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Doc Vail 2844.

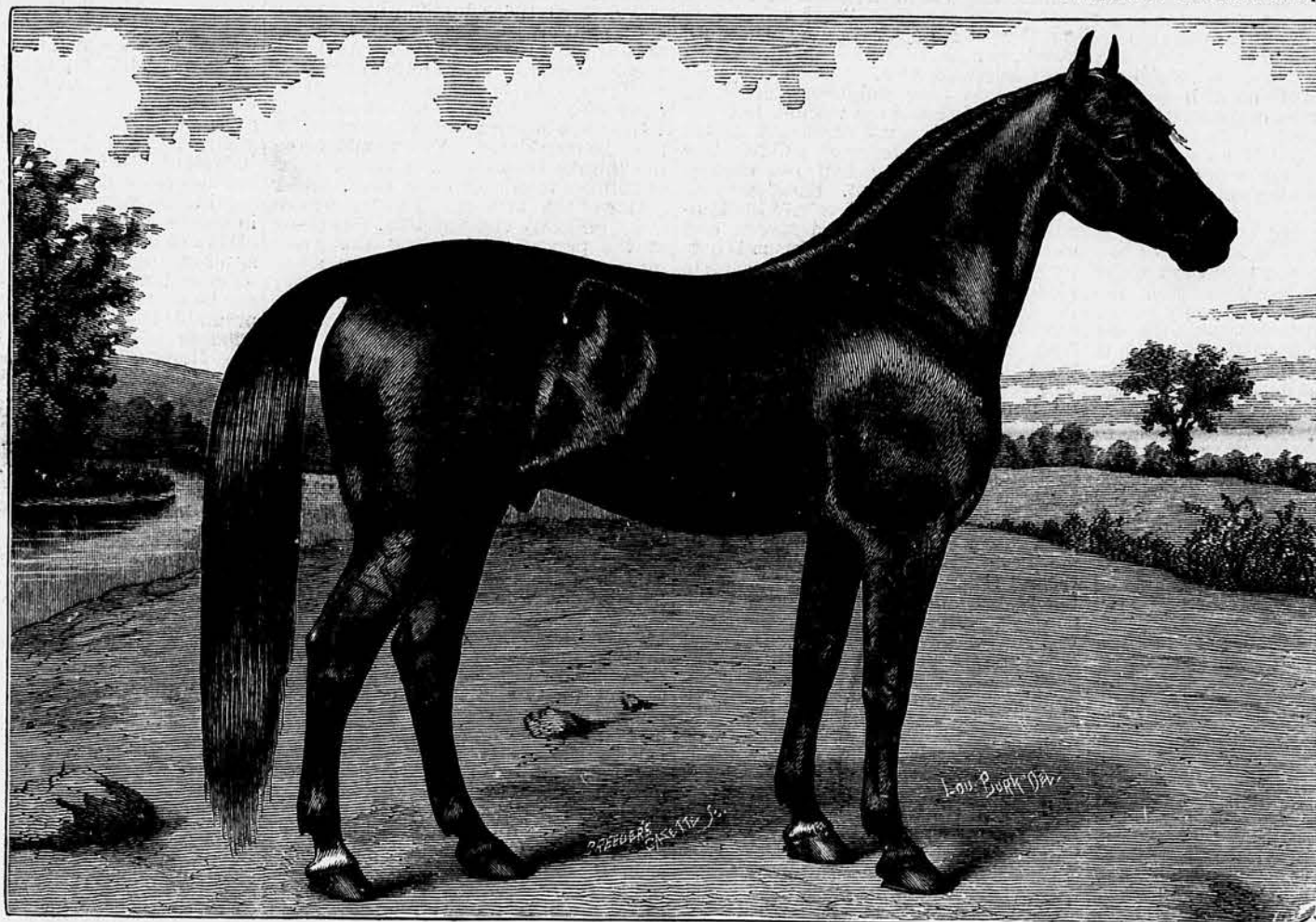
Our illustration this week of the bay stallion Doc Vail, used at the head of the Blue Valley stud of Wm. P. Higinbotham, Manhattan, Kas., is an excellent likeness of the horse as seen by a representative of the FARMER when looking over the many fine roadsters to be found for sale at this estab-

every genuine lover of high-bred horseflesh. Say what we will about what horse it is most profitable to breed, there will always be a good demand for the stout, well-built, compact and stylish horse for the buggy, or the gay, well-matched and lively pair for the gentleman's light carriage. Great speed in a sire is very well, but if he be long, gaunt, thin in his middle-piece, or stands high on slender legs, he is not the animal to

engraving any one can see that this young horse is a model of beauty and perfection for the purpose for which he was bred, and that in him his owner, in all probability, has a most valuable sire. Springing, on his sire's side, in the second degree from the sire of Lulu and May Queen, and on his dam's, from the same degree, from the greatest of all sires, the renowned Hambletonian, what more could be asked in his

How to Take Off a Hide.

The hides of farm-slaughtered animals have a poor reputation, because of the careless way in which they are stripped. Calfskins and sheep-pelts are reduced one-half in value by being cut and gashed, and improperly stretched. When a hide is stripped off, it should be stretched at once, and pegged out to dry, with the flesh side upward. If it is rolled up, or thrown in a



DOC VAIL, NO. 2844, WALLACE'S REGISTER.

Property of Wm. P. HIGINBOTHAM, Manhattan, Kansas, Proprietor of the Blue Valley Herd of Recorded Short-horn Cattle, and Stud of Roadster, Draft and General-Purpose Horses.

lishment at all times. The writer knows of no horse establishment in the State better equipped or conducted than this one. Regarding the subject of our illustration the *Breeder's Gazette* says:

He is a son of the well-known Woodburn-bred stallion Swigert, dam Lady Gano by Stephen A. Douglas; 2d dam Guinea Hen by Long Island Chief (son of Plow Boy). Swigert was got by Alexander's Norman (sire of Lulu, 2:15, and May Queen, 2:20), dam Blandina by Mambrino Chief; 2d dam the Burch mare (dam of Rosalind, 2:21 $\frac{1}{2}$), by Brown Pilot, son of old Copperbottom. Doc Vail is a horse of fine style, showing a good turn of speed, and, we believe, will this season be placed, for a time at least, in the hands of a competent driver, with a view to ascertaining his qualifications for the track. He has been quite freely used in the Blue Valley stud of Mr. Higinbotham, and bids fair to gain more than local reputation as a sire.

From a personal knowledge, the editor of the *Colorado Live Stock Record* writes as follows:

The trotting horse, which is another name for the gentleman's roadster and the business man's indispensable companion and faithful servant, will always have allotted to him a warm corner in the affections of

breed from, if we want strong, hardy, enduring, as well as speedy horses for the general purpose of light driving. A few years since, Dr. W. T. Vail, then of Manhattan, Kas., now of Greeley, Col., purchased a fine mare by Stephen A. Douglas, son of Rysdyk's Hambletonian, for the express purpose of breeding some fine roadsters that should have strength and endurance as well as speed. This mare was a beautiful bay, heavy-bodied, well-muscled, short-jointed, and comparatively heavy-boned, with a good turn of speed on the road. Some of her full brothers have trotted in the 30's. In looking around for a sire he decided to breed her to Swigert, a full brother to Blackwood, by Alexander Norman out of a mare by Mambrino Chief.

The resultant youngster, a stylish, compact and strong-built fellow, with promising action for a trotter, caught the attention of Mr. W. P. Higinbotham, living neighbor to the Dr., a gentleman with a quick eye for anything good or well-bred either among bovines or equines, and a bargain was soon struck, he paying the Dr. what was considered quite a large price for an embryo stallion.

The horse is now five years old, and Mr. Higinbotham, in honor of his breeder, has named him Doc Vail—who by the way has had quite a number of good and fast ones—and placed him at the head of his breeding stud of roadsters. By reference to the

pedigree, especially when we consider that he combines the blood of Mambrino Chief and Long Island Black Hawk as well.

Topeka Stock Yards Sales.

The representative sales of live stock at the Topeka stock yards for the week ending Saturday, August 1, are as follows: Eighty-seven sheep, averaging 80 lbs., sold at \$2.75, and 57, averaging 92 lbs., sold at \$3. The market is good for fat sheep at these prices. Thirty-three hogs, weighing from 140 to 165 lbs., sold for \$3.75 to \$4.05, with a light demand for butchers. Three large young horses sold at from \$105 to \$150 on a weak market; choice roadsters sell at 100 to \$150; plugs, no sale. The market weak with no demand for feeders; for good fresh cows with calves by their side, market strong and active at \$35 to \$37; fat calves, \$4 to \$4.50; heifers sold at from \$15 to \$22.50; 43 fat cattle, ranging from 910 to 1,180 lbs., sold at from \$2.85 to \$3.15.

A rich sandy soil is best for beets. The long red beet grows larger and makes the heaviest crops; it is preferred to others for feeding cows and hogs.

heap and left to dry in that shape, it is so mean-looking that a buyer will offer only half its real value. A few hints in regard to taking off a hide, may be useful. The throat should never be slit crosswise, either in killing or in taking off a hide. The skin is slit from the chin down the brisket, in a straight line to the tail; it is then cut around each hoof; the hind legs are slit behind over the gambrel, but the front legs are slit up in front, over the knee. This leaves the skin in good shape for finishing the leather. The head and legs are first carefully skinned, and all cutting the skin is avoided. The skin is then easily drawn off by taking hold of it firmly, and pulling it steadily. It is then spread out evenly on a floor, and salted with fine salt. If there is but one, it is best to stake it out as soon as the salt has taken, and dry at once in a cool, shaded place. If there are more than one, they are laid upon each other and salted quite freely, and afterwards they are thoroughly dried. If the skins are to be kept on hand, they should be closely watched for moths or grubs.—*American Agriculturist*.

Young chicks should be fed, for morning feed, for the first week, chopped-up hard-boiled eggs.

Sow grass seed over the thin places in your lawns and rake it in, or better, throw an eighth of an inch of fine compost over it and let the rain do the work.

The Stock Interest.

PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.

October 28—Hon. T. W. Harvey, Turlington, Neb.
November 3 and 4—Inter-State Short-horn Breeders,
Kansas City Fat Stock Show.
S. E. Ward & Son, Short-horns, first Friday of Kansas
City Fat Stock Show.

The Hereford at Home.

Address delivered by Mr. William Housman, to the Herefordshire (Eng.) Chamber of Agriculture, June 27.

Since my arrival in the city last night I have found reason to believe that the title selected for my address has led some of you to expect a discourse upon the past development of the breed of Hereford cattle. I must therefore explain to you that upon the present occasion I have no intention of lingering long upon the past, for it is too large a subject for one short address; it would well occupy a series of lectures. And I may here refer to that which is now something more than an open secret—I believe it is generally known or understood—that a work upon the Herefords is in course of preparation by a gentleman who is thoroughly competent to bring out such a work; and I hope that the breeders of the "white-faces," and all who possess information upon the breed, will do their best, in the interest of the Hereford, to strengthen the author's hands. A work of the kind is much wanted, and it is most important that it should be made a true and complete history. We are positively informed, by some Hereford historians, that the breed was originated by Mr. Benjamin Tomkins! I think that a future history will tell us something about the contemporaries of that great breeder, and something about the Herefords before his time. In like manner the Short-horn breed has been looked upon as the result of the work of the Brothers Colling; but the origin of the Short-horn was before their time. Before the Short-horn was generally known the breed foremost in favor was the old Long-horn, the foundation of which is commonly ascribed to the honored Bakewell; but, without detracting from Mr. Bakewell's credit and reputation, it is but right, in the interest of truth, to say that long before Mr. Bakewell's time the breed was in existence, and in general character was similar to the breed improved by him, and before he began had been improved by Webster, Welby, and Sir Thomas Gresley. Mr. Bakewell, however, was the introducer of a new system of breeding. He refined the bone and frame and increased the flesh.

I do not see that the early Hereford breeders were one whit behind the early Short-horn breeders (if, indeed, they did not precede them), and both did for their cattle much the same thing that Bakewell did for the Long-horn. If we can only get authenticated records of those early days I have no doubt that a great deal of interesting matter may be brought out; and with all honor to the name of Tomkins—Benjamin Tomkins—I think it will appear that the Herefords are of older foundation than his time. I think I see among you some who can put the author of this work on Herefords on the right track for information about the early days. I do hope that all possible research will be made concerning the breeders who were contemporary with Mr. Benjamin Tomkins, and those who preceded him. We now come down to historic times, and here we must stop. The history of the Hereford has already been written upon in this country and America, and due honor has been given to a great many names. I see many historical names represented in the audience before me, but it would be invidious to select for special notice the few names which it is possible to introduce in the course of a short address. You all know how the Hereford breed has extended itself, and how, into the Australian Colonies, America, and other parts of the world, runners have been thrown out and have taken root, so that there are now in those countries flourishing plants of the old stock. What you want, I apprehend, is to make the breed flourish more generally in this country, and to introduce it into every nook and corner of the land. I do not say that the Hereford is the breed best suited for all parts, or that it will adapt itself to every district in England. On the contrary, I think that any attempt to push it forward with the notion that it can supplant any and every breed would be quite useless.

I propose now to consider the prospective development of the Hereford, from a commercial point of view. The means of attaining the ends which I have suggested will be best devised by yourselves in council. You will scarcely expect that I, a stranger, should come among you to lay down plans for the extension of the Hereford into every part of the country. What I wish to do is to draw out your own feelings and opinions, and to see you take the subject seriously in hand, trying to devise means to accomplish the most desirable end to which I have alluded. I am myself resident in Lancashire, the old country of the Long-horns, in which they flourished from fifty to a hundred years ago, and at an earlier period had their principal home. The house in which I live was once the residence of a great Long-horn breeder, who ridiculed his neighbors for introducing Short-horn crosses, yet before he died became himself a Short-horn breeder to some extent. The change of breed from Long-horn to Short-horn, over the whole of Lancashire, was effected within a period of ten years. If that was done fifty years ago, what might not be done in the present day, with more rapid circulation of news and better means of sending cattle about the country? I believe that the only reason why the Hereford is not the stock of many districts where other breeds hold their ground, is, that it is not sufficiently known. A few years ago a tenant-farmer in a grazing part of Lancashire was in the habit of coming into the neighborhood of Herefordshire for the purpose of buying Hereford steers, which he said paid him better than anything else. "Then why," I asked, "do your neighbors not have them?" He could not tell me, but the neighbors themselves explained to me that it was the butcher who didn't like them, because they had not enough "fifth quarter" for him. Some of those neighboring farmers went into the Penrith district for Short-horn steers, and as the Short-horns there are usually better specimens of that breed than steers picked up in an outside Hereford-breeding district are of the Hereford breed, the comparison was unfair to the Hereford. I advised the Lancashire farmers to go and see the herds in Herefordshire. The Herefords met with in Lancashire no more favorably represented their breed than such brutes as in this country are often called Short-horns represent the true Short-horn. Because the Hereford is unknown it is not appreciated. All it wants is to be thoroughly brought before the people of the grazing districts. Can you not, in one way or another, facilitate trade with those districts? Cannot the Herefordshire Chamber of Agriculture, or any one of the county societies interested in the matter, devise means to bring Hereford steers, of a superior quality, under the notice of farmers in distant parts of the country? Perhaps you might have agents who would advocate the breed and do their best to effect sales. The occasional sending of steers would enable the people to see what the Herefords are, and to what they may be fed up. I throw out these suggestions, which I hope you will discuss, pull in pieces as much as you like, but by all means discuss them. That the Hereford breed has merits which insure its eventual success I have not the slightest doubt, but that its success may be hastened by yourselves I also regard as certain. The rate of progress will depend much upon your own judgment, energy and unanimity.

The Short-horn was introduced into Lancashire by a land surveyor, a disinterested man who, whilst traveling about a good deal on professional duty, saw the value of the Short-horn, and thought that its introduction into the county, instead of the Long-horn, would be for the public good. The cattle which he introduced were the first examples of the pure breed. Could not something be done in this direction for the Hereford? Something, indeed, in this way has been done, but we want to distribute more widely some distinctive specimens of the breed, and I take it that your object is to devise means to place these animals to advantage about the country. A good General will see that his outposts are supported. If the breeders, as a body, took more interest in the gentlemen who have started herds here and there in new districts, kept up more regular communication with them, and visited them, a community of interests, I think, would be established, and you would find that it would tend to furtherance of the work which you wish to see carried out. The next consideration is what influence the press can exert in favor of your object; and I would refer here to permanent as well as periodical literature. I think that a really good history of the Hereford, something better than any Short-horn history which has been yet published, and an advance upon previously produced histories of the Hereford itself (useful as some of them are, but behind the present day), would forward your interests very much. As to the newspaper press there are false notions of what it can and what it cannot do. A little while ago the Short-horn breed was almost tottering on the verge of decline from its position with the dairy classes of the country. Dairymen began to waver in their opinion, doubting whether the modern Short-horn could continue to be the best breed for them. Some Short-horn breeders took the matter up and established dairy records, which occasionally appear in the newspapers. Accurate records are kept of every animal's milk, and the quality of the milk is tested by able analysts.

The Hereford, we know, is a beef breed; but could you not adopt some plan, *a la* dairy record, to record the weights of your cattle, the cost of their keep from birth to death, etc., and give the record publicity through the press? If this were done I believe the Hereford would come out with flying colors and go into many districts where hitherto it is virtually unknown. Until you demonstrate by figures and facts the superiority of your breed, and show that it is a more paying breed than breeds already established in various districts, you cannot disturb those breeds which have a hold, not only because they are found to answer the purposes of the farmers, but also because there is in human nature a willingness to cling to the things of early life; what I may call the poetry as well as the business side of the question must be considered. You should bring the animals themselves, a better class of animals than they have seen, under notice of the farmers. There is doubtless a difficulty in doing this, especially at the present time, since the great breeders of America have taken away so many of your best animals, and fewer steers consequently are bred. You have not, therefore, the same supply and choice of steers that you had years ago; but that matter will right itself by and by. The great point for you to bring out prominently is the value of your steers. I have corresponded with breeders who consider the Hereford a milking breed, and I do not doubt that its milking properties might be developed, but I look upon that question as of secondary importance; the point to be urged is that the Herefords will beat other breeds for beef. Drive that home—the thin end of the wedge first, and the rest will follow. The work of the press will be to chronicle progress and comment upon the facts relative to it, which facts must be laid before the public, through the press, by breeders. More than this sort of help it is impossible for the newspapers to give; and you must not look to them for "writing up," or anything of that kind. It is for you to supply the plain matter of fact, which may be distributed to the whole world by means of the press. You have by your action already forestalled me in proposing to use the influence of your county societies to induce agricultural associations to offer prizes for Herefords. Prizes might be offered by yourselves, or societies might be induced to offer them by your offer of pecuniary contributions. The Essex Agricultural Society has set a good example, and other societies may follow. You might communicate your wishes to various agricultural societies and do all in your power to induce them to let the Herefords be brought out, and not excluded on the ground that it is not the breed of the county in which the agricultural show might happen to be held.

An agricultural society does not exist for the benefit of any particular breed of its county, but for the benefit of the agriculturists of that county; and if those who rule a society can see their way to bring out a better breed, or a breed which claims to be a better breed, than any in the district, it is surely the society's duty to give that breed an impartial trial in the show-yard. I look upon the shows and the introduction of cattle for grazing, more especially the latter, as the principal means by which you may gain your object of bringing the Herefords before the country at large. In America I see the question of dressed carcasses is taken up more than it is here. There the animals are first exhibited in the show-yard, and the animals are then slaughtered and their dressed carcasses shown. If the Hereford breeders could arrange to first exhibit their fat stock alive and then have a show of the dressed carcasses, another

point would be gained. People would then find that there is something under the Hereford's red skin and white face. As regards breeding, the very celebrity which the Hereford has already gained in America, in Canada, I may say all over the world, may bring about a state of things against which breeders should set their faces. You wish to influence our own breeders to take up the Herefords, and many of them may do so; but when you begin to move the masses you scarcely know what a Frankenstein's monster you are animating. It has been the bane of the Short-horn that many persons who did not understand stock-breeding bought expensive, good cattle, but did not know how to use them. They went on certain lines of breeding, or on one line, because the animals were well-bred and with too little regard to what the animals were in themselves. That state of things extended to serious magnitude, but I think it is now over—at least the death-blow of the system is already struck, and I wish to guard admirers of the Hereford against repetition of the blunder. As you increase the number of Hereford breeders you are certainly enlisting friends in the first place; but then it must be remembered that all who join do not prove friends always; some eventually undermine the breed by breeding bad animals and sending them about the country as the best. In saying this about breeding on certain lines I wish to guard myself by explaining that I do not say it to the depreciation of old lines of blood. Let us, by all means, stick to good old sorts which have proved their excellence, but do not breed for mere paper pedigree. As to the prospect of the breed, I believe its success to be assured, and I have no doubt that the judgment of breeders will secure that; but success will be faster or slower according to your own action. The self-interest of breeders, graziers, and all others who want to buy cattle should be aroused, and those persons are in self-defense bound to have Herefords if it can be shown that Herefords are more profitable than cattle of any other breed. That is what you want to show—that the Hereford is the most profitable breed.

Good Words for Holstein-Friesian Cattle.

Some good things are said by "Beef Breeder," of Independence, Mo., a correspondent of the Kansas City Live Stock Indicator, concerning the Holstein-Friesian breed. He says:

I am not a breeder of Holstein cattle, neither am I interested financially in their success in this country, but I wish to say a few words in commendation of the big black-and-white "milking machines," as they are called. Now that the rival associations of this breed have settled their differences, which seem to have been chiefly the matter of name, and have united in one strong organization, it is to be expected that the energy formerly exhibited in fighting one another, will be turned in the direction of advancing the interests of the breed. I feel certain that when these cattle become known in the West, their popularity will be great. That they are the heaviest milkers of any breed of cattle, cannot be denied, and while their claims to beef qualifications are generally scouted by breeders of strictly beef cattle, yet it is folly for them to longer close their eyes to the fact that the big frames of the Holsteins are capable of carrying a great weight of beef, and I miss my guess greatly, if the coming fat-stock shows do not furnish conclusive evidence of their good feeding qualities and the excellent character of their beef. While the quantity of the milk-flow is universally admitted, the quality is much sneered at, particularly by the breeders of that butter cow, the Jersey. To a man on the outside, this is tolerably cool, in view of the fact that the Holstein cow Mercedes, held the Gazette "challenge cup" as the best butter cow of the world, having won the same in a square contest with a "crack" Jersey cow. Some people can disregard facts with a cheerfulness that is charming. I believe it to be a fact, that the Holstein is winning its way rapidly in the regard of our people as the grandest "combination cow" known. "Milk and beef" is the cry of our common farmers, and these qualities can be found nowhere else in such admirable combination as in the Holstein. I don't believe that this breed is the equal by any means of our so-called beef-breeds when it comes to those qualities, although enthusiastic Holstein men are not backward in asserting it, but what I mean to say is that the cow in the hands of our farmers that will give the most milk and then be easily turned into a good beef carcass, seems to be the Holstein.

A Georgia man tried to cut the cords in the feet of his daughter, so that she could not imperil her soul by dancing.

When all other remedies fail then try Dr. King's New Discovery for Consumption. Trial Bottles free.

The Veterinarian.

[The paragraphs in this department are gathered from our exchanges.—ED. FARMER.]

SCOURS IN COLT.—A colt two weeks old has had the scours a week. The mare seems to have plenty of milk and to be doing well. [Give at one dose, 4 oz. of linseed oil; 1 dr. of chloral hydrate; 2 oz. of glycerine. Mix the last two, then add the first. Three times a day turn down him the following: Pepsin, 5 gr.; bismuth sub nit., 10 gr.; bicarbonate of soda, 5 gr.; milk, 1 gill; mix.]

ABSCESSES.—I have an eight-year-old mare that has a hard bunch the size of a man's double fist on her breast just below where the collar comes. Some call it a hard tumor. Can you tell what it is and what will remove it? It has been coming about six weeks. I work the mare every day, and it does not seem to hurt her. The lump is movable. [Probably an abscess exists, which, when mature, should be deeply and amply lanced to relieve the contents. In case it remains a solid tumor, it may be removed by careful dissection.]

SCOURS IN CALVES.—I have lost three calves inside of a week. They all die of the same complaint; appear all right when delivered; suck all right for about two days, when they are taken with the scours and die in about eighteen hours afterward. [In some seasons this condition of things is epidemic. Take them away from dams when born, and boil the milk; then adulterate it with one-third flaxseed tea, which is made by steeping whole flaxseed in hot water until a mucilaginous fluid is obtained. If this is not successful, we will adopt a different method.]

HORSE CORNS.—There are two very efficient methods of treating corns that are not suppurating: (1) If the frog is a good one, and the heels weak, put on a bar shoe and a leather sole. (2) And we prefer this method, if possible: have about two inches of the heel of the shoe cut off, leaving a three-quarter shoe. Put this on with a leather sole. The advantage of both these shoes is to relieve the pressure from the affected heel, and so remove the cause of the corn. The cob may of course be worked in either shoe without any danger. Use the shoe for two or three shoeings at least.]

BONE SPAVIN.—I got a fine driving horse about two months ago, and did not see a blemish about him. Was asked one day by a close observer if he was spavined. I said I had never seen any sign of it, and on examining I found there was an enlargement on the left leg where the bone spavin appears, but he is not lame, and is no more inclined to favor that leg than the other, as I can see. I have been seeing him occasionally for three years, the length of time he has been at work, and have never known of his being lame. Can it be spavin or not, and would your veterinary advise doing anything to take the enlargement away if he should show no signs of lameness? Do you know anything about Dr. B. Y. Kendall's Spavin Cure? [Horses frequently show large osseous growths on the seat of bone spavin, without exhibiting any lameness whatever. So long as the horse goes sound, do not be persuaded to interfere with the enlargement, as such interference often originates a lameness that is difficult, if not impossible to remove. We have seen the so-called "spavin cure" mentioned get a very impartial trial, and found it to be perfectly worthless: a result that has also been obtained by several of our friends.]

