receiving a great many inquiries for stock through the KANSAS FARMER."

Rome Stock Farm, Rome, Sumner county, presided over by that genial and successful swine breeder, T. A. Hubbard, writes that his swine are doing nicely and trade good; sold nine head one week, averaging \$30.50 each. The FARMER does me good. Mr. H. desires to say to his friends that he is located on his farm at Rome, but with sufficient notice will meet friends at Wellington, or the train will land you at his farm.

We are in receipt of a full report of the proceedings of the swine breeders of Clay county, Neb., but owing to our crop reports, it is crowded out. Officers elected, W. J. Cox, President, Clay Center, Neb.; C. H. Searle, Vice President, Edgar, Neb.; W. E. Spicer, Treasurer, Harvard, Neb.; and S. McKelvie, Secretary, Fairfield, Neb. The next meeting will be held at Clay Center, Neb., on the second Saturday in August.

Levi Chubbuck, Secretary of Missouri State Board of Agriculture, reports the number of young stock very low. The pig crop will be small, and fewer neat cattle are being raised, and more interest is felt in horses than any other class of stock, and less in sheep. Disease of stock is somewhat prevalent, cases of glanders reported in thirty-six counties, hog cholera in sixty-nine counties, and black-leg in thirty-seven counties. Of course it is not to be understood that it is general in those counties but cases were reported to the State Veterinarian.

The New Era Exposition, St. Joseph, Mo., informs us that by mistake some omission has been made in the premium list which they desire stock men to note. On page 17 breeding cattle: Best Red Polled herd, \$50; page 18, second premium offered on lot 124½ of \$50; on page 24 lot 11½ sweepstakes rings by ages any breed, bred and fed by exhibitor. Only those animals will be eligible, that have taken first and second premiums. Further: lot 250½, Best steer 2 and under 3 years old, \$75; lot 250½, best steer 1 and under 2, \$75; 250½, best steer under 1 year, \$75. Write for a premium list of this exposition and note the above corrections.

The remarkable success of the Brilliant family of Percheron horses at the great annual show recently held at La Ferte Bernard, France, may be justly characterized as a triumph rarely, if ever, equaled in the annals of show-rings in Europe or America. A record of twenty-nine awards out of a total of forty-eight, in the stallion rings, and twenty-four awards of forty-two in the class for mares and fillies gained by direct descendants of the grand old horse is something which affords an unerring indication of the value of this now famous blood; and demonstrates indeed the soundness of the judgment which induced Mr. M. W. Dunham to give it so prominent a place in his world-renowned Oaklawn stud at Wayne, Ill. No less than 100 sons and daughters of Brilliant are now to be seen at this great breeding establishment, and the news of this astonishing victory from beyond the sea will add value to every horse in America, carrying his blood. The scientific breeding of Percherons has made rapid strides since the establishment of the stud book of France, and now that the records, blood lines, prize-winnings, etc., of the breed are accessible to all the production of fine horses is being brought to a point where it is attended with little uncertainty if the signs of the times be but half observed. Mr. Dunham is to be congratulated on the possession of such a phenomenal progenitor of prize stock.—Breeder's Gazette.

Sugar Machinery Award.

Prosperity seems to be the natural result of liberally patronizing the KANSAS FARMER, either as a constant subscriber or an advertiser. We are in receipt of a late copy of the Red Wing Daily Republican, sent us by our advertisers, Messrs. Densmore Bros., Red Wing, Minn. The paper contains the following:

"Densmore Bros., of the Red Wing Iron Works, have just been awarded the contract for furnishing the American Sugar Works at Mead, Kansas, with a full outfit of the John F. Porter line and method of concentrating sorghum juice and extracting therefrom sirup and sugar. The main features of the outfit comprise two No. 6 John F. Porter steam evaporators, two J. F. Porter steam defecators, one receiving and one supply tank. Besides these there are steam pumps and water pipes, a hot water supply tank with steam coil and numberless minor matters which go to make up a complete outfit. All conducting pipes for juice and sirup, and all the tanks defecators, evaporators and coolers will be finished in copper. The capacity of the outfit is understood to be from 1,000 to 1,500 pounds of heavy granulating sirup an hour. It is to be shipped early in July and the Messrs. Densmore Bros. will give it their personal supervision until set up and in full operation. The growing favor with which the John F. Porter evaporator is accepted is not only an index of its valuable merits but shows the result of a resolute purpose on the part of Densmore Bros. to turn out work which shall be a credit to themselves and 'value received' to the purchaser."

THE NEW ERA EXPOSITION.

St. Joseph to Have a Grand Exposition in September.

The Largest Premiums Ever Offered for Farm and Other Products—Extracts From the Premium List.

A representative of the KANSAS FARMER was in St. Joseph last week, and while there called in at the Exposition headquarters. A dozen men were at work sending out maps, lithographs, etc., and several clerks were making entries and arranging for the grandest exposition of modern times. Hundreds of men were at work on the beautiful grounds east of the city, and down town the ladies were busily engaged in making decorations for the various buildings. President Perky was interviewed in regard to this great Exposition, and the following is a synopsis of his description of what the people of St. Joseph will have to offer to the public next September:

The National Railway, Electric and Industrial Exposition will open at St. Joseph, Mo., September 3, and continue until October 5. This Exposition will be national in character. In order to have proper representation, each county should have a separate organization, with a secretary to arrange for general exhibits.

The following are extracts from the rules and regulations and premium list, and general information:

The main building for machinery and other exhibits has a floor space of 80x1,040 feet, or 83,200 square feet, the largest building in the West. The grounds comprise forty-five acres, carpeted with blue grass, and covered with beautiful elm, ash and oak trees. There will be forty acres of pavilions, pagodas, arbors, pyramids, granaries, colonnades, arcades, grottoes, canopies, etc., trimmed and decorated with, and for cereal and other agricultural exhibits. There will be lakes, fountains, waterfalls turning the "old mill," rustic bridges, etc. There will be exhibited railway rolling stock and railway appliances; electric light, power and other electrical devices and all kinds of machinery, implements, tools, etc.

Rule 1 reads as follows: "The buildings and grounds will be open for the reception of articles from and after Monday, August 5. The Exposition will be open to the public on Tuesday, September 3, 1889, and will continue open from day to day thereafter until and including Saturday, October 5, 1889, from 9 a. m. to 6 p. m. On Sundays appropriate services will be held, and sermons delivered in the amphitheatre by the most celebrated divines of the country. Music by a chorus of 1,000 voices. The amphitheatre will seat 10,000. Machinery will be closed down on Sundays. The Exposition will be held open nights on special occasions, as may be determined by the Board of Directors."

St. Joseph is in the center of the Territory comprising the four great States of Kansas, Nebraska, Iowa and Missouri—the richest country in natural resources on the face of earth.

Distinguished agriculturists, legislators, journalists, and eminent public speakers of national reputation will visit the Exposition and address the people in the amphitheater.

CORN.

INDIVIDUAL EXHIBIT—BEST CORN.

To compete for the premiums offered for the best dozen ears of corn, the dozen ears must be substantially plaited together with undetached shuck, in one bunch and skillfully arranged. For the purpose of conveniently hanging the corn in place for exhibit, an iron ring should be securely fastened at the upper end of the bunch.

PREMIUMS.

Best dozen ears of corn, plaited together in one bunch with the shuck, \$50.
Second best dozen ears of corn, plaited together in one bunch with the shuck, \$25.
Third best dozen ears of corn, plaited together in one bunch with the shuck, \$12.
Fourth best dozen ears of corn, plaited together in one bunch with the shuck, \$6.
Fifth best dozen ears of corn, plaited together in one bunch with the shuck, \$3.
Sixth best dozen ears of corn, plaited together in one bunch with the shuck, \$1.
Seventh best dozen ears of corn, plaited together in one bunch with the shuck, \$0.50.

CORN—GREATEST VARIETY.

Any individual may compete for premiums under this head, and the exhibitor is not restricted to his own product, but is free to collect it from any country in the world. The quality of the varieties must be good.

While the judges will be governed by variety, both quality and attractive arrangement will doubtless have an influence, and exhibitors are cautioned to make their displays as attractive as possible.

PREMIUMS.

For the greatest variety of corn (six ears

each). First premium, \$50; second, \$25; third, \$10.

General Agricultural Display.

This exhibit may be made by any county or individual organization within a county. The exhibit must embrace all the products of the soil in the locality from which the exhibit is made, and must be made in a pavilion or structure erected at the expense of the exhibitor, on such plan as is acceptable to the architect of this association. It may be made in a properly constructed tent.

PREMIUMS

For the best agricultural display by county or by organization of individuals within a county, \$1,000; second, \$500; third, \$250.

Cereal and Stalk—Trimmed Ornaments, Figures, Statuary, Etc.

None but farmers' wives and daughters can compete for premiums in this lot.

The ornaments, etc., must be artistic in design and not less than twenty-four inches in width and height; they may be of any size larger.

PREMIUMS.

First, \$25; second, \$15; third, \$10; fourth, \$5. Sweepstakes (not confined to farmers' wives and daughters, but open to the world), \$50.

Shocks of Grain.

Best miniature shock of winter wheat—First, \$25; second, \$15; third, \$10.

Best miniature shock of spring wheat—First, \$25; second, \$15; third, \$10.

Best miniature shock of oats—First, \$25; second, \$15; third, \$10.

Best miniature shock of barley—First, \$25; second, \$15; third, \$10.

Best miniature shock of rye—First, \$25; second, \$15; third, \$10.

Best miniature shock of cereals, to consist of fourteen sheaves of variety of grain—First, \$25; second, \$15; third, \$10.

The shock to consist of fourteen sheaves, uniformly two and a half feet high and proportionately small in thickness. No sheaf hood will be required. The shock will set on a board platform or ground and be covered by a canvas top, secured to a center-pole. The sheaves will be set around and fastened to the center-pole. The pole, canvas top and platform will be furnished by the association.

Tobacco.

Best display of leaf tobacco by producer—First, \$25; second, \$15; third, \$5.

Best tobacco ornament by any person, \$25.

Dairy Department.

Best jar of butter (10 lbs.) by farmers' wife or daughter—First, \$25; second, \$15; third, \$5.

Best three tubs creamery butter—First, \$25; second, \$15; third, \$5.

Special provision will be made to keep butter during the entire Exposition, and the exhibit must be in place on the first day and cannot be removed until after the Exposition closes.

FACTORY CHEESE.

Best two boxes cheddars or flats, full cream—First, \$25; second, \$15; third, \$5.

Best two boxes Young America, full cream—First, \$25; second, \$15; third, \$5.

PRIVATE DAIRY CHEESE.

Best two boxes cheddars or flats, full cream—First, \$25; second, \$15; third, \$5.

Best two boxes Young America, full cream—First, \$25; second, \$15; third, \$5.

SWEEPSTAKES.

Largest and best display of cheese, not less than ten boxes, \$50.

Bees, Honey and Apicultural Implements.

[Extracts from rules.]

Exhibitors will not be allowed to remove honey from their exhibit during the Exposition, but may sell from a reserved supply, for which no charge will be made.

Colonies of bees must be exhibited so as to be readily seen.

All exhibits must be in place on opening day of Exposition. The exhibit must be creditable.

Display of comb honey, largest and most attractive—First, \$50; second, \$25.

Display of extracted honey, largest and most attractive—First, \$50; second, \$25.

Display of bees and queens, largest and most attractive—First, \$50; second, \$25.

Largest and most complete line of apicultural implements exhibited by manufacturer, quality of workmanship to be considered—First, \$50; second, \$25.

Fruit.

[Extracts from rules.]

All fruit shall be exhibited open and on plates, except that in general displays. Pyramids, clusters and other artistic designs will be permitted and counted in such displays.

All fruit must be in place on opening day of Exposition, but exhibitors will have the privilege of replacing decayed fruit with sound, and keeping up their display during the Exposition.

Fruit in glass jars will not be admitted.

No fruit shall compete for more than one premium.

Five specimens shall constitute a plate, except where very large, when four shall count for a full plate.

In grapes, plums and crabapples, a plate shall be well rounded up without regard to number.

The name of exhibitor will not be permitted on his display until after the premiums are awarded.

The committee on fruit will do their work during the last week of Exposition, and in

making their awards will observe size, quality, color, sound condition, perfection, correct naming and general appearance of display.

PREMIUMS.

For the largest and best display of fruit by any State, county, local society or individual—First, \$500; second, \$250; third, \$125.

Large premiums will be offered for the largest and best display of the various fruits, as well as for best plates of the same.

Exhibition and Sale of Horses.

Like manufacturers, owners, breeders and dealers in horses are becoming dissatisfied with competitive exhibits at fairs and expositions.

No horseman, for many times the amount of a premium, would see the red ribbon tied on his horse and the blue on the horse of his competitor.

The preference is, that, instead of an awarding committee of two or three men, the public in attendance shall be the judges, after seeing the horses from day to day on the ground and in the show ring.

The New Era Exposition has therefore concluded to offer no premiums for horses, but will provide commodious stalls free for the accommodation of horsemen who desire to show their horses to the hundreds of thousands who will attend the Exposition. These stalls will be at the disposal of owners of horses (subject to such rules as may be made for the better accommodation and protection of all concerned) from and after Saturday, September 1, to and including September 25.

Horses will not be required to be exhibited at the Exposition longer than one week, but may remain until September 25, if, in the opinion of the Superintendent, they have merit enough to be a benefit to the Exposition.

Horses may be received as late as September 17, and no later, except by the permission of the Superintendent of this department.

No person will be allowed to have more than ten horses on the grounds at any one time, except by the permission of the Superintendent.

HORSE SALE.

Any horse exhibited at this Exposition may be offered for sale in private, or at public auction, 3 per cent. of sales to go to the association.

Sale days at public auction will be as follows: September 5, 7, 10, 13, 20 and 23.

Ponies of good breed and style may be exhibited and sold on same terms as horses.

Application for stalls should be made at once, stating the number of horses, whether stallions, geldings, mares, colts, ponies, breed, etc., and when the stall will be required. First applications will secure first assignment of stalls, and thereafter in the order of receipt of applications.

Breeding Cattle.

The exhibition of breeding cattle will commence on Monday, September 30, 1889, and continue six days. No charge for entries or stalls for stock on exhibition.

Entries in any class can be made at any time before the Exposition, by application to the Secretary, either personally or by letter, and at the Secretary's office on the ground up to 9 o'clock a. m. on Monday, September 30, except in case of stock to be exhibited on Monday, which must be entered before 9 a. m. of that day. Entries for each day thereafter must be made before 9 a. m.

FREIGHT RATES.

Exhibits of stock for the St. Joseph Exposition will be carried by all railroads centering in St. Joseph at full tariff rates to St. Joseph and returned free (see rules).

PREMIUMS.

The following premiums are offered for Short-horns, both bulls and cows, and are duplicated for Herefords, Angus, Galloways, Red Polled, Holsteins and Jerseys:

Best bull, 3 years old or over—First, \$25; second, \$15.

Best bull, 2 years old and under 3—First, \$25; second, \$15.

Best bull, 1 year old and under 2—First, \$20; second, \$10.

Best bull, under 1 year—First, \$15; second, \$7.50.

GRAND SWEEPSTAKES.

Best herd of any breed, \$200.

Breeding Swine.

The following premiums are offered for Berkshires, Poland-Chinas, Duroc or Jersey Reds and Yorkshires:

Best boar, 2 years old—First, \$15; second, \$7.50.

Best boar, 1 year old and under 2—First, \$15; second, \$7.50.

Best boar, over 6 months old and under 1 year—First, \$10; second, \$5.

Best boar, 6 months old and under 1 year—First, \$7.50; second, \$5.

Best sow, 2 years old—First, \$15; second, \$7.50.

Best sow, 1 year old and under 2—First, \$15; second, \$7.50.

Best sow, over 6 months old and under 1 year—First, \$10; second, \$5.

Best sow, 6 months old and under—First, \$10; second, \$5.

SWEEPSTAKES HERD.

Best boar and four sows, bred and owned by exhibitor, any breed or age. Boar may or may not be bred by the exhibitor, \$50.
Best herd of ten head of any one breed, \$50.
Best sow and litter of five pigs, under 1 year, \$50.

Breeding Sheep.

The following premiums are offered for pure bred Merinos, Cotswolds, Leicesters, Lincolns, Scotch Cheviots, Shropshires, Oxforddowns, Southdowns and Hampshires:

Best ram, 2 years old and over—First, \$10; second, \$5.

Best ram, 1 year old and under 2—First, \$10; second, \$5.

Best ram lamb—First, \$7; second, \$3.

Best ewe, 2 years old and over—First, \$10; second, \$5.

Best ewe, 1 year old and under 2—First, \$10; second, \$5.

GENERAL RULES AND REGULATIONS OF THE ST. JOSEPH FAT STOCK SHOW.

[See special rules governing each class.]
The grounds will be open for the reception of stock on Thursday, September 26, 1889, and until Saturday night, September 28, 1889.

ENTRIES

must be made on or before September 26, by application to the Secretary, who will furnish blank application on which to specify exhibitor's name and address, with age and description of the animal offered. This rule will be imperatively enforced.

PREMIUMS.

The following premiums are offered in all thoroughbred classes:

Best steer, 2 and under 3 years—First, \$50; second, \$30.

Best steer, 1 and under 2 years—First, \$50; second, \$30.

Best steer, under 1 year—First, \$50; second, \$30.

GRAND SWEEPSTAKES.

Best steer in the show of any age or breed, \$100.

Best thoroughbred herd, any breed, composed of three steers, one 2 and under 3 years, one 1 and under 2 years, and one under 1 year, \$150.

Best grade herd, same as above, \$100.

SWEEPSTAKES HERD IN SHOW, ANY BREED.

Best herd of steers, composed of three animals, one 2 and under 3 years, one 1 and under 2 years, and one under 1 year, \$150.

Fat Hogs.

The following premiums are offered for Berkshires, Poland-Chinas and other pure breeds, white:

Best barrow or spayed sow, 12 to 24 months—First, \$25; second, \$15.

Best barrow or spayed sow, 6 to 12 months—First, \$25; second, \$15.

SWEEPSTAKES RINGS.

Best barrow, any age, open to all, \$50.

Best lot of five barrows or spayed sows, bred and fed in any State, \$100.

Fat Sheep.

The following premiums are offered for long wools, middle wools and fine wools:

Best wether, over 9 months—First, \$25; second, \$15.

Best wether, under 9 months—First, \$25; second, \$15.

SWEEPSTAKES RING.

Best wether, any age, \$50.

LARGE PREMIUMS

will be offered for poultry of all breeds and classes.

For complete premium list, rules and regulations, railroad rates, and general information about the Exposition, address

NEW ERA EXPOSITION,

ST. JOSEPH, MO.

The Anglo-Kansan Investment Company.

We present our readers this week the advertisement of this worthy enterprise. Personal acquaintance with the gentlemen composing the company enables us to commend them and the plans they have matured for the sale of Kansas real estate with great confidence. The object of the company is to bring together those who have lands for sale in Kansas and the land-buyers and home-seekers of the British Islands. They desire to reach the land-owners of Kansas directly, believing they will be able to furnish customers at better prices and in shorter time than any company doing business in the State.

They are all men of experience and well qualified by their knowledge of the State to place real estate before the European customer to the best advantage, a part of the plan being to maintain offices in the principal cities of England, Scotland and Ireland, which will be under the management of Mr. H. A. W. Cerfield, whose wide acquaintance in those countries will be invaluable, not only to the company, but to the whole State of Kansas as well. He has already established offices in London and Liverpool and sailed this week for England to take charge. The President of the company is Hon. W. J. Price, State Commissioner of Immigration. He has been for many years a resident of the State, and is widely known as a business man, having been identified from his coming to the State with many enterprises that have added wealth and prestige to it. Mr. M. B. Bennett is the Vice President. His age, experience and knowledge fit him for this position admirably. Mr. C. R. Smith, the Secretary and Treasurer, is a shining light among the young business men of the city, careful, diligent, courteous and well-informed—just the man for the office work.

It ought to be unnecessary for us to ask the owners of Kansas lands to communicate with this company—"A word to the wise is sufficient." Place your lands in the hands of a company whose hope and belief is that they can bring customers with cash who will buy your lands at living prices.

READ THIS!

Send \$1.00 for recipes for making maple sirup and artificial honey. It cannot be told from the genuine. Or 50 cents for either one. Send by postoffice money order or registered letter.

Address N. J. WATERBURY & CO.,
628 Kansas Ave., Topeka.

The Home Circle.

To Correspondents.

The matter for the Home Circle is selected Wednesday of the week before the paper is printed. Manuscript received after that, almost invariably goes over to the next week, unless it is very short and very good. Correspondents will govern themselves accordingly.

"If I Could See Him Again."

If I could see him again,
If I could hear him say,
Merry and kind as he used to do,
"Well, little wife, what has come to you
All through the busy day,
While I have been away?"

Often then I was cross;
Often I used to reply,
"What comes to a woman everywhere?
Washing, and baking, and household care;
I declare it makes me cry
To think how my days go by!"

Then he would kiss me again,
Try to be still more kind;
Tenderly say, "My poor little wife!
Would I could give you an easier life!"
How could I be so unkind?
Oh, how could I be so blind?

God took him away one day,
Took him away from me;
Now, though I labor the whole day through,
Nobody asks, "What has come to you?"
Nobody pities or shares
The weight of my household cares.

Oh, yes, I have children, too;
A mother cannot complain;
But never a son or a daughter's grace
Can fill the void of their father's place.
A mother cannot complain;
But, oh, for my husband again!

If I had only known
That I should ever find
It was an angel love that for years
Worked for me, cared for me, dried my tears,
I had been far more kind;
But, oh, I was blind! so blind!

—Little E. Barr, in Ledger.

SORROWS.

To one who gazes on the ocean for the first time, lying placid and white in the sun's rays, its surface sparkling like myriads of diamonds, just the least possible ripple, so far as the eye can reach sky and water meeting, the broad expanse, heavenly blue, bending to the immensity of water, there are no words to express the wonderment, the vastness, the sublimity of it. And the wish rises that life might always be like the scene before us—placid, even, perfect. But as we think it over, how cruel the ocean is! Ships, freighted with human souls, start from her harbors, flags are flying, music fills the air; hearts beat with pride; good wishes are showered upon them, farewells are said, friends part to meet soon, and the vessel sails away over the waters. Perhaps not many days from shore fearful storms arise; high winds send the boat now on a huge breaker, now completely out of sight as a wave breaks over her. Of no avail are prayers, life-boat or preservers. Every passenger sinks under the waves—"a hundred fathoms deep." No need of requiem; no shroud or winding sheet. And on the morrow the beautiful, cruel waters smile at the skies and sparkle in the sunbeams, with no trace of yesterday's storm. Old ocean holds her secrets, fast bidden in her caves, lying in her valleys, buried among her wealth, over which living animals roam, never to be known until the sea gives up her dead and all things shall be known.