FLATULENT COLIC.—When Prof. Gamgee was in this country, he said to the writer, that more horses died of colic than of any other malady, and he suggested a remedy which has been published in the *American Agriculturist*, and been found efficacious, we doubt not, by thousands of horse-owners. The remedy, simply stated, is copious injections of cold or tepid water—that is, cold but not too cold. Water that has the temperature of the air in the summer time is right—say 70 to 90 degrees. The best way to apply it is to use a large funnel, holding about two quarts, to which a rubber tube three feet long is attached, and this is terminated by a tin nozzle about fourteen inches long, tapering to a quarter-inch opening. This end should be protected by a lump of solder, so as to prevent injury to the parts. The funnel is filled with water at the level of the horse's rump, and then lifted up as high as possible. Four

to six quarts will usually be sufficient to start the wind; then stand clear. Relief follows at once. There are many causes of colic, as a sudden change of food, hard work or active exercise after feeding, very rapid eating (as after long fasting and hard work), the chill experienced when exposed to too rapid cooling off after sweating—these are some of the common causes, and are conditions to be avoided at any rate. Care will almost always prevent colic, and the above simple remedy will generally cure it; we have never known it to fail.]

Life in a Great City.

The *Post-Dispatch* has a column and a half devoted to the lower walks of life as seen in St. Louis, and well its readers know that as it is in St. Louis, so it is in other large cities. It would seem from these pictures that there are depths of misery and crime which will admit of nothing lower, and we can but wonder that Christian people and philanthropists are not sick at heart when they are shown to them. It is probable, however, that this class rarely come in contact with the vilest criminals and the most abject poverty, for, alas, these travel hand in hand. We all know how easy it is to say, "be good, and then you will be happy," but in the actual experience of life, it is natural to believe that "when you are happy you can be good." What do the people who allow the common coin of sanctimonious phrases to fall from their lips whenever and wherever they have a chance to use them, know of the hell of humanity reared in crime, and with no more of a moral sense than the brute? There can be no doubt that newspaper reporters and the police know more of actual suffering, and while never quite calloused by the contact, yet understand its tendency to crime better than all the benevolent associations in the country. Christian women who really mourn over the wickedness of which they have only a conception, and who would do anything but go down into the slums, are not to be condemned because they do no more. Humanity cannot quite put on divinity, and to the delicate woman, reared in the home of plenty and sheltered always by love, there is an absolute pain in the thought of coming in contact with criminals, which no one not so situated can understand. She feels that her dainty dress, her look of comfort, is an insult to rags and vermin; she comprehends vaguely that tracts do not atone for an empty stomach; she cannot find words to preach duty and uprightness to people who are destitute of moral sensibilities, and who look upon life with the dull apathy of an animal, and she becomes discouraged, while she yet longs to do something. Now and then we find a noble soul, clothed with the armor of the Master, which, fearing nothing, and loving all, goes forth, and, almost alone and unaided, becomes a plank which the very poorest and sin-steeped wretch can cling to for counsel. But ah, even then, what can they do? There is still food for the hungry needed, there is clothes for the naked, and one cannot provide them, nor many, because the demand is a thousand times greater than the supply, and so in crowded, noisome dens, in filth and poverty, in crime and in the midst of pollution, one-half the world lives and dies, and the dwellers in cleanly homes, in palace and in mansion, composing the other half, cannot do much, even if inclined, because "the poor ye have always with you," and only God can look down and forgive and pity his helpless children.—*Sedalia Bazaar*.

T. E. Bowman, Topeka, makes loans on good farm securities, at moderate rate of interest and no commission. Correspondence solicited.

Hungarian grass is a hot weather plant. As soon as hot weather has come to stay, and corn-planting is over, the soil is thoroughly firmed, a bushel to the acre of the seed should be sown broadcast.

Save time and money by using Stewart's Healing Powder for cuts and sores on animals. Sold everywhere, 15 and 50 cts. a box. Try it.

There is no danger of over-production of the best quality of goods. It is the poor goods that do not sell at home or abroad. What is desired is fine beef, fine butter, fine cheese, etc., which are always salable.

Mann Boudoir Cars.

The Wabash is now running the celebrated Mann Boudoir cars between Kansas City and Chicago. This is the only line running these cars in the West.

The progress of invention in utilizing almost the entire product of flax has given such an impetus to the cultivation, especially in the West, that it will doubtless speedily become one of the staple crops of the country.

Mica Axle Grease is the best, because the powdered mica in it fills the axle's pores, making the surface smooth as glass. Mica is a non-conductor of heat, therefore Mica Grease keeps the axles cool. The mica in Mica Grease will in time form a polished coating over the axles and preserve them against wear.

BREEDERS' DIRECTORY.

Cards of three lines or less, will be inserted in the Breeder's Directory for \$10.00 per year, or \$5.00 for six months; each additional line, \$2.00 per year. A copy of the paper will be sent the advertiser during the continuance of the card.

HORSES.

FOR SALE.—On good terms, two imported Clydesdale stallions, with books of 1885 included. Both sure breeders. Can see their colts. For particulars address Robert Ritchey, Peabody, Kas.

THE IMPORTED CLYDESDALE STALLION.—"KING OF HARRIS" (No. 995 Clydesdale stud book), will stand this season at the stable of the undersigned, three miles west of Topeka (Sixth St. road). He is one of the best Clydesdale horses in America. Sire Chieftain; grandsire, the great show stallion Topman. To insure, \$25. H. W. McAFEE.

CATTLE.

ASH GROVE STOCK FARM.—J. F. Glick, Highland, Doniphan county, Kansas, breeds first-class THOROUGHBRED SHORT-HORN CATTLE AND POLAND-CHINA SWINE. Young stock for sale. Inspection and correspondence invited.

WALNUT PARK FARM.—F. Playter, Walnut, Kas., breeds the largest herd of Short-horn Cattle in southern Kansas. Stock for sale. Cor. invited.

JOHNSON & WILLIAMS, Silver Lake, Kas., breeders of Thoroughbred Short-horn Cattle. The herd numbers thirty head, with a Rose of Sharon bull at head.

OAK WOOD HERD, C. S. Eichholtz, Wichita, Kas. Live Stock Auctioneer and breeder of Thoroughbred Short-horn Cattle, Poland-Chinas and Brnz Trkys.

DEXTER SEVERY & SONS, Leland, Ill., breeders of Thoroughbred Holstein Cattle. Choice stock for sale, both sexes. Correspondence invited.

CEDAR-CROFT HERD SHORT-HORNS.—E. C. Evans & Son, Prop'r, Sedalia, Mo. Youngsters of the most popular families for sale. Also Bronze Turkeys and Plymouth Rock Chickens. Write or call at office of Dr. E. C. Evans, in city.

T. M. MARCY & SON, Wakarusa, Shawnee county, Kas. We now have 116 head of recorded Short-horns. If you wish a young bull or Short-horn cows do yourself the justice to come and see or write us.

BROAD LAWN HERD of Short-horns. Robt. Patton, Hamilton, Kas., Prop'r. Herd numbers about 120 head. Bulls and Cows for sale.

ALTAHAM HERD, W. H. H. Cundiff, Pleasant Hill, Cass Co., Mo., has fashionable-bred Short-horn Bulls for sale. Among them are two Rose of Sharon and one aged show bull. None but the very best allowed to go out from this herd; all others are castrated.

U. P. BENNETT & SON, Lee's Summit, Mo., breeders of THOROUGHBRED SHORT-HORN CATTLE, Cotswold sheep, Berkshire swine, Wyandotte turkeys and Plymouth Rock chickens. Inspection invited.

POWELL BROS., Lee's Summit (Jackson Co.), Mo., breeders of Short-horn Cattle and pure-bred Poland-China Swine and Plymouth Rock Fowls. Stock for sale. Mention this paper.

W. A. POWELL, Lee's Summit, Mo., breeder of the Poverty Hill Herd of Thoroughbred Short-horn Cattle. Inspection and correspondence solicited.

J. W. LILLARD, Neosho, Mo., Breeder of THOROUGHBRED SHORT-HORNS. A Young Mary bull at head of herd. Young stock for sale. Satisfaction guaranteed.

CATTLE AND SWINE.

COTTONWOOD FARM HERDS, J. J. Malls, Manhattan, Kansas, Breeder and shipper of SHORT-HORN CATTLE and BERKSHIRE SWINE. Orders promptly filled by express. The farm is four miles east of Manhattan, north of the Kansas river.

D. B. A. M. EIDSON, Reading, Lyon Co., Kas., makes a specialty of the breeding and sale of thoroughbred and high-grade Short-horn Cattle. Hambletonian Horses of the most fashionable strains, pure-bred Jersey Red Hogs and Jersey Cattle.

SHORT-HORN PARK, containing 2,000 acres, for sale. Also, Short-horn Cattle and Registered Poland-China. Young stock for sale. Address B. F. Dole, Canton, McPherson Co., Kas.

GLENVIEW FARM, G. A. Laude, Humboldt, Kas., breeds Short-horn Cattle and Poland-China Swine. Also Saddle and Harness Horses.

I HAVE 10 young pure-bred Short-horn Bulls, 10 Cows and Heifers, a few choice Poland-China Boars and Sows—the latter bred for sale. Send for new catalogue. H. B. Scott, Sedalia, Mo.

H. S. FILLMORE, Green Lawn Fruit and Stock Place, Lawrence, Kas., breeder of Jersey Cattle, Poland-China and Berkshire Swine. Stock for sale.

WOODSIDE STOCK FARM.—F. M. Neal, Pleasant Run, Potawatomi Co., Kas., breeder of Thoroughbred Short-horn Cattle, Cotswold Sheep, Poland-China and Berkshire Hogs. Young stock for sale.

SWINE.

CATALPA GROVE STOCK FARM. J. W. Arnold, Louisville, Kansas, breeds Recorded

POLAND-CHINA SWINE AND MERINO SHEEP. The swine are of the Give or Take, Perfection, and other fashionable strains. Stock for sale in pairs not related. Invite correspondence or inspection of stock.

A. J. CARPENTER, Milford, Kansas, breeder of Thoroughbred Poland-China Swine. Stock for sale. Inspection and correspondence invited.

OUR ILLUSTRATED JOURNAL.—A full and complete history of the Poland-China Hog, sent free on application. Stock of all ages and conditions for sale. Address J. & C. STRAWN, Newark, Ohio.

F. M. BOOKS & CO., Burlingame, Kas., importer and breeders of Recorded Poland-China and Large Berkshire Swine. Breeding stock the choicest from the best herds in seven States. I have special rates by express. Write.

J. A. DAVIDSON, Richmond, Franklin Co., Kas., breeder of POLAND-CHINA Swine. 170 head in herd. Recorded in A. and O. P.-C. R. Call or write.

ROBERT COOK, Iola, Allen county, Kansas, importer and breeder of Poland-China Hogs. Pigs warranted first-class. Write.

SWINE.

V. B. HOWEY, Box 103, Topeka, Kas., breeder and shipper of Thoroughbred Poland-China Swine. Recorded in Ohio Poland-China Record. My breeders are second to none. Write for what you want.

W. M. PLUMMER, Osage City, Kansas, breeder of Recorded Poland-China Swine. Also Light Brahma Chickens. Stock for sale at reasonable rates.

F. W. ARNOLD & CO., Osborne, Kas., breeders of Poland-China Swine. Stock recorded in O. P.-C. R. Combination #989 (first premium at State fair of 1884) at head of herd. Stock for sale. Satisfaction guaranteed.

POLAND-CHINA SWINE.—Of the most noted strains. My breeders are from herds that can show more prize-winners than any other in the United States. Liberal reduction to persons ordering in next thirty days. Photograph of a few breeders free. Address me before buying elsewhere. Special rates by express. [Mention this paper.] H. H. WALLS, Bedford, Indiana.

POULTRY.

400 W. F. B. SPANISH and P. Rock chicks for sale, from my prize-winners. General agent for "Poultry Monthly." Agents wanted. Prepared shell, \$3.00 per 100 lbs. Geo. H. Hughes, North Topeka, Kas.

FAIRVIEW POULTRY YARDS.—Has for sale 2000 Chickens each of P. Rocks, Houdans, L. Brahmas, Wyandottes, B. Leghorns and Langshans. Rock box 764. Mrs. Geo. Taggart, Parsons, Kas.

ONE DOLLAR per thirteen for eggs from choice Plymouth Rock fowls or Pekin ducks. Plymouth Rock cockerels \$2 each. Mark S. Salisbury, Box 361, Kansas City, Mo.

NEOSHO VALLEY POULTRY YARDS.—Established, 1870. Pure-bred Light Brahmas, Partridge Cochins, Plymouth Rocks. Eggs in season. Stock in fall. Write for prices. Wm. Hammond, box 190, Emporia, Kas.

N. R. NYE, breeder of the leading varieties of Choice Poultry, Leavenworth, Kansas. Send for circular.

EGGS FOR SALE.—From Light Brahmas, Buff Cochin and Plymouth Rocks, 13 for \$1.75; 25 for \$3. Also Pekin Duck eggs, 11 for \$1.75; 22 for \$3. Also Emden Geese eggs, 4 for \$2; and Bronze Turkey eggs, 12 for \$3. W. J. McColm, Waveland, Shawnee Co., Kas.

J. M. ANDERSON, Salina, Kas. Bronze Turkeys, Plymouth Rocks, Pekin Ducks, Shepherd Puppies and Jersey Cows and Heifers. Write for prices.

PLYMOUTH ROCK CHICKENS. Eggs for hatching, from the finest breeding pens in the United States. Fowls have taken first premium wherever shown. Eggs safely packed for shipment. Setting of 13, \$2.50. Fowls for sale in the fall. Address E. W. Stevens, Sedalia, Missouri.

MRS. T. W. BAGSDALE, Paris, Mo., breeder of Light Brahma Chickens and Bronze Turkeys—the best. Eggs, \$2.50 for 13.

MISCELLANEOUS.

OSWEGO TILE FACTORY.—H. C. Draper, Prop'r., Oswego, Kas. Best shipping facilities over Missouri Pacific and Frisco railroads. Write for prices.

S. A. SAWYER, Manhattan, Kas., Live Stock Auctioneer. Sales made in all the States and Canada. Good references. Have full sets of Herd Books. Compiles catalogues.

REPUBLICAN VALLEY STOCK FARM.—Henry B. Avery, Wakefield, Clay Co., Kas., breeder of Percheron horses. Stock for sale. Send for catalogue.

MERINO SHEEP. Berkshire hogs and fifteen varieties of high-class poultry of the best strains. Bucks a specialty. Harry McCullough, Fayette, Mo.

PROSPECT FARM.—H. W. McAfee, Topeka, Kas. For sale cheap 15 registered Short-horn bulls, 1 to 3 years old. Also, Clydesdale horses.

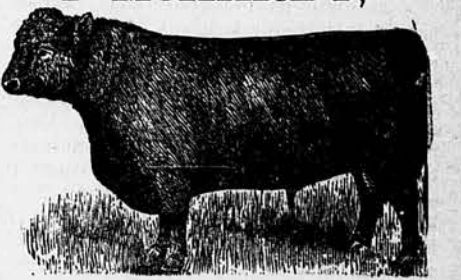
Goodwin Park Stock Farm, BELOIT, : : : KANSAS.

ABERDEEN-ANGUS CATTLE!

A few tip-top YOUNG BULLS, at low figures and on easy terms. We offer a few CHOICE FEMALES from our show herd, for sale for the first time. Two well-bred SHORT-HORN COWS at a bargain. Two standard-bred.

HAMBLETONIAN STALLIONS, at bed-rock figures. There are few better-bred Trotters in Kansas. GRADE ANGUS and GALLOWAY cows at farmers' prices. Send for Catalogue. J. S. & W. GOODWIN, JR.

F. McHARDY,



Breeder and Importer of **GALLOWAY CATTLE,** Emporia, : : : Kansas.

My herd numbers over one hundred head, consisting of the best and purest strains of blood. It is composed of animals bred by the most noted breeders of Scotland—the Duke of Buccleuch, the Earl of Galloway, Thomas Bigger & Sons, Cunningham, Graham, and others. I have thirty head of young bulls, fit for service, sired by the noted bull MacLeod of Drumlanrig; also thirty high-grade females of different ages that I will sell reasonably. Time given to suit purchaser, if desired.

Organization Among Farmers.

Kansas Farmer:

I am glad to note that the FARMER is trying to waken an interest in the question of organization among the farmers for business and political purposes. I have waited to see something said on the subject by those of your readers who are competent to discuss it. I have hesitated to say anything myself, at least till others have spoken. I will wait no longer, but will now say I appreciate the importance of the subject and hope the FARMER will keep up agitation till something has been done.

It seems strange that the farmers, who have the very life of the nation in their hands, should be the most helpless of all industrial classes. Let the farmers but look up the supply of breadstuff for a few months, as it is quite possible for them to do, and they have the rest of the world at their doors begging for food. If the farmer has this power, and he unquestionably has, why must he let others fix the price of his products as well as their own? Were it as easy for farmers to organize as for most other classes, such an organization would probably now exist. Such an organization is quite possible, as I think the KANSAS FARMER has pointed out, and if more difficult to accomplish than others which have prospered being, it should be borne in mind that its need is greater, as also all the results to be attained more important. It is not for me to suggest a plan for organization, but I want to say that while the farmer cannot estimate the cost of a farm product as easily as the manufacturer can that of the factory, he can do it, and he should get a fair price for that product which will pay cost with a profit. Why should not the farmer fix the price of his products as other producers do of theirs? No one will deny the fairness of this proposition, and the question will then be asked, how is it to be done?

First. Organize. Then estimate the cost of a particular crop; add to that cost a reasonable profit, and that is the market price below which it is not to be sold. All produce which individuals cannot hold, will be held by the organization. Is anything easier? If the farmers organized cannot do this, I am certainly way off the track. The price of farm produce will not, of course, be entirely unaffected by the law of supply and demand; but from the study I have given the subject, no producer will be less affected. Less improvements may be made one year or series of years than another, thereby affecting the price of building material to the injury of the produce of the same; somewhat less of clothing may be worn too, but the amount which will be consumed one year of food must be approximately the standard for other years. More will be produced some years than others; but a short crop means maximum cost of production and an abundant crop minimum cost of production; so that unless the surplus is very great a paying price may be realized in each case. If no losses were met we should be more fortunate than any other producer; we must expect some.

Let the farmers organize as they should and may, and I think I can see quite a change in the programme of making sales of farm produce. The farmer now goes to market and succeeds after humiliating experience in inducing the autocrat of the elevator or stock yards to take his grain or stock. Organize and at least important sales will be made on the farm where the farmer may be a little autocratic.

It is quite as important that farmers should organize for political as well as for business purposes. Farmers alone are obliged to take such crumbs of legislation as drop from the table, while if others do not get a square meal there is a penalty. How many farmers refuse support to a candidate because he works for interests directly opposed to theirs while at the capitol? I know of few. I hope the readers of the KANSAS FARMER will take up the discussion and that something may be speedily done. Farmers of Kansas, let us organize.

M. J. WELLS.

Rooks Centre, Rooks county, Kas.

The Ivers & Pond Piano Co., whose advertisement has appeared for some time in our columns, furnishes one of the best pianos for the money that can be found anywhere. The piano from their factory, which was ordered for use in Chaddock college, Quincy,

Ill., last year, has given universal satisfaction. It has been thoroughly tested in both parlor and concert hall and proves to be a superior instrument in every respect. Any one who wishes to obtain a piano that is really worth one hundred cents on the dollar, may safely order from the Ivers & Pond Piano Co., No. 597 Washington street, Boston, Mass.

Fair Trade in Foreign Commerce.

The KANSAS FARMER has said a good deal about the operation of tariff laws in the interest of farmers in particular and of the people in general, and we have tried to present the subject wholly free from technicalities and ambiguity. It is unquestionably of great interest to the American people. We have just read a letter in the *Scottish Agricultural Gazette*, published at Edinburgh, which presents the subject very plainly from the standpoint of a Scotch farmer. We copy a part of the letter, as follows:

There are two gentlemen, brothers. The one is a manufacturer in the Midlands, producing an article which is largely consumed by the 4,000,000 of persons who live in London and its suburbs, and that article, when made, is sent to a depot in London, and from there distributed by a staff of salesmen and others employed for that purpose. The other brother is a London merchant who imports from France the very same article made in Normandy by a French manufacturer and French workmen, and this article when it arrives in London is put into a depot, and from there is also distributed by a staff of salesmen and others employed for that purpose. It is plain, then, that these two articles—the one English, the other French—are in the very same position the moment they reach their respective London depots. Now, suppose this manufacturer from the Midlands, findings his trade not very profitable owing to the strong opposition of his brother, comes to the queen's government, and says, "I have a large factory in the Midlands, in which I employ a large number of persons, who live in houses built for them close by their work, and my workmen's houses and my factory are heavily taxed by what are called local rates, for the expenses of what is called local government. And I and my workmen are also heavily taxed for the expenses of what is called the imperial government, by taxes laid on to our tobacco, spirits, beer, tea, coffee, etc. And, as my workpeople must be paid wages not only sufficient to enable them to live, but also enough to pay these local and imperial taxes, it is quite evident that the cost of the article we produce is increased by these taxes quite as much as if you laid an *Excise duty* upon it at my factory gate for the purpose of paying these local and imperial government expenses. Now, it is the fundamental principle of an *Excise duty* that every person producing or selling the article so taxed shall pay precisely the same duty upon it, and the government are bound, in justice to the honest trader, to put down with a strong hand all smuggling, and to impose a customs duty of precisely the same burden on any similar article imported from abroad to be sold in competition with the taxed article produced at home; for if they did not do so the honest manufacturers who pay the duty on the article they manufacture would be quite unable to sell their article against a smuggled article which had not paid duty, or against a similar foreign article imported here duty free. Now, this being an indisputable position, I ask you plainly, why is my brother allowed to import from France, duty free, the very same article which I produce, and which article, in my case, is so heavily taxed by your indirect taxes on our factory, our houses, our tobacco, our spirits, our beer, our tea, and similar things? The article which my brother brings in and sells against mine was made by a French manufacturer and French workmen, none of whom have contributed one penny toward the expenses of our local and imperial government, both of which have made heavy charges on me and my workmen, and I maintain it is an act of gross injustice to me and my workmen that the French manufacturer and the French workmen have paid their own local and imperial taxation in France, because I and my workmen are forbidden to send our article into France without paying a heavy import duty when it enters a French port. If we were free to send our article into France duty free, as you

allow the Frenchmen to send their article into England duty free, it might place both of us on a fair equality, and it would possibly pay us to sell in France at a price so low that the Frenchmen would be beaten out of their own market, because the more we make the less will the cost of manufacture be, and therefore my workmen and I would probably make a struggle to secure the French market; but the French government takes right good care we shall have no such chance, for they impose a heavy duty on our article if sent into France. I maintain, then, that it is an act of great injustice to me and my workmen to admit into England, duty free, an article made in France, unless France in return allows our article to enter that country also duty free; and I further maintain that, by so doing, you are allowing my brother to sell, free of taxation, the very same article as that on which you charge me and my workmen a very heavy taxation, equivalent to an excise duty!"

Gossip About Stock.

McHatton & Son, Mexico, Mo., advertise Berkshires at one-third the usual prices. See advertisement.

The receipts of live stock at the Kansas City Stock Yards last week were 450 horses and mules, 3,855 sheep, 7,574 cattle and 54,316 hogs.

The *Rural World* says that the Texas wool growers have learned how to induce 8,000,000 sheep in Western Texas to furnish their 40,000,000 pounds of wool against 24,000,000 pounds three years ago.

The value of the farms, live stock and farm implements in the United States is estimated at \$12,104,001,538, divided as follows: Land, \$10,197,096,776; live stock, \$1,500,384,707; farm implements, \$406,520,055.

Greenwood County Republican: Notwithstanding the hot weather 26 car loads of cattle were shipped from Eureka Monday. The parties shipping were Hunter & Verner, Chamberlain, Birkett, Ladd, Erickson and Hawthorn. Twenty-one car loads went over the Santa Fe and six over the Ft. Scott.

Lawrence Herald: Mr. I. N. VanHoesen has shipped to Topeka eight head of beautiful Jersey cows and heifers, to J. K. Hudson, of the Topeka Capital, who paid \$1,000 cash for them. The Jerseys are all finely bred animals, and were raised by Mr. VanHoesen. He raises nothing but the very best, and this little herd was a choice lot.

Nemaha County Republican: This week L. S. White of this city purchased of Harter & Co., the celebrated horse Gray Dan, paying \$3,000 for him. He will at once be placed in the hands of trainer Cox and will be on hand at the Southern District Fair. Gray Dan is six years old and has a record of 2:37. Two or three years ago Geo. Head owned Gray Dan and sold him for \$150. He now wishes he hadn't sold him.

The President has called a special meeting of the Cabinet to consider the petition of cattle owners asking him to modify his recent proclamation. It is not probable that anything of the kind will be done, but as the cattle people are strongly backed by influential public men the President may make up his mind that they are entitled to a hearing and further consideration of the matter. The records show that last year the cattlemen paid to the Indians over \$200,000 for grazing lands.

The Belleville Telescope: Speaking of a big average in the weight of hogs Mr. C. H. Pettyjohn, of Grant township, "takes the cake." He recently shipped two car loads of hogs, of his own raising, to Kansas City, one car load of which averaged 397 pounds each, without a dock, and the other car averaged 358 pounds, with some docks. These are two of the best car loads of hogs ever shipped into Kansas City, the first one being mentioned by the Kansas City papers as the best shipped in this year.