We look on some faces, they are bright with smiles; the voice utters pleasant words; the life is an active one, a useful one. It may be one who labors in the Master's fields, lifting up earth's fallen ones, speaking words of cheer or comfort to discouraged souls. It may be a home and loved ones claim the time and attention. I hardly think it matters in the Father's eye where we labor or what we do, if we but do as well as we can. If we want a field of labor we can find it anywhere. We look on this life and on that life, and wish that our lives could be as fair and pleasant as those before us. Have you ever stood by a rose bush and admired the beauty of roses and inhaled their fragrance? Every bud and blossom seemed perfect in form and coloring. But open one of the largest, most beautiful roses, part the leaves, and down deep in its center you may find an ugly worm eating into it, destroying it surely, slowly. We cannot judge of a person's inner life; we cannot look upon the heart. The smiling face may typify a happy heart, a careless easy life, a heart that knows no sorrow or ache; or it may be a mask that covers an aimless life and blighted hopes. The gay laugh and merry sally serve to drown the pain that is ever gnawing at the heart. The eyes may see, beyond our vision, a ghost at every feast.

Sorrows! oh, they rankle in every breast; they sit in every house; they wait like sentinels at our doors; they come to us unbidden. I have heard that not even the faintest

whisper of sound was ever lost; that somewhere upon the eternal shores the acoustic waves are ever breaking, never to sink into silence while nature's laws endure. If this be so, what a record we are making! The sighs, the moans, the words that fall from our lips, are gone beyond recall.

We do not always know who needs our advice. Those whom we may consider "fallen ones" may be nearer heaven than we are. A noted divine says that to many a body who is carried to a potter's field in a pine box the chariots of Christ will come down. In laboring for the so-called "fallen ones" I should not advise the squandering of pen, ink, paper and time. There was never a wanderer reclaimed by simply reading of the prodigal son. When Jesus walked among men he did not heal them by touching them with a ten-foot pole; He laid his hands on them. We can never reclaim one who has gone astray by talking about them at sewing societies, or by writing to them how they ought to do, and holding our skirts aside when they are passing. We want to labor for love—a love that prompts us to take the dirty, grimy hand in ours, to bind up the wounds and sores, to hold the cool drink to parched and thirsty lips. Love, such as One better or purer than you or I, gives freely to a sin-burdened humanity. Love, like this is as rare as birds in mid winter. In getting near to those who need help, who are grasping blindly after some good, I often think we are nearer, the heavenly Father; for isn't it a natural supposition that He is near those who need Him? We are told that for every thorn there is a garland of roses, for every dark day there is a season of sunshine; and for every groan there is a thousand hymns of praise. It is a pleasing assurance, I am sure, and brings comfort even if it is never fully realized.

—Evangeline, in Michigan Farmer.

The Care of the Sick.

To change the under sheet, roll it lengthwise; that is, begin at the side. Push soiled sheet and all coverings toward the patient, leaving the mattress bare. On this lay the clean roll, tucking one side under the mattress, unroll it toward the patient and move him over the roll on the smooth space, keeping him covered with the top blanket. Go to the other side of the bed, pull out under blanket and soiled sheet, finish unrolling clean sheet and tuck it in. Lay the clean upper sheet over the top blanket, and cover it with another blanket and thin white spread. When these are in place, remove the blankets that are next to the patient, and he will be lying between clean sheets in a clean nightdress and thoroughly bathed, without having been exposed for an instant to the chance of taking cold.

Open the window at the top, and if there seems too much air near the bed, place a screen between that and the window. If none is at hand, improvise one by throwing a shawl over a clothes-horse, or fastening a cord between two convenient points and hanging a blanket over it. If the window will open only at the bottom, tack the flannel there. The pillow cases should be changed frequently, and the pillow turned as often as can be done without disturbing the patient. A cool, fresh surface next the face is very refreshing. Keep the pillow well under the shoulders; nothing is more trying to a weak person than to have the edge come just in the hollow of the neck, throwing the chin forward on the breast.

Gently comb and wash the hair, and if there is a beard keep it washed and free from tangles. If the patient is a woman, part the back hair, and braid each portion. It can be coiled high on the head or allowed to hang in two tails. The nails on both hands and feet should be carefully attended to.

If the carpet cannot be removed, sweep it daily with a carpet sweeper, or a broom with a cloth wound round it, and burn the dust. Wipe the woodwork and furniture daily with a damp cloth. Never leave milk standing in a sick room; it quickly absorbs impurities. If obliged to wait for a few moments until the invalid is ready to take it, cover the glass containing it. Make it a rule to leave nothing in the sick room that is not positively needed there. Remove every cup, glass and spoon as soon as used, and wash all bottles as soon as they are empty. Keep the little table beside the bed covered with a white cloth, and see that it is always spotless.

Be as cheerful as possible, and try to leave worries on the other side of the door. Even when one is very tired and anxious, a resolute effort of the will enables one to do much to overcome the tendency to show it. A calm nurse calms her patient, and nothing helps on recovery like a mind at rest.

Remember while there is life there is hope, and never give way to despair while life remains. Many a person who has been given up to die has recovered to many years of usefulness. Keep up the nourishment as long as it can be swallowed; it may be just the stimulation that is needed to turn the scale from death to life.—Home Magazine.

Glass Houses and Other Possibilities.

The future of the glass industry in the United States is encouraging; for it is only since the war that the manufacture of polished plate has grown up; and there are now running or building, enough furnaces to supply all that will be used in the country. It is within the last ten years that the manufacture of cathedral and rough plate has been thoroughly established, at first disputing and now controlling the home market against England and Belgium. The improvement on window glass has also been great, and there are workmen and manufacturers who think they see the rising sun of much better days and a much better American glass. The concentration of capital in powerful concerns must certainly lead to changes in the system of labor that are bound to insure a more finished product. A new glass recently invented in Germany is said to add marvelously to the power of the microscope. A Yale professor announces the invention of a perfect achromatic telescope lens.

Legend tells of the lost invention of "malleable glass." Tiberius is said to have discouraged a genius who found the secret by beheading him, fearing the innovation would reduce the value of gold. It is also recorded that Cardinal Richelieu was presented with a bust of malleable glass by a chemist, who purposely let it fall into fragments, and mended it before his eyes with a hammer. The inventor was promptly rewarded by perpetual imprisonment, lest his ingenuity should ruin the "vested interest" of French manufacturers. But if glass may not ape the metals in malleability, it may imitate them in another respect just as important. A more fortunate Frenchman (M. de la Bastie) has within a few years introduced into Europe a transmuted glass which, he claims, may displace cast-iron. If it fills his expectations it may mark a new era in glass, and the old adage "as brittle as glass" will be superseded by a new one "as tough as glass." By his process railway sleepers, fence posts, drain pipes, tanks, etc., are cast in moulds, and so toughened by a bath in oils as to be stronger than iron, though much lighter, and costing one-third as much. But it is questioned whether his results reach what is claimed for the process. These undeveloped toughening processes augur astounding changes in the future of glass. "Glass houses" may become the fashion, and we would have to reverse our proverb about them, for they would be bomb-proof. Already transparent glass bricks are made. Extending the possibilities of glass a little further, why may we not build the entire structure of glass? The walls might be cemented blocks cast like hewn stone, but translucent, and of any color. One could thus inhabit a huge pile of amber or of gigantic gems. The windows could be multiform, some of them telescopic, bringing distant things near, some with lenses or mirrors guiding the focussed sun's heat for culinary and comfortable purposes, others straining out the light or chemist rays. Tapestries, furniture and utensils might be made of the universal material. The whole would be more endurable than granite. No fire could harm it; lightning would shun it. Such a dream, blossoming from this miraculous substance, may be realized by an Aladdin whose lamp is of glass.—Harper's Magazine for July.

Cold Storage.

The business of freezing meats and fish and preserving perishable products by various systems of freezing and cold storage has come to be an important feature of commerce. New York has now eight large establishments devoted to it, with an aggregate capacity of 15,000 tons, besides many private "plants" belonging to separate produce houses. Some of them use the old process of ice and salt, while others use the ammonia process. By the former a temperature of five deg. can be reached, and with ammonia it is said the mercury can be sent down to 20 deg. below zero.

The freezing material is sent through pipes which line the large rooms in the refrigerator store houses and become encrusted with ice, keeping the atmosphere crisp, dry and as cool as may be desired. Poultry is the chief commodity thus preserved, and it is often kept frozen fifteen months. One firm stored last season 2,100 pairs of prairie chickens,

15,000 pairs of grass plover, 600 pairs of canvasback ducks and 1,800 dozen English snipe. The system saves great loss and enables the dealer to make special profits on meats and fruits out of season. Fruits and meats are kept in a more moderate temperature, just above freezing. Great quantities of beef and other meats, eggs, vegetables, etc., are kept in these houses, and if proper care is exercised it is claimed that the flavor is improved by long freezing.—Good House-keeping

Fashion Notes.

Epaulettes corresponding in color to the waistcoat and sash are worn with many summer toilets.

Epaulettes made of ribbon, carried around the armhole and tied in a stylish bow at the top, are in favor with both day and evening toilets.

Among the many odd conceits in belt buckles we note wishbones of polished silver. A favorite design is a number of flagree daisies linked together.

An odd hairpin is of mother-of-pearl, topped with a crook of chased gold, in the center of which is a spider's web of fine gold wire, with a ruby and sapphire fly held captive in its meshes.

The fashionable corsage just now is something between a round waist and a basque, extending slightly below the waistline, and slightly pointed or broadly rounded front and back.

Many ladies now have the remnants of discarded silk dresses made up into petticoats to wear under street costumes. They are light and cool, and a dark one looks well underneath all sorts of dark skirts.

The full waistcoats and sashes worn with many of the summer gowns are made of a single piece of wide ribbon, which is fastened at the throat, then carried downward and adjusted by pins to suit the figure and style of the bodice.

Shirt waists are in high favor. The newest are of cotton, gotten up and laundried similar to those worn by gentlemen, but the more feminine looking ones, of silk, nun's veiling and various fancy materials, are more generally popular.

The corsage without darts is being very generally adopted for thin fabrics. Sometimes there are but two seams visible, one under each arm, but oftener there is a side form at the back, and some figures require an additional one under each arm extending far toward the front.

An effective arrangement of ribbon upon a cotton gown is to fasten a strip under each armhole, carry them across the front or back, crossing them, then draw tightly to the waist in front, and tie in long loops and ends. In a few cases this is done both back and front, but the effect is not as pleasing.

Peasant Proprietors in Russia.

The peasant proprietors can neither pay the money owing to the government for their land nor even the state and communal taxes, and are flogged by hundreds for non-payment. In one district of Novgorod 1,500 peasants were thus condemned in 1887; 550 had already been flogged, when the inspector interceded for the remainder. Widespread famine is found over a great part of the country; usurers, the bane of peasant proprietors in all countries, are in possession of the situation; the Koulaks and Jew "Mir-eaters" supply money on mortgage, then foreclose, and when the land is in their possession get the work done for nothing as interest. These bondage laborers, as they are called, are in fact slaves, and are nearly starved, while the small pieces of land are often reunited into considerable estates, and their new owners consider they have only rights and no duties. Meantime, as forced labor is at an end, and free labor is of the worst possible kind, the old land-owners can get nothing done; they have tried to employ machines, bought by borrowing from the banks, and are now unable to repay the money. The upper class has been ruined, with no advantage to the peasant.—Nineteenth Century.

A novel method of removing grease from cloth, woolen or silk goods, and especially applicable to goods of a delicate texture where the color is easily injured, is the use of potato water. Grate the potatoes to a pulp and add water to the amount of a pint to a pound. Let it stand, and when clear pour off all but the potato sediment at the bottom. This is your cleaning mixture, to be applied with a clean linen rag, and followed by the use of a small amount of spirits of wine. I tried it on a very delicate shade of blue silk, removing every trace of grease without injuring the color in the least.

FOR A DISORDERED LIVER TRY BEECHAM'S PILLS.

The Young Folks.

Rounding the Stake-Boat.

She looks well up in the eye of the wind,
Down-pressed by the weight of the north-east gale;
The fleet of flyers is left behind,
And the white foam kisses her low lee rail.

With mainsail reefed and the topmast down,
The lee shrouds curving, the weather shrouds taut,
Our bowsprit dips in the white-cap's crown,
And we know she is carrying all she ought.

Each sheet stands stiff as a rod of steel—
If anything parts, to the race good-by!—
And the firm, strong hands gripped hard on the wheel
Respond to the glance of the anxious eye,

As the helmsman watches the quivering leach
Of the mainsail standing like a board,
Of the jib and topmast stay-sail, each
Dark with the spray against them poured.

Looming larger and dead ahead,
Heaving and rolling, the stake-boat black
Bars our road like a phantom dread—
The mark we must weather, or miss our tack.

If the wind would veer! might we only luff!
We should feel we were down in Luck's good books;
But we know we're holding her near enough,
And she'll fetch to windward of where she looks.

And as if aware that her hour is come,
Her hour when the laurel awaits her clutch,
Like a steed inspired by the battle drum,
She answers the helmsman's cunning touch.

One breathless moment as past we sweep,
And the gun-fire flashes, the whistles sound,
Then with sheets eased off and a glad some leap,
The good yacht rushes the goal around.

A light hand leaps on the heel of the boom,
And with swift knife slashes the reef knots free;
Drops in the bunt as it yields him room,
While it brushes the crest of the sending sea.

And swift as a sea-bird spreads its wing,
When he springs inboard, ere there's time to speak,
The helmsman is manned, with a steady swing
Mast-heading the mainsail, throat and peak.

And our spinnaker boom to port is swung,
To balance the main to the starboard guyed;
The topmast rises, and fluttering fast,
The big club-topsail is bellying wide.

And squarely the wild nor'easter before,
The white wake swirling a mile away,
With a sweeping roll and the foam flung o'er,
The "cup-defender" speeds up the bay.

—Rev. Walter Mitchell, in Harper's Magazine.

INTERESTING FACTS CONCERNING BUTTONS.

The word button (French bouton from bout, an end or extremity, and bouton, to push or place), is less correctly applied to an appendage of dress than to a tiny projection or collet intended to be pressed by the thumb or finger for a specific purpose, of which the aptest illustration is furnished by the terminal button of an electric bell. The idea of utilizing the bouton for hanging anything thereby, or fastening anything thereto, is of comparatively modern date; in short, neither the term nor the article was known to the ancients. The dress of the Greeks and Romans needed not the presence of buttons, ample substitutes for which were found in the clasp. As evidence of this fact it may be cited that among all the paintings and mosaics discovered in the ruins of Pompeii, no single illustration of the button has ever been brought to light. Nor did the simple costumes of the Anglo-Saxons require those accessories, which nowadays we could ill-afford to dispense with.

BUTTONS ALL OVER 'EM.

Previous to the Norman conquest, then, buttons in this country were altogether unknown, so that here we have a distinct proof of our historical indebtedness to the French for all innovations of fashion in the matter of costume. The people of Normandy must certainly have been of an inventive turn of mind, or they would never have conceived the utility of buttons in relation to dress. Nothing in nature could have suggested the button, unless, perhaps, it was that species of flower known as the "bachelor's button;" but that is scarcely probable. Rather let us say the suggestion came from the already familiar wooden knob, or extremity known as the bout or bouton of their early furniture. We know ourselves how convenient it is to hang any article of dress upon a door or drawer handle, or even on the collet of a bed post, so there exists no doubt that in this way it was how the Normans hit upon the idea of temporarily attaching one garment to another, until in course of time they dispensed with the ancient clasp altogether.

Once introduced, buttons soon came to be generally adopted by all classes, though no actual reference to them is to be traced in our literature prior to the early part of the fourteenth century. The reign of Edward I. which ushered in tight-fitting garments, and particularly sleeves, afforded scope for an abundant display of buttons from the

wrist to the elbow, of both sexes, set as thickly as possible, as may be seen in illuminations, and upon effigies of this period. The writer of "The Romance of Sir Degrevant," for example, in describing the costume of an earl's daughter, observes: "To tell her buttons was toore," i.e., hard—to count her buttons would be difficult. Even the servants of the time became infected with the craze. The habit of aping their masters in this particular is thus satirized by an old author:

Now the horse clawers, clothed in pride,
They busk them in buttons as it were a bride.

During the reign of Edward III. the buttons were set close upon one another down the front of the coat hardie (coat or tunic) of males and the gowns of females. In the next century, however, they suffered a considerable decline, in consequence of the introduction of laces and points; but by the sixteenth century they recovered their ascendancy to such a degree that not only did they appear in greater profusion and variety than before, but the material of which they were composed included gold, silver and even diamonds.

MARKS OF DISTINCTION.

In the twelfth year of Charles II. buttons constituted the chief imports of the country, and were subjected to a heavy duty. Soon after this reign, however, gold and silver buttons degenerated into those of paste, which at the time rivaled the brilliancy of the most precious gems, while steel buttons of abnormal size, highly polished, became the distinctive mark of the dandies who frequented the Mall and Birdcage walk of St. James' park in the days gone by. In proof of this, a popular caricature of the year 1777 has for its subject one of these effeminate individuals dzzling a lady by the brightness of his steel buttons.

It is, perhaps, well for us that the prosaic age in which we live affords little encouragement for eccentricity in regard to the wearing of buttons, whether in point of size or number. And yet the button rage of the middle ages certainly found a revival between the years 1873 and 1881, during which period the Birmingham button manufacturers must have made their fortunes. Then it was that the buttons on a lady's costume resembled the stars in the heavens, for there existed no possibility of counting them. There were buttons on the back and buttons down the front; buttons over the shoulders and buttons all the way down and across the skirts; buttons on the pockets and buttons everywhere; there were even buttons round the hat.

In China the highest grade of literary distinction is marked by a gold button affixed on the cap of the individual. The different grades of mandarins are likewise denoted by the color of the buttons which they are privileged to wear. So, also, in Europe, a button in front of the cap formerly represented a mark of civil honor. Thus Shakespeare makes Guildenstern in "Hamlet" say:

On fortune's cap we are not the very button;
meaning not the most highly favored.
Again, George Gascoigne, in his "Woodmanship," makes a similar allusion to the courtly favor of one of his gallants:

His bonnet buttoned with gold,
His comble cape bearded all with gay,
His bombast hose with linings manifold.
—London Queen.

The Name America.

The bulletin of the Paris Geographical society, which has just been issued, contains an account of M. Jules Marcon, of certain further researches which he has made into the origin of the name "America." As far back as 1875, he published a paper on the same topic, which attracted much attention at the time, and he has since devoted much labor to an investigation of early historical documents in which the new world is named.

The popular notion that America was so called from the Christian name of Amerigo Vespucci is, he says, wholly unfounded, and he sums up his conclusions in this way: 1. Amerique is the Indian name of the mountains between Julzapa and Libertad in the Province of Chontales, which separate Lake Nicaragua from the Mosquito coast. The word in the Maya language signifies "the windy country," or "the country where the wind blows always." 2. The Christian name of Vespucci was Alberico in Italian and Spanish, Albericus in Latin. This particular name is subjected to an enormous number of variations, as the nomenclature and calendars of Italian and Spanish saints of the period show; but nowhere is there any such variation of Americus, Amerigo, Amerigo, Almerigo, etc., and none of these is either a diminutive of a variation in use in Italy, Spain or France, for Alberico or Albert. 4. Before 1507, when Jean Basin

of Saint Die published the name, it is not to be found in any printed document, nor even in any manuscript of recognized and incontestable authority.

M. Marcon claims that his theory of a native origin for the name America has been accepted in Spain, Spanish America, and, with some exceptions, in the United States; in France, Germany and Italy it has excited doubt and surprise, but in the last named, he has the support of the eminent Turin geographer, M. Guido Core. There is no doubt that Columbus and Vespucci went along the Mosquito coast at the feet of the Sierra Amerique, and that the name was reported by the officers and men of these expeditions, and Schoner, the geographer, declared in 1815, that the name was already popular in Europe.

It is beyond question that one edition of Vespucci's letter on his third voyage has the name Amerigo in the place of the Christian name. Nineteen editions had Albericus, and subsequent Italian editions had Alberico. The one with Amerigo on the title page was published in 1506, but M. Marcon suggests that this was never intended to be a variation of Alberico, but rather an adaptation of Amerique, a name already known and applied to the new world, to Vespucci's name to distinguish him, as we now say "Chinese Gordon" to distinguish the particular Gordon by suggesting one of his greatest feats.—London Times.

Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all Throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellow-men. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W. A. NOYES, 149 Power's Block, Rochester, N. Y.

ST. JACOBS OIL

For Horses and Cattle.

Recent, Prompt, Good Results.

Swelling. Wagoner, Ill., May 21, 1890.
My mare caught cold; result: swollen limbs
lung between fore-legs and inflammation. Cured
her with St. Jacobs Oil. L. C. GARDNER.

The Arms Palace and Stock Car Co.,
St. Clair Bldg., Toledo, O., June, '90.
We cheerfully recommend St. Jacobs Oil as the
best for general use on stock. E. ARMS & CO.

For 10 Months. Winboro, Texas, June 20, '90.
My horse was hurt on hind leg; suffered 10 months
was cured by St. Jacobs Oil; has remained perma-
nent. W. J. OLIVER.

AT DRUGGISTS AND DEALERS.

THE CHARLES A. VOGELER CO., Baltimore, Md.

PARTIES WITH CAPITAL

can hear of the chance of a lifetime for rapid fortunes
by addressing WM. WOOD, 827 Sixth Ave., New York.

AN EASY WAY TO MAKE MONEY!

AGENTS can make from \$100 to \$150 a
week, representing The Consumers' Supply
Association. No Capital! No Samples! No
Trouble! Write for particulars to The Consumers'
Supply Association, 155 & 157 Broadway, New York.

BEECHAM'S PILLS
ACT LIKE MAGIC
ON A WEAK STOMACH.
25cts. a BOX
OF ALL DRUGGISTS.

MUSIC-ART-ELOCUTION and
General Culture. Desirable Positions
open to progressive students. All interested
will receive valuable information free,
by addressing E. TOURJEE, Boston, Mass.

SAFE INVESTMENT
FARRAND & VOTEY
ORGANS
DETROIT, MICH. U.S.A.