That young and enterprising breeder of Short-horns and Poland China swine, G. A. Laude, Humboldt, Kas., reports a number of sales at satisfactory prices, and says: "Woodson county is rapidly coming to the front as a Short-horn county. There being to my knowledge five new herds started in the last twelve months. My stock is doing very well. The flies are unusually bad. I had two milch cows in a pasture that were confined to pond water, and after watering

them from the well the quantity of milk is nearly doubled. Pond water is not fit for stock to drink.

Russell Live-Stock Journal: The assurance of a large crop of corn has stimulated some inquiry for hogs to feed. Two farmers in this county are wanting to contract for 200 head of feeders each. The same week says the Sedan Graphic: "This county is overstocked with hogs, and in consequence of poor prospects for a big corn crop, a man can get a porker by the mere asking for it. Last year a pig weighing fifty or sixty pounds would readily sell for from five to seven dollars." What an opportunity for a fine combination between Russell and Chatauqua counties.

It will be of interest to farmers who wish to improve their hogs to consult Messrs. Truesdell & Perdue, of Lyons, Rice county, this State. These gentlemen have at considerable expense succeeded in establishing a herd of Poland China swine that are a credit to Kansas. They deserve generous patronage for their enterprise. They write the FARMER as follows: "We have been in the business since 1880 and have fifty breeding sows, all matured. We have purchased our breeders regardless of cost and think our herd is hard to beat. All our breeders are recorded in the American Poland China Record. We now have 100 choice show pigs for sale and a few sows already bred."

Mr. E. Bennett, of Topeka, returned from Montreal, Canada, last week with forty-one very select thoroughbred Clydesdale horses, imported from Scotland. He has just received word from his son, E. R. Bennett, who has just arrived in New York with a lot of Percheron-Norman horses, which will arrive in Topeka soon. This importation of pure bred draft horses makes one of the largest now owned in the State. The *North British Agriculturist* says: "This is without doubt the largest sale of Clydesdale which has ever taken place from one stud to a single purchaser, and it shows, by the very best evidence, that the demand in the United States of America for horses of the select Clydesdale type is by no means on the wane. This is only the second visit paid to Scotland by this enterprising American firm, and it augurs well for their knowledge of horses, etc."

The Kansas auctioneer, Col. S. A. Sawyer, assisted by W. R. Geis, made a notable sale of farm stock for the Carlin Bros., of Saline county, last week, that speaks volumes for Kansas live stock interests. A big dinner was given to the 500 men present and stock disposed of as follows: One Short-horn bull \$165, one and two-year-old grade heifers, including one cow and calf, made an average for sixteen head of \$53.25; three registered Poland China boars at \$71 each, and ten sows bred averaged \$40.20, one Poland China sow with eight pigs sold for \$100, and seven unregistered sows without pigs averaged \$29.78; two three-year-old stallions sold for \$810 and \$850, grade mares with sucking colts sold from \$160 to \$500, average of \$307; also one mare at \$300, fillies at \$176, \$125 and \$155 and two geldings at \$170. The total amount of this remarkable auction sale of farmers stock was \$7,421.35.

The greatest Short-horn sale made in this country this season was the Robert Miller closing out sale, at West Liberty, Iowa. Col. J. W. Judy & Son did the auctioneering successfully. The sale was attended by representative breeders from several States. The weather was melting hot, the thermometer indicating 104 degrees. Ninety-five Short-horns, separate sales, sold for the total amount of \$25,555 an average of \$269. Ten bulls averaged \$285, and 85 females, \$267. But few calves were sold with their dams. Six pure A. Renick Rose of Sharon females sold for \$3,135, an average of \$522.50. The great attraction of the sale, however, was the offering of a number of Cruickshank Short-horns, sixteen females sold at prices ranging from \$300 to \$1,065, making an average of \$583.75, and four Cruickshank bulls sold for \$1,385, an average of \$346.25. The Cruickshanks sold to breeders in Minnesota, Nebraska, Missouri, Illinois and Kansas. Col. Harris, of Linwood, Kansas, purchased the 16-months Cruickshank heifer, Princess of Aberdeen, for \$775.

About Listers.

Here is part of a letter written by Frank Wilkinson to an Eastern paper. If he over-colored anything it is in the interest of the lister. His description is plain, so that all may understand the make and operation of the machine. He has tried the lister and says that it saves labor, and its work produces better results than he has obtained by other methods.

The uplands lying in the semi-arid belt have never been considered good corn lands, excepting by dishonest loan agents who invest (for 10 per cent. commission) the money owned by credulous Eastern men in Western farm mortgages.

A few years ago a listing plow was invented, by whom I was unable to learn. This plow, with the improvements added by the farmers, or suggested by them, is now perfected and in use on the best managed of the corn farms of the semi-arid belt. The perfected plow is called by the farmer a lister. It has two mould boards, each twelve inches wide, springing from the opposite sides or a heavy shin. Attached to the shin, and running behind it in the double furrow thrown by the lister, is a small double mould board sub-soil plough. To this is attached a corn planter, whose mechanism admits of its being set to drop a kernel of corn at any required interval. The corn is fed through a spout that discharges directly behind the subsoil plough, and to the full depth it loosens the soil. The expectation, which practical working in the field proves to fulfill, which was the loose earth thrown up by the subsoil plough would roll back and cover the seed corn.

How does the lister work? The trash and litter that cumbers the ground to be planted to corn, generally an old corn field, is raked into windrows by heavy, revolving corn-stalk rakes attached to farm wagons. When the wind is in the right direction the windrows are burnt. Four powerful horses are hitched to the lister. The reservoir of the corn planter is filled with seed corn. The driver mounts. The heavy plough is thrown clear to the ground by a lever that is within easy reach of the driver as he sits in his seat, and the team is driven to the field. There the lister is set to plough a furrow eight inches deep. The subsoil plow is set to plough three inches deeper. The corn planter is adjusted to drop a kernel of corn at the desired intervals, and its mechanism is connected to that of the heavy wheels the lister is mounted upon. The point of the lister is inserted into the ground precisely between the rows of corn-stubble of the previous year's growth. The team is started. They strain heavily as the lister takes ground, and then settle down to a steady, sweat-starting pull. The black earth turns in deep furrows from both sides of the plough, cutting a trench which, theoretically, shall be two feet wide and eight inches deep, and further trenched by the subsoil plough; but really the trench is in the shape of a V, about sixteen inches deep. The seed corn lies two inches deeper. The furrow which has been thrown out covers the unploughed soil for a foot on each side of the trench. The far side of the field reached, the lister is thrown out of the ground by another lever, the team turned, and the lister set between the next adjacent rows of corn stubble. This operation, continually repeated until the field is ploughed, ridges the field as though for celery. By this system of ploughing but one-half of the soil is annually ploughed. But that is ploughed to a depth of from ten to twelve inches. One man and four horses are expected to plow and plant eight acres per day. The greater portion of the rain that may fall runs into the bottom of the trench where the seed corn lies, and where it is needed. As soon as the corn plants are above the ground, and the weeds have begun to grow, the two-horse corn cultivators are started. The horses are made to walk on the top of the ridges and the earth is thrown into the trench. When the lister was first introduced, the farmers found that during the first cultivation they destroyed a large number of corn plants by covering them with earth. This threatened to be a fatal objection to the use of the lister, as no Western corn raiser can afford to have his workmen fool away their time during the rush of corn cultivation in pawing the earth to uncover buried corn plants.

Last spring John Crumrine, a West Vir-

ginian, stood with hands thrust in his pockets watching the exasperating, oath-provocative work of a cultivator in a listed corn field. He stopped the team and said to the heated, swearing driver:

"Go tell your boss to give you two eight-inch boards, three feet long, with a hammer and some nails, and a bit of a rope. You bring the things here and I'll fix you so that you will never again have to dismount from your cultivator to uncover buried corn."

Doubtfully, hesitatingly the driver elevated the shovels of his cultivator and drove home. He brought back the materials Crumrine sent him for. The genius from the highlands of West Virginia nailed the pieces of board together as a trough without contents, with restraining end pieces. He attached the rope to one end of it, and inverted it in the trench; then he tied the rope to the axle of the cultivator, and adjusted its length so that the trough should be opposite the cultivator shovels. The cultivator was put in motion. The inverted trough passed over the small corn plants. The earth that had previously covered the plants fell on the sloping sides of the trough and rolled back to settle gently around the tender plants as the trough followed after the cultivator. To John Crumrine belongs the credit of perfecting the lister and insuring its permanence in Western agriculture by improving the corn cultivator. Of course Crumrine did not patent his improvement. If he had, he would have been a rich man in a few years. As it is he will toil away his life on a mean piece of upland.

When the corn is ready for the second cultivation the trough is laid aside. The shovels are set to throw the earth to the corn plants, now strong and two feet tall, and they are also set to take the ground deeply. This cultivation throws almost all the earth into the trench that the lister threw out. The weeds are deeply buried. The surface of the field is level. The main roots of the corn plants are at least ten inches below the surface of the ground, and how much further they have sunk into the rich, damp, underlying ground no one knows. But now no ordinary drought affects the plants. The hot southwest winds can blow, the mercury can rise until the integrity of the thermometer is threatened, the sun can course across a cloudless sky for weeks, but the corn leaves do not roll. The plants thrive, and if a soaking rain falls between the middle of June and the middle of July the listed corn will make a full crop.

I think the lister is the most important agricultural tool that has been introduced into the semi-arid belt. It has placed all the lands that lie between the bottoms and the uplands in the class of corn lands; and its use will enable the farmers who own rich uplands to raise fair crops of corn, and in addition it will surely push the line of productive corn lands 100 miles further West and bring millions of acres of land that has hitherto been unfit for remunerative corn culture under the silk and tassel of the most noble grain that grows.

Of course, the lister is not intended for use in regions where there is, year after year, sufficient rainfall to insure crops. Its use in the semi-arid belt has almost eliminated the doubtful factor in agriculture in that region, and the fact that its use insures the corn crop has caused corn land to advance in value by leaps. This tool has, in my opinion, made semi-arid belt corn-land mortgages about as good security as Government bonds.

According to information given to the *Christian Union* by a large number of clergymen, not more than five per cent. of American artisans in cities habitually attend religious services of any kind. All but two of the letters say that the attendance is diminishing, and all but one that the neglect is not from unbelief in Christianity. The cause of non-church attendance, as given by these experts, may be summed as follows: The men have to work all the week, and they recreate on Sunday. They cannot dress as well as those with whom they must associate, and therefore stay away. They think secret societies are as good as the church. They are unable to pay for the privileges because of the high prices of things which they must have. The large salaries of the ministers disgust some. Some feel that the minister is a hireling, and therefore seeks to upbraid his church as a doctor seeks to increase his salary. Some employers of labor are so bad in their treatment of their employees that the men do not want to go where they shall meet those in whose real Christianity they have so little faith. All the letters indicate that especially in the large places artisans feel that they are not welcome in churches frequented by the wealthier classes.

BARTHOLDI'S BIG GIRL.

The Prejudices Met By a Canvasser for the Pedestal Fund.

The Bartholdi pedestal fund is nearly complete. The statue has arrived and soon New York harbor will be graced by the most magnificent colossal statue the world has ever seen.

"Liberty Enlightening the World! What a priceless blessing personal liberty is. It is the shrine at which people, ground under the heel of tyranny in the older worlds, worship with a fervency that Americans can scarcely realize; it is a principle for which Nihilists willingly die the death of dogs; and fit and proper it is that at the very entrance of the Bay of New York this emblematic statue should flash a welcome to the world.

The press is entitled to the credit of this achievement. Mr. Philip Beers, who has been making a circuit of the country on behalf of the Pedestal fund, says that the fund will certainly be raised, as the *World* does not know the word *fail*.

Mr. Beers says that he has found the most pronounced generosity among those of foreign birth. They seem more appreciative of liberty than do our native-born. Moreover, among some a strange prejudice seems to exist.

"Prejudice? In what particular?"

"I have ever found that however meritorious a thing may be, thousands of people will inevitably be prejudiced against it. I have spent most of my life on the road and I know the American people 'like a book.' In 1879 a personal misfortune illustrated this prevailing prejudice. I was very ill, had suffered for several years with headache, fickle appetite, dreadful backache, cramps, hot head, cold hands and feet and a general break-down of the system. I dragged myself back to New York, seeking the best professional treatment. It so happens that among my relatives is a distinguished physician, who upbraided me roundly for preaching so much about my own case. Finally, with some spirit, I remarked to him:

"Sir, you know that much of your professional wisdom is pretense. You are controlled by prejudice. You cannot reach a case like mine and you know it, can you?"

"I had him; and he finally conceded the point, for it was bright's disease of the kidneys which had prostrated me, and the schoolmen admit they cannot cure it. Having cured myself, however, in 1879, and not having seen a sick day since, my relative finally admitted that Warner's safe cure, which accomplished this result, was really a wonderful preparation. Had President Rutter, of the Central-Hudson used it, I am certain he would be alive to-day, for he could not have been in a worse condition than I was."

"I have found similar prejudices among all classes concerning even so laudable a scheme as the pedestal fund."

Mr. Beers' experience and the recent death of President Rutter, of the Central-Hudson railroad, of an extreme kidney disorder, proves that the physicians have no real power over such diseases, and indicates the only course one should pursue if, as the late Dr. Willard Parker says, headache, sickness of the stomach, dropsical swellings, backache, dark and offensive fluids, prematurely impaired eye-sight, loss of strength and energy occur, for they unmistakably indicate a fatal result, if not promptly arrested.

"Yes, sir-ee, every cent needed for the pedestal will be raised. Of course it will be a great triumph for the *World*, but would it not have been an eternal disgrace had our people failed to provide for this pedestal?"

Plowing in Dry Weather.

On this subject an Eastern paper makes some good suggestions. While it is very desirable to have a moist seed bed for winter wheat, it says, the fact makes it necessary to plow early and often when the soil is terribly dry and hard. Even stubble ground, after a few days exposure to the burning sun of July and August, hardens so that it is very trying on teams, plowmen and plow points. An excellent way to keep the soil mellow is to go over it with a spring tooth drag or some other implement which will loosen a large surface quickly. With a good team, ten to twelve acres of stubble may be dragged over in a day. This will only break the surface, but sufficiently to set scattered grain and weed seed to growing, and to hold the water that falls instead of having it run off over a hard surface.

We always get rain enough between grain harvest and seeding to make a moist seed bed if none is wasted. Harrowing the surface prevents loss of moisture, as even a small amount of loose earth retards evaporation. The plow should follow with as little delay as possible, and it will be done enough easier to make the previous harrowing a good investment. It is no small gain to have scattered oats and barley sprouted, so that they can be destroyed by subsequent cultivation before seeding time. By doing this the grain acts as a fertilizer to the wheat instead of being a pestilent weed, robbing the wheat crop of needed moisture and fertility.

When the Hessian fly is prevalent, wheat should never follow the same crop, or the old stubble should be plowed so early that the scattered grain will germinate and be replowed before seeding time. In this way the eggs of the fly, which are always laid as soon as the plant appears above ground in warm weather, will be plowed under and

destroyed. A still better way to manage would be to fall plow wheat land infested with Hessian fly, and sow with oats or barley the following spring.

Kansas Fairs.

The following counties have reported dates for holding their annual fairs, giving name of Secretary and the place of holding the fair:

The Western National Fair (Bismarck), Lawrence, September 7-12; Secretary, R. W. Cunningham.
Anderson County Fair Association, Garnett, August 25-28; Secretary, M. L. White.
Bourbon County Fair Association, Fort Scott, October 6-9; Secretary, E. W. Hulbert.
Brown County Exposition Association, Hiawatha, September 8-11; Secretary, C. H. Lawrence.
Butler County Exposition Association, El Dorado, September 29 to October 2; Secretary, H. W. Beck.
Chase County Agricultural Society, Cottonwood Falls, September 22-25; Secretary, E. A. Kinne.
Cherokee County Agricultural and Stock Association, Columbus, September 8-11; Secretary, S. O. McDowell.
Clay County Agricultural Society, Clay Center, September 15-18; Secretary, Wirt W. Walton.
Coffee County Fair Association, Burlington, September 15-18; Secretary, J. E. Woodford.
Cowley County Fair and Driving Park Association, Winfield, September 21-25; Secretary, D. L. Kretzinger.
Dickinson County Agricultural and Industrial Association, Abilene, September 23-26; Secretary, H. H. Floyd.
Doniphan County Agricultural, Horticultural and Mechanical Association, Troy, September 15-18; Secretary, Thos. Henshall.
Elk County Agricultural Society, Howard, September 15-18; Secretary, J. V. Bear.
Western Kansas Agricultural Fair Association, Hays City, September 22-25; Secretary, P. W. Smith.
Franklin County Agricultural Society, Ottawa, September 28 to October 2; Secretary, John B. Shaffer.
Harper County Agricultural and Mechanical Association, Anthony, September 1-5; Secretary, J. W. Clendenen.
Harvey County Agricultural Society, Newton, September 22-25; Secretary, A. B. Lemor.
Jefferson County Agricultural and Mechanical Association, Oskaloosa, September 30 to October 2; Secretary, A. J. Buck.
Valley Falls District Fair Association, Valley Falls, September 1-4; Secretary, M. M. Maxwell.
Jewell County Agricultural and Industrial Association, Mankato, September 29 to October 2; Secretary, Geo. A. Bishop.
Johnson County Co-operative Fair Association, September 28-30; Secretary, C. M. T. Huelt.
LaCygne District Fair Association, LaCygne, September 29 to October 2; Secretary, O. D. Harmon.
Marion County Agricultural Society, Peabody, September 1-4; Secretary, L. A. Buck.
Marshall County Fair Association, Marysville, September 22-25; Secretary, C. B. Wilson.
McPherson County Fair Association, McPherson, September 9 to October 2; Secretary, J. B. Darrab.
Miami County Agricultural and Mechanical Association, Paola, October 7-10; Secretary, H. M. McLachlin.
Montgomery County Agricultural Society, Independence, September 16-19; Secretary, B. F. Devore.
Morris County Exposition Company, Council Grove, September 29 to October 2; Secretary, F. A. Moriarty.
Nemeh a Fair Association, Seneca, September 15-18; Secretary, W. E. Wilkinson.
Phillips County Agricultural and Mechanical Association, Phillipsburg, September 16-18; Secretary, J. W. Lowe.
Rice County Agricultural Society, Lyons, October 13-16; Secretary, C. W. Rawlins.
The Blue and Kansas Valley Agricultural Society, Manhattan, August 25-28; Secretary, S. H. Sawyer.
Saline County Agricultural, Horticultural and Mechanical Association, September 29 to October 2; Secretary, C. S. Martin.
Arkansas Valley Agricultural Society, Wichita, October 5-9; Secretary, D. A. Mitchell.
Sumner County Agricultural and Mechanical Association, Wellington, September 8-11; Secretary, D. A. Espy.
Neosho Valley District Fair Association, Neosho Falls, September 21-26; Secretary, O. S. Woodard.
Decatur County Exposition Society, Oberlin, September 23-25; Secretary, T. D. Bebb, Vallonia.
Smith County Agricultural Society, Smith Center, September 23-25; Secretary, F. J. Patee.
Kaw Valley Fair Association, St. Marys, September 22-25; Secretary, A. J. Beak-y.
Osage County Fair Association, Burlingame, September 15-18; Secretary, A. M. Miner.
The Kansas Central Agricultural Society, Junction City, September 30 to October 2; Secretary, Chas. S. Davis.
Rice County Fair, Lyons, October 6-9; Secretary, C. M. Rawlins.
Washington County Fair, Washington, September 29 to October 2; Secretary, C. W. Aldrich.
Kansas Association of Trotting Horse Breeders, Topeka, September 22-25; Secretary, Rufus Bean.
Parsons Fair and Driving Park Association, Parsons, September 15-17.
Caldwell Driving Park and Agricultural Association, Caldwell, August 27-29; Secretary, John W. Nice.
Pawnee County Fair and Stock Association, Larned, September 23-26; Secretary, Geo. A. Sills.
Reno County Fair, Hutchinson, October 13-16.
Ottawa County Fair, Minneapolis, September 8-11; Secretary, W. H. Chappel.
Centralia Fair Association, Centralia, October 6-7.
Frankfort Fair Association, Frankfort, September 29 to October 2.
Linn County Agricultural and Mechanical Association, Mound City, September 21-23; Secretary, E. F. Campbell.
The Kansas City Fat Stock Show, Riverview Park, Kansas City, October 29 to November 5; Secretary, Edward Haren.
First Annual Poultry and Fat Stock Show, Kansas City, December 29, 1885, to January 1, 1886, inclusive; Secretary, Edward Haren.

The Home Circle.

The Shore of Time.

Alone I walked the ocean strand;
A pearly shell was in my hand;
I stooped and wrote upon the sand;
My name—the year and day,
As onward from the spot I passed.
One lingering look behind I cast;
A wave came rolling high and fast,
And washed my lines away!

And so, methought, 'twill shortly be
With every mark on earth from me;
A wave of dark oblivion's sea
Will sweep across the place
Where I have trod the sandy shore
Of time, and been to be no more;
Of me—my day—the name I bore,
Nor leave nor track, nor trace.

And yet, with Him who counts the sands,
And holds the waters in His hands,
I know a lasting record stands
Inscribed against my name,
Of all this mortal part has wrought;
Of all this sinking soul has thought;
And from these fleeting moments caught,
For glory or for shame!

—Hannah F. Gould.

Aye, true it is, that as man grows mature,
Grave thoughts of human woe, and wrong,
and sin

Press heavily upon the heart within—
A sad sore weight 'tis bitter to endure,
But as life, waning, makes the spirit sure
Of all that from God's goodness man may

win,
The aged, hollowed spirit will begin
To find the light of Heaven more bright and

pure.
Then will he see beyond the things of time
The calm and wonder of a loftier way,
His soul uplifted with a faith sublime
Into the vision of a happier day;

Where all men's wrong and trial, borne in
pain,
Become sweet peace, and turn to glorious
gain.
—The Spectator.

Must We Run Our Chances?

(Concluded.)

If ours was an isolated case I should not have the courage to mention it, but I know of many more. A friend of mine, not long since, asserted in that off-hand, high-bred manner, frequently used to dismiss a subject that is quite too insignificant to be dwelt upon, "Well, for my part, I never interfere with my wife's government."

"Does that mean that you never exert any right of control over your children?" I asked.

"That is exactly what he means," said the little mother.

"Well, it wouldn't do for me to do the governing; I haven't wife's patience, and if they did not mind me I should give them an awful whipping,"—as though a whipping would be most disastrous to the healthy discipline of any family.

Not long since I was sitting at the tea-table of a friend whose wife was violently ill. A bright girl of five years persisted in taking a large piece of cake, from which she ate only the frosting.

"Dora," eat that cake!" commanded the father, in a sudden burst of authority.

The baby's eyes flashed, and she clambered out of her high chair with a very amusing amount of dignity, exclaiming, "Papa Foote, that's the very first time you ever spoke to me in that way in your whole life!" and she put a door between her insulted-self, and her astonished father, with a bang.

"Dora, I afterwards asked her, 'do you think it right for a little girl to speak so to her father?'"

"I don't eat cake, I only eat frosting; and my father has no business speaking to me in that way!" was her brave defence, and I had no answer ready.

I have sometimes heard of such instances, but I have yet to have any personal knowledge of a case of ruining by too much home government. Where the girls are self-willed and immodest, and the boys are impudent and dishonest, the home government has been left to the mother, and the greater authority, that could have held the evil under restraint, has been wanting.

I am not sure that the Nineteenth Century aversion to the whip in the household is resulting in the highest good for all its members. Take, for instance, children from families whose love of duty is strong, and whose religious rites are never neglected, where children daily hear themselves prayed at during family devotions; whose peccadilloes are magnified into crimes; who are whined at during family meals, expostulated with after meals, and remon-

strated with between meals of our oft-times most worthy deacons and pastors, and see if the result is as satisfactory as it is in those families where the fathers are more violent and deliberately whip the evil out of existence, wasting no time in praying at it or remonstrating with it.

"Children of many prayers," often reach maturity with characters wanting in uniform stability, because hand in hand with the prayers there was not found that parental law that makes obedience a fixed habit.

"I talk the matter over with my children and appeal to their better judgment, but I never use brute force," is a favorite remark among the parents of to-day. They have never stopped to consider that judgment is not born in a child, and you cannot safely appeal to things that are not created. Conscience is the result of the years, not of the blood, and parents cannot appeal to the one nor arouse the other without resulting in a distress of heart and a goading sense of personal responsibility dangerous to the physical health of a child upon the one hand, and almost surely fatal to the ultimate respect and affection of that child.

Set your son down and give him an "awful talking to" for half an hour, then send him about his days duty; for hours afterwards that child's face will wear one of two expressions, either a look of bitterness, or a premature care-worn expression most painful to behold. I can recall many families where, day after day, the children's hearts are rasped to exasperation, their ears dinged to deafness of affection, if not of the ear; yet for either of those parents to strike a twelve-year-old boy with a rawhide would be brute force, though the blow might not be needed three times a year. Whipping lasts longer than scolding.

Do not correct children for childishness—things that are unpleasant to you, but that the child will surely out-grow. Do not make a child feel that your eyes are always upon it, your thoughts always with it; this destroys a child's originality and makes it either a coward or a sneak. Five blows will establish your authority better than five hundred cross words, and be sure it will leave the child in a better humor.

A three-year-old boy heard a lady say "she never whipped her boy," of the same age "because it did not do him a bit of good." The next time he saw his mother trimming a cherry-tree sprout he cried out, "Mamma 't'wont do a bit of good to whip me," but he hasn't run away since, and the little boy who don't get whipped, because "whipping don't do him any good," has to be hunted up at all hours.