IRRIGATED LANDS in Rio Pecos Valley,
in Southeastern New
Mexico. Choice lime-
stone soil; abundance of pure water; a deligh-
ful climate all the year; almost continuous sun-
shine; altitude 3,500 feet; healthiest locality in
the U. S.; no consumption, no malaria. 30 acres
will yield a competency. Write for particulars,
naming this paper, to Pecos Irrigation & In-
vestment Co., 84 Monroe St., Chicago, Ill.

FREE READING!

If you are desirous of receiving papers, cat-
alogues, samples, etc., send 10 cents to have
your name inserted in our Agents' Directory,
which goes to publishers all over the U. S.
Address R. E. ELLIOTT, Dawsonville, Ga.

In writing to advertisers, please mention the
KANSAS FARMER.

WASHBURN COLLEGE.

TOPEKA, - - KANSAS.



FOR BOTH SEXES. Collegiate and Prepara-
tory courses.—Classical, Scientific, Literary; also an
English course, Vocal and Instrumental Music, Draw-
ing and Painting, Oratory and Elocution. Fourteen
Instructors. Facilities excellent. Expenses reason-
able.
Address PETER MOVICAR, Pres.

State Agricultural College

Free Tuition. Expenses Light.
Endowment, \$500,000. Buildings, \$120,000
Grounds and Apparatus, \$100,000.
30 INSTRUCTORS. 500 STUDENTS.
Farmers' sons and daughters received from Com-
mon Schools to full or partial course in Science and
Industrial Arts. Send for Catalogue to
MANHATTAN, KANSAS.

Southwestern
Business College.
WICHITA, KAN. — WRITE FOR CATALOGUE.

The only business college in Wichita. The largest
institution of its kind west of Chicago. Nearly 800
students in attendance last year. Board \$1.50 per
week. Write for circulars.



BETHANY COLLEGE.

Under care of the Protestant Episcopal Church. For
GIRLS and YOUNG LADIES, exclusively. Boarding and
Day Pupils.

Twenty-six Officers and Teachers.

Faithful Maternal oversight for all entrusted to our care
ALL BRANCHES TAUGHT—Grammar and Collegiate,
French, German, the Classics, Instrumental and Vocal
Music, Elocution, Drawing, Painting.
THE MUSIC DEPARTMENT—Employs ten teachers, and
twenty-four pianos and three organs.
In the ART DEPARTMENT, the Studio is well equipped
with casts, models and copies.
Send for Catalogue to T. C. VAIL, Bursar, or BISHOP
T. H. VAIL, President, Topeka, Kansas.

EMPORIA BUSINESS COLLEGE

—EMPORIA, KANSAS.—
PROF. O. W. MILLER, -- -- -- PRESIDENT.

THE STATE NORMAL SCHOOL,

EMPORIA, KANSAS, enrolled 930 pupils last
year. It is the great teach-
ers' training school of Kan-
sas. In equipment and faculty it ranks among the best schools of the kind in this country. For circulars
and catalogue, address
A. E. TAYLOR, President, Emporia, Kas.

KANSAS FARMER.

ESTABLISHED IN 1883.

Published Every Wednesday by the
KANSAS FARMER COMPANY.OFFICE:
KANSAS FARMER BUILDING,
Corner Fifth and Jackson Sts.

SUBSCRIPTION PRICE: ONE DOLLAR A YEAR.

An extra copy free fifty-two weeks for a club
of six, at \$1.00 each.
Address KANSAS FARMER CO.,
Topeka, Kas.

ADVERTISING RATES.

Display advertising, 15 cents per line, agate, (four-
teen lines to the inch).
Special reading notices, 25 cents per line.
Business cards or miscellaneous advertisements
will be received from reliable advertisers at the rate
of \$5.00 per line for one year.Annual cards in the Breeders' Directory, con-
sisting of four lines or less, for \$15.00 per year, in-
cluding a copy of the KANSAS FARMER free.Electros must have metal base.
Objectionable advertisements or orders from unre-
liable advertisers, when such is known to be the case,
will not be accepted at any price.To insure prompt publication of an advertisement,
send the cash with the order, however monthly or
quarterly payments may be arranged by parties who
are well known to the publishers or when acceptable
references are given.All advertising intended for the current week
should reach this office not later than Monday.
Every advertiser will receive a copy of the paper
free during the publication of the advertisement.Address all orders.
KANSAS FARMER CO., Topeka, Kas.The price of wheat is rising, as our
market reports show.Butler county is making a splendid
crop record this year.The KANSAS FARMER will be sent on
trial thirteen weeks to new subscribers
for 25 cents.Secretary Mohler in his report for
June puts the aggregate wheat yield of
the State at 34 768 560 bushels.Mr. Adamson, the "roasting process"
sugar man, is sanguine of success. He
is putting in a plant at Minneola, Clark
county.The machinery for the manufacture
of twine is inexpensive, and the twine
is very easily made, requiring no special
skill in its manufacture.The last fair held at Atchison was in
1881, but this year they have organized
the Atchison District fair to be held on
September 10-16. Frank Royse is Sec-
retary.A Dickinson county farmer says that
by reason of the advice and urging of
the KANSAS FARMER he sowed 150
acres of wheat last fall and now has his
reward.In another column we present a list,
as far as reported, of Kansas fairs for
1889. If any of our readers know of any
fairs to be held not included in this list
we shall be glad to have particulars.The St. Louis wool market reports
quote unwashed Kansas, Nebraska,
Wyoming and Utah, medium 22 to 24
cents, coarse 21 to 23 cents, low 17 to 19
cents, light fine 20 to 21 cents, heavy
fine 14 to 15 cents.The crop report of Missouri State
Board of Agriculture dated July 5
shows the average yield of wheat for
that State to be about fourteen bushels
per acre. The average condition of
every crop growing is put below 100.The American Hereford Cattle Breed-
ers' Association offers special prizes at
the Kansas State Fair, September 16 to
21, amounting to \$175, as follows: Best
Hereford bull, any age, \$30; best Here-
ford cow, any age, \$30; best Hereford
herd, either aged or graded, \$30; best
young herd, \$30; best four animals, any
age, the get of one bull, \$30; best steer
under three years, \$25.Breeder's Gazette last week says: At
this time last year the choicest beeves
were selling around \$6, or \$1.50 per 100
pounds above present prices. Texas
cattle were no higher than now. Hogs
are more than \$1 per 100 pounds
lower than they were twelve months
ago, though just why there should be so
great a difference is one of those things
that "no fellah can find out."SHALL WE ABANDON THE OLD
PARTIES?This subject, like every other one of
great importance, ought to be discussed
in the light of reason; no man is reason-
able when his mind is clouded with
prejudice; hence, in order to treat this
matter fairly it is necessary that all
party feeling be for the time ignored, if
such a thing be possible. A good citizen
ought to be broad enough to know that
the interests of all the people are of
greater worth than those of a part of
them, and he ought to be broad enough
in his views to comprehend the truth
that the whole country is worth more
than any political party. The best ser-
vice that can be performed for a party
is that which is best for the people.In determining this question of aban-
doning the old party organizations to
make a new one, the turning point in
every mind ought to be the common
weal. What is best for all the people,
for the common interests of the people,
and having decided as to that, then
inquire what line of procedure will best
accomplish the object sought.First, then, let us consider what is
chiefly desired by persons who raise the
question. It is desired most of all that
the interests of farmers and manual
workers in general be better repre-
sented in the administration of public
affairs. This broadly covers the whole
ground, but there are logical divisions
following certain lines of labor or con-
venience, as transportation and money.
Without ready means of transporting
produce farming has few commercial
advantages, and without money there
would be no need of railroads or ships.
With these facilities we enter the broad
field of foreign commerce and that sug-
gests the disturbing query—what about
tariff duties? If it be required to state
in one word the object of this great
movement toward another party or-
ganization, the word *justice* would be
employed. Farmers ask for nothing
more than justice and they will be satis-
fied with nothing less. Men differ,
however, in many cases about what
justice is. The difference is greater as
it relates to methods than it is as to
the principle involved. Still there are
differences relating to fundamental doc-
trines, and they come partly by reason
of education, partly through lack of in-
formation, and partly through party
prejudice. The nearer we are to prin-
ciples the closer we stand in opinion,
but the more attention we pay to de-
tails the farther apart we go in action.What is justice in this direction? Is
it an equal distribution of burdens? If
so, what is such equal distribution, and
how shall it be effected? Is it justice
to exact from every citizen an equal
amount in taxes without regard to the
amount or character of his property?
Shall property be taxed? If so, shall
we include all classes of property, and
shall there be any exemptions? Shall
we tax labor, or the products of labor?
Citizens have equal rights and privileges,
but they are unequal in the amount
of their natural capital—intelligence,
energy, tact, etc. Shall these mental
endowments be considered in levying
taxes? Is it necessary to consider them
in order that justice may be done to all
citizens? Shall we have a single tax—
a tax on land, for example, and shall
that be in the nature of rent rather than
a percentage on estimated value of
property owned? This line of thought
brings to view reasons for honest dif-
ference in details of work. Are the
people agreed as to this matter of taxa-
tion? Is it not a vital one? and is it not
for that very reason, among the first to
be considered in any movement toward
the uniting of forces on a new economic
line?But we have only entered the field of
taxation. What about the taxing of
commodities imported from foreign
countries? If we adopt a tariff system
shall the duties be laid upon all articles
indiscriminately, or shall we distinguish
between classes, and shall the rule
of assessment be according to value(ad valorem) or according to quantity
(specific)? And shall there be anything
in view except the mere matter of
revenue? All these divisions of the
tariff subject appear in the discussion
of details after the main question has
been determined.As to transportation there is no dif-
ference of opinion concerning its object;
but on the threshold we meet differences
concerning the relative rights of owners
and patrons of railroads and other
transportation lines; then, a little far-
ther along men differ about the rule of
compensation, they differ about the
basis of measurement, whether the unit
shall be a pound or a ton or a carload,
and they differ about the rate of in-
crease as quantity or distance increases.Concerning money radical differences
appear and they relate to first prin-
ciples. Money, as it is recognized in
law and as it is dealt with in practice,
is the property of individual persons,
many of whom use it as capital in trade,
hiring it out to borrowers, just as a
livery stable keeper or a pawnbroker
lends to persons for hire. This utterly
defeats the operation of the principle of
justice, for it takes from one person
more than it takes from another for a
like service. Interest rates are not
uniform in practice. The "money
market" varies from day to day in the
same places and in different places.
And then, persons differ as to the source
of money, some insisting that the gov-
ernment's duty is only to coin gold or
gold and silver, and to regulate its value,
while others believe that money ought
to be provided by the government and
issued directly to the people without
the intervention of banks, and they be-
lieve, further, that interest rates ought
to be uniform in all parts of the country,
being fixed by Congressional enactment.This is enough to call attention to
differences of opinion on matters neces-
sarily involved in the proposed move-
ment, differences relating to principles
as well as to details. This, as we look
at it, is of primary importance. If we
are now not of one mind on vital ques-
tions, are we ready for the organization
of a new party whose strength, if it has
any, will come from union on these very
matters? It is believed by sanguine
persons that when the expected union
of forces takes place at St. Louis in
September, three to four million per-
sons will be enrolled in one grand
association working for the establish-
ment of justice as herein above out-
lined. That vast army of workers will
be composed of members of political
parties now existing. The following
table shows how parties stood numeri-
cally at the last two elections:

	1884.	1888.
Republican.....	4,848,150	5,441,902
Democrat.....	4,913,243	5,538,560
Prohibition.....	151,062	249,937
Labor.....	65,098	147,521
Total	10,048,639	11,395,591

Those figures show the total vote of
the country in the years named, and
they show how the people felt on the
principal issues at the time. In 1884,
Democrats being out, made adminis-
trative reform the issue, and won the
election. In 1888, being in, they made
reforming the tariff the issue and were
defeated. The apparent difference be-
tween the parties on the general sub-
ject of reform was greater in 1884 than
it was four years later. The result of
that election scores on the side of re-
form, though subsequent events have
shown that it was a change rather than
a reform which was secured by the
nearly 5,000,000 voters who supported
Mr. Cleveland. The masses want re-
form in directions other than those in
which the great parties have been going,
but certain leading questions have con-
trolled the elections, as they always
will, and these special reforms which
the people want are kept in the back-
ground, and will be until the people in
non-partisan associations bring them
forward and demand their considera-
tion by legislative bodies.The Labor party was the only one
that presented a distinctly reform plat-form; that is, a platform setting out
particular reforms desired, and it is only
fair to say that the Labor party more
nearly represented the opinions of
leaders in the new movement than any
other party did. Democrats in 1876
named specific reforms which were de-
manded, the platform of that year was
affirmed every election year since, yet,
though the vote of the party increased
at every election, and though the party
was successful in 1884, not one step was
taken in the direction of particular re-
forms demanded by the Labor party.
And Republicans, successful on the
protection issue, will not be likely to
inaugurate any special reforms unless
the people's wants are made known in
other than party meetings where only
party measures are discussed.This brings us to the last considera-
tion. In order to make a successful
party, voters are needed; they must be
drawn from the old parties, and the
numbers must be millions; and the new
voters must be converted to the new
doctrines espoused by the new party,
they must be satisfied with the doctrines
in general, and they must agree upon
methods of administration. Is there
any ground for hope that all this can be
done by an attempted breaking away
from the old parties? We do not be-
lieve there is. Men belonging in the
old parties, men by thousands aye,
millions, believe in general, just as our
alliance and grange friends believe,
but the instant you undertake to over-
turn a man on the tariff question, or on
the money question, or on the taxation
question, or on the prohibition question,
you stir up an enemy. As we view the
situation, it is better for farmers and
workers in general to form associations
for the purpose of discussing and agree-
ing upon principles, leaving details alone
for the present, sowing good seed, get-
ting men well grounded in doctrine,
leaving them to preach to their party
friends and thus leavening the entire
mass. In course of time new reforms
will come in that way just as others
have come within recent years. Get
men of all parties together in the asser-
tion of good principles and they will
serve as missionaries in their several
party councils. In this way the old
parties can be brought forward and the
needed work will be done. Let these
non-partisan associations speak plainly
on all matters of interest, and the fact
that thousands of voters indorse them
without severing their party relations,
will go forth to teach party managers
what they need most to know.The figures above given show how
nearly the people are equally divided
between the two great parties. And
while this equal division appears, it is
quite as true that while the Labor party,
the only party claiming to be distin-
ctively reform though ignoring the
great issue of the last campaign—pro-
tection, numbers only 147,521 voters,
the number of persons now enrolled in
the grange, alliance, and other like as-
sociations is probably not less than two
millions. It is estimated by persons in
position to be well informed that when
the Alliance Union is effected the grand
aggregate membership will be little if
any below four million. But one of the
conditions of the union will be that the
association will be non-partisan, for
that is fundamental among all the
bodies that will unite in the great unit.
Let the grange introduce the discussion
of party politics into its deliberations
and the order would dissolve in a year.
The same is true of the alliance, the
wheel, and of every like association of
men. Citizens, as citizens, differ hon-
estly on great national questions on
which parties are divided; they hold to
their political opinions as firmly as they
do to those relating to their religion.
But on matters of special interest to
farmers, all farmers are practically
agreed. Go out among them and talk
to them about transportation, interest,
special franchises, monopolies, trusts,
etc., and there are no irreconcilable
differences to be found; but the instant

you raise party issues you discover differences that cannot be adjusted. Right here lies the great obstruction, and it will, sooner or later, serve as the principal object lesson to be learned. Upon the questions of special concern to farmers and hand workers generally, there is little more than apathy to prevent a speedy coming together if the workers are active, earnest and persistent; and when they do get together and demand what they want they will get it, no matter what party is in power. A million alliance men scattered over a dozen States would be divided politically just as working citizens in general are divided, though they would be a unit on those subjects which concern them most directly, and which need only the backing of working people to place them where politicians will take hold of them and do with them just what the people ask. The point is: Farmers are or may be united on some essential things; on some other things they are divided and will so remain; the matters on which they are united are the essential ones in their interest; therefore, let farmers combine on these essential matters, and they will be so many voters that their influence will control in all parties. This leaves men free to act on purely party questions as they desire, at the same time bringing to bear the weight of their combined influence on those matters—transportation, currency, interest, redemption of real estate, taxation, education, etc., on which men do not divide according to party lines. Whenever the membership of farmers' associations, in one grand body, becomes large enough to carry an election for a party of its own, it would be large enough to control every other party if the members were divided just as they now are on party lines.

The KANSAS FARMER believes that the present movement of farmers will succeed by concentrating on the essentials as above indicated, and that it will not succeed if it undertakes to interfere with the party opinions of voters.

Co-operation Among Farmers.

What farmers most need in the commercial line is union, working together, association, combining the strength of individual persons in a larger unit, in order that the same principles of business which other classes of citizens have adopted may be employed by farmers in the transaction of their business. One hundred farmers acting separately, do the work of a hundred persons, and it requires just that many men to do the business—one manager for every farmer. One hundred farmers associated and doing their business as one body, need but one person to attend the business; one person may sell all the products of the hundred, and he may buy all the supplies. Such a combination is in position to secure and hold advantages in every direction which one man alone cannot command. And besides these advantages, when one farmer is in need of assistance, the association can help him without inconvenience, and thus save him the necessity of borrowing money at high rates of interest. A friend sends us the following clipping, which is suggestive:

"As has often been said, says a Connecticut farmer, 'middlemen take all the profits.' I see no reason why the day should not come when the farmers will buy and sell their own goods entirely. In some sections this is largely the case now; but it is only because the farmers are united and work together. This is most noticeable in the co-operative creameries in New England. The farmers now manufacture their butter and fix a price on it, instead of, as before, taking it to the store and 'trading it out' at the store-keeper's price. If the farmers can manufacture and sell butter in this way, why can't they grow and sell potatoes and the other crops in the same way? I hope to see the day when our Western farmers will own their own mills and make their own flour. Allowing these middlemen to

'corner' our crops and take our profits are things we will have to prevent, either by handling our own crops or by making our voice heard in the Legislatures. This can only be done through co-operation."

The Business Situation.

Reviewing the state of trade for last week, R. G. Dun & Co., New York's commercial agency, say: Business has been fairly maintained in volume, and is gradually improving in prospects. June has been a month of unusually large transactions. Prices of commodities, despite the rise of some speculative markets, have fallen during the month about 2 per cent. and are hardly now 12 above the lowest average ever recorded. But there are signs of substantial improvement in the most important branches of industry.

The monetary situation remains undisturbed. Nevertheless the stock market, by many considered an indication of the future, has been sinking. The wars of Western, and to some extent of Eastern railroads have disheartened many buyers. The half-yearly return of failures shows a relatively larger increase in New England than in any other section, about 28 per cent., and next in the trans-Mississippi regions this side of the Rocky mountains about 20 per cent. In the Middle States the increase has been but 4-5 per cent., thence to the Mississippi about 5 per cent., and the South about 3½ per cent. Against a general increase of 8 per cent. there is a decrease of 3½ per cent. in aggregate liabilities. The markets have not changed greatly during the week.

The monetary prospect is clouded by the exports of \$17,707,640 gold and \$1,135,464 of silver from New York alone since June 1. In consequence the circulation has been reduced \$17,000,000 in June, though the aggregate is even now \$8,000,000 larger than a year ago. It is felt that a continued outgo in July would be apt to cause pressure in September.

The business failures number 202 as compared with 215 last week and 220 the week previous. For the corresponding week of last year the figures were 214.

Silos and Ensilage.

Bulletin No. 6, Kansas Experiment Station, is the result of experiments made on the College farm under direction of Prof. Shelton. We will reproduce it in the KANSAS FARMER next week. In the meantime, persons desiring it, with accompanying tables, should address Prof. Shelton, Director, Manhattan, Kas.

Lectures on Forestry.

The law establishing forestry stations in Kansas requires the Superintendent when petitioned by twenty-five or more persons in any county to go to such county and hold meetings instructing the people in the culture of trees. It has been suggested that Mr. Allen, the Superintendent, could be made serviceable in this direction by acting in connection with farmers' institutes. He could visit a good many counties in a circuit giving one lecture at each institute. Mr. Allen, we doubt not, would cheerfully respond to any such invitations, independently of his duty under the law.

Honor to Whom Honor is Due.

Mr. President Fairchild, of the State Agricultural college, calls our attention to an omission in our notice of the annual report of the Experiment Station. Carelessly we neglected to give proper credit for the work which the report shows was done. Of the 350 pages of matter contained in the report, 116 represent the Farm department, of which Prof. Shelton is head, forty-eight pages present chemical work under Prof. Failyer, 116 pages give the work in horticulture and entomology, of which Prof. Popenoe has charge, and sixty-nine pages describe the work in botany under Prof. Kellerman.

D. M. Osborne & Co. and Binding Twine. The following letter explains itself. It is printed in accordance with our rule to let the party accused answer for himself, provided always he is reasonable about the length of his answer:

St. Louis, Mo., July 5, 1889.

EDITOR KANSAS FARMER:—We are in receipt of a copy of your paper of June 27, and notice in the alliance correspondence that Mr. John L. Downing, Secretary of some farmers' alliance in Kansas, has addressed a letter to you regarding carload of binding twine which he claims that we sold to the alliance. In justice to us we would like you to publish the following:

Referring to letter and resolutions signed by John L. Downing, Secretary of alliance, we have to say that he does not state the matter correctly and fairly. Some time ago one of our traveling men called on the Morris County Alliance and took an order for a carload of twine, which was taken with the distinct understanding that it was subject to the approval of D. M. Osborne & Co., of St. Louis. Our contract so read that no contract for twine will be valid unless approved by us. This contract was not approved and we wrote the alliance as soon as we had thoroughly investigated the matter that we could not accept the order. We consider that we treated them entirely fair as we always do all of our customers.

Very truly yours,

D. M. OSBORNE & Co.

The Silk Outlook is Good.

Dr. Buck, Superintendent of the Silk Station, is very much encouraged by the interest in silk culture manifest among Kansas people. He says the season has not been a good one for making the best silk, but a great many cocoons have been raised. He distributed a large quantity of eggs among persons residing in twenty-seven different counties of the State. The station is paying 33½ cents a pound for green cocoons and \$1 a pound for good dry ones. The Doctor thinks it is better for the growers to send in the cocoons green and let the worm be stifled at the station, where the work can be done more uniformly and more economically, securing best results. A new stifling implement was recently received from the Department of Agriculture at Washington. Inexperienced persons are in danger of spoiling silk in the process of stifling or otherwise destroying the worms, and as one to three is a fair proportion in prices of green and dry cocoons, the grower will lose nothing and may save something by selling the cocoons green.