It often chances while the children are wee ones that the father's authority is not required, and that he should not be expected to be in sympathy with the inner-workings of a little tot that had eaten green plums. Thus as the years go by it is easy to fall deeper into the habit of leaving mother to be the disciplinarian of the family.

Perhaps it was your son I passed last evening, again, but this time he was driving a pair of gay ponies and a plentifully powdered young lady was talking to him. He is just stepping from that perilous bridge uniting boyhood to manhood. He has inherited your appetites, your passions, your lack of resolution and inability to say "No" in the right place, the magnitude of not one of which your even-tempered, weak-constituted wife can comprehend; yet you are leaving her to battle with them alone, enemies she knows not of and cannot comprehend. She does not see those sink-holes everywhere. You see them; you know about where their first stumbling will be, for your stumbled there yourself, or saw your companions do it—and they used up the best years of their lives getting away from there. Have you bridged over that spot? If not, take the lines in your own hands and drive them around it. For you may be sure that if your influence has not helped bolt the flood-gates of iniquity in your community, nor your home authority established obedience in your household, your boys, too, "must run their chances."

E. T. W.

The largest diamond in the world is soon to be cut at Amsterdam, where a special workshop is being constructed. The gem is South African, and weighs 475 carats, thus being 135 carats heavier than the "Grand Mogul" belonging to the Shah of Persia, and hitherto the biggest diamond known.

A Letter from Englishwoman.

Perhaps some of the Kansas mothers will appreciate the enclosed lines. It is a long time since I wrote to the FARMER, and I think a great many more of the ladies can say the same, but spring is always a very busy time—garden, chickens, sewing, besides the extra farm work. This year I have been very unsuccessful in raising chickens. I should be very glad if some one would tell me in the FARMER the laws of Kansas concerning wills, bequests, distribution of real estate and property, etc. I think it important that every family should have definite knowledge on these points and that all heads of families should see to leaving their affairs in order, as death will come to all sooner or later, and a little kindly forethought often prevents much trouble to bereaved families.

I was glad to read that article on cheese-making. I wonder if any of the readers of the KANSAS FARMER have ever visited the neat little factory at Keene (a few miles from Dover) where Mr. Rutledge daily turns out some 400 pounds of full cream cheese. Everything is so carefully and cleverly done and withal the good folks are so hospitable that a visit amounts to real pleasure.

That's right, "Job" I like a good patriotic fellow who isn't ashamed of his colors. I admire the good American folks more and more, and am proud of the land of my adoption, but "before all lands in East and West, I love my native lands the best." I'm often amused in the course of conversation at the ludicrous ignorance with regard to English freedom which the so called free folks here display. I noticed the error concerning Mr. Gladstone and thought of mentioning it when I next wrote. I suppose in every civilized country there must be laws—and enforcement of the laws—and I suppose that likewise there are Guiteau's and Parnell's in all such countries who learn sooner or later that they are not free to break those laws. One word for our dear old Queen: There never was a better. Long may she reign to enjoy the respect and affection of millions of subjects on whom the sun never sets. If in the distant future a mighty Australia or thriving New Zealand should launch forth on its own account, it will only be as a child leaving home to become the centre of a new sphere of influence. Oh, no! I'm not afraid of the fall of England just yet. I heartily endorse nearly all the facts Job states, but would not take up the satirical strain he uses, as I am sure were our American cousins better informed on the subject they would be more cautious in their statements.

ENGLISHWOMAN.

A MOTHER'S CARE.

I do not think that I could bear
My daily weight of woman's care
If it were not for this;—
That Jesus always seemeth near,
Unseen, but whispering in my ear
Some tender words of love or cheer,
To fill my soul with bliss.

There are so many trivial cares
That no one knows, and no one shares,
Too small for me to tell;
Things e'en my husband cannot see
In his dear love uplift from me—
Each hour's unwearied perplexity
That mothers know so well.

The failure of some household scheme,
The ending of some pleasant dream,
Deep hidden in my breast;
The weariness of children's noise,
The yearning for that subtle poise
That turneth duties into joys
And giveth inner rest.

These secret things, however small,
Are known to Jesus, each and all,
And this thought brings me peace.
I do not need to say one word;
He knoweth what through my heart has
stirred.
And by a white-clothes my Lord
Makes a thrumming cease,
And then, upon His loving breast
My weary head is laid at rest,
In speechless ecstasy!
Until it seems that in vain
That care, that grief, or mental pain
Should hope to drive me forth again
From such felicity!

Tell Ye or Wife.

If you are in any trouble or quandary, tell your wife—that is if you have one—all about it at once. Ten to one, her invention will solve your difficulty sooner than all your logic. The wit of women has been praised, but her instincts are quicker and keener than her reason. Counsel with your wife or mother, or sisters, and be assured, light will flash out of darkness.

Women are too commonly adjudged as weak in all but womanly affairs. No philo-

sophical student of the sex thus judges them. Their intuitions, or insights, are subtle; and if they cannot see a cat in the meal there is no cat there. In counseling a man to tell his troubles to his wife, we would go farther and advise him to keep none of his affairs secret from her. Many a home has been happily saved, and many a fortune retrieved, by a man's full confidence in his "better half." Woman is far more of a seer and a prophet than man, if she be given a fair chance.

As a general rule, wives confide the minutest of their plans and thoughts to their husbands, having no involvement to screen them. Why not reciprocate, if but for the pleasure of meeting confidence with confidence? We are certain that no man succeeds so well in the world as he who, taking a partner for life, makes her the partner for all his purposes and hopes. What is wrong in his impulses and judgement she will check and set right with her almost universally right instincts. "Helpmeet" was no insignificant title as applied to man's companion. She is helpmeet to him in every darkness, difficulty and sorrow of life. And what she most craves and most deserves is confidence, without which love is never free from shadow.

And the woman who would be man's trusted counselor must take heed to her ways. She must be no gossip, betray sacred confidences and making endless trouble; no grumbler, complaining and finding fault at that which cannot be helped; no petulant complainer, growing angry at trifles, and becoming discouraged at the slightest difficulty. But she must keep her mouth as with a bridle, and guide her affairs with discretion; she must be swift to hear, slow to speak, slow to wrath. Above all, she should live in a very atmosphere of Divine love, and seek the constant guidance of the Holy Ghost, that her counsel may be the very counsel of the Lord, and that she may ever walk in wisdom because she walks with God. In this way her words shall have power; her forming hand shall mold the lives of those around her—she shall be man's helper here, and shall share his joy hereafter.—Exchange.

Suggestions About Brightening the Home.

Most house-mothers not only desire to make the house sweet and clean before the cold weather necessitates closed doors, but to give the house a bright, new appearance. Many a nervous, hard-worked woman has been driven almost to desperation by the sight, year after year, of the same surroundings. A friend of mine, whose means are exceedingly limited, has made charming changes in her house this fall. Sitting-room, dining-room and bed-room look quite new. Her carpets were getting decidedly the worse for wear in both sitting-room and dining-room. They were of the best quality of ingrain and were alike. The worn parts were cut out while the carpets were yet on the floor, then it was beaten as clean as possible, ripped all apart and washed in good soapsuds, with a tablespoon of ox gall put in each water. It was a hot day and the carpet was thoroughly dried before night and smoothly folded. The sitting-room was fifteen feet square, and three widths nine feet long were sewed together without piecing for it. Sixteen and a half yards of light matting at twelve cents per yard, made a border and home-made rugs; these were laid before the doors and under the windows. The dining-room carpet needed considerable piecing, but it was done neatly and the seams laid open and caught down. The large dining-room table always stood in the middle, and the joining was done so skillfully that it was not noticed. White matting, at ten cents per yard, made the border in this room. The sitting-room had a large, old-fashioned cupboard, the lower shelves used for books, while the upper ones held a miscellaneous assortment of things not needed. The doors were taken off and two coats of black varnish were put upon the inside of the door around the panel. It was quite dry in a few hours, and some of the handsome flowered calico, which sells at eight cents per yard was neatly tacked over the panel. A short curtain, gracefully draped hid the upper shelves, while the books on the lower shelves, together with two or three pretty pasteboard plaques, were quite an addition to the attractiveness of the room, while the cost of the whole was less than a dollar. A beautiful wall-decoration consisted of three or four cat-tails and as many stalks of the wild grass, which is so much like pampas grass, except in color. The stalks were some five feet long and were nailed fast to the wall in a slanting position and were apparently held in place by a handsome ribbon. A very pretty banner hung on the dark side of the room and appeared to be painted on satin. The design was cut from cretonne and simply pasted on. The rods were of pine, painted with liquid gold, and this same liquid gold converted a pair of old-fashioned bisque vases into radiant gilt ones, which, when filled with wild grasses and bursting pods of the beautiful wild cotton, wore as pretty as need be. The dining-room had a tall closet not often used and the whole door was covered with fancy cards and pictures neatly tacked on. The dark window shades were drawn up close to the top and over them were hung full curtains of five-cent cheese-cloth, which is so soft and pretty. About six inches from the top and bottom was stitched a handsome strip of the gay-figured calico, and curtain-bands of the same were made up over pasteboard.—Farm and Fireside.

The Young Folks.

My Eyrie.

BY ROBIN WOOD.

My eyrie is high, through an azure sky
Into misty depths I gaze—
And the clouds drift low, and beckon me so,
With feathery, dreamy maze,
That I envy the swallow, and fain would follow
His distant, rapid flight
As he darts to and fro, now through trees below
Then away, and far out of sight.

The tops of tall pines in dark, somber lines
Are waving and tossing beneath;
They waft up to me a faint melody,
And a fresh and fragrant breath;
Far down 'mid the cones I hear the sweet tones
Of the robin as he works away;
And I wonder if he can really be
As happy as seems to-day.

Afar through the trees, tossed about in the breeze,
A glimmer of light may be seen
Where waters are dancing, flitting, and glancing,
A silvery blue white sheen;
And far o'er the lake, where the colors partake
Of blue intermingled with gray,
A sailboat is flying, the seagulls outvying
In speed as she hastens away.

Strange as I wait, in my eyrie so late,
And the day is almost gone,
With the sun's golden crest sinking low in the West,
That I should feel so alone;
With friends all around who with love surround
My life every hour and day,
Yet I know that before lies a fast nearing shore,
And I am drifting away.

Like the clouds that float by in the azure sky,
I am drifting along so fast,
Like the sailboat away I am speeding to-day;
Out of sight I soon shall have passed,
Like the sun dropping low in a golden glow.
May my end be a peaceful one,
With a promise bright of new morning's light.
When for me life's day is done.

HAIL COLUMBIA.

Origin of the Song and Incidents of 1793.

Thousands of men who despised John Adams, who detested the Federalists, who loathed the influence that Great Britain had in Federal affairs, now turned to support the Government with vigor. Their hearts were still warm toward France, but they could not suffer even so old and dear an ally to heap up insult on their native land. Such an outburst of patriotism had never before been seen. It began in Philadelphia, and spread thence as fast as the post-riders could carry the news. Night after night at the theater, pit, boxes and gallery joined in one mighty shout for the "President's March," for "Yankee Doodle," or for the stirring music of "Stony Point," while the airs were being played the wildest excitement prevailed. The audience rose to their feet, stood upon the seats, waved hats and walking-sticks, sang, cheered, and, when the piece was finished, demanded that it should be given over and over again. Then a band of hardy Republicans in some part of the gallery or pit would call for "Ca ira" or the "Marseillaise" hymn, till their cries were drowned in a storm of hisses and groans. Not to be outdone the Republicans bribed the musicians to play no Federal tunes. The first night they refused a storm of indignation was raised in the theater and they gave way. The next night they stood firm and were well pelted for their pains. The Federalists were highly indignant. The theater, said they, more than any other place, bring men of all classes together. The managers should therefore pay some heed to public feeling in the selection of the music. The present is no time to grate the public ear with those Gallic murder shouts, "Ca ira" and the "Marseillaise."

The enthusiastic clamor with which the "President's March" had been called for, and the deafening applause with which it had been greeted, should have taught them this. Is it the purpose of a theater company to please or insult the public? The action of pelting the fiddler and smashing the fiddle is greatly to be condemned. The firm and dignified conduct of leaving the theater and keeping away till the managers solemnly promise that the "President's March" shall be the first tune played in the house, is much preferred.

The theater, the Republicans protested, was a public house, and the manager would do well to keep this in mind. If, however, they were determined to make it the resort of the British faction, then let him look to that faction for support. Every earnest Republican and true patriot would keep away. This, was the rejoinder, is greatly to be wished. Men of sense long for the time when the Jacobins and their murder-shouts shall be driven from every decent resort. Let them desert the theater, and with

the shillings thus saved pay some of their old debts.

While the factions wrangled, the benefit night of a favorite actor drew near. No man knew better than he how to profit by the popular will, and at no time in the whole course of his life had so fine a chance of profiting by the popular will been offered him. Politics ruled the hour. The city was full of excited Federalists who packed the theater night after night for no other purpose than to shout themselves hoarse over the "President's March." He determined to make use of this fact. He would take the march, find some one to write a few patriotic stanzas to suit it, and, on the night of his benefit, sing them to the house. Federalists were consulted, were pleased with the idea, and named Joseph Hopkinson as the man best fitted to write the words. He consented, and in a few hours "Hail Columbia" was produced. The night for the benefit was that of Wednesday, the 25th of April, and the *Gazette* announced that the performance would comprise a comedy called "The Italian Monk," the comic opera of "Rosina," "More Sack," an epilogue on the character of John Falstaff, and "an entirely new song (written by a citizen of Philadelphia), to the tune of 'The President's March,' will be sung by Mr. Fox, accompanied by a full band and a grand chorus:

Firm united let us be,
Rallying round our liberty;
As a band of brothers joined,
Peace and safety we shall find."

Long before the curtain rose the house was too small to hold the thousands who clamored to be let in. Those who got in were too excited to wait quietly for the song. At last the comedy ended and Mr. Fox appeared upon the stage. Every line was loudly applauded, the whole house joined in the chorus, and when the verse, "Behold the chief who now commands" was reached, the audience rose to its feet and cheered till the building shook to its foundations. Four times the song was encored, was demanded again at the end of the pantomime, and again at the close of the play. A few called for "Ca ira," but were quickly put down. The words of "Hail Columbia" were printed in full in the newspapers of the following day. The *Gazette* hoped that every lady in the city would practice the music, learn the words and sing them at the next repetition; then, perhaps, the two or three French-Americans who remained might feel the charm of patriotism and join in the chorus the song.

The Whippoorwill.

There has been for some time in Hartford a standing inquiry concerning the habits of the whippoorwill; not so much its habits of eating, nesting and the like, but of song. Does it, for instance, sing in the morning? Our pertinacious inquirer even versified the query, and insisted upon inflicting his rhymes upon a small segment of the unforgiving public. Inquiry of several persons born and bred in the country disclosed the information that they had never heard the whippoorwill sing in the morning. The subject had ramifications, and into some of these the searcher was led. The remarkable shyness of the bird was discussed. "I have never seen a whippoorwill," said one country bred person, "although I have heard many of them sing." "Neither have I seen one," said another, whose love of nature is in his very bones. "They keep close in their haunts, and although I have often searched for them I have never been successful." A reader in the *Atlantic* noted that in one of that magazine's bird articles the exceeding modesty of the whippoorwill was alluded to as a noteworthy characteristic. Few people, comparatively, have had the pleasure of getting a sight of the bird. So it seemed to be settled that the whippoorwill does not sing in the morning; that it confines its plaintive melody to the night; and that it is so shy that little is generally known concerning its quiet habits.

Cyclopedias, however, tell a different story bearing on the interrogatory. The whippoorwill does sing in the morning, as well as at night.

A citizen of long experience who was born and brought up in a country town, said he had never heard the whippoorwill sing in the morning—

"Yes, sir, often." And others have since come to his support.

"Have you ever seen one?"

"Yes, sir. They are black and small—a little bigger than a robbin, perhaps. And I know a great deal about their habits. They lay their eggs—only two are seen at a time—in the open field on a stone. I have seen many of these.

"And another thing; when they start to fly they go up in a straight line—way, way up ever so high; you might think they were never coming down again. And they make a noise at short intervals like 'peep,' 'peep.' When they descend they alight at the point of start, just before reaching which they emit a harsh and peculiar noise."

"That's the night-hawk," said a listener when the informant had departed. "He goes up just like that on the edge of the evening, makes just the same noise, and when he comes down is just as harshly expressive. That's the night-hawk exactly."

The night-hawk and the whippoorwill are allied and resemble each other in size. The whippoorwill is ten inches long; the hawk nine. They fly at the same dusky hours and are frequently heard in the morning; and save for the difference in their cries and methods of flight might be easily confounded. The whippoorwill is supposed to sing

from alder bushes generally, the dense growth of which is congenial; and not necessarily for woods on low or swampy land, although the alder grows on moist ground.

A friend relates that at his country home a whippoorwill was in the habit of sitting and singing at dusk on the stepping-stone before a much used door on the north side of the house. His family were very careful not to alarm him, that they might watch him when the moon rose.—*Philadelphia Post*.

Prices of Wild Animals.

An elephant is worth, at the lowest, \$5,000. From that sum the price runs up to \$10,000, which was the amount paid for Jumbo. Of course white elephants are out of the question, and the two brutes now exhibited as sacred white elephants of Siam are worth \$100,000 as rarities. With the elephants are counted those other two pachyderms, the hippopotamus and rhinoceros. The former is an odd-looking animal, whose head seems to be about one-third of its bulk. It is worth in good condition about \$4,000. A fine specimen will bring \$5,000. In these days of elephant babies it may do to recall the famous baby hippopotamus of a few years ago. It appeared like an overwhelming big hog, with a pink hairless skin, and its owner valued it at \$25,000. The same beast is now probably worth one-fifth of that sum. A fine rhinoceros is worth \$10,000. It particularly hideous and vicious it will bring \$12,000, while a mild, soft-tempered fellow goes begging at from \$6,000 to \$8,000.

Following the thick-skinned animals next in value come the members of the cat family headed by the king of beasts, the lion. A fine male lion, thunderous roar and all, is worth \$2,000, while the lioness will bring only \$1,000 to \$1,500. A Royal Bengal tiger, with his glistening eyes, smooth hide, and supple proportions, is quoted at \$2,000. Pretty but vicious panthers are sold for from \$100 to \$200, and leopards are about twice as costly—say \$500 for a spotted variety. The wildcat, as a concentration of wickedness, is lightly prized, but \$25 will buy one. Any price from \$10 to \$100 has been paid, according to the rarity of the variety and its size.

An ordinary polar bear is worth from \$900 to \$1,000. One somewhat smaller is less, while a magnificent example like the one in the zoological gardens in Cincinnati will command \$2,000. The grizzly is costly. Taking one of the more mammoth grizzlies, of the kind that can break the neck of a bull buffalo by a stroke of its fore paw, and it can be sold for from \$1,000 to \$1,500. The size usually seen is worth only from \$600 to \$800. Black bears are cheap bringing \$100 apiece. The sun bear of Borneo is more valuable, for in addition to being rare and pleasing to look upon, it is intelligent and good-natured. It commands from \$250 to \$500, as also does the poonah bear of India. The brown bear is becoming scarce, and its price is gradually increasing. A good specimen will be valued at not less than \$250.

Only the rarer kind of deer are exhibited, and they are very costly. The blesbok, for instance, is worth \$2,500 and the hartebeeste the same. Gazelles bring \$1,000; an oryx is worth \$1,000, and the eland \$2,500. Common red deer can be purchased by the hundreds for \$100 each, and fallow deer for the same; but these delicate animals are more fitted for parks and zoological gardens than menageries. The few elk seen in captivity are worth from \$250 to \$500. Reindeer, on account of the difficulty experienced in keeping them alive in warm climates, are more valuable, being quoted at from \$500 to \$1,000.

Another delicate animal is the giraffe. The Giraffe is more valuable, perhaps, than any other animal ever exhibited. Little ones, from five to ten feet high, are estimated to be worth from \$2,500 to \$5,000. Large ones bring \$10,000, and those from sixteen to twenty feet cost from \$15,000 to \$25,000.

Camels are now cheap, so are dromedaries, their price being \$250 to \$500 each. Zebus have degenerated, costing only \$500 to \$750, and the same sum will purchase a zebra.

Of the ox tribe our common buffalo, or bison, is the most imposing, and a good specimen is worth from \$1,000 to \$2,500. The musk ox brings \$1,000, and the yak of Thibet \$1,500; South African oxen are quoted at \$1,000, and the llama of South America cost \$500. The tapir of the same continent and a member of the great padrydam family is valued at \$750. Kangaroos, from the opposite side of the world, are cheap at \$800. Fine ones bring \$1,200.

Of inhabitants of the water, menageries carry only sea lions, worth \$100 to \$200, and seals valued at \$300 to \$400 apiece. Snakes of the larger kind, such as boas, pythons, etc., cost from \$250 to \$500. Smaller varieties are only worth \$25 to \$100. The feathered kingdom is generally represented by ostriches, which can be purchased for \$2,000, as can the emu of Australia. Man's ancestors, monkeys, cost from \$5 to \$500 for chimpanzees or mandrills.—*New York Sun*.

Hold the trinket near thine eye,
And it circles earth and sky;
Place it further, and behold!
But a finger's breadth of gold.

Thus our lives, beloved, lie
Ringed with love's fair boundary;
Place it further, and its sphere
Measures but a falling tear.

—John E. Tubb, in *Atlantic Monthly*.

Animals as Barometers.

I do not know of any surer way of predicting changes in the weather than by observing the habits of the snail. They do not drink, but imbibe moisture during a rain and exude it afterward. This animal is never seen abroad except before a rain, when you will see it climbing the bark of trees and getting on the leaves. The treesnail, as it is called, two days before rain, will climb up the stems of plants, and if the rain is going to be a hard and long one, then they get on the sheltered side of a leaf, but if a short rain on the outside, then there are other species that before a rain are yellow; after it, blue. Others indicate rain by holes and protuberances, which before a rain rise as large tubercles. These will begin to show themselves ten days before a rain. At the end of each tubercle is a pore which opens when the rain comes, to absorb and draw in the moisture. In other snails deep indentations, beginning at the head between the horns and ending with the jointure of the tail, appear a few days before a storm.

Every farmer knows when swallows fly low that rain is coming; sailors, when the sea gulls fly toward the land, when the stormy petrel appears, or Mother Carey's chickens, as they are called, predict foul weather.

Take the ants; have you never noticed the activity they display before a storm—hurry, scurry, rushing hither and yon, as if they were letter carriers making six trips a day, or expressmen behind time? Dogs grow sleepy and dull, and like to lie before a fire as rain approaches; chickens pick up pebbles, fowls roll in the dust, flies sting and bite more viciously, frogs croak more clamorously, gnats assemble under trees, and horses display restlessness.

When you see a swan flying against the wind, spiders crowding on a wall, toads coming out of their holes in unusual numbers of an evening, worms, slugs and snails appearing, robin redbreasts pecking at your windows, pigeons coming to the dovecote earlier than usual, peacocks squalling at night, mice squeaking, or geese washing, you can put them down as rain signs. Nearly all the animals have some way of telling the weather in advance. It may be that the altered condition of the atmosphere with regard to electricity, which generally accompanies the changes of weather, makes them feel disagreeable or pleasant. The fact that a cat licks herself before a storm is urged by some naturalists as proof of the special influences of electricity. Man is not so sensitive. Yet many feel listless before a storm, to say nothing of aggravated headaches, toothaches, rheumatic pains, and last, but not least, corns.—*Con. Cincinnati Enquirer*.

Ay, Oliver! I was but seven, and he was eleven;
He looked at me pouting and rosy. I blushed where I stood.
They had told us to play in the orchard (and I only seven!
A small guest at the farm); but he said,
"Oh, a girl was no good!"
So he whistled and went, he went over the stile to the wood.
It was sad, it was sorrowful! Only a girl—only seven!
At home in the dark London smoke I had not found it out.
The pear-trees looked on in their white, and blue-birds flash'd about,
And they too were angry as Oliver. Were they eleven?
I thought so. Yes, every one else was eleven—eleven!

Pluck wins! It always wins. Though days be slow
And nights be dark 'twixt days that come and go,
Still pluck will win. Its average is sure,
He gains the prize who can the most endure,
Who faces issues, he who never shirks,
Who waits and watches, and who always works.
—*Toronto Mail*.

For He that flung the broad blue fold
O'er mantling land and sea,
One third part of the sky unrolled
For the banner of the free. —*Emerson*.

The seasons alter; hoary-headed frosts
Fall in the fresh lap of the crimson rose.
—*Shakespeare*.

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Reduction of the public debt in July was something over eight million dollars.

Indications in business circles are improving, especially in the dry goods trade.

Corn is on the go. All reports agree as to its rapid growth. Much of it is now in roasting ear.

The Kansas Central Agricultural Society holds its next annual fair at Junction City September 30th and October 1st and 2d.

The last week's reported business failures in the United States shows 178, a considerable reduction since the previous week.

This office is in receipt of two long communications, one on forestry, the other on grain gambling. They came too late for examination this week.

The house in which General Grant was born was bought, a few days ago, for \$8,000. It is to be taken to New York city. The owner had great difficulty in keeping relic hunters from injuring the building.

An official report from Spain as to the number of cases and deaths from cholera in the infected districts of Spain, from the beginning of its appearance, March 4, to July 4, 1885, shows: Total number of cases, 28,044; total number of deaths, 12,374. Nearly one-half the cases were fatal.

Farmers' Interests.