To Members of P. of H.

The Committee on Women's Work in Capital Grange, Topeka, have decided to take for consideration during the next six months the constitution of the United States. The first five sections will be considered at the next meeting on July 13. A thorough study of contemporaneous history bearing on the subject will be in order.

This constitutes only one of many good features of this stalwart farmers' organization. Farmers who are not now members are cordially invited to join the order of Patrons of Husbandry.

Whitman Agricultural Co., St. Louis, have our thanks for the most complete catalogue of agricultural machinery that we ever received. It will make a valuable book for our library. They have the most complete line of hay presses, horse powers, corn shellers, cider mills, feed cutters, and seed sowers. Every business agent of the Farmers' Alliance and every exchange should have a copy of this catalogue.

The State Fair last year provided a large refrigerator in order to encourage a dairy exhibit and the display was very meager indeed. In view of the rapid strides made by this industry during the past year, we trust that Kansas dairymen will see that an exhibit is

made this year that will show to the world the progress made by this important industry. The Kansas Dairy Association should see to it.

There was not one day last month which was entirely free from clouds at the meteorological observing station, State University, Lawrence, according to Prof. Snow's report.

We desire special attention of our readers to the new advertisement of Ames Plow Co., Boston, in this issue. They make a very desirable line of machinery that is very much in demand. They are one of the largest manufacturing establishments of farm implement machines in this country. Their eighty-five-page catalogue contains an interesting array of nearly every kind of machinery for the farm. Don't fail to write to them for particulars.

The first annual exhibition of the Kansas Poultry and Pet Stock Association will be held in Wichita, December 3, 4, 5 and 6, Theodore Hewes, of Trenton, Mo., judge. All breeders of poultry or pet stock who are not already members of the association are cordially invited to send in their applications for membership accompanied with the fee of \$1. Let us make an extra effort to have the grandest poultry exhibition on record, competition open to the world. For further particulars address

HARRY SWIFT, Secretary,
Marion, Kas.

Weather-Drop Bulletin

Of the Kansas weather service in co-operation with the United States Signal Service, for the week ending Saturday, July 7, 1889.

Precipitation.—The rainfall has been light this week in most of the counties; some counties in the northeast, some in the central, and some in the southwest reporting no rain. Nearly all the observers speak of good showers passing their stations. On the 2nd it sprinkled in Lawrence, while to the west the roads were rendered muddy to within a mile of town. Same day, a tenth of an inch fell at Marydale farm, two miles north; it was heavy enough to fill the gutters and start the creek. Good rains have fallen in Johnson, Montgomery, Reno, Ford and from Salina west. Excessive rains in Chautauqua, the contiguous portions Ellis and Trego, and in Greeley.

Temperature and Sunshine.—A high temperature prevailed during the opening days of the week, ranging from 2 deg. to 4 deg. in excess of the normal, but with the approach of the high barometer on the 2nd it dropped below the normal, ranging from 2 deg. to 7 deg. below, the rest of the week. This cool wave was felt all over the State. In the western counties the temperature rapidly rose above the normal on the 5th. The sunshine has been about normal.

Results.—The conditions of the weather have generally been very favorable to the crops. Corn and potatoes have made excellent progress, while the former is tasseling in the southern counties, and in some is silking. In the south the wheat and rye are harvested, mostly stacked and threshing is now in progress; in the central counties the oat harvest is well under way, while in the northern the wheat harvest is being pushed to a conclusion. Rust has touched the oats in most of the eastern counties. In the southern counties cotton is doing well. Chinch bugs are reported at work in many counties of the eastern division.

T. B. JENNINGS,
Signal Corps, Asst. Director.

Kansas Fairs for 1889.

Kansas State Fair, Topeka, September 16-21.
Anderson county, Garnett, August 27-30.
Atchison county, Atchison, September 10-16.
Barber county, Kiowa, October 15-17.
Brown county, Hlawatha, September 8-7.
Chase county, Cottonwood Falls, September 4-6.
Cheyenne county, St. Francis, September 25-28.
Clay county, Clay Center, October 1-4.
Coffey county, Burlington, September 9-13.
Crawford county, Girard, September 24-27.
Ellis county, Hays City, September 10-13.
Ford county, Ford, September 18-20.
Franklin county, Ottawa, September 3-7.
Graham county, Hill City, September 26-28.
Harvey county, Newton, September 10-13.
Jefferson county, Oskaloosa, September 10-13.
Jewell county, Mankato, September 10-13.
Lincoln county, Lincoln, September 25-27.
LaCygne District, LaCygne, September 24-27.
Linn county, Mound City, September 14-20.
Linn county, Pleasanton, September 10-13.
Marion county, Marion, October 2-4.
Morris county, Council Grove, September 23-26.
Mitchell county, Cawker City, September 24-27.
Nebraska county, Seneca, September 17-20.
Neosho county, Erie, October 1-8.
Osage county, Burlington, September 16-13.
Ottawa county, Minneapolis, October 9-11.
Osborne county, Osborne, September 17-20.
Plainville fair, Plainville, September 24-27.
Phillips county, Phillipsburg, September 17-20.
Rawlins county, Atwood, October 1-8.
Reno county, Hutchinson, September 11-20.
Rush county, Hsion, September 18-20.
Saline county, Salina, September 24-27.
Sheridan county, Hoxie, September 26-27.
Sherman county, Goodland, September 10-13.
Smith county, Smith Center, September 18-21.
Sumner county, Wellington, August 27-30.
Woodson county, Neosho Falls, August 20-23.

Horticulture.

THE GRAPE INDUSTRY IN MISSOURI.

Address of G. E. Meisner, before the American Nursery Association, at the last meeting.

MR. PRESIDENT:—That you have requested me to say a few words about the grape interest in Missouri, I suppose is only due to the fact that Missouri grapes and Missouri wines have a good name and well established reputation throughout the country, and though perhaps the grape industry of our State is not as extensive as it is in some other sections, in the quality of our products, especially our wines, we stand second to no other, neither the Golden State on the Pacific, nor the Empire and Buckeye States in the East.

It is now some forty or fifty years ago that grape culture on any extensive scale was first attempted in Missouri by the German settlers on the banks of the Mississippi and Missouri rivers. The success which crowned the first attempts of these pioneers, especially around the little town of Herman, quickly encouraged others to follow, and grape culture soon assumed quite an important role in the industries of our State. At first the old Catawba and Isabella, together with a small proportion of Norton's Virginia, supplied the bulk of the vines planted here, until, with the introduction of the Concord, a new impetus was given to grape culture and vineyards sprang up all over the State. In those days the dreaded grape diseases (rot and mildew) were almost unknown, and grape culture seemed not only to be one of the most profitable, but also one of the safest and most reliable pursuits. For some years this proved really the case, but alas! that it did not continue so. By the advent of the black rot and mildew, grape culture in Missouri, in common with grape culture throughout the largest portion of our country received a severe check. The old Isabella and Catawba were the first to fail, and even the Concord after a few years proved unreliable over a great extent of territory, and many vineyardists, who had staked all their hopes, their labor and expense on these varieties became discouraged and abandoned their vineyards or gave them over to other cultures. Not so, however, those who were fortunate enough to have planted the Norton's Virginia, or other varieties less subject to the attacks of fungoid diseases. Their vineyards continued to flourish and yield remunerative returns. More attention was necessarily given to such varieties and kinds as Cynthiana, Ives, and Perkins, and they gained more prominence. New varieties, originated in Missouri, were introduced, notable among them the Elvira, Missouri, Riesling, Etta and Montefiore, which succeeded well, and have given new courage to many of our grape-growers. Some of the varieties named may not be what we would call first-class table grapes, but they are reasonably reliable, produce good crops, and their fruit finds ready disposal in the markets for canning, cooking or preserving, or through the presses of the wine cellars.

What is the most encouraging and the most important, however, and this applies not only to Missouri but to American grape culture throughout the entire country, is the well-founded hope that the grape-grower may soon have his greatest enemies (the dreaded grape mildew and black rot) under control, and may prevent their ravages by timely applications of the copper salt remedies, which have so largely been experimented on, and with generally favorable results during the last two years.

If, as I am now almost convinced, this hope shall be verified, our finest, choicest and most delicate table grapes, as well as many additional valuable wine grapes will be grown successfully, not only in Missouri but throughout a vast extent of our country, where the grape has hitherto been considered a rather unreliable food, and American

grape culture will take a development that will place it high in the ranks of our national agricultural industries.

As to the copper salt remedies before referred to, full directions for their preparation and proper application can be obtained from Department of Agriculture at Washington, which, under the direction of its late Commissioner and Secretary, and former President of this society, the Hon. Norman J. Colman, of Missouri, deserves the highest credit for the great attention which it has given to this and other matters pertaining to practical horticulture. In view of this and in further view of the excellent administration in general, which he has given to his Department throughout the term of his office, I beg to conclude my remarks, Mr. President, by moving that we, as his brother nurserymen in convention assembled, express our recognition by an especial vote of thanks or approval to Norman J. Colman for the services which he has rendered as the head of the Department of Agriculture. He is a member of our fraternity of whom we may all feel proud, and of whom none need feel jealous.

New Fruits.

EDITOR KANSAS FARMER:—The present season gave us an abundant strawberry harvest. All kinds did well and yielded their utmost; yet people always desire the best and wish only to cultivate what will seem and be most remunerative. While the Crescent is as good as any one can expect for an early berry for family use, it is worth very little for market—too soft. There are none much earlier. The Mammoth is a little more so, with a few fine berries, and this may take the place of the Crescent, being better for market. The attention of the public has been divided between the Jessie and Bubach No. 5, both claiming to be the best in all essentials. Whether this year's trial decides for all time to come, remains to be seen, but the Jessie will have the more advocates; it is the most productive, large fruit and strong plants. But the Bubach will produce the largest berry, and is a strong, healthy plant. The Gandy's Prize is an exceedingly fine late variety, with vigorous plants; and the Bomba is the perfection of strawberry, in size, shape, and color (which comes on all sides alike) of any yet tried. There are lots of others, as good or better, but not yet fruited. Strawberry-growers can dispense with Downing, Crescent, Sharpless, Wilson, and a host like them. A. H. GRIESA.

Lawrence, Kas.

Tree Culture in Nebraska.

EDITOR KANSAS FARMER:—The great necessity of forests, and their importance as a supply of fuel, for manufacturing purposes, for their influence on the climate of a country in tempering the extremes of the heat of summer and in modifying the cold of winter, by preventing the radiation of heat, and for their effect on the rainfall, will be recognized by all. A few instances may be cited to show the effect timber has had in modifying or changing the climate and rainfall of a country. Asia Minor was once a fertile land and supported a much larger population than at present. It is referred to in the Bible as a land flowing with milk and honey. How different to-day—a barren waste of sand and rock, without timber or vegetation of any kind to temper the fierce glare of a semi-tropical sun. Travelers who have visited this land are surprised at its barrenness and that it could have been the fertile country it was fifteen hundred years ago. The destruction of the forests has undoubtedly been the chief cause in producing this change, by producing less rainfall. Other places may be referred to where the clearing away of the forests has affected the climate and rainfall. Spain is not as fertile a country now as in the time of Columbus, and unless something is done to check the destruction

of the forests it will only be a question of time when that country will be a desert. The climate of Italy is also being changed from the same cause, but not to so great an extent. Humboldt says, "By felling the trees covering the hills and mountains under all zones men prepare for the coming generation a two-fold plague, lack of fuel and lack of water."

On the other hand, the planting of forest trees has a great effect on the climate and rainfall of a country. Lower Egypt formerly did not receive a drop of rain, but now twenty or thirty days of drizzling rain occur annually, and this change has been effected by the planting of millions of trees in that country in the last few years. Many such cases could be cited to show the effect produced by the change in the forest area of a country, but this is sufficient to show that tree-culture should be encouraged, especially in countries where the area of timber is limited. The forest area of Nebraska is very small; probably not over 2 per cent. of the entire surface of the State is covered by natural forests. Tree culture has been encouraged by the State since 1876, when Arbor Day was made a legal holiday. Since that time millions of trees have been planted. These trees, with the cultivated land, have been the direct cause of the increase of rainfall of the State. The rainfall has been steadily increasing for the last fifteen years. What was once a barren waste and totally unfit for farming is now the best agricultural section of the State. Timber increases the amount of moisture in a country by preventing radiation of heat, by shading the ground and retaining the moisture longer, and by keeping the atmosphere cooler, thus producing condensation and rainfall.

Peru, Neb.

S. W. VEACH.

Pruning Shrubs.

Shrubs, like trees, are pruned for different purposes, and no one rule will apply for all cases. The shade tree requires pruning, but not of the same kind as the apple tree, which must be pruned with the view to making it produce the best fruit, and a liberal supply of it. Shrubs are similar to trees in this respect. Some are pruned for grace and symmetry, while others are pruned in order to make the production of flowers greater. Shrubs should not be cut back so ruthlessly. They should be sheared off evenly and uniformly in growing in a border. Grace and beauty are the two things desired, and this cannot be obtained any better than by trimming the sides off in a symmetrical curve. Single, isolated plants should be made to assume the appearance of an egg or a perfect sphere.

Flowering shrubs should be carefully pruned. Every branch that is lopped off is likely to carry with it several buds, which would in time present handsome flowers. If the pruning is done after the buds are formed, the shrubs will attempt to repair the loss by throwing out new shoots, which will bear abundant flowers the following spring. In this way pruning will sometimes encourage a strong growth of flowering wood. In pruning it is not always advisable to adopt a treatment that has only one season of flowering in view. The time of flowering is short, and the general shape and grace of the shrub should also be had in view when cutting off the branches. Even in winter a gracefully trimmed shrub has a grace and beauty of its own. As a general rule then no shrub should be cut back so as to impair its vigor or to ruin its natural outlines. Weak shoots only should be cut off and in such a way as to develop the best form of the whole plant.—Geo. Wilson, in *Indiana Farmer*.

Farm Loans.

Loans on farms in eastern Kansas, at moderate rate of interest, and no commission. Where title is perfect and security satisfactory no person has ever had to wait a day for money. Special low rates on large loans. Purchase money mortgages bought.

T. E. BOWMAN & Co.,
Jones Building, 116 West Sixth Street,
Topeka, Kas.

CECIL'S FRUIT FARM AND NURSERY.
J. F. CECIL, Prop'r, North Topeka, Kas. Fruit and Ornamental Trees, Vines, Plants and Shrubs. Cherry Trees and Small Fruits a specialty.

KANSAS HOME NURSERY

BEST HOME-GROWN TREES. Choice Fruit and Ornamental Trees of real merit for the Western Tree-Planters. Also best Fruit and Flower Plants. Water-proof. Samples by mail, 10 cents each; \$6 per 100, by express.

A. H. GRIESA, Drawer 28, Lawrence, Kas.

Hart Pioneer Nurseries

Established 1865. 460 Acres. Full line of Nursery Stock. Forest Seedlings for Timber Claims and Apple Trees for Commercial Orchards a specialty. Large Premium for planting forest trees in spring of 1899. Treatise on cost and profit of apple orchard, free on application. Good salesmen wanted.

Red Cedars! Hardy Catalpas!

FOREST TREE SEEDLINGS—all kinds, Fruit Trees and Plants, Mammoth Dewberry, Black Walnuts, \$1 per barrel. Lowest prices, largest stock! Write for free Price Lists.

GEO. C. HANFORD,
(Successor to Bailey & Hanford),
Makanda, Jackson Co., Ill.

POTTED AND LAYER STRAWBERRY PLANTS.

Haverland, potted, \$2 per 100; Jessie, Bubach No. 5, Warwick and Parry, \$15 per 1,000, potted. Windsor Chief, Capt. Jack, Crescent, Miner's Prolific, Jas. Vick, May King, Chas. Downing, potted, \$10 per 1,000. Layer plants, \$2 per 1,000.

H. H. KERN, Manager,
Bonner Springs Nurseries, Bonner Springs, Kas.

Mount Hope Nurseries

For the Fall of 1899 and Spring of 1899, we call attention to our IMMENSE STOCK of Nursery Stock in all its branches, especially of Cherry and Pear Trees, Standard and Dwarf. This is native stock and is worth twice that of Eastern-grown. Wholesale trade a specialty. Catalogue in August. Agents wanted. Correspond.

A. C. GRIESA & BRO., Lawrence, Kas.

LA CYGNE NURSERY. MILLIONS

Fruit Trees, Shade Trees, Small Fruits. Vines, Ornamental Trees, Etc.

TEN MILLION FOREST TREE SEEDLINGS. ONE MILLION HEDGE PLANTS.

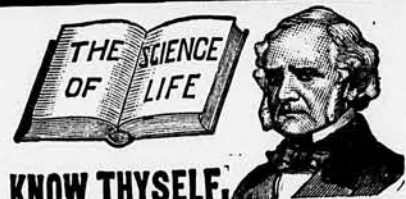
ONE HUNDRED THOUSAND TWO-YEAR APPLE TREES—Grown from whole root grafts.

FIVE THOUSAND IRISH JUNIPERS—Two-feet, SPLENDID WALNUTS, and other forest tree seeds and nuts, prime and fresh.

Full instructions sent with every order, and perfect satisfaction guaranteed. Send for full list and prices. Address

D. W. COZAD
Box 25, LACYGNE, LINN CO., KANSAS

THE GLORY OF MAN STRENGTH VITALITY!



KNOW THYSELF.

THE SCIENCE OF LIFE
A Scientific and Standard Popular Medical Treatise on the Errors of Youth, Premature Decline, Nervous and Physical Debility, Impurities of the Blood,

EXHAUSTED VITALITY AND THE UNTOLD MISERIES

Resulting from Folly, Vice, Ignorance, Excesses or Overtaxation, Enervating and unfitting the victim for Work, Business, the Married or Social Relation. Avoid unskillful pretenders. Possess this great work. It contains 300 pages, royal 8vo. Beautiful binding, embossed, full gilt. Price, only \$1.00 by mail, post-paid, concealed in plain wrapper. Illustrative Prospectus Free, if you apply now. The distinguished author, Wm. H. Parker, M. D., received the GOLD AND JEWELLED MEDAL from the National Medical Association, for the PRIZE ESSAY ON NERVOUS and PHYSICAL DEBILITY. Dr. Parker and a corps of Assistant Physicians may be consulted, confidentially, by mail or in person, at the office of THE PEABODY MEDICAL INSTITUTE, No. 4 Bulfinch St., Boston, Mass., to whom all orders for books or letters for advice should be directed as above.

YOUNG AND MIDDLE AGED MEN

Suffering from the effects of Youthful Follies, Indiscretion, Excess or Indulgence, producing Nervousness, Debility, Dimness of Sight, Self-Distrust, Failing Memory, Physical Decay, Pimples on Face, Aversion to Society, Loss of Ambition, Unfitness to Marry, Dyspepsia, Stunted Development, Pains in Back, Milky Urine, Night Losses, Unnatural Drains and Lost Manhood, you can be CURED to STAY CURED. Relief at once, all exhausting drains stopped, weak parts strengthened and enlarged. Treatment tested 32 years and in thousands of cases. Send stamp for Question List No. 1, in plain envelope. Add. JAMES WHITTIER, M. D., 215 W. Ninth St., KANSAS CITY, MO.

The Poultry Yard.

FOOD FOR YOUNG CHICKS.

Until twenty-four hours old, a chick does not require food. Its system still retains undigested a portion of the yolk of the egg, and when that reserve fund is exhausted, something of a like nature should be offered. I have tried a good many different kinds of foods, and find that soft egg-bread broken into a pan of sweet milk and heated to the boiling point, to be the best food for young chicks until they are one week old. After that time, sound wheat, boiled until soft but not until it becomes a solid mass, should be given. The wheat can either be given alone, or mixed with the bread and milk prepared as described above.

Table scraps, as bits of bread, meat and cold vegetables, softened with sweet milk, or with the richest of the liquor in which the meat and vegetables have been boiled, form what the little chickens consider a very palatable meal. If you want your chicks to live and grow fast, feed them liberally from the start; it makes them strong and vigorous, and prevents their falling a prey to all sorts of diseases.

Once a day, at least, their mess should be seasoned with chopped meat or dripping. Fresh meat is no doubt preferable to salt pork and bacon, but the latter will make a very good substitute when given in a reasonable quantity. Every few days Flora gathers up all the meat skins, bacon rinds and odds and ends of both fat and lean meat, and puts them on in plenty of water and cooks them until even the meat skins are tender enough to come to pieces. This is chopped fine and mixed with the morning meal for the chicks.

Our plan is to give them their breakfast in their coops, which stops their mouths and contents them nicely for awhile; then after the sun has risen, and nearly or quite dried the dew from the grass, we let them all out. By that time they are usually very hungry again, and are disposed to stand around and beg for another meal, but we are obdurate, and "shoo" them all out into the orchard to see what they can glean. By thus sending them off hungry they take a larger range, and show more energy and enterprise in satisfying their appetites.

The coops should then be turned over to air, the floors cleaned off, and when necessary moved to a clean spot on the grass, and the little dead chickens picked up and thrown away, but this spring we have attended to them so well that there have scarcely been half a dozen dead ones to be found at all. At 10 o'clock we make another pilgrimage to the poultry yard, I with a bucket of boiled wheat mixed with bread and milk, and Flora with a large wooden bucket of buttermilk, or thick clabber, and a tin dipper. Together we make the rounds of the feeding coops, I putting a liberal feed in each one on a clean bit of board or an old tin pan, while Flora fills with milk each of the shallow pans which is placed near the coops.

We are very proud of our feeding coops, not that they are so handsome, but because there are so many of them. Before this we have had only one or two, but this year we made nearly a dozen, so that the hens could almost have one apiece, and not fight over them so badly.

They are very simple affairs, only square pens made of tobacco sticks, arranged so that some of the interstices are large enough to admit the little chicks. The top is made of loose boards, as they must be uncovered every evening, for one of our neighbors keeps a pack of hounds that visit us every night, and if they have any difficulty in reaching the few crumbs that remain in the coops they demolish them entirely.

When we go out to the yard at the regular hour for feeding, the watchful old mothers note our approach, and come to meet us from every direction with their eager little broods running

before them. The chicks rush into the coops and make haste to fill their crops, while their mothers stand by and cluck, thankful to pick up a stray crumb here and there. At 10 o'clock this performance is again repeated, and again at 4, when those hens whose broods are very young are gently driven into their own coops, fed there and fastened up for the night.

Until they are a week or ten days old, I do not permit them to stay out all day, the little things are so tender and so easily tired. The other chicks are fed no more that day, sufficient food being placed in their coops for their supper. Milk is given them twice a day, at 10 in the morning and again at 8 or 4 in the afternoon. All the year round my fowls have as much milk as they can drink, and no flock can show a better record for good health, or a more commendable appearance of general thriftiness.

To some extent I attribute it to those same hounds I spoke of above; they are such excellent scavengers, come every night and devour everything that is left, and leave the drinking troughs and feeding pans perfectly clean, so that not a drop of milk or crumb of bread is left to get old and rancid. Neither is my poultry yard troubled by depredations from vermin, as is the case with some of my neighbors, so now I often leave something on purpose for the dogs. They do not molest the chickens themselves, and the vermin are afraid to come near a place frequented by them.

Where the ground is much shaded little chickens are likely to suffer from gapes. The only preventive I know of is to keep them out of the dew, and to confine them to their coops in rainy weather. This spring too, I have been giving them a few drops of turpentine in their feed once a day, and have noticed but few cases of gapes, but I am rather inclined to attribute it to the unusually favorable weather.

They have also been fed upon cooked food entirely, which I think much more wholesome for chicks until one month old.

All this is a great deal of trouble I must admit, but the pleasure of seeing the chicks grow off so fine and healthy makes one forget that; then, too, there is a certain satisfaction to be gained from doing even the simplest thing really well.—A Farmer's Daughter, in Country Gentleman.

Poultry Notes.

We hope all our readers love poultry. If you are not a breeder you should be.

A cross of the Toulouse gander and Embden goose produces a goose larger than either of the parents. There is no profit in geese if they are confined.

The average farmer thinks the fowls can take care of themselves in hot weather. Yet he will coop a brood of chicks in the open field, subject to the direct rays of the sun, and deem them well cared for. You must learn better than this; success will never meet your efforts half way.

The hens will lay as well with no cocks present as with them, and the eggs will keep twice as long. This may be a small matter to notice, but it is a very important item in the matter of having the eggs keep or spoil, which is the object to be observed when the eggs are stowed away.

Make the surroundings of your poultry houses look neat and inviting whether you have pure stock or mongrels. A little extra labor with but a small outlay of currency will turn an "eye sore" into a "thing of beauty." Then your birds will be healthy and happy fowls, are a source of unlimited pleasure, while a flock of drooping, ragged-looking birds cause only pity and disgust.

On farms where there is plenty of range guineas are of great advantage. They do not scratch or do damage, but destroy large numbers of insects, searching everywhere for them. If hatched under hens and induced to roost near the house at night, they will give the alarm should intruders put in

an appearance, being always on the alert for hawks or owls. The Pearl guinea is the best known, though the Whites are favorites with some.

The best whitewash we have ever had knowledge of is composed of lime, slacked to the proper consistency of application, into which for inside work while hot, mix a starch made from half a pound of flour or two ounces of common white glue, thoroughly dissolved. For outside work add to the above preparation a handful of rock salt and as much soft boiled rice. This will stick with certainty.

A good remedy for cholera in chickens is a teaspoonful of castor oil slightly warm. If the first dose does not act well give more in about eight hours, and so on until the bowels act. I have never had to give more than two doses but twice. Keep the chickens in a dry coop and give no water until medicine has acted well, then allow them to have three swallows three times a day until they are looking better, and feed them on soft feed.

A roup remedy which has met with excellent results is as follows: Take one teaspoonful of lard, three-fourths teaspoonful of cayenne pepper, thirty drops of carbolic acid, and a piece of borax the size of a grain of corn (powdered fine), mix well and add enough meal to make a dough. Roll into pills the size of small marbles and give two a day. When you catch the chick squeeze out his nose good and run a feather up it as far as you can saturated with kerosene oil. Keep the chicks in for a few days. Give little ones half a pill. If they rattle in the throat give a teaspoonful of kerosene oil.



MANLY PURITY AND BEAUTY

CUTICURA REMEDIES CURE SKIN AND BLOOD DISEASES FROM PIMPLES TO SCROFULA.

NO PEN CAN DO JUSTICE TO THE ESTEEM IN which the CUTICURA REMEDIES are held by the thousands upon thousands whose lives have been made happy by the cure of agonizing, humiliating, itching, scaly, and pimply diseases of the skin, scalp and blood, with loss of hair.

CUTICURA, the great Skin Cure, and CUTICURA SOAP, an exquisite Skin Beautifier, prepared from it, externally, and CUTICURA RESOLVENT, the new Blood Purifier, internally, are a positive cure for every form of skin and blood disease, from pimples to scrofula.

Sold everywhere. Price, CUTICURA, 50c.; SOAP, 25c.; RESOLVENT, \$1. Prepared by the POTTER DRUG AND CHEMICAL CO., Boston, Mass.

Send for "How to Cure Skin Diseases."

Pimples, blackheads, chapped and oily skin prevented by CUTICURA SOAP.

Rheumatism, Kidney Pains and Weakness speedily cured by CUTICURA ANTI-PAIN PLASTER, the only pain-killing plaster.

CONSIGN YOUR CATTLE, HOGS & SHEEP TO
Larimer, Smith & Bridgeford,
LIVE STOCK COMMISSION MERCHANTS,

Kansas City Stock Yards, Kansas City, Kansas.

Highest market prices realized and satisfaction guaranteed. Market reports furnished free to shippers and feeders. Correspondence solicited. Reference:—The National Bank of Commerce, Kansas City.

EVERY FARMER

Who is obliged to borrow, should do so on the best possible terms. Write direct to the lender and save Agent's Commissions. Money always ready when papers are signed. NO DELAYS! NO EXTRAS!

Russell & Metcalf, Lawrence, Kas.

Dr. WHITTIER

ORIGINAL Dr. Whittier in Kansas City.
OLDEST Dr. Whittier in Missouri, and
Dr. Whittier in Kansas City who has
ONLY practiced medicine over 15 years.
CURES Syphilis, Scrofula, Rheumatism, Gout, Eczema, etc., causing ulcers, eruptions, pain in bones, swelling of joints, enlarged glands, mucous patches in mouth, falling hair, and many other symptoms. All poison thoroughly and permanently eradicated from the system by purely Vegetable Treatment.
Spermatorrhea, Impotency, Nervous Debility, etc., resulting from youthful indiscretion, excesses in matured years, and other causes, inducing some of the following symptoms, as dizziness, confusion of ideas, defective memory, aversion to society, blotches, eruptions, exhaustion, Varicose veins, etc., etc., are permanently cured.
URINARY, KIDNEY and BLADDER troubles, Weak Back, Incontinence, Gonorrhea, Gleet, Stricture, etc., are quickly and perfectly cured.
Consult the OLDEST DR. WHITTIER in person or by letter first. No promises made that age, integrity and experience do not justify. Medicines sent anywhere by mail or express, secure from observation. Consultation free and invited. Office hours, 9 to 5, 7 to 8; Sunday, 10 to 12.
NO FEE UNTIL CURED, from responsible persons.
NEW BOOK free. Address,
H. J. WHITTIER, M. D.,
10 W. Ninth St., Kansas City, Mo.

A MAN

UNACQUAINTED WITH THE GEOGRAPHY OF THE COUNTRY WILL OBTAIN MUCH INFORMATION FROM A STUDY OF THIS MAP OF THE



Chicago, Rock Island & Pacific Ry.

Including Lines East and West of the Missouri River. The Direct Route to and from CHICAGO, ROCK ISLAND, DAVENPORT, DES MOINES, COUNCIL BLUFFS, WATERTOWN, SIOUX FALLS, MINNEAPOLIS, ST. PAUL, ST. JOSEPH, ATCHISON, LEAVENWORTH, KANSAS CITY, TOPEKA, DENVER, COLORADO SPRINGS and FUELLO. Free Reclining Chair Cars to and from CHICAGO, CALDWELL, HUTCHINSON and DODGE CITY, and Palace Sleeping Cars between CHICAGO, WICHITA and HUTCHINSON.

SOLID VESTIBULE EXPRESS TRAINS

of Through Coaches, Sleepers, Free Reclining Chair Cars and (East of Mo. River) Dining Cars daily between CHICAGO, DES MOINES, COUNCIL BLUFFS and OMAHA, with FREE Reclining Chair Car to NORTH PLATTE (Web.), and between CHICAGO and DENVER, COLORADO SPRINGS and Topeka. Splendid Dining Hotels west of St. Joseph and Kansas City. Excursions daily, with Choice of Routes to and from Salt Lake, Portland, Los Angeles and San Francisco. The Direct Line to and from Pike's Peak, Manitou, Garden of the Gods, the Sanitariums, and Scenic Grandeur of Colorado.

Via The Albert Lea Route.

Solid Express Trains daily between Chicago and Minneapolis and St. Paul, with THROUGH Reclining Chair Cars (FREE) to and from those points and Kansas City. Through Chair Car and Sleeper between Peoria, Spirit Lake and Sioux Falls via Rock Island. The Favorite Line to Watertown, Sioux Falls, the Summer Resorts and Hunting and Fishing Grounds of the Northwest.

The Short Line via Seneca and Kankakee offers facilities to travel to and from Indianapolis, Cincinnati and other Southern points.

For Tickets, Maps, Folders, or desired information, apply at any Coupon Ticket Office, or address E. ST. JOHN, JOHN SEBASTIAN, Gen'l Manager, CHICAGO, ILL.

Tutt's Pills

After eating, persons of a bilious habit will derive great benefit by taking one of these pills. If you have been

DRINKING TOO MUCH, they will promptly relieve the nausea,

SICK HEADACHE and nervousness which follows, restore the appetite and remove gloomy feelings. Elegantly sugar coated.

SOLD EVERYWHERE. Office, 44 Murray St., New York.

TO ADVERTISE and meet with success requires a knowledge of the value of newspapers, and a correctly displayed advertisement. To secure such information as will enable you to advertise

JUDICIOUSLY CONSULT LORD AND THOMAS

NEWSPAPER ADVERTISING, CHICAGO, ILLINOIS.

ADDITIONAL CROP REPORTS.

The following reports did not come to hand in time for last week's issue, hence they are given this week:

Barton County.—Wheat very good; farmers crowding the harvest, and as the grain ripens slowly there is but little very ripe grain. Oats very good but somewhat short in straw generally, and ripening up well with wheat and rye. Corn is looking fine, a little short of common growth at this time of season, but generally very well cultivated and clean. Rye is excellent and heavy growth, mostly cut. Preparation for testing corn on stubble but in a limited way. We have had a very fine rain to-day, and perhaps more will plant than have expected to. Sorghum, Kafir corn, and in fact everything is looking very promising.

Cowley.—Excessive rains retarded the wheat harvest very much. There is some yet to cut where the ground is too wet. It is now being put into the stack. Wheat is good, yielding well. Oats are being cut; are rusted quite badly. Some corn now being planted with lister on wheat stubble. Quite an acreage of sorghum will be planted on wheat stubble. All other crops are looking well.

Chautauque.—Wheat a perfect crop in all respects, and generally well saved, yield from twenty to forty bushels per acre. Oats did promise as good as wheat but part of the early sown is injured by the rust. Late appears to be better. Very little if any other crops planted on wheat stubble. All other crops promise more than an average. Cane, Kafir corn, millet and even the early planted Dent corn promise a most abundant crop; it is now in silk and tassels.

Cloud.—Wheat damaged slightly by rust. Oats extra good, will probably average over sixty bushels per acre. A little smut in some localities. Corn never better. Potatoes and other vegetables good.

Decatur.—Wheat promises to be a fair crop in this county. Oats are injured some by dry weather and continuous heavy winds, will perhaps be two-thirds crop. Rye is injured, not more than one-half crop. Corn is looking exceedingly well, promises to be a good crop. Sorghum is looking well. The acreage of all kinds of crops is larger than usual in this county.

Douglas.—Wheat crop is good and had a good season to develop it and fine weather for harvest. Oats are never better; a full area is grown this season and will soon be ready for the reaper. Corn is good for the season, except where on wet land, is weedy. More planted here on wheat stubble. Kafir corn grown only as an experiment. Tame grass is excellent, while prairie grass is reported light.

Edwards.—Wheat and early sown oats a good crop. Wheat ground being plowed extensively for corn and forage crops. All crops in first rate condition. Prospect charming and farmers jubilant.

Greenwood.—Oats splendid crop, straw long, well headed, kernels large and fine. Winter wheat excellent and now being headed. Spring wheat not yet ready to harvest, but bids fair for a full crop. The hay crop is the heaviest in years. Sorghum is doing finely, and that sown for fodder will be an immense crop. Kafir corn has done well, but not very much planted this year. Millet is looking good. No chinch bugs to speak of. Potatoes are the best raised for several years. Peaches getting ripe and are of fine quality. Apples will not be as big a crop as last year.

Garfield.—Wheat light stand, short straw but heads well filled, some destroyed by hail. Some oats reported pretty good and some worthless. No corn planted on stubble. Corn reported fine but some of it weedy. Sorghum fine, except the early planting weedy. Have had heavy rains this week and everything growing very fast.

Gove.—Where seasonable rains fell the wheat is very good, some claiming thirty-five to forty bushels per acre, while in more unfavorable portions the crop will not make over five bushels. Oats about same as wheat. Rye good. Corn, where well tended and kept clean, is growing very fast and in fine condition, but where neglected is curling during the heat of the day and needs rain badly. Sorghum, Kafir corn and milo maize are in good condition, sorghum exceedingly so.

Greeley.—The much-needed rains of May have been fully made up by the excessive June rains. Rye and wheat 80 per cent. of a crop. Sorghum, millet, potatoes and corn bid fair for a full crop. Surface water plenty, ponds all full. Everything in fine condition and all are hopeful.

Hamilton.—May was dry, plenty of rain through June. Crops backward but prospects good. There has been no hail to do injury; no chinch bugs. There are some fields of spring wheat and barley in this neighborhood that would be thought good anywhere. Winter wheat and oats are short but well headed. This season has established the possibility to grow alfalfa on upland without irrigation. Kafir corn, milo maize, rice corn and sorghum are in splendid condition. New potatoes and other vegetables are abundant. The county is too new for fruits.

Jackson.—Wheat in shock, fair both in yield and quality. Oats good, just ready to harvest, some rust on straw. Corn promising, plowing it last time. Increased acreage of sorghum for sirup, looks well. Flax and millet excellent.

Jefferson.—Wheat on upland not so good as was thought before harvesting time, all in shock. Oats beginning to ripen; about three-fourths of a crop, short on account of rust. Corn in good shape, fields generally clean, about all laid by. Sorghum in good condition. No new crops.

Lane.—Wheat and rye being put in stack; yield is better than any previous year. Oats yielding well. Corn, Kafir corn and milo maize look well. Early potatoes fair. Had timely rains thus far.

Miami.—Wheat is matured in good shape. Oats getting ripe and will make a No. 1 crop, both as to yield and quality. Corn foul but healthy. The limited crop of sor-

ghum in good condition. Potatoes very good, and the market full of home-grown fruits.

Mitchell.—We are in the middle of wheat harvest; large crop, good quality, small amount of rust in places but confined to late seeded fields. Oats immense, and corn everywhere and growing faster than scheduled time. Sorghum, Kafir corn, millet, potatoes and vegetables are making strong growth.

Norton.—Wheat, oats and corn are in the best shape and nicest prospects for crops we have had in northwest Kansas for last three years. Potatoes are jumping to the front this year; they are so plenty that two weeks ago they were \$2 per bushel, yesterday 50 cents. No Kafir corn raised here. Sorghum doing fine, largest acreage ever known.

Osborne.—Some pieces of fall wheat damaged by rust, others good. Rye a heavy crop. Oats very heavy, many fields already in shock. Corn growing well, and where clean is very promising. Sorghum is doing well, now warm weather has come. All busy taking care of the unusually large small grain crop.

Ottawa.—Wheat most all in shock and stack, crop simply immense. Oats, potatoes, sorghum, in fact all crops are first-class. There is being some sorghum and corn planted after the header.

Phillips.—Wheat is rather above the average, and it is free from rust or chinch bugs. Oats are rather short straw, but are well headed, and will be above the average crop. Rye and other small grains are good. So far the corn is looking nicely and the fields are in a cleaner condition than is usual at this season of the year. Sorghum is looking well.

Pottawatomie.—Winter wheat is harvested and a better crop we have not raised for years. Harvesting oats is about to commence and the prospect for a crop looks flattering. Corn is well cultivated and clean, but not as far advanced at this date as in other years. Prospect for a general crop at this date looks well.

Rice.—Farmers are now in the midst of harvest and are gathering the heaviest wheat crop ever grown in this portion of Kansas. Oats are ready, crop very heavy, will average 50 to 60 bushels per acre, much is down and will have to be cut with scythes. Irish potatoes are simply magnificent. A large area has been planted to sweet potatoes. Corn is very promising. Sorghum and Kafir corn are in excellent condition.

Reno.—Wheat nearly out, some May wheat threshed makes from eighteen to twenty-five bushels per acre. Oats being out, will make a fair crop, partly hurt by rust. Corn looks splendid and is now tasseling. Nearly all the farmers are putting wheat stubble in ninety-day Leaning corn, mostly listing. Altogether, prospects have not been brighter for many years.

Rooks.—The wheat, rye and oats are all ready for the sickle. About one-third of the harvesting is done; yield will be about twenty-two bushels for wheat, thirty for oats and twenty-five for rye. The wheat and rye kernels will mostly be plump, yet in some spots it has failed to mature fully on account of lack of moisture at the proper time; oats will be light in weight from the same cause. Very little corn will be planted on stubble. Corn planted at the proper time is looking very good. Sorghum is also doing well, many acres of which have been sown to be cut as hay.

Sheridan.—Wheat and oats are good. Corn is good, is rather small, but the recent rain will bring it out all right. Sorghum and Kafir corn looks well. There is some flax and I believe it is the best crop for this county. Potatoes in abundance. Grass looks well.

Stafford.—Wheat all out, mostly with the header; acreage not large but quality good, average yield twenty-five bushels per acre. Some late rye not yet out, quality good. Oats harvest will begin about July 1, acreage large, berry plump, estimated yield about sixty bushels per acre. Nearly all the stubble ground being listed in corn as fast as cut; a heavy rain on the 20th which will bring it up. Spring wheat is filling well. Scarcely any sorghum is planted for molasses but a large acreage sown for fodder.

Stanton.—Wheat is good, but very short in some parts of the county. Rye is good, while oats are good in some localities and very poor in others. Early-planted corn in fine condition, late planting is not so good. Cane, Kafir and rice corn is in very good condition.

Stevens.—Wheat partly harvested, straw is short, will run from eight to twenty bushels per acre; late wheat is best. Oats good on third-year breaking, short on second breaking. Corn, cane, Kafir corn, rice corn and milo maize looking extra well; some had to replant, but there is a good stand generally. Castor beans rather poor, some plowed up and put to broomcorn, of which there are several thousand acres. Potatoes looking well, fine ones already in market. There will be some sorghum and millet sown on wheat stubble. Weather cool with some showers.

Wabunsee.—Wheat is in the stack in good condition. Oats are being out, and are yielding, like wheat, enormously. Corn is making up for lost time, and is now about as far advanced as is common at this date. Some wheat stubble is being planted to fodder corn with the lister, and some to navy beans.

Wallace.—The wheat crop of Wallace county has proved a success, averaging twenty bushels per acre. Oats crop fair, average thirty bushels per acre. Corn is in fine condition. A large acreage of sorghum for feeding purposes. Kafir corn is not extensively planted but is well adapted to the soil and climate. Broomcorn is being planted quite extensively with good prospect.

Washington.—Wheat is a good crop, quality excellent. Oats a good crop, the late oats will be the heaviest. The outlook for corn is good, where it has been well cultivated the condition would be about 95. Hay crop extra good. Sorghum, alfalfa and alsike clover have proven very successful this year, as also timothy and red and white clover.

WILLISTON, FLORIDA, September 7, 1888.

MESSRS. A. T. SHALLENBERGER & Co., Rochester, Pa.—Gents:—I have tried the bottle of Pills, for Malaria, sent me, with the most wonderful results; one dose cured a case of two months standing. Please send me one dozen by mail, immediately, with some advertising matter. Very truly, J. P. EPPERSON, Dealer in General Merchandise.

A gray beard on a man under 50 makes him look older than he is. The best dye to color brown or black is Buckingham's Dye for the Whiskers.

Patents.

Higdon & Higdon, Patent Lawyers, solicitors for American and foreign patents, office rooms 55 and 56 Hall Building, Kansas City, Mo., and room 29 St. Cloud Building, opposite United States Patent Office, Washington, D. C., report the following inventions patented for week ending June 25, 1889. [By applying to them at either office a printed copy of any patent here named can be obtained for 25 cents. Send for book of instructions, free of charge].

MISSOURI.

Safety-pin—Edward McConnell, Cape Girardeau.

Smoke-preventer for furnaces—Samuel E. Flint, St. Louis.

Dry ore concentrator—Gustav T. Chaudess, St. Louis.

Latch—Richard H. Barber, Rich Hill.

Chair rocker—Cornelia M. Jacoby, St. Louis.

Running-gear for vehicles—Sheets & Walker, Holden.

Hair dye and tonic—Edward A. Vogt, Friedheim.

Carriage-jack—Arthur Zimmerman, St. Louis.

Nose-ring for cattle—Edmund K. Rea, Cogwill.

Split chuck for watch-maker's lathe—Frederick Lautermilch, Kirkwood.

Cider mill and press—Joseph G. Harris, Sedalia.

Combined water-cooler and filter—Lewis W. Mozingo, Kansas City.

KANSAS.

Implement for dehorning cattle—Jerome W. Fugate, Lawrence.

Seeding attachment for plows—William D. Lindsley, Huntsville.

Copy-holder—Frederick G. Winnek, Leavenworth.

Flour-bin—Elijah P. Ellis, Oak Hill.

Churn-dasher—Ira A. Sabin, Kalvesta.

NEBRASKA.

Washing machine—Hans Netzell, Stromsburg.

Hame staple and clip—John L. Ream, Greeley Center.

BOYS!

If you are interested in a business education, that will be worth a fortune to you if taken, write to me, mentioning this paper, and I will send you by mail an elegant illustrated catalogue and beautiful specimens of penmanship, free. Address D. L. MUSSELMAN, Principal, Gem City Business College, Quincy, Illinois.

THE MARKETS.

(JULY 8.)