A letter from one of our correspondents, which we print this week, forcibly calls up again the subject of organization among farmers. This is a matter of great importance, and becomes more and more imperative as the years pass. Farmers' interests are not so different from those of other men as to be perceptible, only as other men organize in practical opposition to the farmers. The organization is not for the purpose of injuring other people or other interests; it is for the purpose of better protecting the common interests of the persons operating. There is more or less organization everywhere among intelligent workers in other departments of industrial life. Mechanics and day laborers have many and strong organizations; merchants, traders, manufacturers, bankers, carriers, nearly every class of workers, has some common understanding for mutual benefit. They are not operating in opposition to farmers, but for their own protection only. That ought to be the object of all organized effort on the part of farmers.

What farmers' interests are, then, becomes pertinent. The first thing that naturally suggests itself is, that farmers should understand their own business. They should know how to make the most produce on the least area of land, and they should understand the economies of the farm, knowing how to save as well as how to make, and they should know how to live comfortably as well as how to make money.

In the second place, farmers ought to know how other men live, what they do, how and why. Farmers ought to understand all ordinary business methods and the laws of business; they ought to know where commodities of trade are produced, and what means are used to get them into commerce. Farmers should understand the theory and practice of railroad building, and they should be informed as to methods of transportation; in short, farmers ought to be well informed upon matters of trade in general.

In the third place, farmers ought to be informed as to the principles of commercial law, and rules governing express and implied contracts, and they should know what their rights and remedies are in cases of bailment and agency. They should understand the law of warranty, and also be familiar with the theory of insurance.

These are three great departments in which various interests of farmers are seen. It may be said, in brief, that a farmer ought to be a well informed man generally. His interests, then, include information which will fit him for practical work in agriculture, his own vocation, and for good, honest work in other relations when called upon to act in defense of his own and his neighbors' interests. Organization among farmers will bring this state of things about. Social intercourse, even unaided by any special effort of mind, has a very good effect upon men; it is a rudimentary, informal organization. It produces the first fruits of coming together. And that shows that a coming together is necessary as preliminary to organization. Farmers need to see one another often and talk about things which they and their fellows are interested in. By adding educating processes their meetings they grow more friendly, and they learn from one another the things they most need. It is wonderful how much even plain farmers know, when the fact is discovered. Add to their experimental knowledge what other practical men have learned, and there is a vast fund of useful facts stored away under a rough exterior.

Farmers must be well informed them-

selves, and their children must be taught to know more than their parents knew. Protection to agricultural interests requires knowledge equal to competing with men in other callings when it comes to the enactment of laws or establishing of rules. Organization will effect all this. We need more farmers in our legislatures and other deliberative bodies, but they are useless there unless they are intellectually able to maintain their proper relation. On a farm the farmer is great, he is wise; it ought to be just that way when he meets his fellow men in a body for the discussion of matters pertaining to the common welfare.

Kansas Fruit Crop Report.

Mr. G. C. Brackett, Secretary of the State Horticultural Society, in transmitting a detailed report of the condition of Kansas fruit, June 30, 1885, says the State per cent. is below an average of the past five years, and but little above half a crop of all classes. But there is no cause for discouragement, when we consider the fact that our State has produced three successive good crops in the past three years, which is an unusual occurrence in the most favored fruit States, where, during the years of our abundant productiveness, there have occurred three years of nearly total failure.

From reliable information from the counties of the State, all classes of fruit trees bloomed profusely, but failed to set their fruit, which fact points to the exhaustion of the tree, caused by heavy fruiting, as at least one if not the main cause of the casting of their fruit the present year.

Trees throughout the State are reported in healthy condition, except that in some localities "twig blight" appeared, though not in a severe form, generally, while in some of the Eastern States are reported in a seriously damaged condition, and dying.

Kansas still holds her position as one of the leading fruit States in the Union, and as free from conditions adverse to a successful fruit crop.

Preparations for Wheat Seeding.

It is important that farmers be very prudent in the selection and preparation of ground that is intended for wheat. It should be free from weeds, it should be clean, and it should not be infested with insect eggs. This last mentioned item is very important. Ground that produced wheat at the recent harvest, should not be used for wheat again this year, if one has any other ground; and if it was buggy it ought not be used for wheat again this year at all, even though the owner have no other ground. Insects are propagated fast enough when left to their own resources, so that there is no need of farmers aiding them. The best thing to do with wheat stubble where insects operated is to plow it soon after harvest, and then re-plow it two or three times before winter, and sow oats or rye on it in the spring, or rye and orchard grass.

And if a cornfield is infested with chinch bugs, it is not fit ground for wheat next fall. No bug-ridden ground should be used for wheat any year.

Have the ground deeply and thoroughly plowed, covering all weeds and trash, harrow well so as to make a level surface that will make it much easier to destroy young growth of weeds and other plants that will soon grow. Early and good plowing puts everything in better condition. Besides destroying a first crop of weeds, and making it easy to destroy a second crop, it also aids in the destruction of insect eggs, and prepares a good bed for the coming wheat seed.

The Place of Burial.

General Grant's funeral services began yesterday at the cottage where he died at Mt. McGregor, near Saratoga. (The body is embalmed). The programme appointed was as follows: Scripture reading, 90th Psalm. Prayer by Rev. Bishop Harris, of the Methodist Episcopal church of New York. Hymn, "My Faith Looks Up to Thee." A discourse by Rev. J. B. Newman, D. D., LL. D. Hymn, "Nearer My God to Thee." Benediction. Contralto solo, "Beyond the Smiling and the Weeping." The remains were to be removed then, to Albany, to lie in state there, thence to City Hall, New York, and lie in state there, thence, on Saturday next, to the place of interment on a high point jutting out into Hudson river, in Riverside park, about eight miles from the City Hall, and six miles from the Grand Central depot.

The site chosen is donated by the city of New York; it contains twenty acres so located that no private or public improvements can ever obstruct the view up and down the river, for it is a kind of promontory, a high point extending out into the river, thus having the natural water line of a great river on three sides of it. The park of which this is a part contains 177 acres. All this belongs to the city, but is not yet graded nor laid out. The place of interment will be a vault on the highest place on the lot, over which a monument will be erected. The grounds will be laid out with reference to the fact that Riverside park contains the grave and monument of General Grant.

The view from this spot is said to be very picturesque, it being unobstructed for miles up and down the river. Hoboken and Jersey City are in sight, and the great city of New York stretches off in the distance, its spires and great buildings in plain view. The spot is retired and can always be kept clear of the noise and merry-making of pleasure-seekers.

The General had suggested three places of burial. As to New York his reason was, as he wrote it with his own hand—"Because that city befriended me in my need." He left the matter of selecting a place to his son Col. Fred, exacting one condition only—that his wife's body, when she dies, should be laid beside his. The deed of conveyance by the city of New York provides for this condition.

One very good thing coming out of the death of General Grant is an expression of good will on the part of men who not many years ago were at war. Kind words have gone up from all parts of the South, and there will be thousands of ex-Confederate soldiers at the great Captain's funeral. Old Simon Cameron, one of the most radical Union men in the war time, telegraphed the other day to Col. Fred Grant: "I am glad to know that Generals Johnston, Buckner and Gordon are going to act as pallbearers with Sherman and Sheridan. Your father's prayer for peace to his country has been answered and the last bitterness of war wiped out forever." General Hancock, who has charge of the funeral programme, telegraphed Mrs. Grant to inquire what special desire she has if any in relation to the obsequies. Her reply was that she had none, except that if any of the Union General officers were selected as pallbearers, she would be pleased if the rebel armies could be represented, also, and she mentioned two of the names written in Mr. Cameron's dispatch—Johnston and Buckner.

A meeting of barb wire manufacturers was held recently in Chicago, and it was agreed to put up the price of their product 15 per cent.

The last ten days of July were very warm in nearly every part of the country. In New York city, nine of the ten days, the mercury was above 90 deg.; on two days it reached 99, and one day 101. At Chicago, Milwaukee, Omaha, St. Louis, Louisville and Cincinnati similar reports were made.

Maud S., the celebrated trotting mare, lowered her record last week at Cleveland, Ohio, in the presence of over 10,000 people. The fleet little mare trotted a mile over a slow course in 2:08½. This beats her previous record by half a second, and is one second and a half faster than the best mile ever trotted by any other horse. The trial was for a cup and the time goes on record. The day was a warm one. There had been heavy storms during the night and the track was heavy, but when the mare started to break her record it was in a fair condition, but not fast.

Gen. Hancock having been requested by Mrs. Grant to name the pall-bearers for General Grant's funeral, has appointed the following: General Wm. T. Sherman, U. S. A.; Lieutenant General Philip H. Sheridan, U. S. A.; Admiral David D. Porter, U. S. N.; Vice Admiral Stephen C. Rowan, U. S. N.; General Joseph E. Johnston, of Virginia; General Simon B. Buckner, of Kentucky; Hamilton Fish, of New York; Geo. S. Boutwell, of Massachusetts; Geo. W. Childs, of Pennsylvania; John A. Logan, of Illinois; Geo. Jones, of New York; Oliver Hoyt, of New York.

A great deal of damage is being done to trees now by insects. They ought to be watched closely and a war of extermination made on them. On small trees about the house grounds, and on shrubs, flowering plants, etc., they can be seen and destroyed with little effort if one is only vigilant. The writer of this, a day or two ago, was looking at a favorite locust tree. The twigs are pale green in color very pretty. He was about to retire in the belief that that tree was all right, when a swollen place was observed. The fingers were run over the swell and a caterpillar began to crawl along the limb, taking the swell with it. On further examination, a dozen or more swells were found and that many worms destroyed. They would have cleaned the leaves off that tree in the next few days if they had not been removed.

A committee has been organized in New York city to collect funds from the people generally to be used in erecting a monument to the memory of General Grant. Ex-President Arthur is chairman of the committee, and he is assisted by the Mayor, Mr. Grace, by Hamilton Fish, and other gentlemen well known to the country. The committee have issued a circular stating that action will soon be taken for the organization of a commission to represent the entire country for the erection of a suitable monument above General Grant's grave. Pending this, the committee calls on all newspapers, railway, telegraph and express companies, postmasters, bankers, churches and municipal authorities, commercial bodies and exchanges, manufacturing and business establishments to co-operate in the immediate collection of contributions to be forwarded to Drexel, Morgan & Co. for this committee or to the Mayor of New York city. All contributions will be acknowledged. The Western Union Telegraph Company also sent instructions to the managers of all its offices throughout the country to receive contributions from the public and forward them to the committee.

Horticulture in Cowley.

The Cowley County Horticultural Society held an interesting meeting recently at Winfield, as we see by the *Telegram*. G. C. Brackett, Secretary of the State Horticultural Society, was present. A leaf-twig destroyed by the basket or bag worm was presented. Secretary Brackett said the worm was new to him; had seen it in southern Illinois; would correct Saunders on the round-headed apple tree borer, that the eggs were laid in June or July—he had found the eggs on September 15th. The beetle was discussed; would kill by puncturing and destroy the eggs October 15th. Henry Hawkins, as a preventive of these destroyers, would shade the tree trunk with its own limbs. Secretary Brackett thought the shade no protection against the round-headed borer; would kill flat-headed borer with carbolic washes. President Martin introduced the subject of Cowley county fruit shipping.

Mr. F. A. A. Williams reported the receipt of several solicitous letters from fruit dealers. Secretary Brackett would ship only perfect fruit—reject all defective fruit; make two or more grades in the assorting and packing of all fruit.

Secretary Brackett called out the Russian apricot question; said that the Russian apricot was about the size of the wild goose plum, quite full of fruit, but the curculio was present in abundance; considered it valuable for canning; would not plant them at 40 cents apiece, but send and get the apricot pits at \$4 per bushel, that will raise 12,000 plants; would plant a few, which might produce for several years. W. H. Mears, of Peabody, Vice President of the State Society, would probably send pits to anyone. On motion the treasurer was instructed to procure one-half bushel of seed. Henry Hawkins gave valuable instructions in training fruit trees, by diagram; not to start two limbs from the same height, but leave a considerable space in height. Secretary Brackett thought the Japanese persimmon a very fine fruit; do not know if they can be raised. J. Q. Merriam—I have made a failure in trying to raise them. Secretary Brackett read an essay on "Relative hardness of grafted and seedling fruits" for the forthcoming State report, for which the society voted a vote of thanks.

Raise Turnips.

It is not too late yet to raise a crop of good turnips if one has a good piece of ground for that root. Other things being in good condition, the best place for turnips is where some early vegetables, as lettuce, or radishes, were grown. But the ground must be rich and clean. If a hog lot, or grounds about old straw or hay stacks was well plowed and put in potatoes and thoroughly cultivated so there was nothing allowed to grow on it or in it but potatoes and potato tops, that ground will raise the best turnips, and it does not need replowing, if the potatoes were raised with a digger or were plowed out. In such case, all that is needed is to remove the tops, harrow the ground thoroughly and sow the seed.

After the young tops appear and get to growing well, if they are too thick, they ought to be thinned out to a reasonable growth.

If there is a patch in the garden, or anywhere about the premises that is rich, well drained and can be made loose and easily worked, even though it be but a rod square, dig it up, or plow it, or work it in any way that will insure a clean, soft surface with a deep body and sow turnip seed on it. Good turnips are very wholesome as food for man

or beast, and they grow in very large quantities. A single square rod of ground, if it does well, will produce five or six bushels of turnips.

July Weather.

Prof. Snow, of the University at Lawrence, reports for July: The first twelve days of this month were, with one exception, remarkably cool for the season. This brought the average temperature for the entire month below July mean, although sixteen of the last nineteen days were oppressively hot. The rainfall was above the average, and was unusually well distributed.

Mean Temperature—77.06 degrees, which is 1.16 deg. below the July average. The highest temperature was 96 deg. on the 16th; the lowest was 56 deg. on the 2d, giving a range of 40 deg. The mercury reached 90 deg. 17 times. Mean temperatures at 7 a. m. 73.20 deg.; at 2 p. m., 85.64 deg.; at 9 p. m., 74.71 deg.

Rainfall—6.03 inches, which is 1.53 inches above the July average. Rain fell on 13 days. There were 5 thunder showers. The entire rainfall for the seven months of 1885 now completed has been 21.84 inches, which is 0.26 inch above the average for the same months in the preceding 17 years.

Inquiries Answered.

LAW OF DESCENT.—A request is made by a correspondent this week concerning the law of descent and distribution of property. The editor will prepare an article on the subject next week. It would have been done this week, had the subject not been overlooked until too late.

INSECTS ON TREES.—Worms or caterpillars must be destroyed by killing them. Look closely; they are usually so much the color of the twig or leaf that it is difficult to distinguish. Where a twig appears to be swollen, look for a stretched worm, and remove him instantly. When they attack leaves it almost always is on the under side. Of a small tree, the branches may be raised by the hands so that the under sides of the leaves can be examined easily. Where the tree is larger, a hand rake is a good thing to push up the branches and also to remove worms. If the tree is very high, splice the handle.

QUESTION OF LAW.—Will you be so kind as to answer the following in next issue, to settle a difference of opinion here: A. rents B. some land to seed in corn. B.'s first and second planting is destroyed by flood and worms; he saves part of the crop, but can't clean out the best because it is too grassy. Can A. cut B.'s fodder for the grass in the corn? Whose grass is it, and has A. a right to cut it? Is B. entitled to any of the grass, and how much? B. gets two-thirds of the crop.

—If the facts are as stated, B. should make the most out of the ground in some summer crop, and give one-third of it to A. in like manner, as he was to give one-third of the corn. If the best that can be done is to make fodder of what corn is left and the grass, do that and divide. If B. did his duty; if he did as well as men of ordinary prudence would have done in like circumstances, he is liable for one-third of what he is compelled by unforeseen happenings to accept. In such case A. has no right to interfere. It all turns on the reasonableness of B.'s efforts to raise corn.

A young lady, Miss Florence M. Coon, aged 20 years, died suddenly, or seemed to die, at Oceanta, near Edgerton, Wisconsin, one day last week. A dispatch says: "Her body was brought home the following day and arrangements made for the funeral services which took place Saturday. Although apparently dead, the usual evidences of dissolution are not present. She was therefore not interred. The body has at no time been rigid, nor are her extremities cold, and no signs of decomposition are visible. Before her death she exacted a promise from her mother that if ever she should die suddenly her remains should be kept until her relatives were certain of her death, as she

had a horror of being buried alive. Her remains will be kept unburied until death is established beyond a doubt."

THE MARKETS.

By Telegraph, August 3, 1885.

STOCK MARKETS.

New York.

BEEVES—Receipts 156 cars. Prices were fully sustained for good and prime steers and stronger for middle grades. Extremes, 4 95a 44 for native steers; 4 15a 20 for Texas do.

SHEEP—Receipts 1,110. Firmer, with good clearances. Sales were at 3 00a 3 50 for common to prime sheep, and 7 50 for South lambs.

HOGS—Receipts 825. None offered alive. Nominal values 4 80a 50.

St. Louis.

The Midland Journal reports:

CATTLE—Receipts 2,500, shipments 1,400. Supply chiefly Texans, which were quiet and weak. Native shipping steers ranged at 4 60a 75, native butchering steers 4 20a 4 75, mixed lots 2 75a 4 00, grass Texas steers 2 75a 4 00.

HOGS—Receipts 5,300, shipments 2,400. Market quiet and active. Packing 4 50a 4 85, butchers' 5 00a 5 25, light weights 5 00a 5 25.

SHEEP—Receipts 900, shipments 700. Market quiet. Common to medium natives 2 00a 2 75, good to choice muttons 3 00a 3 65, Texans 1 65a 3 00.

Chicago.

The Drovers' Journal reports:

CATTLE—Receipts 5,000, shipments 2,000. Market strong; natives 10c higher. Shipping steers 4 50a 5 90, stockers and feeders 3 00a 4 45, through Texas cattle steady at 2 90a 4 40.

HOGS—Receipts 16,000, shipments 5,000. Market opened 5c higher but closed weak. Rough and mixed 4 25a 50, packing and shipping 4 40a 4 90, light weights 4 60a 5 40.

SHEEP—Receipts 1,600, shipments none. Market steady. Natives 2 00a 2 25, Texas 1 75a 3 75.

The Drovers' Journal special Liverpool cable quotes best American cattle weak at 12½c per lb. dressed—the lowest price in many years.

Kansas City.

CATTLE—Receipts since Saturday 926. The market to-day was firm and fairly active for all classes, with values of natives 5c higher, while Texans were firm at last week's prices. Sales ranged 3 55 for Colorado steers to 4 15 for feeding steers.

HOGS—Receipts since Saturday 6,612. The market to-day strong and active with values of heavy and mixed 5a 10c higher, while light were steady, all classes closing weak and a shade lower. Extreme range of sales 4 20a 80, bulk at 4 40 and above.

SHEEP—Receipts since Saturday 228. Market quiet. Sales, 82 natives av. 99 lbs. at 2 90.

PRODUCE MARKETS.

New York.

WHEAT—Receipts 9,898 bus., exports 23,566 bus. Spot higher but closing weak. Options opened very steady, strong and higher; ruled steady and closed weak. Ungraded red, 99a \$1 00; No. 3 red, 98c; No. 2 red, 99½c; No. 2 red August, 99½a 1 00; September, 1 01½a 1 02½.

CORN—Opened firm and closed weak. Receipts 219,068 bus.; exports 232,904 bus.; ungraded, 51a 53½c; No. 2, 52½c.

Chicago.

WHEAT—Sales ranged: August, 87½a 88½c; September, 89½a 90½c; October, 92½a 93½c; No. 2 spring, 87½c; No. 2 red, 91a 93c; No. 3 red, 87c.

CORN—Cash, 45½a 46½c; August, 45½a 46c; September, 44½a 45½c; October, 44½a 45½c, closing at 45c.

OATS—The market was a strong market for both cash and futures. Cash, 25½a 27½c.

St. Louis.

WHEAT—No. 2 red cash, 99½a 1 00½c; August, 99½c bid; September, 1 00½a 1 01½c.

CORN—No. 2 mixed cash, 41½a 42½c; August, 41½c; September, 42½a 43½c.

OATS—Higher and firm. No. 2 mixed, cash, 21½c.

RYE—Quiet at 52c.

Kansas City.

WHEAT—Daily elevator receipts 11,235 bus, withdrawals, 5,000 bus; in store, 708,329 bus. Regular was somewhat excited at a sharp rise. No. 2 soft was nominal and strong. No. 2 red cash was nominal and offering at 80½c. August was ½c to ¾c premium over cash at 81½c to 81½c, and active against 79½c to 79½c Saturday. September 1¼c to 1½c higher; October was 1½c higher.

CORN—Daily elevator receipts 8,281 bus, withdrawals 17,038 bus, in store 157,408 bus. Corn was strong to-day, selling at ¾c to ¾c advance. Trading was moderate. August No. 2 sold at 34½c to 35c against 34½c to 34½c Saturday; September went up ½c to 35½c. The first year corn of the season sold to-day at 27½c.

RYE—No cash, no bids nor offerings.

OATS—No. 2 cash, 20c bid, 22½c asked.

BUTTER—Receipts are light of all kinds and the quality, on account of the warm weather, very poor, and demand active for good.

We quote:

Creamery, fancy..... 18 a 19

Good..... 15

Fine dairy in single package lots..... 15

Storepacked, in single package lots..... 5 a 10

EGGS—Supply equal to the demand and market steady at 7c per doz.

CHEESE—We quote: Full cream, 11c; flats partly skimmed 6a 7c; Young America, 11c.

POTATOES—Home grown from wagons 30a 35c per bus.

SWEET POTATOES—We quote home grown at 2 00a 2 25 per bus.

TURNIPS—35a 40c per bus from growers.

Horticulture.

Intensive Horticulture.

Extract from a lecture on "Illustrations of Intensive Horticulture," delivered before the Ingham County, Mich., Horticultural Society, by Prof. L. H. Bailey, Jr.

All agriculture is divided into two great divisions as regards the manner in which it is pursued. One division is characterized by the attempt to force a little farm to yield its utmost—to produce by high culture and double cropping as much from one acre or ten acres, as is commonly produced on twice or thrice that area. In this sort of agriculture all efforts are intensified; it is intensive agriculture. The other division is characterized by many acres and a looser culture. All its operations are extensive; it is extensive agriculture. The great grain farms and cattle ranches of our Western prairies are apt examples of extensive culture. The limits of acres and of wide ambitions narrow as we approach the more densely crowded States of the East, until about the borders of the great cities we find an intensive agriculture. America is the land of extensive farming. Its broad unbroken plains attract the ambitious, and afford unparalleled advantages for the growth of great agricultural enterprises. We can illustrate abundantly the extensive side of agriculture; the intensive side we can scarcely more than approach. Horticulture, that branch of field culture which includes the growing of fruit, flowers and vegetables, is of necessity bounded by narrow limits in acres. Most of our intensive agriculture is pure horticulture. I propose now to confine your attention to this horticulture, and furthermore to divide the art, as we have divided agriculture in general, into the two divisions, extensive and intensive. Extensive horticulture is illustrated in the great orchards and fruit farms of Michigan and other States; intensive horticulture is fairly represented in suburban market gardens and fruit farms. It is a matter of vital importance that we familiarize ourselves with the process by which three or four or even more crops are raised on a single acre of land in one year. The time is not far distant when such knowledge will be to many more of our horticulturists a necessity. We are drifting toward this high culture which alone overreaches severe competition. Our large cities, and gradually also our smaller villages, must be supplied with fresh and nutritious fruits and vegetables, but it is only those growers who can grow the most, the earliest, and the best on the least ground who can hope for great success in gardening.

The most instructive illustrations of intensive horticulture are found among the market gardeners of our large cities. There is no class of farmers in this country who understand so well the secret of making earth yield her utmost as these gardeners. The secret of their success lies in the promptness and thoroughness with which every operation is conducted. Their methods are for the most part simple and capable of application to any garden. The garden vegetables rarely bring what the general farmer would call high prices. They are articles of universal consumption, and so cheap that every family in city and country can afford them. Most of them can be readily grown by any farmer on land ten times cheaper than the valuable acres in the vicinity of large cities. How, then, does the market gardener make his money? His secret lies in these two causes: He grows more vegetables to the acre than the ordinary farmer, and he markets them in better season and in a more attractive condition. The average farmer with land worth but \$50 an acre, and manure costing but a trifle, makes a bare margin from cabbages, but the expert market gardener, on land worth \$1,000 per acre, and with an outlay of \$75 to \$100 for manure, realizes a good profit.

I will bring you a few detached illustrations of the methods of high culture in gardening. It is necessary at once to understand that high culture is three-sided, and that all sides must be simultaneously developed. It consists of good tillage, abundant fertilizing, and judicious planning as to the succession of crops. Good tillage is not keeping down weeds—it is stirring the soil deeply and often for the direct benefit of the crop. I know of no fallacy so unfounded as that which uses the hoe only when weeds become conspicuous. Good till-

age kills the weeds while they are still under the surface. I never knew a market gardener who knew or cared much about weeds. In a certain garden of 100 acres I never saw a weed, unless it grew along a path or about a compost. I often think of weeds as a divine blessing—as a necessary good to prick up the shiftless farmer. If not this, they may be regarded as a warning to cultivate no more than you can cultivate well.