	GRAIN.		LIVE STOCK.		
	Wheat.	Corn.	Cattle.	Hogs.	Sheep.
New York....	\$1.00 @ 57 1/2 %	\$3.49 @ 49 1/4 %	3 1/2 @ 1.00	3 1/2 @ 1.00	3 1/2 @ 1.00
Chicago....	83 1/2 @ 54 %	31 % @ 32 %	3 1/2 @ 1.00	3 1/2 @ 1.00	3 1/2 @ 1.00
St. Louis....	84 @ 57	28 @ 24 1/4 %	2 1/2 @ 85	4 1/2 @ 30	3 1/2 @ 30
Kansas City.					

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 fifty 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 \$5.00 to \$50.00 is affixed to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the 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 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 ten dollars, 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 twenty dollars.

FOR WEEK ENDING JUNE 27, 1889.

Chautauqua county—W. F. Wade, clerk.

PONY—Taken up by Geo. Stephens, in Lafayette tp., May 25, 1889, one Texas pony, 8 or 9 years old, 14 hands high, circle on left jaw, letter S on left hip and 22 on left thigh; valued at \$30.

PONY—By same, one Texas pony, 13½ hands high, shod all around, branded M on right shoulder, 10 or 11 years old; valued at \$20.

HORSE—Taken up by E. J. Breeze, in Harrison tp., May 30, 1889, one dark sorrel horse, 14 hands high, 9 years old, both hind feet white up to pastern joint; valued at \$25.

Cherokee county—J. C. Atkinson, clerk.

PONY—Taken up by C. L. Hall, in Pleasant View tp., P. O. Opolis, one bay mare pony, about 14 years old, Texas brand on left hip; valued at \$20.

HORSE—By same, one brown horse, about 15 years old, shod in front; valued at \$20.

PONY—By same, one black horse pony, about 9 years old, Texas brand on left thigh, had on web halter; valued at \$20.

FILLEY—Taken up by R. P. Hall, in Pleasant View tp., P. O. Opolis, one black filly, about 2 years old.

Allen county—R. W. Duffy, clerk.

MARE—Taken up by G. W. Squire, in Humboldt tp., June 3, 1889, one bay mare pony, 5 years old, 14 hands high, star in forehead, four white feet.

Linn county—Thomas D. Cottle, clerk.

2 HORSES—Taken up by E. H. Loyd, in Potosi tp., P. O. Pleasanton, two horses, one bay and one brown, 8 and 12 years old, 5 feet 4 inches high, bay has star in forehead and left hind foot white, brown has no marks or brands; valued at \$50 each.

Johnson county—W. M. Adams, clerk.

PONY—Taken up by T. C. Porter, in Shawnee tp., P. O. Shawnee, June 8, 1889, one clay-bank horse pony, 14½ hands high, brand on left shoulder similar to J, on left hip B, on right fore leg similar to V, and on right hip H, black mane and tail, stringhalt in left hind leg; valued at \$20.

FOR WEEK ENDING JULY 3, 1889.

Pawnee county—James F. Whitney, clerk.

MARE—Taken up by Mathew Wilson, in Keyesville tp., June 2, 1889, one bay mare, both hind feet white, star in forehead; valued at \$30.

Chase county—J. S. Stanley, clerk.

MARE—Taken up by W. W. Kurtz, in Diamond Creek tp., P. O. Clements, June 5, 1889, one sorrel mare, 6 years old, no marks or brands; valued at \$50.

Johnson county—W. M. Adams, clerk.

MULE—Taken up by Geo. W. Davison, in Monticello tp., P. O. Holiday, one dark bay mare mule, 14½ hands high, 4 years old, stripe across the shoulders and part way along the back.

Crawford county—J. C. Gove, clerk.

PONY—Taken up by J. W. Towery, P. O. McCune, June 13, 1889, one brown mare pony, white face, branded E on left shoulder; valued at \$35.

STEER—Taken up by W. H. Richardson, P. O. Girard, April 25, 1889, one red steer, 1 year old; valued at \$5.

STEER—By same, one red steer, 1 year old, white on head, feet and belly; valued at \$6.

FOR WEEK ENDING JULY 10, 1889.

Johnson county—W. M. Adams, clerk.

HORSE—Taken up by John Marty, in Shawnee tp., P. O. Glenn, one gray horse, 15½ hands high, weight 1,050 pounds, all four feet white, tall light color, forehead light, 7 years old, no marks or brands; valued at \$30.

HORSE—By same, one gray horse, 15 hands high,

weight 1,050 pounds, scar on left hip near the rump, about six inches long, all his legs dark color; valued at \$60.

Shawnee county—D. N. Burdge, clerk.

COLT—Taken up by W. H. Oswald, in Mission tp., June 24, 1889, one bay mare colt, 1 year old, left hind foot white, white on right foot, white spot in face; valued at \$20.

Geary county—P. V. Trovinger, clerk.

STEER—Taken up by Conrad Schmidt, in Junction City, June 4, 1889, one red steer, 2 years old, white spots on belly and right flank; valued at \$12.

HEIFER—By same, one red and white heifer, 2 years old; valued at \$12.

HEIFER—By same, one black and white heifer, 2 years old, right horn broken off; all three branded R on right hip; valued at \$12.

Leavenworth county—J. W. Niehaus, clerk.

2 MARES—Taken up by Thos. Mussett, in Kickapoo tp., (Missouri river bridge), May 18, 1889, two mares, one 15 hands high and the other 12; one bay, small white spots on one side, 4 years old, and the other black, white face, one hind foot white, 3 years old; one branded S.B. on left shoulder, injured in fetlock joints; one valued at \$35, other \$20.

Notice to County Clerks!

We will regard it a personal favor if each County Clerk will mail us, at the first opportunity, a complete list of breeders (with their postoffice addresses) of thoroughbred horses, cattle, swine, sheep and poultry; also the name and location of every creamery and manufactory in his county. When we have a complete list we will favor you with the directory for the State. KANSAS FARMER CO., Topeka, Kas.

HENRY W. ROBY, M. D.,
C. F. MENNINGER, M. D.,

Surgeons.

118 WEST SIXTH AVENUE, TOPEKA, KANSAS.

J. P. LEWIS, M. D.,

519 KANSAS AVENUE,

TOPEKA, - - - KANSAS.

Special attention given to General Orthopedic and Gynecological Surgery.

OFFICE HOURS—10 to 12 a. m., and 2 to 4 p. m.

TOPEKA
Commercial Security Co.,
807 Kansas Avenue, Topeka.

Six to twelve months loans at current rates. Approved stock sale notes bought. Correspondence solicited.

TOPEKA
Investment & Loan Co.
TOPEKA, KANSAS.

FARM LOANS A SPECIALTY

Low rates of interest. Money paid when papers are accepted. Write for terms.

JOB PRINTING!

Quick Time. Reasonable Prices.

Large Line of Chrome Cards, \$2.50 per 1,000 up.

RUBBER STAMPS.

Every Kind and Style.

STEEL STAMPS AT 15¢ PER LETTER

Check Protectors and Perforators.

Notary and Corporation Seals.

BARKING & DOUGLASS, Topeka, Kas.

EASY-FITTING

CHAS. BENNETT,
PRACTICAL OPTICIAN
511 Kansas Ave., Topeka.

Carries a full line of Optical Goods. Examination of eyes for glasses, free.

STATE LINE

To Glasgow, Belfast, Dublin and Liverpool

FROM NEW YORK EVERY THURSDAY.

Cabin passage \$35 to \$50, according to location of stateroom. Excursion \$65 to \$80.

Steerage to and from Europe at Lowest Rates.

AUSTIN BALDWIN & CO., General Agents,
55 Broadway, New York.

JNO. BLEGEN, Gen'l Western Agent, 164 Randolph St., Chicago.

ROWLEY BROS., Agents at Topeka.

DRS. MULVANE, MUNK & MULVANE.

OF THE
TOPEKA

Medical and Surgical

INSTITUTE

Make a specialty of all Chronic and Surgical Diseases. We have practiced medicine and surgery here for fifteen years, and during that time have treated successfully hundreds of chronic cases which had resisted the skill of local physicians.

WE CURE ALL FORMS OF CHRONIC DISEASES.

Remove tumors, cure cancers without the knife, cure piles without knife or ligature. ALL DISEASES regular to women speedily and successfully treated. We remove tape worm entire in from two to four hours. If you have any chronic or private disease, you will find it to your interest to write us. Correspondence free and confidential.

Refer by permission to Bank of Topeka; John D. Knox & Co., Bankers, Topeka; Citizens Bank, North Topeka; American Bank, North Topeka.

Send for printed list of questions.

DRS. MULVANE, MUNK & MULVANE,
110 W. 6th St., Topeka, Kas.

TOPEKA BUSINESS COLLEGE
AND
SHORTHAND INSTITUTE
521 & 523 QUINCY ST.
E. E. ROUDEBUSH,
BUSINESS MANAGER.
TOPEKA, KANSAS.
Send for Catalogue and College Journal.

HALL & O'DONALD LITHOGRAPHING CO.,
Lithographers, Printers and
Blank Book Manufacturers.

A full line of Conveyancing and Justices Blanks in stock. Lithograph Bonds and Certificates of stock a specialty. Stock Catalogues got out on short notice. Write for samples and prices.
110 and 112 EAST EIGHTH AVE., TOPEKA, KAS.

THE ANGLO-KANSAS LAND INVESTMENT CO.
521 Kansas Ave., Topeka, Kansas.

Improved and Unimproved Lands in Eastern and Central Kansas bought and sold. We invite the particular attention of all whose circumstances are such that they MUST SELL FOR CASH within the coming six months. Quick sales assured if prices named are bargains. Send us full description and plat of farm. Must have exclusive sale for four months.
C. R. SMITH, Secretary.
EUROPEAN OFFICES—LIVERPOOL AND LONDON.

JOHN W. CAUGHEY.
FINE DESIGNING AND ENGRAVING,
HORSES: CATTLE, SHEEP, HOGS & POULTRY A SPECIALTY.
Send for samples of Electrotype. We have for sale.
Nothing sells stock as quickly as a fine cut.
49 FIFTH AVENUE, PITTSBURGH, PA.

ENGRAVING for Stockmen, Manufacturers and all who require cuts. A fine line of Electrotype of Horses, Cattle, Sheep, Hogs and Poultry for sale. Send stamp for samples. We have the best and cheapest. Send for prices.

- PATENTS -

Obtained in the United States, Canada, and all foreign countries. Official Gazette of the Patent Office received weekly, and all Patent Laws on hand and free for consultation to clients. The largest and best selected Patent Library west of Washington, D. C., embracing a complete list of all patents issued from the organization of the office, 1790, to the present time.

Rejected Cases, Appeals, Re-issues, Caveats, Assignments, Forfeited Cases, Design Patents, Trade Marks, Labels, Copyrights, Interferences and Infringements

attended to with skill and fidelity, by

JAMES G. YOUNG,

ATTORNEY AT LAW, NOTARY PUBLIC, SOLICITOR OF PATENTS, and UNITED STATES CLAIM AGENT,

Office, Rooms 62, 63 and 64 Hall Building, 9th and Walnut Streets,

Telephone 1829.

Kansas City, Mo.

THE GEO. W. CRANE PUBLISHING Co., Topeka, Kas., publish and sell the Kansas Statutes, Kansas and Iowa Supreme Court Reports, Spalding's Treatise, Taylor's Pleading and Practice, Scott's Probate Guide, Kansas Road Laws, Township Laws, Lien Laws, &c., and a very large stock of Blanks, for Court and other purposes, including Stock Lien Blanks, Conveyancing Blanks, Loan Blanks, &c., &c. For fine printing, book printing, binding, and records for County, Township, City and School Districts, this is the oldest and most reliable house in the State.

BRIGHTINE

DIABETES

LIVER AND KIDNEY DISEASES.

Bottle \$1. Ask Druggist or write

WM. T. LINDLEY & CO.,

218 La Salle St., Chicago, Ill.

No good Windmill can be manufactured and sold for

LESS MONEY

than we are now selling this Mill.

Write for circulars containing full descriptions.

PEABODY MANUFACTURING CO.,
Peabody, Kansas.

FULL LEATHER TOP DIRECT TO CONSUMER.

\$85

SAVING 25 TO 40%
NO MIDDLEMEN'S PROFITS NOR EXPENSES OF TRAVELING MEN

CATALOGUE & FREIGHT CHARGE TO YOUR PLACE ON APPLICATION

PIONEER BUGGY CO.,
COLUMBUS, O.

SEED WHEAT

STRAWBERRY PLANTS, FRUIT TREES, SMALL FRUITS, DUTCH AND CHINESE FLOWERING BULBS, WINTER BLOOMING HOUSE PLANTS, POULTRY, PEKIN DUCKS, BRONZE TURKEYS, GERMAN HARES, &c. Our annual Fall catalogue, 1889, of Seed Wheat, Plants, Poultry, &c., will be ready by July 20. Samples of 7 new, hardy and productive varieties of Winter Wheat, including the Ironclad RELIABLE and celebrated LEHIGH No. 6, will be sent with catalogue for 10c. in postage stamps. Address,

SAMUEL WILSON, Mechanicsville, Bucks Co., Pa. Catalogues free on application.

Lawrence Business College.
A free, progressive, high-grade practical school for ambitious and industrious young men and women who wish to qualify thoroughly for the active duties of life. The oldest, largest and best equipped institution of its kind west of the Mississippi. Our large 64-page illustrated catalogue, finest published, will be sent free to any address. Be sure and write us before going elsewhere. **R. L. McILRAVY, Pres't,**
Lawrence, Kas.

W. T. DOYLE, MARYVILLE, MO.

Breeder of choicest strains of **POLAND-CHINA** swine. 150 pigs by such noted boars as Bravo C. 267 (S), Spartacus 8089 (A), Maryville's Best 2821 (S), Keno 524 (S), and Goldnest 1st 1990 (S), and out of sows, all of gilt-edge breeding. Special express rates. Inspection invited and correspondence promptly answered.

MAPLE GROVE HERD

WM. PLUMMER, breeder and shipper of **POLAND-CHINA** swine and Light Brahma Fowls of the best strains. 25 choice sows bred to three first-class boars for the season's trade. Young stock for sale, and eggs in season. Farm three and a half miles southwest of Osage City. **WM. PLUMMER, Osage City, Kas.**

MAINS'
Fountain Head
and
Storm Cloud
Claim this Space.

Mains' Herd of Pure-bred **POLAND-CHINA** HOGS, of as fashionable strains as can be had. All recorded in the Ohio Poland-China Record. Fall pigs of both sexes and spring sows bred and to breed for sale. A large selected herd of sows (most of which were bought in Ohio) now bred for season of 1889 to No. 1 boars of as good royal breeding as there is in the country. **JAMES MAINS, Oskaloosa, Jefferson Co., Kas.**

HIGHLAND HERD POLAND-CHINAS
Deitrich & Gentry, Ottawa, Kas.

Such strains as Corwin, Give or Take, Hoosier Tom, Duchess, Riverside Beauty, Lady Maid, I. X. L. and others represented. 75 pigs from 6 boars. Orders booked now for spring pigs. Correspondence answered promptly. Mention **KANSAS FARMER**.

THE GOLDEN BELT HERD OF
Thoroughbred Poland-Chinas

Two hundred and fifty choice Spring Pigs now ready to ship, at prices lower than ever. Order now, and secure selections from either sex, or pairs, tries, or small herds, not akin. Stock shipped from here over either the A. T. & S. F. Mo. Pacific or St. Louis & San Francisco R. R. All breeders registered in American P.-C. Record. Pedigrees with each sale. **F. W. TRUEDELL, Lyons, Kas.**

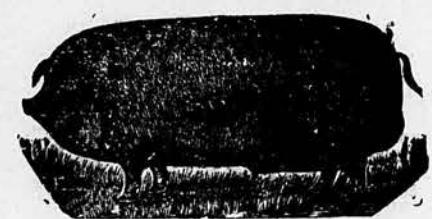
JACKVILLE HERD OF POLAND-CHINAS
J. S. RISK, Prop'r, WESTON, MO.



I have a fine lot of early pigs farrowed January and March. I can furnish very choice pigs not akin. Pigs sired by six different boars. Write for prices or call and see stock.

Rome Park Stock Farm

T. A. HUBBARD,
Rome, Sumner Co., Kansas.



Show yard of Poland-Chinas and Large English Berkshires. I am breeding the best and leading strains, including Graceful, U. S., Black Bess, I. X. L., Corwins, Sallies, Bella Donnas, Duchesses, Dukes and Champions. The best of blood, with extra size and individual merit. Write or come and see me. Two hundred pigs for sale. Am using thirteen extra good boars.

SELECT HERD OF LARGE BERKSHIRES

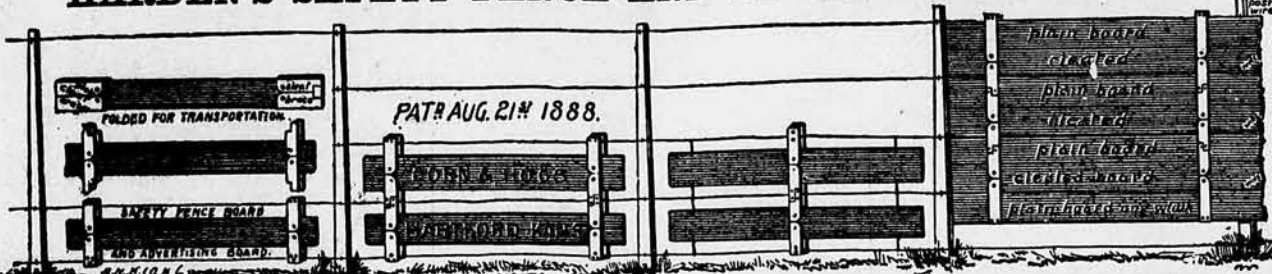
Of the Royal Duchess, Sallie, Hillside Belle, Charmer, Stumpy, Fashion, Queen Betsy, and other families of fine, large, fleshy qualities, with such top breeding as British Champion, Longfellow and Sovereign Duke, and the noted young show boar PERKINS 18845 at head of herd, the property of **G. W. BERRY, Berryton, Shawnee Co., Kas.** Located on the K., N. & D. R. R., nine miles southeast of Topeka. Farm adjoins station. Write for prices and free catalogue. Orders taken now for spring pigs from show sows.

ENGLISH BERKSHIRES.



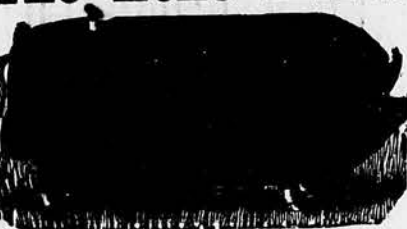
THE WELLINGTON HERD consists of twenty matured brood sows of the best families of home-bred and imported stock, headed by the celebrated **HOPEFUL JOE** 4889, and has no superior in size and quality nor in strain of Berkshire blood. Also **Plymouth Rock Chicks**. Your patronage solicited. Write. **M. B. KEAGY, Lock Box 784, Wellington, Kas.**

HARDEN'S SAFETY FENCE AND ADVERTISING BOARD.



This engraving only shows part of its forms of application. A hatchet, saw, square, brace and bit, and wire nails only are needed in its construction. It is at once economical, complete, easily made, taken down and folded up, and can be put on fence again or stored away, being always ready for use. Whenever it is desired to use these improved attachments in a particular field, they can be applied, and then afterwards changed to another field, so that a farmer having enough for eighty rods of fence can, as circumstances require, practically have his whole farm hog-tight. Circulars free. Agents wanted in every county in the United States. Send one dollar (\$1), with numbers of your land—section, township, range, etc., and receive deed to one farm right. This offer is made for a short time only to introduce it in your neighborhood. As soon as a company is formed and our Agents are at work the price will be \$5 for each Farm Right. **W. I. F. HARDEN, Box 1, Hartford, Kas.**

The Echo Herd.

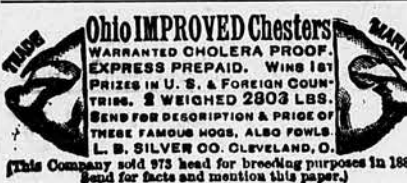


For Registered Prize-winning **BERKSHIRE SWINE AND SOUTHDOWN SHEEP** or money refunded. Come and see or address **J. M. & F. A. SCOTT, Huntsville, Randolph Co., Mo.** Mention **KANSAS FARMER**.

PLEASANT VALLEY HERD OF
Pure-bred Berkshire Swine.



I have thirty breeding sows, all matured animals and of the very best strains of blood. I am using three splendid imported boars, headed by the splendid prize-winner Plantagenet 2919, winner of five first prizes and gold medal at the leading shows in Canada in 1881. I am now prepared to fill orders for pigs of either sex not akin, or for matured animals. Prices reasonable. Satisfaction guaranteed. Send for catalogue and price list, free. **S. McCULLOUGH, Ottawa, Kansas.**



Holstein - Friesian Cattle.

I have a choice herd of these justly-celebrated cattle of all ages. Also some nice grades, for sale at reasonable prices. Personal inspection invited. Call on or address **JNO. D. PRYOR, Winfield, Cowley Co., Kas.**

HOLSTEIN PARK.



WM. A. TRAVIS & SON, North Topeka, Kas., breeders of the best strains of **HOLSTEIN-FRIESIAN CATTLE**. Five registered young bulls for sale cheap on easy terms, from 1 month to 2 years old, and other sex when wanted.

SHANNON HILL STOCK FARM.



GLICK & DEVIN, Atchison, Kansas. Breed and have for sale Bates and Bates-topped **SHORT - HORNS.** Waterloo, Kirklevington, Filbert, Cragg, Princess, Gwynne, Lady Jane, and other fashionable families. The grand Bates bull imp. 8th Duke of Kirklevington No. 41798 and Waterloo Duke of Shannon Hill No. 89879 at head of herd. Choice young bulls for sale now. Correspondence and inspection of herd solicited, as we have just what you want and at fair prices. Address **LUTHER DEVIN, Manager, Atchison, Kansas.**

Humphrey's Veterinary Specifics,

Condition Powders, and all Drugs, Lubricants Oils of all kinds. One of the best places to get these is of **H. M. WASHBURN, Druggist, 323 Kansas Ave., Topeka, Kas.**

MORGAN HORSES Western Headquar-
ters for Stallions of high breeding, and Grade Fillies.
DR. A. W. HINMAN, Dundee, Ill.

E. Bennett & Son,

TOPEKA, - KANSAS,

The Leading Western Importers of

CLYDESDALE,
PERCHERON,
CLEVELAND BAY

French Coach Horses.

AN IMPORTATION OF 125 HEAD,
Selected by a member of the firm, just received.