Next to the care of the soil itself, the manure is the most important consideration of the gardener. He does not consider a good dressing of manure once in two or three years to be sufficient; that is not high culture. Every year, almost independent of cost, every acre must be heavily manured. For ordinary lands, the gardeners about Boston use annually about ten cords of horse manure to the acre, and its cost is seldom less than \$7 or \$8 per cord. The gardener usually has little faith in the value of manure the second year after it is applied. He applies it to his land in a thoroughly decayed condition, and expects to reap his reward at once. For certain crops, he even applies twice a year. Even after several years of this excessive manuring, should a year be skipped, the crops will almost universally fail to produce a profit. Peter Henderson relates an apt illustration of this sort. A market gardener of twenty years' experience, and whose premises had always been a perfect model of productivity, proposed to run a street through his grounds. Thinking this land sufficiently rich to carry a crop of cabbages without manure, he gave it no attention. On either side of the street he applied guano at the rate of 1,200 pounds to the acre. Upon the unfertilized portion and the contiguous areas, he planted early cabbages. From the fertilized ground, his cabbages brought him \$1,400 per acre; from the unfertilized, \$330 per acre—a loss per acre of over \$1,000. Much is said and written about the ultimate exhaustion of soils, and the inevitable failure of agriculture. The famous market-garden lands of Arlington, near Boston, were arid wastes when the British soldiers marched on Lexington, and even fifty years ago they were called, in derision, "poverty plains." To-day, they are among the richest lands I ever saw.

The successive cropping, the double cropping of lands, is the distinctive feature of intensive horticulture. The *multum in parvo*, the ever persistent cropping of every foot of ground in every available season, is the only method of realizing a profit from high-priced land. A good story is told of a shrewd gardener who hired a piece of land at a nominal price, allowing the owner the privilege of entering upon the land at any time by paying him the value of the crop upon it. The owner soon saw the increasing value of his land, but after watching it for several years, he could not find a time when the crops upon the ground were not worth more than the ground itself, and he was finally obliged to sell to the tenant at a very low figure.

A skillful gardener who has a small place contrives to keep some crop upon the land the year round. Most of his vegetables are started in hot-beds, cold-frames, or especially prepared seed-beds, and are transplanted to the open field as soon as some crop is harvested. In this manner no time is lost in waiting for seeds to germinate. A simple illustration of triple cropping is the growing of radishes, carrots and celery upon the same ground. The radishes and carrots are sown at the same time in alternate rows under glass frames. These spring cold-frames are made simply by laying sashes across two boards which stand edgewise and run parallel to each other at a distance of six feet apart, forming the sides of the frame. These boards are movable, and upon the advent of warm weather they and the sashes are piled away. The earlier radishes are marketed before the weather is warm enough to remove the sashes, and the carrots soon have the whole ground. By the middle of June the carrots begin to come into market, but before they are all harvested, celery has been set between every third or fourth row, and it soon occupies the ground.

Russian Apricot.

Such great claims have been made for the Russian apricot by its champions that exorbitant prices have been asked for the tree on account of the many claimed qualities, such as being proof against blight, borers, insects and many other things that operate against the fruit and trees of other sorts. Secre-

tary Brackett made a visit to the southern part of the State and fully investigated the Russian apricot. He informed a representative of the KANSAS FARMER that it was not all that was claimed for it, and while it is worthy of cultivation it is not worth the price usually asked, nor is it proof against insect depredation, etc., more than other fruits. The Russian apricot cannot be recommended as withstanding everything more than ordinary sorts of fruit.

The Poultry Yard.

Chickens as Helpers.

A. C. Hawkins, a correspondent of *American Cultivator*, says that a lot of chickens ranging over the mowing fields from July to November would be worth more to the farmer than the application of many dollars' worth of commercial fertilizer, besides the profit on the chickens. I know of a mowing lot that has not been plowed for fifteen years, but has had large broods of chickens ranging over it after the hay crops were harvested, and the grass was so heavy on it last season that much of it became lodged before it was ready to cut, and on some parts of it there were harvested three tons of hay to the acre. When the chickens were first allowed to run over this piece of land, the owner had to take a rake to get enough grass together to wipe his scythe. It was a poor, run-out piece of land that had been neglected and cropped for years without fertilization.

In keeping poultry do not crowd over thirty hens or pullets into each of the apartments in the hen-house, as you will receive more eggs from twenty-five to thirty fowls than from forty to fifty in the same room. Neglect of this point has caused more disastrous failures, and has discouraged more poultrymen, than any other one thing excepting incubators. Many people have an idea that 100 hens will give four times as much profit as twenty-five. It is true they will, but they must be kept under as favorable conditions. They must have four times the room, be kept in four flocks, be given four times the care and food, and then they will pay in the same proportion as the smaller number.

If it is desired to keep more fowls, the accommodations must be extended, never allowing less than eight square feet of inside room for each fowl. There is no reason why a thousand cannot be kept as well as not, only do not start with a thousand until you know how to take care of a hundred. I have no doubt that you could give the poultry the entire farm to run over, and put your attention to them, so that they would yield you more clean profit than any other farm stock.

Some will say that everybody is going into raising poultry, but do not be afraid of that. There is always plenty of room at the top for all of us who can get there. Each should strive to raise a better quality of goods than his competitor. If you can furnish a hotel with fifty or 100 dozens eggs per week of uniform color, of good size and clean, warranting every one laid within two days of shipment, you will find no lack of customers for your products at fancy prices. Even if you depend on your grocer for a market for your eggs, it will pay you to have them uniform in color and size and kept clean. Then when the times of plenty come, he will take your product in preference to that of some other farmer who believes that an egg is an egg, whether white or brown, large or small, clean or dirty. Work up a reputation for yourself for always having the best, and your

customers will come to you instead of you seeking a market for your eggs.

There is another crop on the farm which is much benefited by keeping a large number of fowls. I refer to the fruit crop. Fowls are very valuable in destroying the borers and other insects injurious to the fruit trees. A vigorous and healthy growth of fruit trees will be induced around a farm when poultry is kept. The manure seems especially adapted to them. Fowls are more valuable in connection with the cultivation of plums, as there are very few localities where this fruit can be raised on account of its destruction by the curculio.

I have now on my place nearly 1,000 plum trees, and nearly all the trees that are over three years old bear heavy crops every year. A small part of the fruit is stung by the curculio and drops off, but we have to pick many more to prevent the trees from breaking and to insure a good quality of fruit. Other farms in the same locality, where plum trees are not so favorably located, very rarely get a full crop of plums. Fowls are also valuable in keeping the borers out of the quince bush. It is only necessary to loosen the soil about the bushes, as the fowls will do the rest.

An important item in the keeping of poultry is the large quantities of valuable manure produced. The best method of retaining the ammonia in this manure, which is held in large proportions, is to spread dry loam or plaster under the roots and then to store the mixture in barrels. It will hold its strength in this form, and will prove one of the most valuable fertilizers for corn, grass or grain. It is very strong and must be composted thoroughly before using it in contact with seed. If properly applied it will act quickly on the crop, as its elements of plant food are of such a nature as to be easily assimilated by the plant.

The enormous size to which many of the better specimens of the Bronze Turkey attain was something exceptional for a few years after they commenced to be disseminated, but at the present time so marked and special has this valuable trait of size proved that thousands of monster gobblers of the Bronze turkey are distributed in all parts of the United States. The ground color of the Bronze turkey is mostly black, variegated upon wings and tail with brown, white and gray, while nearly the whole plumage shows reflections, in a bright light, of the most beautiful bronze.

Fowls must have a sand-bath. It is their sponge, towel, tooth-brush and dressing-comb all in one. How would you feel, my dainty lady, if denied all your toilet appendages and compelled to go day after day unwashed and unkempt, and to wear soiled and rumpled garments? Even so suffers Mistress Biddy without her daily dust-bath, and nature, that infallible teacher, directs her to the nearest and most convenient place for such a renovation of the skin and feathers. If no other soft, sandy and loamy earth is at hand you may be sure she will use your flower bed without regard to consequences.

An experiment was lately made in France for the purpose of finding the relative value of hens and ducks as egg producers. Three of each sort were selected for testing the result by observation as to their relative fertility. Between the first day of January and the end of August the three hens laid 257 and the ducks 402 eggs. Moreover, in the autumn months of the previous year, the ducks laid 215 eggs, while the hens had ceased laying. Altogether, therefore, the ducks had produced 617 eggs within the twelve months, as against 257 obtained from the hens. The birds of each class selected for experiment were of the same age, and as far as could be judged, of the same relative size and strength.

In the Dairy.

Composition of Milk.

A correspondent of the *Country Gentleman* inquired as to the composition of milk, and Henry Stewart answered as follows:

Milk is a complex fluid. To the practical dairyman it consists of a watery fluid which contains an uncertain proportion of fat which separates in the form of cream, from which butter is made; another uncertain proportion of curd or casein, of which cheese is made, and a residue of thin liquid known as whey. But to the chemist, milk is a very different fluid, containing a large number of widely-differing substances, in solution and in suspension, which have peculiar reactions upon each other, and which produce those exceedingly complicated changes which surprise and confound, and often seriously trouble the dairyman or the housewife. It is very useful to know, then, of what milk consists, and its behavior under certain circumstances, because the dairyman's successful management of milk depends very much upon this knowledge.

Milk consists of the following substances, varying more or less according to circumstances, viz.: Water, 87 per cent.; casein, 4 per cent.; fat, 4 per cent.; sugar, 4.40 per cent., and saline matter, 0.60 per cent., which consists of lime, magnesia, iron, potassium, sodium, phosphoric acid, chlorine, and some free soda. The fat which we know as butter is also a complex substance, consisting of stearine, margarine, oleine, butyrin, caprin, and caprylin, each of these substances being composed of a distinct acid combined with glycerine.

The fat exists in milk in the form of separate globules of various sizes, but all much too small to be visible by the eye. These globules float in the liquid, and are a little lighter than water. The liquid part of milk consists of the casein, sugar, and the various salts dissolved in water; but it will be observed that among the various phosphates and chlorides there is some free soda by which the milk is made alkaline. This fact is of great interest and importance, because casein is not soluble in water, and only in alkaline liquid, and without this soda milk would not continue fluid, but the casein would solidify and separate.

We are ready now to note the behavior of milk as desired by our correspondent. When the milk is strained and set away the fat globules which contain the butter begin to rise to the top because of their lightness and the heaviness of the milk. The specific gravity of the fat is about .950, while that of the milk is about 1.029 or 1.030. Really, the heavier milk tries to fall to the bottom, because of its greater weight, and so forces up the lighter globules of fat. This is just as the common toy balloons rise in the air when let go—the heavier air forcing them up, or as the heavy water will force up a quantity of corks placed at the bottom of a pail. The fat globules rise slowly, because of the viscous and adherent nature of the milk, and for this reason they carry up with them a considerable quantity of milk, which adds largely to the bulk of the mass, and which, with the globules, forms cream.

This cream then consists of the fat globules suspended in a small quantity of milk, and the less milk there is in the mass, the thicker and more nearly solid the cream is. When this cream is beaten about in the churn, the globules are thrown against each other with sufficient violence to make them adhere in course of time, and they gradually gather together in masses, first quite small and increasing in size, until finally the greater part of them becomes united in several considerable grains or masses, or at length into one lump, which is the butter. But at the end of the churning the milk is found to be changed, and a thick viscous liquid is formed, which may be either sweet or sour. This change is due to the large contact of the milk with air as it is churned. This air comes into contact with the sugar of the milk, and the oxygen of the air acts upon the milk sugar with the result to change some of this sugar into lactic acid, by breaking up its elements and reforming them. Thus one atom of the milk sugar is broken up into two atoms of lactic acid, and if this action was continued, the milk would become sour instead of alkaline, and the casein would separate and become curd. But as fast as this

acid is formed it is taken up by the soda which is in the milk and neutralized—lactate of soda being formed, until the whole of the soda is combined, and then the milk gradually becomes sour. The formation of lactic acid is accompanied by a viscous condition of the milk, and this causes the buttermilk to be soft, thick and slightly glutinous. When the milk is permitted to become sour before it is churned, the buttermilk is then more decidedly sour, and if set away for a short time, or warmed, the curd will separate, because it will not remain dissolved in any but an alkaline liquid.

The quality of butter is not changed by the sweetness or sourness of the cream, unless the cream is very sour, when the butter is injured in flavor because the strong acid of the milk has acted upon its various constituents, and has started in them a process of decomposition. Sweet cream makes excellent butter, which is much liked by some persons, but generally butter from sour cream is preferred. This is for the following reasons: Butter, as has been stated, consists of various acids, among which are butyric, capric and caprylic. These acids are exceedingly changeable and volatile, and soon begin to decompose into gases of strong flavor and odor. The presence of lactic acid seems to act as a ferment which starts the decomposition. As soon as the milk or cream turns sour this decomposition begins. At first the gases evolved are not disagreeable, but to some persons contribute an agreeable flavor, which they call ripeness; just as the pleasant ripeness of cheese is produced by the first starting of decomposition of the butter in it. In sweet cream butter this ripeness is deficient until the butter is kept some time, but in sour cream (or ripened cream) butter, the flavor is at its best, and this butter is generally preferred. If either butter were perfectly freed from impurities of every kind, they would both be equally tasteless and insipid; so that it is simply the difference of impurities which makes the difference between the flavors of sweet cream and sour cream butter.

Casein is the nitrogenous principle of milk, and contains a notable proportion of sulphur. It is almost identical in composition with the fibrin or clot of blood, the fiber of flesh, the albumen of eggs, and the gluten of vegetables. The legumin of peas and beans is also very similar to casein, and the Chinese make a very passable cheese from it, which, when ripe, has the odor and flavor of ordinary cheese. Milk sugar is identical in decomposition with cane sugar, but is less soluble and therefore not so sweet, and is much harder and more gritty than cane sugar.

Dairy Notes.

Every dairyman should be prepared to feed green grass or green corn fodder in the stable night and morning, as soon as the pasture begins to fail.

Cows inherit the propensity to give large or small quantities of milk, but still the quantity will be varied greatly by the treatment to which they are subjected.

All things considered, the flow of milk is the most profitable, unless it is secured at too great expense; and reason must be used here as in all other things.

There are 2,400 stables of cows in New York, the milk of which is sold in the city, and these cows, from the time they enter the stables until no longer able to give milk never see grass.

A square, symmetrical cow, says the *Dairy World*, is not always the best dairy cow. The milker is rather wedge-shaped as seen from before, and has plenty of belly, with great hips and thighs.

It is poor economy to allow the cows to fail in milk for want of a little grain or other feed, in addition to their pasture. The largest steady flow of milk which can be obtained by a reasonable outlay of feed is always the most profitable.

No more striking evidence of the growth of the business in condensed milk can be given than in the statement of the Anglo-Swiss Condensed Milk Company, that the annual production of condensed milk is estimated at 60,000,000 cans, manufactured by eleven different firms in Europe and America.

Regularity in feeding and milking is an important consideration in providing for the comfort of the cows. If fed at irregular hours they are in alternate conditions of hunger and of surfeit,

and cows soon learn to let down their milk at certain hours, and if not milked then they often suffer greatly when in full milk.

Time is required to demonstrate the real value of a cow. Some cows promise extremely well when in the flush of milk, but go dry so long and become so trifling in many ways before they have been in milk five months that they are not worth their feed. The real test of a good cow is her performance after the first three or four months in milk.

Farmers often value a cow more for her fine calves than for her dairy qualities. This is eminently proper, as a good calf is more valuable to them to raise into a fine steer than the products of the milk. The dairyman, though, has a different object in view, and keeps the cows for their milk only. It is then necessary that these cows give a liberal quantity of rich milk and through a long period, to meet the dairyman's requirements.

The Busy Bee.

Dividing Colonies for Increase.

At a recent convention of bee keepers in Maine, Mr. W. H. Norton read the following:

I wish to ask, for what do we keep bees? I, for one, am obliged to say that it is mostly for profit, or rather honey and the increase of bees. This being our object, how shall we procure the best result? By natural swarming or dividing? To illustrate, we will take two colonies—one we will allow to swarm, the other we will prevent from swarming and divide it. We will now try to trace them through the season.

First, take the one we are to divide. Our first object in the spring is to build up our colonies good and strong in numbers for the honey season, as it requires bees to get any honey. In this northern climate it is all we can possibly do to get them in good forces at the time of the honey flow, then we propose to put on the sections, or use the extractors, and give them room to work; if rightly managed, and if they have sufficient room in the brood chamber, and plenty of surplus room, you will soon have a large colony with plenty of honey; and when the honey season is nearly over, you can take off the sections, divide the colony, introduce the laying queen, and then they are in the best of condition to be prepared for the winter; that is, they have a chance to rear a colony of young bees, and can supply them with wholesome stores to winter on.

Now, let us see how the other colony is doing—the one which is to swarm naturally. To give it a fair chance we will allow it to be equally as strong at the beginning of the honey season. In order to have them swarm naturally, we must let them get crowded for room—that is, get the brood chamber packed full, and perhaps what few sections are on. As they get this done, it being in the height of the honey flow, they find that their house is too small for them, and they begin to prepare to swarm, as follows: Finding the queen has no room in which to deposit her eggs, and being crowded with bees which have no room to work, they hang out on the exterior of the hive. Usually a heavy force puts in their time in this way; and recollect that this is right in the midst of the honey flow. At this point they begin to build queen cells; after a few days the queen, if not having any vacant room, deposits eggs in them, which require three days to hatch. Then they remain for three days in the larval state before they are capped over, and usually on the second day after the first queen cell is capped, if it is a fine day, the first swarm issues.

There has been, so far, ten days lost, and the colony is left in such condition that they cannot do actual work, and this, too, just when they should be doing their best. Of course all are aware that the first swarm which issues is the force of working bees and the old queen, comprising nearly all that can fly, except a few which are left in the field. The old colony is now composed of the brood, several queen cells, the young bees, and a small number that have returned from the field. The queen cells, according to the rules of nature, do not hatch for several days. After the next queen is about three days old (making about nine days from the time the first swarm issued), she comes out to mate. During this time the colony has built up from hatching

brood, and, owing to the prevailing excitement, follows the queen out, which makes the second swarm. The colony is now so reduced that when another queen comes out to mate, there is not enough bees left to follow her out, and she is allowed to go back, and in six days commences to lay—an operation at that time very much needed, as there have been no eggs deposited in this hive for about twenty-one days.

Let us now compare and see which is preferable, natural swarming or division. First, the colony has swarmed, has gone through with all this process and loss of time during the best of the season, besides being all cut up, requiring more housekeepers, and leaving less bees for the field; on the other hand, the colony that you are to divide at the close of the season contains nearly or quite as many bees as all of the three swarms together; there is no laying out if properly managed; no loss of swarms by their going away to the woods; no loss of queens; not so many housekeepers required, allowing more bees for the field; in fact, this colony is doing the right kind of work, and that, too, at the right time, as we cannot get a very large amount of honey out of season.

There are several reasons why I object to natural swarming; one is, where a beekeeper is rearing queens that are out, or that are enticed to come out by the excitement, then join the swarm, and he suffers the loss of several queens. He may say that he does not care for that, as he does not rear any queens, and lets his bees swarm naturally. Now I say that he is rearing queens just the same, to a certain extent.

After the swarm has issued you are in the same fix—you have what is left with a queen that is not mated, and when she comes out to mate she is just as liable to join the swarm as not; if she does you lose your queen, having your colony queenless and with no brood from which to rear another. If you do not notice the loss, and do not give them another queen, the colony will soon dwindle and be useless. Some may say, how can we keep them from swarming? It is simply by understanding thoroughly the nature of the colony; that is, give them the room they require, and when they require it.

I would say, that if you have a colony that you are afraid you do not understand well enough to keep them to work, and prevent them from swarming, it would perhaps be well when they show signs of swarming to divide in this way: Take out a two or three frame nuclei and the old queen, and replace her by introducing a young laying queen. I think that this will prevent further trouble. Right here we get the benefit of dividing; in fact I do not see how we are going to get along without dividing. I do not say that it is best for all to divide their colonies, further than they rightly understand it, for if it is not done rightly, it is better to let them alone.

Dividing colonies has something more to it than merely to make a separation. One must thoroughly learn the nature of this wonderful insect so as to help nature, for when you divide a colony you have got everything in your own hands.

I wish to call attention to more trouble than would be experienced in natural swarming if you had 200 colonies or more in one yard, as I have had the pleasure of witnessing, and this, too, being a small garden spot. How do you think that your courage would be in such a yard as this on a good swarming day? I think that things would be a little mixed, and as a large number of swarms would be mingling together in the air at once, all that could be done would be to stand and gaze on them and wonder what to do next. I, for one, say that it is better for all practical beekeepers to depend on swarming by division.

Fun Facts and Fiction.

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Mistakes of Wheat Growers.

Wheat will always be a staple crop, and the more we know about raising it cheaply and in great abundance the better. John M. Stahl, a competent writer, in a late issue of the *Indiana Farmer*, calls attention to some things in the culture of wheat which he considers as mistakes. The first one usually made, he says, is not to plow the land for winter wheat in July or early in August. Early plowing is such a gain that I would recommend that if the ground has grown a crop of small grain this season it is better to stack than to wait a week to thresh from the shocks, though I am in general in favor of threshing from the shocks, especially if you can be among the first in the neighborhood to thresh. The gains by early plowing are: Stopping the growth of weeds, breaking the ground before it has become hard and dry (thus saving both labor and clods), securing the aid of sun, air and rain in preparing the seed bed, proper application of manure, and atmospheric fertilization. Let us take these up in order.

First, stopping the growth of weeds. A weedy growth is never a desirable thing, no matter for what purpose the ground may be used. But there may be times when the only damage done by the weeds is the extraction from the soil of food needed by the crop. In the case of ground intended for winter wheat, however, weeds occasion greater damage in each of two other ways. The growth that springs upon stubble ground rapidly matures, the weather being warm and dry, and if plowing is delayed the ground will be fouled with seed, to appear as a vexatious weedy growth in subsequent years. Again, it is universally admitted that a solid seed bed is essential to the best of wheat. But if the weeds are allowed to make a considerable growth before they are turned under, it will be impossible to compact the seed bed; they will make crevices and openings in spite of all that can be done. If the ground has been in either wheat or oats it is desirable that the grain that has fallen upon the ground germinates before the wheat is sown. If the ground is plowed early all grains except those put down so deep that they will not reach the surface that season, will germinate, and the after work of preparing the seed bed will destroy their growth.

Second, breaking the ground before it has become hard and dry. In the zone of variable winds we usually have droughty and hot weather from July 15 to September 1. If we delay plowing, the ground becomes so hard and dry (parched), that breaking it up is very hard work for both men and team, and to do the work in the best manner is impossible. The plow cannot be made to run a uniform depth, and when the ground is plowed it has only been broken up into hard, lifeless lumps. To reduce these to a condition approaching a fit one for the reception of the seed will require a large amount of hard, well directed work. If the ground has been plowed early, before it has become hard and dry, the work will be easier for both man and team, wear on the plow will be lessened, time will be gained, the plow will pulverize some of the ground, and the lumps that are thrown up will have considerable moisture in them, so that if other mistakes, to be noticed hereafter, are not made, a lively, fine, compact seed bed can be made with a less amount of work.

Third, securing the aid of sun, air and rain in preparing the seed bed. To have a proper bed for the seed we must have a powdered, solid one; that is, one made of granulated soil, well compact-

ed. Land is often in such a condition, particularly late in the summer, that when you use the harrow and roller you only make many small clods out of one large one. The ground is not lively because it is not disintegrated. Sun, air and rain have a strong tendency to reduce clods; and when they reduce a clod they make it into fine, lively ground. Hence it is very desirable to get their aid. They not only do their work in the best possible manner, but they work for nothing. They ask for neither wages nor board. It is plain they cannot work until the ground is plowed; and the earlier the ground is plowed the more time they will have for work and the more they will do. Besides, if the ground is plowed early the clods will offer less resistance, as we have seen. And, like the man and team, the sun and air and rain can do more than if the clods are thrown up hard and dry. But when the ground is made fine it must also be compacted—the particles driven close together. These two processes may well be carried on simultaneously. And sun and rain will compact the ground better than it can be done with harrow and roller. They pulverize it better and then drive the particles together better. A good shower washes the clods into small particles and then beats down these particles; thus doing very effective work, which costs you nothing.

Fourth, the proper application of the manure. For when the ground is plowed so early the manure must be spread on the surface of the plowed land, where the manure for wheat is put. Wheat is a shallow feeder, and if the manure is plowed under and the land is plowed deep, much of the manure will not be used at all until a second plowing throws it on the surface. The wheat will receive no good from it whatever. More, the wheat needs the manure most in the fall, that it may make a vigorous growth against the severities of winter, but in the fall the roots of the plants are short and for manure to be available it must be near the surface. If spread on the surface of the plowed ground the harrow and roller will find it and incorporate it with the upper stratum of the soil, thus putting it in that condition and position in which it will do the most good.

Fifth, atmospheric fertilization. The atmosphere renders the soil more fertile in two ways. First, it fines it, thus making it more lively and readily soluble, hence makes more of its plant good available to the crop. Second, it breaks up the chemical compounds in the soil, setting their elements free, and thus making them available to the plant, which they were not before. To accomplish this work the air must come in direct contact with the soil, and the work is greater when the surface exposed is moist and fresh. Hence plowing, which exposes a greater surface to the air and also a moist, fresh one, increases this work; and the earlier the plowing is done the longer the air has to work upon this greater surface and the more it will increase the real fertility of the soil.

The *Chicago News* asserts that diseased sheep are sold daily at the stock yards: "Sales are made openly despite the presence of inspectors, and no bar has thus far been interposed to stop the repulsive traffic. A thousand diseased sheep are bought at the stock yards daily by mercenary scalpers and sold to the unsuspecting public as good mutton. Scab, foot rot and glanders were ailments of the sheep that was definitely ascertained were slaughtered and are now in local butcher shops or at the Jackson street market.

A New Wheat Pest.

A correspondent of the *McPherson Republican* says: "In May many heads of wheat in nearly all the fields turned white just as the kernel was in the milk. The whole head looked well formed, but it weighed light and the kernel was shriveled. Some fields were badly damaged; others very slightly. In all these white or affected heads there was found a small green worm in the joint next the head. Some of the wheat was sent to Prof. Snow, at Lawrence, and he pronounced them the 'Isosoma' of Riley, or the wheat stalk worm. He further says that it frequently does as much damage as the Hessian fly; further, that it stays in the stubble until next spring, when the eggs hatch. They are a pest that can easily be killed by burning the stubble. If the stubble is too light and full of weeds, it would pay to first mow the ground and then burn. To sow wheat on ground affected by this pest is labor thrown away, for they will eat it all up next spring. The most of these when they hatch are wingless and cannot travel far. It seems to me that the fact of their staying in the stubble until spring should be generally known, for each individual has the remedy in his own hand, and can destroy them. This county was the first to report them, and this is the first time that they have made their appearance in the State, and it would be well for all farmers to burn their stubble, or if they do not, to sow wheat on ground that did not have wheat this year, for there is a dead certainty that wheat sown on land affected by this pest will not be harvested. In the June agricultural report is found a full account of this pest and the Hessian fly.

About Listers.

We find in an Eastern paper a long article, well written and carefully embellished, headed, "The Marvel of Kansas Farmers." The writer begins by saying: "The Western agriculturists, who wisely believe that the road to wealth leads through corn fields to the pens and pastures where hogs and cattle are fed, and who till the rich lands lying adjacent to the Arid Belt, have for years demanded a tool that would enable them to plant their seed corn so deeply in the ground that, when their fields were laid by, the main roots of the corn plants would be thrust deep into the moist earth that always lies below the thick layer of dry, dusty soil that covers the surface of Western corn fields during a drought."

Another paragraph tells the story in brief: "Last year on my farms in Kansas two forty-acre tracts of rich, black sandy loam were selected to experiment on. The land is as level as a floor. There is not a particle of difference between the tracts in fertility or location. One tract was ploughed deeply with a common plough, and planted with a check rower in hills four feet apart, three kernels in a hill. It was thoroughly cultivated four times. The other piece was listed, the kernels of corn planted fourteen inches apart. The ridges were leveled by two cultivators. The listed field produced fifteen bushels of corn per acre more than the check-rowed corn, and its cost of production, previous to husking, was one-half less per acre than the checkrowed corn."

An exchange truly remarks that the growing demand for American corn abroad is indicated by the fact that our exports of this grain were larger the past year than ever before. The area under cultivation is estimated at 4,000,000 acres more than produced the large crop of 1884. It is almost too early yet

to speak with certainty, as untimely frosts may spoil a crop which was generally got in late in the spring and which is yet backward. Present conditions in nearly all parts of the country are favorable. A few more weeks of good weather and we shall have a crop of corn more valuable than the largest wheat crop, and of which we shall almost certainly have more to export than of wheat the coming year.



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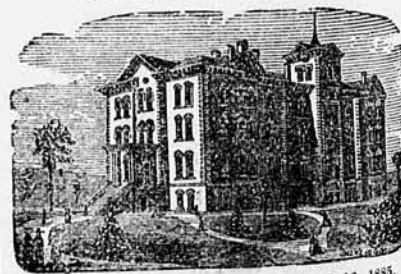
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Hard Work in Hot Weather.

It is never easy to work hard, and it is still less so in very warm weather. It is harder on persons in towns, and especially in crowded cities, than it is in the country. Where the air circulation is largely cut off by high walls of houses, and where the surface of the earth is made to be a great reflector by the paved streets and sidewalks, the injurious effect of high temperature is much increased. When men work in such places during very warm weather, they need to be very careful. They ought to bathe their bodies at least once a day; their clothing should be light in body and color and should be wool in part at least. Their hats ought to be very light in the crown, and made of straw or of very loosely-woven fabric kept stiff enough to not lie on the head, and the brim should be stiff and colored on the under side blue or light brown. And occasionally, say every half hour, a brief rest should be taken in an airy spot shaded, and the head ought to be bathed with water not very cold. Bathe the hands and wrists and neck, by simply applying water, not rubbing. Take a cup of water in one hand, pour slowly on the front of the other wrist and particularly on the vein which shows the pulse. Pour slowly a very few seconds, then change to the other hand. Repeat a few times, changing to the neck, particularly below and about the ears, and you will soon be cool enough to go to work again. The food and drink should be very plain and substantial. Avoid all strong liquors. Drink plenty of cold but not ice water when you are not overheated, and lemonade will prove a cooling and refreshing drink. Lemon juice and fresh water mixed make a good drink.

Farmers in the fields have several advantages over their brethren in the towns; they have fresh air and plenty of it. They do not need to be as much guarded as the towns people, still, they ought to be very careful, for men sometimes are overcome by heat even in the open fields. Farmers and other rural workers in warm weather ought to regard clothing and food as matters of prime importance. The suggestions above given for townsmen are equally applicable to country people. We agree with a contemporary, the *Rural Home*, that people exposed to extreme heat—as laborers in the harvest field—should beware of all excesses. Every one should avoid the use of liquors and be extremely careful in using ice-water or any iced drinks. Oatmeal-water, buttermilk, and other summer beverages, are far preferable. Great injury often results from the immoderate use of cold water when the system is overheated—iced drinks especially being nearly as dangerous as the strongest liquors—and it is averred that a great majority of the fatal sunstrokes in our cities occur with persons of intemperate habits. Farmers who have ice, as many of them do of late years—and it is a blessing when properly used (albeit a great metropolitan journal asserts that "iced drinks are against the laws of nature")—should take the precaution to temper the ice-water with warmer water before drinking, especially in the harvest field, or elsewhere if overheated. As an attack of sunstroke generally occurs without any special warning, prompt action is necessary whenever a person is prostrated. Whenever one feels a weakness or prostration suddenly coming over him while at work during very hot weather, it is usually a warning which should be at once heeded. The wisest course is to stop work immediately, rest, and employ proper means to recuperate an enervated system. In case of actual sunstroke, the patient should be placed

in as cool and comfortable a position as possible, and ice or ice-water applied to the head without delay, while a good physician is being summoned. The chest should also be bathed with cool water, and mustard plasters applied to the feet and calves of the legs as soon as possible. In all such cases delays are dangerous, while prompt and decisive action often saves the lives of the prostrated.

Farmers who can possibly do so ought to avoid all heavy work during the heat of the day, doing the lighter work then, and taking a long "nooning," that both men and teams may be refreshed. Indeed, during the season of midsummer, with its sudden changes and great variations of temperature, our rural friends can scarcely be too prudent, particularly while the extreme heat of midday prevails. At such a time it is wise to "make haste slowly," lest a waste of health, if not of life, be the result of speed or over-exertion. It is far better to take things easy during hours of tropical heat, and perform the heavier work toward and in the evening whenever possibly convenient. While fully believing in the Gospel of Work, we subscribe to the orthodox doctrine that "there is a time for all things," and do not consider it the dictate of wisdom to perform much severe manual labor during those hours of the day when the mercury ranges among the nineties in the shade, while the temperature in the blazing sunshine is so torrid as to be unendurable. Hence, our advice to all specially interested is, to take things as calmly and systematically as possible while the dog-star remains rampant. Most farmers are wont to be very imprudent at this busy season, and a little rest and sanitary reform would probably have a salutary influence upon their health and longevity, and also promote their pecuniary interests.

Late Patents to Kansas People.

List of patents granted to citizens of Kansas for the week ending Tuesday, July 28, 1885, compiled from the official records of the United States Patent office, expressly for the KANSAS FARMER, by Herring & Redmond, solicitors of patents, No. 637 F street N. W., Washington, D. C., of whom information may be had:

- No. 323,266—J. G. Bradley, Wetmore, rolling cultivator and pulverizer.
- No. 322,919—W. T. Ferguson, Corn-ing, harrow and land roller.
- No. 322,920—T. M. Foote, Black Wolf, railway switch.
- No. 323,127—N. G. Franzen, Randolph, rocking chair.
- No. 322,926—J. L. Hall, Colony, alarm attachment for baling presses.
- No. 323,247—J. W. Wilson, Brookville, bran duster.

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The Thos. Bradford Co.,
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Water Wheels, Millstones
and PORTABLE MILLS
Manufactured by
A. A. DeLoach & Bro., Atlanta, Ga.
Prices wonderfully low. Send for
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CURES ALL OPEN SORES,
CUTS FROM BARBED
WIRE FENCE,
SCRATCHES,
KICKS,
CUTS,
&c.
Sold
Every-
where.
15 & 50 cts
a box. Try it.
STEWART HEALING POWDER CO., ST. LOUIS.

Self Cure Free
Nervous
Debility
Lost
Masthead
Weakness
and Decay
A favorite prescription of a noted specialist (now re-
tired.) Druggists and all R. A. Address
DR. WARD & CO., LOUISIANA, MO.

THE STRAY LIST.

HOW TO POST A STRAY.

BY AN ACT of the Legislature, approved Feb 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 a 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 \$50 to \$500 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.

How to post a Stray, the fees fines and penalties for not posting.

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

Unbroken animals can only be taken up between the 1st day of November and the 1st day of April, except when found in the lawful enclosure of the taker up.

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

If an animal liable to be taken, shall come upon the premises of any person and falls 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 a stray, must immediately advertise the same by posting three written notices in as many places in the township, giving a correct description of such stray.

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 appraiser, 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.

Strays for week ending July 22, '85.

Leavenworth county—J. W. Niehaus, clerk.

HORSE—Taken up by J. D. Hines, of Easton tp., one dark brown horse, 11 or 12 years old, saddle marks, slightly knee-sprung, stiff in shoulders; valued at \$50.
PONY—Taken up by Valentine Krapp, of Sherman tp., June 12, 1885, one bay horse pony, white star on forehead, left hind foot white, some saddle and harness marks, 14½ hands high, supposed to be 11 or 12 years old; valued at \$25.

Reno county—W. R. Marshall, clerk.

SOB—Taken up by George Avery, of Hayes tp., July 2, 1885, one 1-year-old sow with pig, black with white feet; valued at \$10.

Butler county—James Fisher, clerk.

HORSE—Taken up by John Lipscomb, of Spring tp., June 18, 1885, one dark bay horse, supposed to be 10 years old, medium size, both hind feet and left fore foot white above pastern joint, white saddle marks on each side of back, white star in forehead, no other marks or brands visible; valued at \$75.

Elk county—J. S. Johnson, clerk.

MARE—Taken up by C. H. Branch, of Pawnee tp., June 8, 1885, one dark bay mare, about 15 hands high, about 10 years old, saddle and collar marks; valued at \$70.

Ford county—Sam'l Gallagher, Jr., clerk.

COLT—Taken up by Edward E. Lawrence, of Spearville tp., June 19, 1885, one dun mare colt, small slit in one ear.

PONY—By same, at same time, one light roan mare pony, 6 or 7 years old, branded M. O. on left hip.

Montgomery county—H. W. Conrad, clerk.

MARE—Taken up by Wm. Persinger, of Sycamore tp., June 15, 1885, one sorrel mare, 7 years old, blaze in face, both left feet white; valued at \$20.

MARE—By same, one gray mare, 2 years old, slit in right ear; valued at \$40.

MULE—By same, one black horse mule, 2 years old; valued at \$60.

Linn county—J. H. Madden, clerk.

HORSE—Taken up by B. M. Thompson, of Potest tp., June 29, 1885, one bright bay horse, star in forehead, about 15 hands high, has collar marks, is lame in right fore leg; valued at \$90.

Strays for week ending July 29, '85.

Jefferson county—J. R. Best, clerk.

MARE—Taken up by J. Q. Puse, of Sarcoxie tp., on or about July 1, 1885, one black mare, about 14½ hands high, tick marks all over, a letter Y on left shoulder, sore on one shoulder; valued at \$25.

PONY—By same, about July 1, 1885, one bay mare, about 13½ hands high, white spot in the face, barb wire cut on shoulder, collar marks on both shoulders, supposed to be about 10 years old; valued at \$75.

Douglas county—M. D. Greenlee, Dep. clerk.

MARE—Taken up by T. J. Harris, of Eudora tp., (1½ miles south of Eudora), June 10, 1885, one black mare, 14½ hands high, Texas brand on left shoulder and hip; valued at \$20.

Miami County—J. C. Taylor, Clerk.

PONY—Taken up by M. J. Williams, of Middle Creek tp., June 13, 1885, one black Texas mare pony, branded with 37 on left hip and shoulder, shoat in front, supposed to be about 7 years old.

Strays for week ending August 5, '85.

Rush county—L. K. Hain, clerk.

PONY—Taken up by Robert Stephens, of Belle Prairie tp., one bay mare pony, white spot in forehead, 6 years old, both ears rounded off, branded T on left shoulder, F on right hip and 7 on left hip; valued at \$25.

PONY—By same, one bay mare pony, white spot in forehead, 5 years old, branded F on left shoulder and F on right hip; valued at \$20.

PONY—By same, one dark bay mare pony, 4 years old, branded T on left shoulder, 7 on left hip and F on right hip; valued at \$20.

Ellsworth county—N. H. McCoy, clerk.

COW—Taken up by Geo. L. Kitchell, of Empire tp., one red-roan cow, 3 years old, crumpled horns, under-bit in left ear.

CALF—By same, one white sucking calf; both foregoing animals valued at \$25.

HEIFER—By same, one dark brown heifer, about 2 years old, no marks or brands; valued at \$21.

Russell county—H. C. Hibbard, clerk.

COW—Taken up by Jacob Harnish, of Plymouth tp., (P. O. Dorrance), one red cow between 2 and 3 years old, ear cropped, no brands.

Franklin county—L. Altman, clerk.

STEER—Taken up by John S. Mallory, of Franklin tp., one red and white spotted steer, 1 year old, marked with smooth crop in right ear and slit in left ear; valued at \$16.

STEER—By same, one red 1-year-old steer, same ear-marks as above; valued at \$16.

HEIFER—By same, one red heifer, same ear-marks as above; valued at \$16.

Butler county—James Fisher, clerk.

PONY—Taken up by Jesse Varner, of Lincoln tp., July 2, 1885, one brown mare pony, branded A on left shoulder, 8 or 10 years old; valued at \$40.

**KANSAS FARMERS' MUTUAL
FIRE INSURANCE CO.,**
—OF—
ABILENE, : KANSAS.

OFFICERS:

J. E. BONEBRAKE, President.
O. L. THISLER, Vice President.
M. P. ABBOTT, Secretary.

INSURES

Farm Property and Live Stock
AGAINST
**Fire, Lightning, Tornadoes and Wind
STORMS.**

The Company has now complied with the law enacted by the last Legislature for Mutual Fire Insurance Companies to create a guarantee capital and now do business on a cash basis.

AGENTS WANTED in Every County in Kansas.

For any information, address the Secretary, Abilene, Kansas.

**RIVER VIEW
Stock Farm.**

50 HEAD OF

**IMPORTED NORMAN
STALLIONS**

Just arrived from France, added to my stock of Norman Horses, which now numbers upwards of 100 HEAD, from 2 to 5 years old. Parties wishing to purchase first-class stock will do well to call and see my Normans before purchasing elsewhere. Prices and terms to suit purchasers. All of the above stallions were selected by myself in France this season. (Mention this paper.)

JAMES A. PERRY

Importer and Breeder of Norman Horses.

River View Stock Farm, Wilmington, Ill.

Fifty miles south of Chicago, on the Chicago & Alton railroad.

PERCHERON NORMAN, CLYDESDALE

and **ENGLISH DRAFT HORSES**

E. BENNETT & SON

Importers and Breeders,

Topeka, : Kansas.

All stock registered. Catalogues free.



If there is any manure about the barn and stables, or lying out exposed to the weather, haul it out where it will help to increase the crop yield and farm receipts the coming season. It is valuable capital that should be invested.

An orchard is a fine place for swine. If set in clover it will afford fine grazing for the pigs, and they may be allowed to root to their hearts' content, as it is all the better for the trees, as many insect pests are thereby destroyed.

A correspondent of the *Poultry World* says that a mixture made of equal parts of red pepper, alum, resin and sulphur will cure chicken cholera. Feed a tablespoonful of this mixture in three pints of scalded meal daily, and the chickens will get well speedily.

T. B. Terry says: "The meanest man on earth is the one who hires his children to do a job and then forgets to pay them—who gives them a calf to raise for their own, and sells it when grown up and coolly pockets all the money. Who would blame such a man's children for wanting to leave the farm?"

A Texas man, already aware that his boy was dull of apprehension, observed during a heavy shower that the youngster actually did not know enough to come in when it rained. Much impressed by the result of this proverbial test, he applied to a court to have the little fellow adjudged idiotic and committed to an asylum. The motion was denied, however, no other evidence being presented to sustain it.

An enormous quantity of grog is being sent to Western Africa. From Boston a single vessel recently took out 132,000 gallons, and a ship which sailed previously carried a few missionaries to the tribes on the Congo and also bore 5,200 gallons of rum to the same tribes. Tremendous quantities of liquor are shipped at Liverpool and Glasgow. Hamburg is now said to be providing liquor of the worst kind for the Niger and Congo regions.

Nervous Debilitated Men

You are offered a free trial of thirty days of the use of Dr. Dye's Celebrated Voltaic Belt with Electric Suspensory Appliances, for the speedy relief and permanent cure of Nervous Debility, loss of Vitality and Manhood, and all kindred troubles. Also, for many other diseases. Complete restoration to health, vigor and manhood guaranteed. No risk is incurred. Illustrated pamphlet, with full information, terms, etc., mailed free by addressing Voltaic Belt Co., Marshall, Mich.



Chester White, Berkshire and Poland-China Pigs, fine Setters, Dogs, Scotch Collies, Fox Hounds and Beagles, Sheep and Poultry, bred and for sale by W. G. Grooms & Co., West Chester, Chester Co., Pa. Send stamp for Circular and Price List.

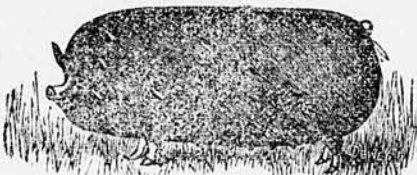
REGISTERED BERKSHIRE PIGS!

By Imported Boars, boxed and shipped at ONE-THIRD THE USUAL PRICE, by

McHATTON & SONS,
MEXICO, MO.

PLEASANT VALLEY HERD

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. McCULLUGH,
Ottawa, Kansas.

PURE-BRED Berkshire and Small Yorkshire SWINE.



We are breeding 25 of the best selected sows of the above named swine to be found in the country, direct descendants from Imported Sires and Dams. We are prepared to fill orders for either breed, of both sexes, at the very lowest prices.

We have tried Small Yorkshires thoroughly, and are satisfied that they cannot be excelled as a profitable hog to raise. They are very docile and mature rapidly. Send for prices and catalogue to

WM. BOOTH & SON,
Winchester, Jefferson Co., Kas.

S. V. WALTON & SON,

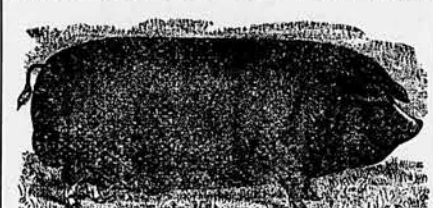
Box 207, Wellington, Kansas,
—Breeder of—

IMPROVED POLAND-CHINA HOGS

Of the Highest Type.

All well pedigreed. Correspondence solicited

TRUEDELL & PERDUE,



Owned by TRUEDELL & PERDUE, Lyons, Rice Co., KANSAS.

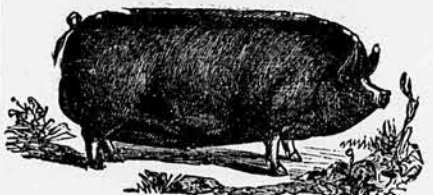
Breeders of Thoroughbred Poland-China Swine, Lyons, Rice Co., Kas. Our herd carries the blood of the most noted strains, headed by three of the best boars west of the Mississippi river. 100 choice show pigs now for sale; also sows bred, and boars ready for service. Stock recorded in the American Poland-China Record. Correspondence promptly answered. Prices reasonable and satisfaction guaranteed.

If you want A YOUNG SOW, Bred to our crack Boars; If you want A YOUNG BOAR, Pig; If you want A YOUNG SOW, Pig; If you want to place an order for A SPRING PIG;	POLAND-CHINA SWINE.	If you want A SETTING OF Plymouth Rock Eggs, at \$1.50; If you want a Thoroughbred SHORT-HORN BULL, From \$100 to \$125. Write to MILLER BROS., Junction City, Box 298. - Kas.
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THOROUGHbred POLAND-CHINAS



As produced and bred by A. C. MOORE & SONS, Canton, Ill. The best hog in the world. We have made a specialty of this breed for 38 years. We are the largest breeders of thoroughbred Poland-Chinas in the world. Shipped over 700 pigs in 1883 and could not supply the demand. We are raising 1,000 pigs for this season's trade. We have 160 sows and 10 males we are breeding from. Our breeders are all recorded in American P.-C. Record. Pigs all eligible to record. Photo card of 43 breeders free. *Swine Journal* 25 cts. In 2 cent stamps. Come and see our stock; if not as represented we will pay your expenses. Special rates by express.



ABILENE HERD

BERKSHIRES FOR 1885.

COMPRISING the choicest strains of blood bred to perfection, including ten different families known to fame, such as the Sallie, Sweet Seventeen, Cassanara and Gipsy families. At the head of my herd stands

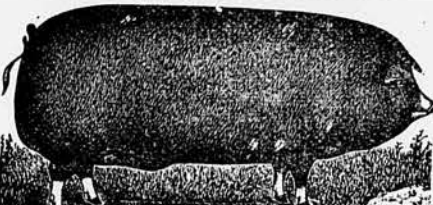
EARL OF CARLISLE 10459,

A son of Imp. Royal Carlisle 3433 and Imp. Fashion, and Duke of Wellington 13392, winner of second prize at St. Louis Fair in 1884, under one year old. My pigs this spring are very fine, from five different boars. I never young SHORT HORN BULL—fine individual and fashionably bred. I would always prefer parties to

Come and See My Stock Before Purchasing,

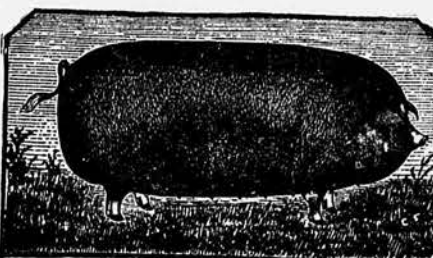
But orders trusted to me will receive my own personal attention and will be filled with care, for I will not send outstock that I would be ashamed to keep myself. Catalogues will be ready soon. Correspondence solicited. Come and see or address

JAMES ELLIOTT, Abilene, Kansas.



Owned by J.V. RANDOLPH, Emporia, Kas.

Established in 1868.



RIVERSIDE HERDS POLAND and BERKSHIRE SWINE.

Having been a breeder of Poland-China Swine in Kansas for seventeen years, it is with pride as well as pleasure that I announce to the people of the New West that I am offering the finest lot of Pigs that I have ever seen offered, representing the best strains of the breeds, and thoroughbred. I will fill orders of either sex and any age at reasonable figures. All stock warranted to give satisfaction. Come and see my stock or write, and if not as represented, I will pay your expenses. Orders promptly filled.

J. V. RANDOLPH, Emporia, Kansas.

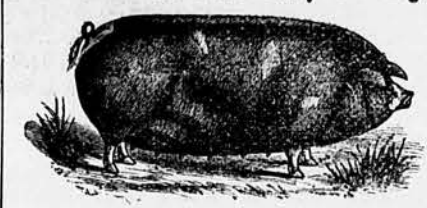
TIMBER LINE HERD

HOLSTEIN CATTLE and POLAND-CHINA PIGS.

We have on hand 150 head of fine pigs for sale now and for spring trade. Also fine yearling Holstein bull and a few grade Holstein cows for sale. Splendid milkers. We guarantee satisfaction. All correspondence answered. Inspection invited.

W. J. ESTES & SONS,
Andover, Butler Co., Kas.

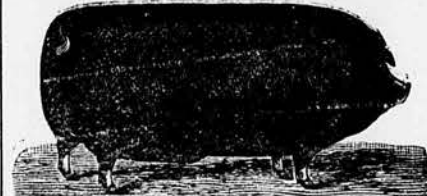
OTTAWA HERD OF Poland-China and Duroc Jersey Red Hogs.



I. L. WHIPPLE, Prop'r, Ottawa, Kas.

I have for sale a fine lot of young pigs sired by Jay-hawker 2039, Ottawa King 2585 (the champion hogs of Franklin county), and Buckeye Boy 24219, Ben Butler 2977, Leek's Gilt-Edge 2887, which are very fine breeders of fashionable strains. My sows are all first-class and of popular strains. I also have an extra fine lot of Duroc Jersey Red pigs for sale from sires and dams that have never been beaten in the show ring in four counties in Kansas. I have hogs of all ages in pairs or trio, of no kin, for sale. Herd has taken over twenty prizes this last year. My herd has never had any disease. Stock all eligible or recorded in Central Record. Please call and see stock, or write and give description of what you want. Inquiries promptly answered. Farm, three miles southeast of Ottawa, Kas.

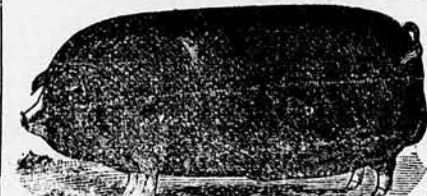
MEADOW BROOK HERD



OF POLAND-CHINA SWINE.

Breeding Stock recorded in American and Ohio Records. Tom Duffield 1675 A. P.-C. R., at head of herd. Always apace with latest improvements of the favorite breed. Personal inspection solicited. Correspondence promptly answered.

JELLEY & FILLEY, Proprietors,
KINGMAN, KANSAS.