Terms to Suit Purchasers. Send for illustrated catalogue. Stables in town.

E. BENNETT & SON.



30 HORSES **CHAMPION PRIZE-WINNING STUD OF THE WEST.** **70 PRIZES**
RIX & GOODENOUGH,
TOPEKA, KANSAS,

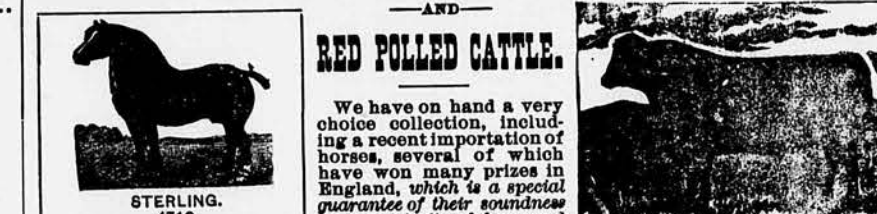
IMPORTERS AND BREEDERS OF PERCHERONS, CLYDES, SHIRES AND CLEVELAND BAYS.

GOOD HORSES, LONG TIME, LOW INTEREST, MODERATE PRICES. No other firm in America sells to stock companies under the same perfected system that we do, which insures to companies square dealing, successful breeders and absolute success. Illustrated catalogue free. Farm and Stables—Two miles east of Highland Park, **TOPEKA, KANSAS.**

Champion Gold Medal Stud.
250 CLEVELAND BAYS AND ENGLISH SHIRES!

Of the highest breeding and most popular strains. We carry a large stock of young, vigorous stallions and mares at all seasons, imported young and matured on our farms, thus fully acclimated, and sure breeders. Prices low and terms easy. **150 HOLSTEIN-FRIESIANS** at exceptionally low prices. Grand opportunity to secure foundation stock at low figures. Send for Illustrated Descriptive Pamphlet. Mention this paper. **GEO. E. BROWN & CO., AURORA, ILL.**

IMPORTERS AND BREEDERS OF
ENGLISH SHIRE AND SUFFOLK PUNCH HORSES



RED POLLED CATTLE. We have on hand a very choice collection, including a recent importation of horses, several of which have won many prizes in England, which is a special guarantee of their soundness and superiority of form and action. Our stock is selected with great care by **G. M. SEXTON, Auctioneer to the Shire Horse Society of England.** Prices low, terms easy, and horses recorded in respective stud books and guaranteed. **SEXTON, WARREN & OFFORD, Maple Hill, Kansas.**

Walnut Grove Stock Farm

Western Headquarters for **ENGLISH SHIRE** Stallions and Mares and **HEREFORD** Cattle. These animals have been selected with the greatest care by ourselves from the most noted stud-herds, both in England and this country. Any one wishing first-class animals should give us a call. Terms favorable and prices low. Will trade for steers. Farm two and a half miles northeast of town and 100 miles west of Topeka on Santa Fe railroad. Write for particulars to **MAKIN BROS., Florence, Marion Co., Kas.**

RUPTURE--RUPTURE

A new and sure method for the relief and cure of rupture. Every case guaranteed. Recommended by leading physicians and hundreds of patients from all parts of the Union as far superior to all other methods of treatment. Patient is made comfortable and strengthened for work at once, and an early and permanent cure assured. No operation, pain or hindrance. Send 10 cents in stamps for 96-page pamphlet on Rupture and its Treatment, with numerous statements from physicians and patients. **DR. D. L. SNEDIKER, 511 Commercial St., Emporia, Kas.**

HIRES



25¢ HIRES' IMPROVED 25¢ ROOT BEER!
IN LIQUID NO BOILING EASILY MADE
THIS PACKAGE MAKES FIVE GALLONS
MAKES FIVE GALLONS
DELICIOUS AND SPARKLING
Root BEER
The most APPETIZING and WHOLESOME
TEMPERANCE DRINK in the world. TRY IT.
Ask your Druggist or Grocer for it.
C. E. HIRES, PHILADELPHIA



WELL DRILLS
for all purposes.
Send 20 Cts. for mailing
catalogues with
full particulars.
CARPENTER ST. AND CARROLL AVE.

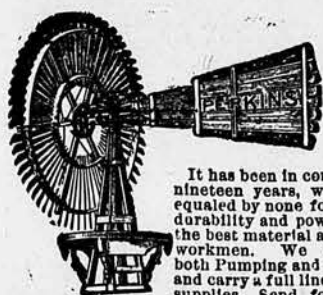
THE COOLEY CREAMER



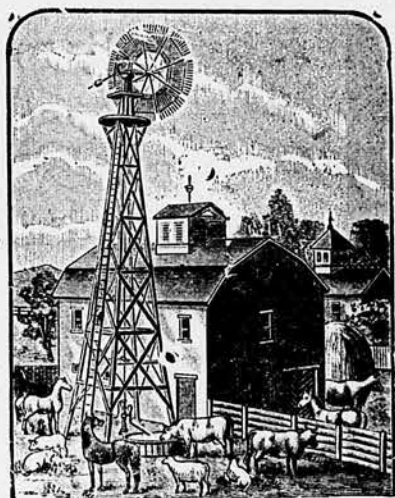
The first invented, never
yet equalled, and the only
one that uses the patented
submerged process.
Which gives it its
great value over
all others.
Where there are no agents
will sell one at wholesale
price. Send for circular.
JOHN BOYD, Mfr.,
199 Lake Street, CHICAGO.
Please mention this paper.



The Perkins Windmill.

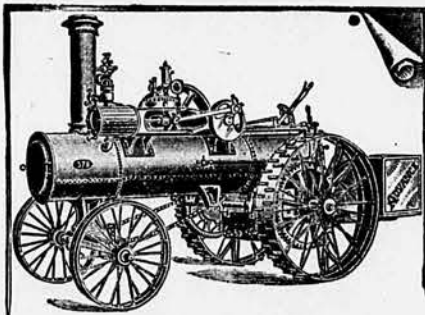


It has been in constant use for
nineteen years, with a record
equaled by none for simplicity,
durability and power. Made of
the best material and by skilled
workmen. We manufacture
both Pumping and Geared Mills
and carry a full line of Windmill
supplies. Send for catalogue,
circular and prices. Address
PERKINS WINDMILL & AX CO.
MISHAWAKA, IND.



Searles Bros. Wind Mill and Pump Co.,
780 Commercial St., Atchison, Kas.

Wholesale Dealers in Monitor Swivel-Geared
and Pumping WINDMILLS and BAKER
PUMPS, Pipes, Tanks and Water Fixtures.
Agents wanted.

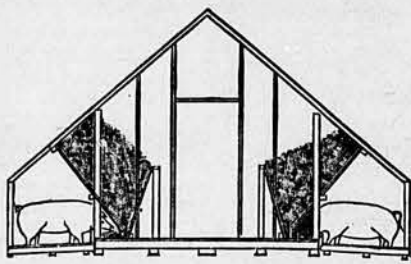


ADVANCE
THRESHERS AND ENGINES

Manufactured by the
ADVANCE THRESHER CO.,
Factory and Main office, Battle Creek, Mich.
Write for full information to the factory, or to
KANSAS CITY, MO.



The Hog Sanitarium



[Patented Oct. 9, 1888, by a practical feeder.]

For Saving Feed and Work and Protect-
ing Hogs from Disease.

A Granary and Automatic Feeder Combined,
to be erected in the Feed Yard. Will store 900
bushels of corn; feed 150 head of hogs. Any
farmer can build it.

For feeding laxative and nitrogenous food,
such as Bran, Ground Rye, Ground Oil Cake,
Shorts, etc., with Corn, shelled or ground, dry,
and without waste; also for feeding salt at all
times, thoroughly mixed through the feed.
Warranted, when properly used, to save at
least 20 per cent. of the feed as usually fed.
Not by the direct saving alone, but mostly by
reason of increased thrift and rapid and even
fattening. Will require for construction about
2,000 feet of lumber and 3,000 shingles for
feeder of regulation size. Can be built of less
capacity and added to at any time to suit the
farmer's needs.

The use of this feeder with a proper supply
of nitrogenous and laxative food with corn,
will in two weeks' time place the most un-
thrifty hogs in good condition, if not already
infected with cholera. It is the greatest safe-
guard against cholera. Sanitarium hogs eat
regularly and often; never overeat. No mud
or filth to consume; all work and waste prac-
tically dispensed with.

The use of shelled corn or meal in the San-
itarium is not half the trouble it is to feed ear
corn. Keeps the yard free from litter; gives
all hogs in the yard the same chance to thrive,
all having equal access to feeder. When you
see your corn trampled in the mud and filth
you feel like kicking yourself. When you
witness hogs eating from the Sanitarium in a
muddy time you smile; so do the hogs. You
do not hesitate to provide for the comfort of other
farm animals; why neglect the hog? He brings a
quicker and better return for money invested than
any other animal. Protect his health and feed him
properly and he will be more remunerative to you. I
furnish Permit with full instructions about building
and operating Sanitarium on one quarter section or
less tract of land, for \$10.00.

If, after thorough trial the Sanitarium fails to give
satisfaction, the amount paid me for permit will be
refunded, as per proposition in circular. In all cases
when making application for a permit (farm right)
send name, quarter section, township and range cor-
rectly.

Applications must be accompanied with cash or
draft, and can be made direct by mail or through
regularly authorized agents. Parties holding per-
mits are entitled to plans for both portable and regu-
lation size. Permits to first application in a town-
ship at one-half the regular rate (\$5.00), and feeder
to be built within sixty days.

Territory not for sale, but farm rights will be
held so as to be within the reach of all. Send for cir-
culars, giving full description and plan of operation.

E. M. CRUMMER,
Patentee and Owner,
BELEVILLE, KAS.

KIRKWOOD WIND ENGINE

MADE BY THE
KIRKWOOD MANUFACTURING CO.,
Arkansas City, Kansas.

The following are a few of the advantages we claim
for the Kirkwood Wind Engine, over all others:

1. Being built entirely of iron and steel, it cannot
shrink, warp or shake loose by exposure to weather,
as wooden wheels will. 2. It is the most powerful,
as it has more wind surface, the vanes covering the
entire face of the wheel and shaped so as to receive
the wind to the best advantage. 3. It requires less
wind, and running at a greater speed, it will pump
more water than any other wheel in use. 4. It has
the best automatic governor arrangement of any in
use. 5. As it has a very narrow edge, being less than
six inches in a ten-foot wheel, it presents less resis-
tance than any other iron wheel in a storm. 6. It is
the only engine that has an equalizing arrangement
for keeping the edge of wheel in line with the wind,
making it perfectly safe in a storm. 7. Owing to
the principle of construction it can be built lighter
and run with less wind and greater speed than any
other wheel in use. 8. No clogging. 9. It will run
in light winds. 10. An 8-foot Kirkwood wheel will
do as much work as a 10-foot wheel of any other
make. 11. It is not only the most durable, most
powerful and symmetrical engine made, but also the
most beautiful.



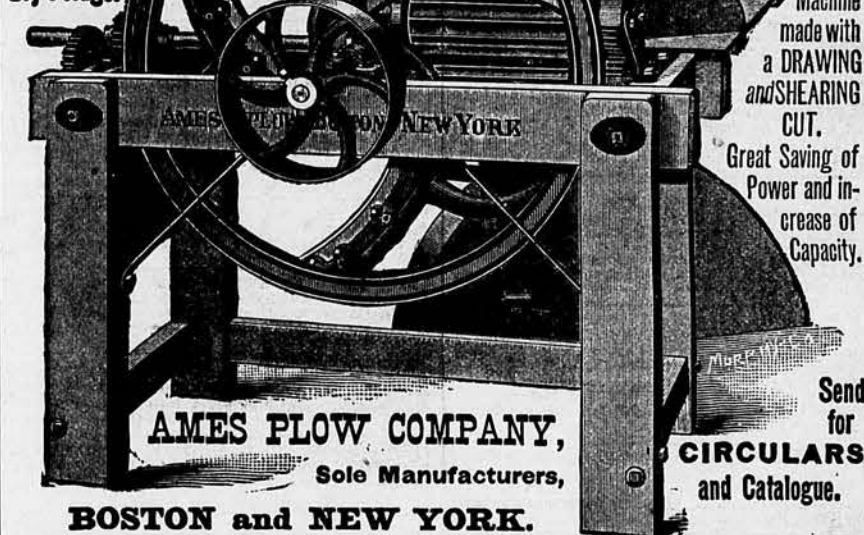
WARRANTED not to blow
down off
the tower, and that our
Geared Wind Mills
have double the power
of all other mills.
Mfrs. of Tanks, Wind
Mill supplies and
the Celebrated
CHALLENGE
Feed Grinders,
HORSE POWERS,
CORN SHELLERS,
PUMPS and
BRASS
CYLINDERS
Send for Catalogue
and Prices.
Good AGENTS WANTED.
CHALLENGE WIND MILL & PUMP CO.,
BATAVIA, KANE CO., ILL.

FAT FOLKS
using "Anti-Corpulene Pills" lose 15 lbs. a
month. They cause no sickness, contain no poison and never
fail. Particulars (sealed) 4c. Wilcox Specific Co., Phila., Pa.

-CANCER!-
The only institution in the world where Cancers
and Malignant Tumors are permanently removed
without using knife, ligature or caustics, and in all
cases a permanent Cure is Guaranteed. Consultation
free. Call or address
KOEHLER CANCER HOSPITAL CO.,
1420 Grand Ave., Kansas City

The New Dr. Bailey Cutters

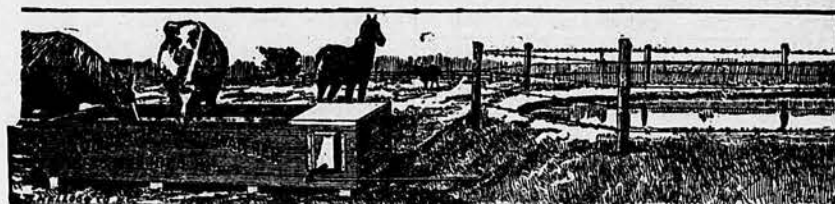
FOR
ENSILAGE,
Corn Stalks,
HAY
AND OTHER
Dry Forage.



AMES PLOW COMPANY,
Sole Manufacturers,
BOSTON and NEW YORK.

ONLY
Machine
made with
a DRAWING
and SHEARING
CUT.
Great Saving of
Power and in-
crease of
Capacity.

Send
for
CIRCULARS
and Catalogue.



AN ENTIRELY NEW DEVICE.

An Automatic or Self-Regulating Stock
Waterer.

Can be attached to barrel, tank or pond. Keeps on
hand a constant and regular supply of water. One
tank or trough especially for hogs. For detailed de-
scription send for circular. Correspondence solicited.
Agents wanted. Territory for sale.

Manufactured by **PERRY & HART,**
P. O. Box 381, Abilene, Kansas.



THE CELEBRATED **ROSS** Special **ENSILAGE** and **FODDER**
CUTTERS, CARRIERS and POWERS.

THE FINEST AND LARGEST LINE OF FODDER
CUTTING MACHINERY IN THE WORLD.

Better made. Stronger, more Durable, and
will cut faster with less power than any
other Cutter manufactured. Send
for our Illustrated Catalogue and
Treatise on Ensilage and Silos. Address

E. W. ROSS & CO.,
MANUFACTURERS,
SPRINGFIELD, OHIO, U.S.A.

EVANS-SNIDER-BUEL CO.,

(INCORPORATED)

SUCCESSOR TO HUNTER, EVANS & CO.

CAPITAL STOCK, - - - \$200,000.

KANSAS CITY STOCK YARDS, 17 YEARS' ACTIVE EXPERIENCE in Live Stock Com-
mission Business, Market Reports regular and special, and all
other information incident to the business, will be furnished
FREE by each house.
KANSAS CITY, MO.

Each Office in charge of a member of the company. **UNION STOCK YARDS,** Correspondence always ha-
CHICAGO, ILL. prompt attention.

DIRECTORS: A. G. EVANS, President. M. P. BUEL, Vice President. **NATIONAL STOCK YARDS,**
C. A. SNIDER, Treasurer. A. T. ATWATER, Secretary. ST. CLAIR CO., ILL.
F. W. FLATO, Jr. I. K. T. PRYOR.

LIVE STOCK COMMISSION MERCHANTS.

The Kansas City Stock Yards.

Are by far the most commodious and best appointed in the Missouri Valley, with ample capacity for feed-
ing, weighing and shipping Cattle, Hogs, Sheep, Horses and Mules. They are planned throughout, no yards
are better watered, and in none is there a better system of drainage. The fact that higher prices are realized
here than in the East is due to the location at these yards of eight packing houses, with an aggregate daily
capacity of 3,300 cattle and 27,300 hogs, and the regular attendance of sharp, competitive buyers for the pack-
ing houses of Omaha, Chicago, St. Louis, Indianapolis, Cincinnati, New York and Boston.

All the sixteen roads running into Kansas City have direct connection with the yards, affording the best
accommodation for stock coming from the great grazing grounds of all the Western States and Territories,
and also for stock destined for Eastern markets.

The business of the yards is done systematically and with the utmost promptness, so there is no clashing,
and stockmen have found here, and will continue to find, that they get all their stock is worth with the least
possible delay.

Kansas City Stock Yards Co. Horse and Mule Market.

FRANK E. SHORT. | **FRANK E. SHORT & CO.,** Managers. | **CAPT. W. S. TOUGH.**

This company has established in connection with the yards an extensive Horse and Mule Market know-
n as the **KANSAS CITY STOCK YARDS COMPANY HORSE AND MULE MARKET.** Have always on hand
a large stock of all grades of Horses and Mules, which are bought and sold on commission or in cash lots.

In connection with the Sales Market are large feed stables and pens, where all stock will receive the best
of care. Special attention given to receiving and forwarding. The facilities for handling this kind of stock
settlements will be made when stock is sold.

C. F. MORSE,
General Manager.

E. E. RICHARDSON,
Treasurer and Secretary.

H. P. CHILD,
Superintendent.

RIDER PRESSES
due to C. H. STEWART,
Washington St., Chicago, Ill.

FRUIT QUEEN STEAM
EVAPORATOR for Cook Stove. New, novel, perfect.
THE ZIMMERMAN MACHINE CO., Cincinnati, Ohio.

BREEDERS' DIRECTORY.

Cards of four lines or less, will be inserted in the Breeder's Directory for \$15.00 per year, or \$5.00 for six months; each additional line, \$2.50 per year. A copy of the paper will be sent to the advertiser during the continuance of the card.

HORSES.

NORRIS & CLARK, of Malden and LaMotte, Ill., are going to close out their entire stud of imported Clydesdale and Shire horses—ninety-two head—at bottom prices. Send for catalogue.

PROSPECT FARM—H. W. McAfee, Topeka, Kas., breeder of Thoroughbred and Standardbred Horses for sale now. Write or call.

M. D. COVELL, Wellington, Kas., breeder of Registered Percherons. Acclimated animals, all ages and sexes. At head of stud, Theophile 2795 (3746), black, imported by M. W. Dunham, and sired by his celebrated Brilliant 1271 (755).

CATTLE.

MAYES & COX, Peabody, Kas., breeders of purebred Hereford cattle. Horace Wilton (29186), grandson of Lord Wilton, at the head of herd. Young bulls and heifers for sale. Write or come and see.

M. E. MOORE, Cameron, Mo., breeder of purebred HOLSTEIN-FRIESIAN CATTLE ONLY. The home of Gerben 4th, who has a better record of thirty-two pounds in seven days.

GEO. M. KELLAM & SON, Richland, Shawnee Co., Kas., breeders of Galloway Cattle and Hambletonian and Morgan Horses.

THOS. J. HIGGINS, Council Grove, Kas., breeder of purebred Hereford cattle. Choice young bulls and heifers rich in Wilton, Grove 3d and Anstey blood for sale at reasonable prices. Correspondence and inspection solicited.

A. DE BOURQUIN, Nekoma, Illinois, breeder of BROWN SWISS CATTLE.

NORWOOD HERD OF SHORT-HORN CATTLE, V. R. Ellis, proprietor, Gardner, Johnson Co., Kas. Herd is headed by Baron Bigstaff No. 34476, a purebred Rose of Sharon. Stock of both sexes for sale.

JOHN P. HALL,
HOLSTEIN-FRIESIAN CATTLE.
EMPORIA, KANSAS

ENGLISH RED POLLED CATTLE—Young bulls for sale, pure-blooded and grades. Your orders solicited. Address L. K. Masetline, Decherster, Greene Co., Mo. (Mention Kansas Farmer.)

VALLEY GROVE HERD OF SHORT-HORN CATTLE—For sale choice young bulls and heifers at reasonable prices. The extra fine Cruikshank bull Earl of Gloster 74523 heads the herd. Call on or address Thos. P. Babst, Dover, Kas.

L. A. KNAPP, BREEDER, } SHORT-HORN CATTLE
DOVER, KANSAS. } AND BUFF COCHIN POULTRY
FOR SALE.

JERSEY CATTLE—A. J. C. Jersey cattle, of noted butter families. Family cows and young stock of either sex for sale. Send for catalogue. C. W. Talmadge, Council Grove, Kas.

T. M. MARCY & SON, Wakarusa, Kas., have for sale Registered yearling Short-horn Bulls and Heifers. Breeding herd of 100 head. Carload lots a specialty. Come and see.

EARLY DAWN HEREFORD HERD—Apply to owner, George Fowler, Kansas City, or to foreman, G. I. Moyer, Maple Hill, Kas.

W. E. GOULD, MARSHALL, Mo., breeder of Thoroughbred and Grade Holstein-Friesian Cattle. Calumet 5532 H. B. heads herd—a choice butterbred Netherland bull. Stock for sale.

W. M. BROWN, LAWRENCE, Kas., breeder of Holstein-Friesian and Jersey Cattle of noted families. Correspondence solicited.

DR. W. H. H. CUNDIFF, Pleasant Hill, Mo., proprietor of Aitman Herd and breeder of fashionable Short-horns. Straight Rose of Sharon bull at head of herd. Fine show bulls and other stock for sale.

OAKWOOD HERD OF SHORT-HORN CATTLE—All recorded. Choice-bred animals for sale. Prices low. Terms easy. Imported Earl of Gloster 74523 heads herd. C. S. Kichka & Son, Wichita, Kas.

C. E. DAVIS, WELLINGTON, SUMNER CO., KANSAS, breeder of A. J. C. JERSEYS from the greatest prepotent butter families. Bull calves for sale or to trade for heifer calves. I am also a breeder of STANDARD-BRED registered horses and harnesses. Correspondence solicited. Mention KANSAS FARMER.

CATTLE AND SWINE.

C. H. SEARLE, Edgar, Clay Co., Nebraska, breeder of Thoroughbred Holstein-Friesian cattle and Duroc-Jersey and Poland-China swine. Breeders recorded. Farm one mile west of town.

SAVED—By getting my prices before buying SHORT-HORN CATTLE and POLAND-CHINA HOGS. Good individuals and pedigrees. PLYMOUTH ROCK fowls of most noted strains. Eggs \$1 per thirteen. C. M. T. HULETT, Edgerton, Johnson Co., Kansas.

JOHN LEWIS, Miami, Mo., breeder of Short-horn Cattle, Poland-China Hogs, Cotswold Sheep, Light Brahms and Bantam Chickens, Breeze Turkeys, Fowls, Pekin Ducks and White Guinea. Young stock for sale. Eggs in season.

M. H. ALBERTY, Cherokee, Kas., breeder of Registered Holstein-Friesian cattle and Poland China swine.

J. J. MAILES, Manhattan, Kas., breeder of Short-horn cattle, Berkshire and Poland-China hogs. Fine young stock of both sexes for sale. Examination or correspondence always welcome.

J. L. TAYLOR & SON—Englewood Stock Farm, Lawrence, Kas., breeders of Holstein-Friesian Cattle and Poland-China Hogs. Stock for sale. Terms easy.

HILLSIDE STOCK FARM—W. W. Waltemire, Carbondale, Kas., importer and breeder of CHESTER WHITE swine and Short-horns. Pigs for sale now.

A. B. DILLE & SON, Edgerton, Kas., breeders of choice Poland-China hogs, Short-horn cattle and thoroughbred Poultry. Choice young bulls and boars for sale cheap.

SWINE.

Z. D. SMITH, Greenleaf, Kas., breeder and shipper of fine Poland-China swine. Also Jayhawk strains of Plymouth Rock Fowls. Write for prices.

THE GOLD DUST HERD OF POLAND-CHINAS—Established 1880. Are premium hogs of very best strain. They please visitor's eye. Stock, both sexes, for sale, and a few choice sows ready bred. Your patronage solicited. Address J. M. McKee, Wellington, Kas. Also Fancy Poultry. Lock Box 100.

SWINE.

MAHAN & BOYS, Malcolm, Nebraska, breeders of pure Essex Swine.

JOHN BUCHE, breeder of Poland-China Swine. Stock of all ages for sale. Young pigs ready to ship May 1st. Pleasant View Farm, Miltonvale, Kas.

KAW VALLEY HERD POLAND-CHINAS—Tat's Sample at head. All breeders fine individuals. Also fancy poultry. Inspection invited. Correspondence promptly answered. M. F. Tatman, Rossville, Kas.

LONGVIEW HERD OF POLAND-CHINAS. Pigs of either sex for sale at all seasons. All breeders recorded. Correspondence promptly answered. Walter Ferguson, Valley Falls, Kas.

THE PIONEER HERD—Of Pure Duroc-Jersey Swine, Partridge Cochins and Slate Turkeys. A. Ingram, proprietor, Perry, Pike Co., Ill. Showed at seven fairs in 1888 and won 60 premiums. Orders promptly filled.

SCOTT FISHER, Holden, Mo., breeder of the very best strains of Poland-China. Pigs from five noted boars. Can furnish small herds not akin. Sell nothing but first-class stock. Over 100 pigs for this season's trade. Write me and mention this paper.

V. B. HOWEY, Box 103, Topeka, Kansas, breeder of Thoroughbred Poland-China and English Berkshire swine. Stock for sale. Also fancy poultry eggs. \$1.50 for 15; \$2 for 25.

POLAND-CHINA SWINE—From No. 1 breeding stock. All stock recorded or eligible to record. Personal inspection solicited. Correspondence promptly answered. Satisfaction guaranteed. Henry H. Miller, Rossville, Kas.

THOS. C. TAYLOR, Green City, Mo., breeds best strains of Poland-China pigs; also Langshan fowls. Write for prices of pigs and eggs.

PEDIGREED POLAND-CHINAS—At prices that will sell them. Well loaded with Cornish blood and other popular strains. Marion Brown, Nortonville, Kas.

POULTRY.

SHAWNEE POULTRY YARDS—Jno. G. Hewitt, Prop'r, Topeka, Kas., breeder of leading varieties of Poultry, Pigeons and Rabbits. Wyandottes and P. Cochins a specialty. Eggs and fowls for sale.

MRS. A. B. DILLE, Edgerton, Kas., breeder and shipper of the best strains of Plymouth Rocks, Wyandottes, Brown Leghorns and Mammoth Bronze turkeys. Stock for sale, and eggs at \$1 per thirteen, \$2 for thirty. Turkey eggs at \$2 per eleven.

KANSAS POULTRY YARDS—Fifteen eggs for \$2 from Silver Wyandottes, Plymouth Rocks and Light Brahmas. Stock strictly first-class. J. H. Siemer, Abilene, Kas.

1889. EMMA BROSIUS, TOPEKA, KANSAS, 1889. Established in 1880. Four miles southwest of city. Breeder and shipper of highest class fancy poultry. Eggs—Light Brahmas, \$3 per 13, \$5 per 25; Silver Wyandotte, \$2.50 per 13, \$5 per 25; Pekin duck, \$1.50 per 13, \$3 per 25; M. Bronze turkey, \$3 per 9. Breeders first class in every respect.

S. C. BROWN LEGHORNS EXCLUSIVELY—At S. C. Brown Fruit Farm. Whoever purchases a setting of eggs or a fowl, receives a good poultry monthly for a year. Eggs \$1.50 per setting from prize-winning birds, scored into the 90's by I. K. Felch. Mrs. Belle L. Sprout, Frankfort, Marshall Co., Kas.

CAPITAL POULTRY YARDS—A. D. Jencks, Prop'r., North Topeka, Kas., box 855. Breeder of high-scoring Plymouth Rocks. Eggs, \$1.50 per 13.

EUREKA POULTRY YARDS—L. E. Fitzley, Emporia, Kas., breeder of Wyandottes, B. B. R. Games, P. Rocks, B. and W. Leghorns, Buff Cochins and Pekin Ducks. Eggs and birds in season. Write for what you want.

PRAIRIE LAWN POULTRY YARDS—Contain the best strains of Golden Pouter, Brown Leghorns, Light Brahmas, Plymouth Rocks—two yards, Bronze Turkeys, Toulouse Geese and Pekin Ducks. Eggs in season. Also proprietor GOLD DUST HERD OF POLAND-CHINA HOGS. J. M. McKee, Wellington, Kas.

G. C. WATKINS, Hiawatha, Kas., originator of the Sandowner strain of Plymouth Rocks. Largest size and good layers. Eggs \$2.00 per thirteen. Express prepaid.

E. E. FLORA, Wellington, Kas., breeder and shipper of pure-bred poultry—Partridge Cochins, Plymouth Rocks, Single-comb Brown and White Leghorns, Rose-comb Brown Leghorns, Wyandottes, Light Brahmas, Buff Cochins, Langshans. Eggs per 13, \$2 per 30. Pekin duck and Hongkong geese eggs 10 cents each. Bronze turkey eggs 15 cents each. Stock next autumn.

PLYMOUTH ROCK EGGS—One dollar per thirty. Plymouth Rock cockerels, two dollars each. Mark S. Salisbury, Independence, Mo.

JOHN C. SNYDER, Constant, Gowley Co., Kansas, breeds PLYMOUTH ROCKS and BRONZE TURKEYS. No fowls for sale. Eggs in season. Write for wants or send for circular, and mention this paper.

RICH. E. HANDEL, Topeka, Kas., breeder of fine Plymouth Rocks. Eggs \$1.25 for 13. My Poultry Powder will cause an increase of eggs; also prevent and cure cholera, roup, gapes. Try it. Price 25 cents.

EXCELSIOR POULTRY YARDS—C. E. Masters, Prop'r, Irving Park, Ill., breeder of the leading varieties of Poultry. Also Ferrets, Rabbits, Pigeons and Pets. White Leghorns, White Wyandottes and White-Face Black Spanish a specialty. "Excelsior" is my motto—the very best is none too good. Eggs in season \$2. Send for circular, giving full description.

JAMES ELLIOTT, ENTERPRISE, Kas.—Proprietor of the Enterprise Poultry Yards, composed of the following varieties: Silver and White Wyandottes, White and Barred Plymouth Rocks, Light and Dark Brahmas, White and Buff Cochins, Langshans, R. C. White and Brown Leghorns, B. B. Red Games and Mammoth Bronze Turkeys. Breeding fowls strictly No. 1. Eggs \$1.50 and \$2 per 13. Also breeder of pure Berkshire Swine and Cotswold Sheep. Swine, sheep and poultry for sale. Your patronage solicited. Golden rule guarantee. Mention the "Kansas Farmer."

TOPEKA WYANDOTTE YARDS—Breeder of Silver-Laced, White and Golden Wyandottes, S. B. Hamburgs. Pen No. 1—eggs, \$3 for 13; pen No. 3—\$2 for 13; Hamburgs, \$2.50 for 13. A. Gandy, 624 Kansas Ave., Topeka, Kas.

MISCELLANEOUS.

W. L. LAYSON LUMBER CO.—Farmers, call and get prices. Yards, First and Jackson streets, Topeka.

F. P. ZIMMERMAN, Lunch Counter and Meat Market, 116 Sixth St. East, Topeka. Farmers and everybody call.

WICHITA AND SOUTHWESTERN KENNELS—D. T. SPOCK, Veterinary Surgeon, proprietor, No. 1927 South Wichita street, (Lock Box 154), Wichita, Kas. Breeder of Imported Dogs. Leonburg St. Bernards, Newfoundlanders, English Cocker Spaniels, German, English and Irish Pointers, Great Dane or German Mastiffs, English Mastiffs, Bull Terriers and Pugs, Fox Hounds, Large and Small Black-and-White Irish Setters, King Charles, Cocker, "Waterside" Spaniels, English shepherds, Scottish Western Heelers, Mexican, Poodles, and others. Headquarters for all breeds of dogs. Addressing and Grade. Mention KANSAS FARMER. IAN, Dundee, Ill.

SEEDS

J. G. PEPPARD, 1220 UNION AVENUE, (One block from Union Depot) KANSAS CITY, MO.

MILLET A SPECIALTY.
Red, White, Alfalfa & Alsike Clovers,
Timothy, Blue Grass, Orchard Grass, Red Top,
Onion Sets, Tree Seeds, Cane Seed, Etc.

TWO-CENT COLUMN.

"For Sale," "Wanted," "For Exchange," and small advertisements for short time, will be charged two cents per word for each insertion. Initials or a number counted as one word. Cash with the order.

Special.—All orders received for this column from subscribers, for a limited time, will be accepted at one-half the above rates—cash with the order. It will pay you! Try it!!

FOR SALE—FARMS AND MILL PROPERTY.—One farm of 240 acres, 200 acres in cultivation, balance fenced to pasture; fruit and forest trees; house with six rooms, good well water, windmill, good barn with stone basement. Farm in high state of cultivation, situated in Ottawa county, six miles from county seat—Minneapolis. One farm of 160 acres, 120 acres in cultivation; stone house with two rooms; fruit and forest trees; school and church facilities convenient; eight miles from Minneapolis. One hundred acres in Lincoln county, five miles from Beverly, a railroad town on the Saline river; four acres in cultivation; small frame house; pasture fenced. Saw and grist mill on the Saline river, three and one-half miles from Lincoln; one of the best water powers in the State; 120 acres of land; plenty of timber; fifty acres in cultivation, balance fenced to pasture and cereals; houses, barns and outbuildings; railroad within forty feet of mill door. Any or all of the above property will be sold cheap and on easy terms. Inquire of H. W. Graham, Lincoln, Lincoln Co., Kas.

\$500 CASH—Will buy a first-class ten-horse-power engine and boiler (return free), a J. I. Case separator and a patent straw-stacker. The first cost can be made this year. Apply at once to Harry A. Stanton, Knox Building, Topeka.

STRAYED—Sorel mare pony, collar marks on both shoulders. Any one returning same to Sprout & Son, corner Sixth and Clay streets, Topeka, will be rewarded.

FOR TRADE—One hundred and sixty acres in Butler county, Kas. Half bottom, well improved, balance fenced to pasture; fruit and forest trees. Unable to stock it properly, and want to trade for smaller farm—either Kansas or Missouri preferred. Also one stone store building in Latham, Kas., centrally located. Worth \$2,000, clear. Will trade together or separate, for land, or the building for merchandise. D. L. Dever, Leon, Kas.

EMPORIA PROPERTY TO EXCHANGE—For land. \$15,000 New York farm for clear land. Exchange of all kinds. Farms and ranches for sale. Devon cattle for sale. Runney Bros., Emporia, Kas.

WANTED—Every person interested in patents, to read James G. Young's card in another column of this paper.

WANTED TO EXCHANGE—A two-story brick eight-room house and brick stable, everything in good order, close in, for a farm within fifty miles of Kansas City. Address James G. Young, attorney at law, notary public and solicitor of patents, rooms 62, 63 and 64 Hall Building, Kansas City, Mo.

FOR SALE—A young Jersey Coomassie bull; dam the only recorded tested Jersey cow in A. J. C. C. butter record. D. D. Perry, Peabody, Kas.

FOR EXCHANGE—Some land, lots and live stock for merchandise, hardware or groceries preferred. Address Box 155, Ness City, Kas.

FOR SALE—Two improved deeded quarters and one timber entry in the famous Bow Creek valley. Box 62, Lenora, Kas.

STRAYED—One sorrel colt, 2 years old, narrow white strip in face, three white feet. Any information sent to P. O. Box 285, Topeka, will be rewarded. H. H. Wallace.

FOR SALE—Dedrick Hay Press—new size—bale 14x18. Cheap for cash. Address J. Pitney, Leclaire, Kas.

AN EXTRA SHEEP RANCH WITH SHEEP—And entire outfit, for sale or trade for property in some good town. Address D. W. Tinkham, Brookville, Kas.

FOR SALE—A few choice Jersey bull calves of the blood of Stoke Pogs 5th. Living prices. T. C. Murphy, Thayer, Kas.

STRAYED—From my farm, one bay horse, 8 or 9 years old, strip on nose, spot in forehead, weight 1,000 pounds. Also a gray horse—nearly white, left hock large from cut, branded C on left shoulder and weighs 900 pounds. Both horses have collar marks. \$20 reward for recovery. Address J. A. Morgan, Vidette, Shawnee Co., Kas.

FOR SALE AT A BARGAIN—A first-class threshing outfit, consisting of a ten horse-power engine, separator and revolving strawstacker. All as good as new. Apply to Harry H. Stanton, 111 West Sixth Ave., Topeka, Kas.

FOR SALE—Space in this column, to advertisers who wish for results at little cost. Try it?

FOR SALE—Eggs of W. F. B. Spanish, \$2.50 per setting; P. Rocks, \$1; Pekin ducks, \$2. Each seventh order free. Eggs after May 1 half price. Mrs. Viola W. Gribble, Virgil, Kas.

SHORT-HORNS AND JERSEYS—Males and females, of any age, for sale by John T. Voss, Girard, Kas.

POULTRYMEN!—The Fanciers' Review, Box K, Chatham, N. Y., a 16-page poultry journal, 25 cents year. Three sample numbers 10 cents.

WATER GRIST MILL—Dwelling and ten acres of land to lease or trade for Kansas property. B. N. Turk, Holton, Kas.

WANTED—Everybody that desires to buy, sell or exchange anything of value should try this column. It brings results with little cost.

WANTED—Gentle horse for light work two months for keeping. Good care. Address "F," KANSAS FARMER office.

WANTED—All those farmer boys who are thinking of attending a business college this fall, to know that we will deduct your railroad fare both ways to and from Topeka to any distance not exceeding 150 miles, from the cost of the fall scholarship if you go to our school. All the finest educators and best business men say we keep the best school for a business education in the State. Pond's Business College, Topeka, Kas.

WANTED—To negotiate with parties interested in starting a cheese factory or separator creamery. Have some means and fourteen years experience as butter and cheese-maker. Address J. L. Ables, 1023 New Jersey St., Lawrence, Kas.

GARDEN TOOLS—A full line of Planet Jr. hand and horse tools. Send for pamphlet. Trumbull, Reynolds & Allen, Kansas City, Mo.

2,000,000 HEDGE PLANTS—125,000 two or three-year-old apples, 500,000 meadusian mulberries, catalpas, etc. A full line of nurseries. Babcock & Stone, North Topeka.

TWO-CENT COLUMN—(Continued.)

SWEET POTATO PLANTS. TURNIP and BEET seed for stock. Soft maple, and all kinds of seeds. Trumbull, Reynolds & Allen, 1425 and 1428 St. Louis Ave., Kansas City, Mo.

PURE PEKIN DUCK EGGS—Seventy-five cents per dozen. Would like to exchange for pure Plymouth Rock and Bronze turkey eggs. Mrs. Vina Beeson, Fall River, Kas.

BROOD MARES AND COLTS—One, two and three years, to exchange for milk cows. M. S. Babcock, Nortonville, Kas.

FOR EXCHANGE—A 20-word advertisement in this column to our subscribers five weeks for \$1.

Agricultural Books.

The following valuable books will be supplied to any of our readers by the publishers of the KANSAS FARMER. Any one or more of these standard books will be sent postage paid on receipt of the publisher's price, which is named against each book. The books are bound in handsome cloth, excepting those indicated thus—(paper):

FARM AND GARDEN.

Allen's New American Farm Book.....\$2.50
Barry's Fruit Garden.....2.00
Broomcorn and Brooms......50
Flax Culture (paper)......30
Fitz's Sweet Potato Culture......60
Henderson's Gardening for Profit.....2.00
Hop Culture (paper)......20
Onions: How to Raise Them Profitably (paper).....50
Silos and Ensilage......30
Stewart's Irrigation for the Farm, Garden and Orchard.....1.50
Tobacco Culture: Full Practical Details......25
Farming for Profit.....3.75
Jones' Peanut Plant: Its Cultivation, etc. (paper).....50

FRUITS AND FLOWERS.

Fruits and Fruit Trees of America (new edition).....5.00
—Downing......5.00
Propagation of Plants—Fuller......75
Field Notes on Apple Culture—Bailey......75
Elliott's Hand-Book for Fruit-Growers.....1.00
Every Woman Her Own Flower Gardener.....1.00
Fuller's Small Fruit Culturist.....1.50
Fuller's Grape Culturist.....1.50
Henderson's Practical Floriculture.....1.50
Parsons on the Rose.....1.50

HORSES.

American Reformed Horse Book—Dodd.....2.50
The Horse and His Diseases—Jennings.....1.25
Dodd's Modern Horse Doctor.....1.50
Jennings' Horse Training Made Easy.....2.00
Horse-Breeding (Sanders).....2.00
Law's Veterinary Adviser......75
Miles on the Horse's Foot......75
Woodruff's Trotting Horse of America.....2.50
Youatt & Spooner on the Horse.....1.50

CATTLE, SHEEP AND SWINE.

The Dairymen's Manual—Henry Stewart.....2.00
Allen's American Cattle.....2.50
Coburn's Swine Husbandry.....1.75
Dodd's American Cattle Doctor.....1.50
Harris on the Pig.....1.00
Jennings' Cattle and Their Diseases.....1.25
Jennings' Sheep, Swine and Poultry.....1.25
Randall's Practical Shepherd.....1.50
Stewart's Shepherd's Manual.....1.50
The Breeds of Live Stock (Sanders).....3.00
Feeding Animals (Stewart).....2.50
A B C Butter-Making (boards)......30

MISCELLANEOUS.

King's Bee-Keeper's Text Book.....1.00
Silk Culture (paper)......30
American Standard of Excellence in Poultry.....1.00
Wright's Practical Poultry-Keeper.....2.00
American Bird Fancier.....1.50
Quincy's New Bee-Keeping.....1.50
Dogs (by Richardson)......50
Arwood's Country Houses.....1.50
Barns, Plans and Out-buildings.....1.50
Arnold's American Dairying.....1.50
Fisher's Grain Tables (boards)......40
Fuller's Forest Tree Culturist.....1.00
Willard's Practical Butter Book.....1.00
Willard's Practical Dairy Husbandry.....3.00
Practical Forestry.....1.50
Household Conveniences.....1.50
Dodd's American Reform Horse Book.....2.50
Jennings on the Horse and His Diseases.....1.25
Profits in Poultry.....1.00
Frank Forrester's Manual for Young Sportsmen.....2.00
Hammond's Dog Training.....2.00
Farm Appliances.....1.00
Farm Conveniences.....1.50
Household Conveniences.....1.50
Hussman's Grape-Growing.....1.50
Quinn's Money in the Garden.....1.50
Reed's Cottage Homes.....1.25
Dogs of Great Britain and America.....2.00
Allen's Domestic Animals.....1.00
Warrington's Chemistry of the Farm.....1.00
Williams' Window Gardening.....1.50
Farm Talk (paper)......50
American Bird Fancier (paper)......50
Wheat Culture (paper)......50
Gregory's Onions—What Kind to Raise (paper).....30
Gregory's Cabbages—How to Grow Them (paper).....30
Our Farm of Four Acres (paper)......50
Cooked and Cooking Foods for Animals (paper).....50
The Future by the Past, by J. C. H. Swann.....1.00

Address KANSAS FARMER CO., TOPEKA, KANSAS.

NO POOL FOR US.

We want to state here that we do not belong to any so-called "Pool" or "Trust," but stand on our own footing and sell our celebrated Oak Brand Harness at live and let live prices. Beat these prices if you can:

Our No. 1 single buggy harness.....\$ 5.75
Our No. 4 single buggy harness.....9.75
Our No. 16 double buggy harness.....15.00
Our No. 18 double buggy harness.....18.00
Our No. 21 double farm harness.....18.50

All our harness are made from No. 1 Oak-Tanned Leather and are hand-made. Satisfaction guaranteed or money refunded. Address all orders to H. A. EVERT HARNES CO., 513 W. 7th St., Sioux City, Iowa.

Dr. JACOBS,

1115 Main St., KANSAS CITY, MO.
The leading Physician, Surgeon and Specialist in the West. Chronic, Nervous and Sexual Diseases of Men and Women Scientifically Treated. Illustrated Book, "Life's Secret Errors," with Question List, for stamp. Consultation FREE.

DETECTIVES We want a man in every locality to act as Private Detective under our instructions. Particulars free. Central Detective Bureau, Box 195, Topeka, Kansas.