RANKIN BALDRIDGE,

Parsons, Kansas,

Breeder of Pure Poland-China Hogs. This herd is remarkable for purity, symmetry, and are good breeders. Black Jim, a prize-winner, bred by B. F. Dorsey, heads the herd. Stock recorded in Central Poland-China Record. Correspondence invited.

EMPIRE BREEDING FARM,



G. M. EMERICK, M. D., Brookville, Ill. 18 Holstein-Friesian Bulls, 100 Victoria Pigs for sale at living rates; now is the time to procure choice stock. 30 varieties of Fancy Poultry. Write for what you want. JAMES FAGER, Manager.

The Line selected by the U. S. Gov't
to carry the Fast Mail.

Burlington Route

H&STJ & K.C. STJ & C.B. R.R.S.

5,000 MILES IN THE SYSTEM,

with Elegant Through Trains containing Pullman Palace Sleeping, Dining and Chair Cars, between the following prominent cities without change:

CHICAGO, ST. LOUIS, PEORIA, KANSAS CITY, DENVER, OMAHA, ST. JOSEPH, QUINCY, BURLINGTON, HANNIBAL, KEOKUK, DES MOINES, ROCK ISLAND, LINCOLN, COUNCIL BLUFFS, ATCHISON, TOPEKA, LEAVENWORTH, SIOUX CITY, ST. PAUL, MINNEAPOLIS.

Over 300 Elegantly Equipped Passenger Trains running daily over this perfect system, passing into and through the important cities and towns in the great States of

ILLINOIS, IOWA, MISSOURI, KANSAS, NEBRASKA, COLORADO.

Connecting in Union Depots for all points in the States and Territories, EAST, WEST, NORTH, SOUTH. No matter where you are going, purchase your tickets via the

"BURLINGTON ROUTE"

Daily Trains via this Line between KANSAS CITY, LEAVENWORTH, ATCHISON, ST. JOSEPH and COUNCIL BLUFFS, OMAHA, SIOUX CITY, ST. PAUL and MINNEAPOLIS.

KANSAS CITY, ATCHISON, ST. JOSEPH and QUINCY, HANNIBAL and CHICAGO, Without Change.

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PATRONIZE HOME INSTITUTIONS.

THE SOUTHERN KANSAS RAILWAY

IS A KANSAS ROAD,

And is thoroughly identified with the interests and progress of the State of Kansas and its people, and affords its patrons facilities unequalled by any line in Eastern and Southern Kansas, running

THROUGH EXPRESS trains daily between Kansas City and Olathe, Ottawa, Garnett, Iola, Humboldt, Chanute, Cherryvale, Independence, Winfield, Wellington, Harper, Attica, and intermediate points.

THROUGH MAIL trains daily except Sunday between Kansas City and Wellington, and intermediate Stations, making close connections at Ottawa, Chanute and Cherryvale with our trains for Emporia, Burlington, Girard, Walnut and Coffeyville.

ACCOMMODATION TRAINS daily except Sunday between Kansas City and Olathe and Ottawa.

REMEMBER that by purchasing tickets via this line connection is made in the Union Depot at Kansas City with through trains to all points, avoiding transfers and changes at way stations.

THROUGH TICKETS can be purchased via this line at any of the regular Coupon Stations, and your baggage checked through to destination, East, West, North or South.

PULLMAN SLEEPERS on all night trains. For further information, see maps and folders, or call on or address

S. B. HYNES,
Gen'l Passenger Agt.,
Lawrence, Kansas.



Peerless Self-Dump, Climax Hand-Dump Sulky Hay Rakes. They are the leaders as they possess many new and attractive advantages. Don't let dealers induce you to buy other makes until you examine these favorites. Circulars free.

BARNES MFG. CO., Freeport, Ill.

This, That and the Other.

The deep, dark plot of a Baltimore girl was to mix some chemical with the rouge used by a rival, so that it would turn her cheeks black indelibly instead of pink.

A remarkable bedstead made to order by a Milwaukee furniture firm is twenty-four feet wide, and has nine compartments, each intended to hold one of the purchaser's children.

The foremost belle at a California summer resort is not beautiful, and her wardrobe is not commandingly fine; but she drives a four-in-hand of zebras, and that fixes her in the public eye.

The newspaper of Mazatlan, Mexico, asserts that of all the Yankees who have visited that place not one has been a gentleman, and it earnestly begs the United States to send a specimen, if such a thing exists.

Max Hoffman who was Secretary of State in Indiana from 1869 to 1871, died of small-pox a few years ago, after having been wrecked by dissipation. His family were left destitute, and his wife now supports herself and family by selling papers and keeping a fruit stand in the city.

Coal is said to be an almost unknown luxury to the Chinese of San Francisco. Their mode of cooking is to have an empty oil can serve as a stove, upon which they place their teakettle or a cooking pan. They start a fire with two or three small sticks of wood, which they add to as they burn, and in this way manage to establish a good degree of heat with but a small expenditure of fuel.

Whatever lacks purpose is evil; a pool without pebbles breeds slime;
Not any one step hath chance fashioned on the infinite stairway of Time;
Nor ever came good without labor, in toil, or in science or art;
It must be wrought out through the muscles—born out of the soul and the heart.
—Chas. J. O'Malley.

Shakespeare uses more different words than any other writer in the English language. Writers on the statistics of words inform us that he uses 15,000 different words in his plays and sonnets, while there is no other writer who uses as many as 10,000. Some few writers use 9,000 words, but the majority of writers do not employ more than 8,000. In conversation, only from 3,000 to 5,000 different words are used.

Read This.

We have a Nichols, Shepard & Co. 10-horse power Traction Engine, a Nichols, Shepard & Co. 36-inch cylinder Separator, a Keystone 6-hole Power Sheller, with water-tank on trucks, belting, jack, and everything to make a complete Steam Threshing and Corn-Shell-ing Outfit. Engine and machines are practically new and in good working order. We will sell them at low prices for cash or on time payments, or trade them for good country or town property. For further particulars come and see us or address
IRON CLAD STORE CO.,
Wamego, Kansas.

MISSOURI PACIFIC.

Elegant Equipment Between Kansas City and Omaha.

On and after July 1, 1885, the Missouri Pacific night express, between Kansas City and Omaha, leaving Union depot at 8:20 p. m., arriving at Omaha at 6 a. m., returning leave Omaha at 9 p. m., and arrive at Kansas City at 6:35 a. m. daily. These trains will be equipped with two new elegant Pullman palace sleeping cars, the Potosi and Glendale, and elegant palace day coaches. Day express (daily) except Sunday to Omaha leaves Kansas City at 8:45 a. m., arrives at Omaha at 6 p. m. These trains run through Leavenworth, Atchison, Hiawatha, and run to and from the Union Pacific depot at Omaha.

Connections made at Omaha for all points west on the line of the Union Pacific, for all points north to St. Paul, and with all eastern lines from Omaha.

For tickets and sleeping car berths, call on your ticket agent, or No. 1,048 Union avenue and 528 Main street, Kansas City, Mo.

H. C. TOWNSEND, G. P. Agt.,
J. H. LYON, W. P. Agt.,
Kansas City, Mo.

Established **FAY'S** 1866.

MANILLA ROOFING

Resembles fine leather; for ROOFING, OUTSIDE WALLS, and INSIDE in place of Plaster. Very strong and durable. CARPETS and RUGS of same material. Catalogue with testimonials and samples, Free.
W. H. FAY & CO., Camden, N. J.

SEED WHEAT

CROP OF 1885, READY BY JULY 10TH.

All the hardy and improved varieties, many that have withstood the past winter almost entirely unharmed, will be ready for delivery by July 10th or 15th. Samples with mode of culture, sent on receipt of 6 cents in postage stamps. Address

SAMUEL WILSON, Mechanicsville,
Bucks Co., Penna.

Ritchie's Safety Attachmen.

FOR HORNED ANIMALS,
Or Bull Conqueror.

Pat. April 8, 1884. Entire

Patent or Territory for

sale, \$5 and \$5.50 per set.

Sent to any part of U. S.

on receipt of price. Circular

and testimonials sent on

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stamp for reply. Address

GEO. W. RITCHIE,

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Morton's Lightning Arrestor

FOR WIRE FENCES

Preserves fences from damage and live stock and persons from being killed by lightning.

Agents wanted.

Address W. T. DAVIDSON, Abilene, Kas.

TILE & BRICK MACHINERY.

STONE-SEPARATING CLAY-CRUSHERS

Illustrated Catalogue free.

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No. 146 Mill St.,

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Rock Drilling, Well Digging, Pipe Driving,

Prospecting Machines and Outfits.

GENERAL WELL SUPPLIES

MANUFACTURED BY

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Prices Greatly Reduced for 1885

SAMPLE MONARCH POTATO DIGGER, Only \$10.

SENT ON 60 Days' Test Trial.

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Liberal Discount to the Trade.

Send for Wholesale Prices etc.

MONARCH MFG. CO., 206 State St., Chicago.

TIMKEN SPRING VEHICLES.

OVER 400,000 IN USE.

Easiest Riding Vehicle made. Rides as easy with one person as two. The Springs lengthen and shorten according to the weight they carry. Equally well adapted to rough country roads and fine drives of cities. Manufactured and sold by all leading Carriage Builders and Dealers.

Address ZIMMERMAN MFG CO., BURLINGTON, IOWA.

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ZIMMERMAN FRUIT & VEGETABLE EVAPORATOR

Made of Galvanized Iron, 5 SIZES. 16,000 SOLD. Economical, Durable and Fire Proof. Will pay for itself in 30 days use, out of sale of its own products.

FREE! Our Illustrated Catalogue and Treatise.

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Sedgwick STEEL WIRE Fence

Is the best general purpose wire fence in use. It is a strong net-work without barbs. Don't injure stock. It will turn dogs, pigs, sheep, and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock ranges, and Railroads. Very neat, pretty styles for Lawns, Parks, School-grounds and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is better than boards or barbed wire in every respect. Give it a fair trial; it will wear itself into favor. The Sedgwick Gates made of wrought iron pipe and steel wire, defy all competition in lightness, neatness, strength, and durability. We make the best, cheapest, and easiest working all-iron automatic or self-opening gate, and the nearest cheap iron fences now made. The Boss folding poultry coup is a late and useful invention. The best Wire Stretcher, Cutting Pliers, and Post Augers. We also manufacture Russell's excellent Wind Engines for pumping, and Geared Engines for grinding, etc. For prices and particulars ask Hardware Dealers, or address, mentioning paper, SEDGWICK BROS., Richmond, Ind.

Address SEDGWICK BROS., Richmond, Ind.

WATER WHEELS, PORTABLE MILLS, Millstones & Mill Gearing,



Manufactured by

A. A. DeLOACH & BRO., Atlanta, Ga.,

Dealers in Bolting Cloth, Smut Machines and Mill Supplies

of all kinds, Saw Mills, Cotton Gins, Steam Engines and

anything needed about a mill of any kind, at lowest prices.

PLEASE OBSERVE: That we build the simplest and cheapest Water Wheel in the market. Durable for a life time and about half the usual price of Turbines.

Any farmer owning water power, however small, can improve it with one of our wheels. Our Portable Mills are

guaranteed to make best quality of table meal and prices

are very low. In writing, please mention this paper

and state fully what you want, so that we can answer to

best advantage. Don't fail to get our prices before buying.

\$220.00

Will buy a Pony Saw Mill with Ratchet Head-blocks and all the latest improvements.

Our Water Wheels set either inside or outside of water house to suit present location which is quite an advantage.



ADAMS WIND MILLS

— ARE BACKED BY A —

SPLENDID TWELVE YEARS RECORD

TIME-TRIED. + STORM-TESTED.

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READY MADE WIND MILL TOWERS, SQUARE, OR ROUND WATER-TANKS, IRON-PUMPS, BRASS PUMP-CYLINDERS, &c.

Pamphlets, Circulars and Testimonial Sheets, Mailed Free.

MARSEILLES M'FG CO., Marseilles, La Salle Co., Ill., U.S.A.

TOLL YOUR OWN CRIST !!

"MANVEL" WIND ENGINE

SIMPLE, DURABLE, SELF-REGULATING, NOISELESS. STOCKMEN AND FARMERS CAN

HARNESS THE WIND

AND GRIND ALL THEIR GRAIN with a machine without a cog, friction clutch, or ratchet, and at the same time Pumps all their water for Stock. FULL LINE OF PUMPS, TANKS, IRON PIPES & FITTINGS kept on hand. Parties requiring a Wind Mill should examine this machine, built for service, and write, stating the kind and amount of work they want done, to

B. S. WILLIAMS & CO., (Limited), Atchison, Kas.
(FACTORY, KALAMAZOO, MICHIGAN.)

"ACME" HAY RICKER, LOADER and RAKES.

Z. O. 50 P. G.

AGENTS WANTED!

The Greatest Money-saving, Labor-saving, Time-saving Hay Machinery Ever Invented.

Twenty to forty acres of Hay put up in one day, at a saving of from 50 to 75 per cent. The hay is not touched with fork until on the rick in splendid shape for stacker. They make the farmer perfectly independent, even with a large crop of hay on hand, at a time when it is difficult to get reliable help, at great expense.

THE ACME RICKER is always ready for work, eats nothing, never strikes for higher wages and is not subject to sunstroke. It builds Ricks or Stacks 20 to 25 feet high, and elevates from 300 to 1,000 pounds at one time. It is also the best and most complete Hay-loader on the market. These statements verified by thousands of the best farmers in the land.

Write for Catalogue giving full particulars.

ACME HAY HARVESTER CO., Manufacturers, Peoria, Illinois.

MO LINE PLOW CO., Kansas City, Mo.,
GENERAL AGENTS FOR KANSAS AND WESTERN MISSOURI.

TOWER'S SLICKER

The Best Waterproof Coat.

THE FISH BRAND SLICKER is warranted waterproof, and will keep you dry in the hardest storm. The new POMMEL SLICKER is a perfect riding coat, and covers the entire saddle. Beware of imitations. None genuine without the "Fish Brand" trade-mark. Illustrated Catalogue free. A. J. Tower, Boston, Mass.

TWO-CENT COLUMN.

"For Sale," "Wanted," 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.

FOR SALE—Sixty head of choice Cows, Heifers and Calves, at a sacrifice. E. A. Stevens, Diamond Springs, Morris Co., Kas.

WANTED—Ten first-class fresh Milch Cows, within 30 days. Address S. T. Davidson, Treasurer's office, A. T. & S. F., Topeka, Kas.

EXTRA BARGAINS—Five extra Yearling Short-horn Bulls for sale cheap. L. A. Knapp, Dover, Kansas.

FOR SALE—A choice high-bred Ross of Sharon Bull, to head herd. Address Willis Pope, Lincolnville, Kas.

THE ELMWOOD HERD

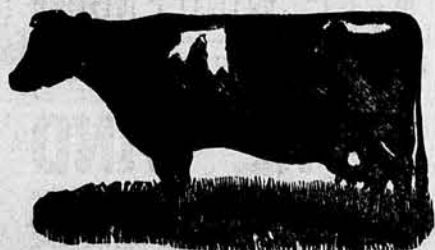
—OF—
A. H. Lackey & Son,
PEABODY, Marion Co., KAS.,

BREEDERS OF
SHORT-HORN CATTLE

AND
BERKSHIRE SWINE.

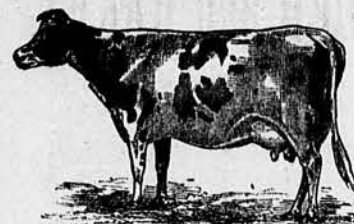
Our herd numbers 130 head of well-bred Short-horns, comprising Cruickshanks, Rose of Sharons, Young Marys, Arabellas, Woodhill Duchesses, Lavinias, Floras, Desdemonas, Lady Janes and other good families. The well-known Cruickshank bull **BARMBTON'S PRIDE** 49854 and the Bates bull **ARCHIE HAMILTON** 49792 serve our herd. We make a specialty of milking Short-horns, the Arabellas being specially noted as milkers. Good, useful animals of both sexes always for sale.
Premium Berkshires very cheap.

Pioneer Herd of Holstein Cattle
—AND—
DUROC JERSEY SWINE.



For beef, butter, and cheese, breed **HOLSTEINS**. For largest return on money invested in swine, breed **DUROC JERSEYS**. Choice registered animals for sale by **WM. A. GARDNER**, Oregon, Mo. Correspondence solicited. When writing mention this paper.

HOLSTEIN-FRIESIANS



ALL AGES AND BOTH SEXES. HOME-BRED AND IMPORTED.

Cows and Heifers Bred to Best Netherland and Aaggie Bulls.

The Average Records of a Herd are the True Test of Its Merit.

The Following Milk and Butter Records Have All Been Made by Animals Now in Our Herd:

MILK RECORDS:

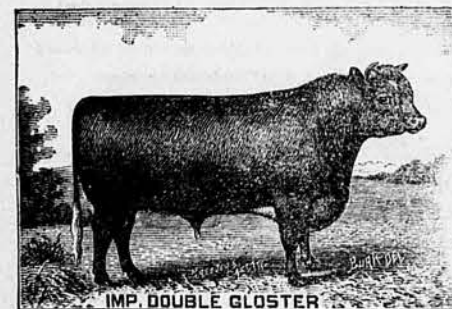
Five Cows have averaged over 19,000 lbs. in a year. Ten Cows have averaged over 18,000 lbs. in a year.

We know of but 23 Cows that have made yearly records exceeding 16,000 lbs. and 14 of them are now in our Herd and have averaged over 17,500 lbs.

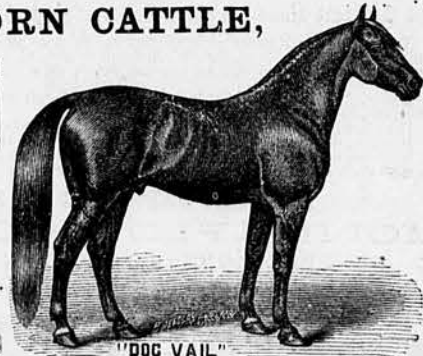
Twenty-five have averaged over 16,000 lbs. in a year. Sixty-three, the entire number in the Herd that have made yearly records, including 14 three-year-olds and 21 two-year-olds, have averaged 12,785 lbs. 5 ozs. in a year.

BUTTER RECORDS:

Five Cows have averaged 20 lbs. 7 ozs. in a week. Nine Cows have averaged 19 lbs. 1/2 oz. in a week. Fifteen Cows have averaged 17 lbs. 6 ozs. in a week. Six three-year-olds have averaged 14 lbs. 3 ozs. in a week. Eleven three-year-olds (the entire number tested) have averaged 13 lbs. 2 ozs. in a week. Six two-year-olds have averaged 12 lbs. 1 1/2 ozs. in a week. Fifteen two-year-olds (entire number tested) have averaged 10 lbs. 8 3/4 ozs. in a week. The entire original imported Netherland Family of six cows (two being but three years old) have averaged 17 1/2 lbs. in a week. This is the Herd from which to get foundation stock. Prices low for quality of stock. **SMITHS, POWELL & LAMB**, Lakeside Stock Farm, Syracuse, N. Y.

BLUE VALLEY HERD and STUD
OF SHORT-HORN CATTLE,

IMP. DOUBLE GLOSTER



"DOG VAIL"

Such as Cruickshanks, Roses of Sharons, Young Marys, Phyllises, Josephines, and other good sorts. Also

Roadster, Draft & General-Purpose Horses, Mares & Mules.

Stock always in fine condition and for sale at reasonable prices. Correspondence and inspection invited. Call at the **Blue Valley Bank, Manhattan, Kansas.**

WM. P. HIGINBOTHAM, Proprietor.

STATE FAIR
—OF—
KANSAS.

On account of no State Fair being held at Topeka this year,

The Marion County Agricultural Society

Will hold a State Fair at

PEABODY, KANSAS,

SEPTEMBER 1, 2, 3 and 4, 1885.

LIBERAL PREMIUMS & PURSES.

Competition open to the World.

Greatly reduced Railroad Rates to exhibitors and visitors.

For Premium Lists or other information, address

L. A. BUCK, Secretary,
T. M. POTTER, President,
Peabody, Kansas.

Wanted at the Fairs!

ACTIVE AND RELIABLE MEN, who mean business and can do good work for the

KANSAS FARMER,

Are wanted at every Fair held in Kansas this season. Very liberal terms are offered to such men. Address
KANSAS FARMER CO.,
TOPEKA, KANSAS.

EXCELSIOR HERD OF POLAND-CHINAS

D. H. WEBSTER, Austin, Cass Co., Mo.

My herd is made up of individuals from noted and popular families. Are all recorded in the "Central Poland-China Record." Single rates by express. I also breed from best strains, P. Rocks, P. Cochins, B. Javas, Langshans, Wyandottes, B. Lezhorns, Mammoth Bronze Turkeys, Toulouse Geese, Aylesbury and Mammoth Pekin Ducks. Eggs in season. Send for circular and mention **KANSAS FARMER**.

The AULTMAN & TAYLOR
THRESHING MACHINERY!

TRADE MARK.
PATENTED



The Most Reliable in the Market! The Most Durable in the Market! No other Separator will Thresh the Grain as Clean. None other will Save as Much Grain for the Farmer!

It is called the "Starved Rooster Thresher" because it puts the grain in the half bushel instead of the straw stack, and leaves none in the straw-stack for chickens to fatten on as is the case with other Threshers.

Owners of Aultman & Taylor Threshers make more money than the owners of any other Machines: Because they can always have the preference of jobs: because they can obtain better prices for their work: because they can thresh grain in all conditions, when other machines cannot; they have less expenses, less detentions, less breakages, for the machinery is durable and strong.

In the case of steam rigs, farmers feel safer in employing an Aultman & Taylor Engine than any other, for they are built strong, and are safe; they do not wish to employ new and untried Engines; they want the "old reliable" Aultman & Taylor, that has stood the test for years.

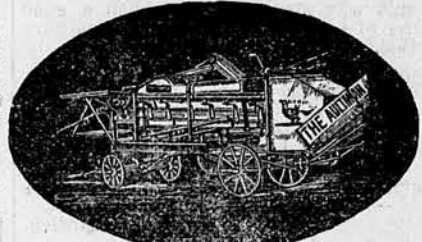
Threshermen, See the New Improvements for 1885!

On Separator and Engine, which places this machinery still further in advance of all competitors. The light-running, double geared Aultman & Taylor Horse Power is also kept ahead.

The durability of this Machinery (as well as its good work) is the most wonderful of any Threshing Machinery ever made. Amongst the many instances of durability, would refer our customers to M. A. & W. W. Wiscarver, of Keighley, Butler county, Kas., to whom we last fall sold a new Separator to replace an old Aultman & Taylor Separator that was bought fourteen years ago and has been run every season since!

We can refer to a number of parties who bought Aultman & Taylor Machines when we first came to Kansas City, twelve or thirteen years ago, and are still running them. Can any other machines show such a record? No. Is not the Aultman & Taylor the cheapest to buy, even at 50 per cent more money than other Machines? Yes, but they can be bought at same price as other so called first-class Machines. Are not the greatest bargains in Threshing Machines in this country to be had in the Aultman & Taylor? Yes.

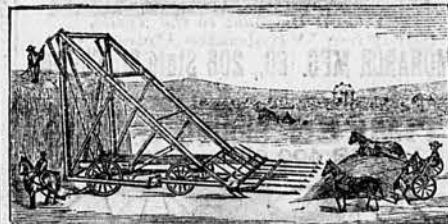
Call on our Agents for Descriptive Pamphlets, Price Lists, etc., giving the liberal terms offered on this Machinery, or send to us direct.



TRUMBULL, REYNOLDS & ALLEN,
General Western Agents, KANSAS CITY, MO.

THE DAIN IMPROVED AUTOMATIC HAY-STACKER and GATHERERS!

The Greatest Labor-saving, Money-saving, Time-saving Machinery Ever Introduced on the Farm or Ranch.



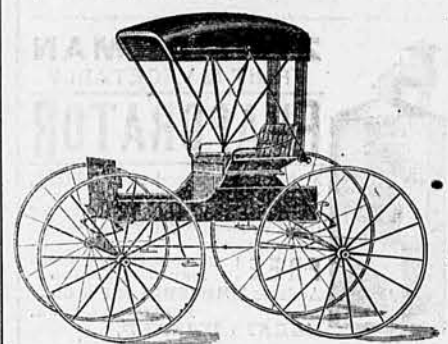
Will save 50 to 75 per cent. in the cost of putting up hay over the old way. Does away with the hard labor of putting up hay: hay not touched with a fork from the time it leaves the mower until it is on the stack; is put up better than it can be done by hand, so that hay keeps better and is worth more. The cost of a Stacker and two Gatherers saved in putting up every seventy tons of hay! No farmer or ranchman who puts up hay can afford to be without it. Makes a farmer independent. One man, three boys and five horses will do the work of ten men and six horses. Send for Descriptive Circulars and Price Lists.

TRUMBULL, REYNOLDS & ALLEN,
(Manufacturers) Kansas City, Mo.

Vehicles for All Kansas and the Southwest!

BRADLEY, WHEELER & CO.,

Manufacturers' Direct Distributing House for



Wagons, Carriages,

AND

Farm Machinery,

INCLUDING

The Old Reliable **Schuttler Wagon,**

The Celebrated

WATERTOWN SPRING WAGONS.

OUR JUMP SEAT.

BUGGIES OF EVERY STYLE AND GRADE.

Concord Buggies, Buckboards, etc. Garden City Plows and Cultivators. Bradley Mowers and Rakes. All goods sold under our own name and guarantee!

Catalogues and full information promptly furnished. Inquiries or visits solicited from every body.

CORNER 10th AND HICKORY STS., (Near Union Depot on route to Stock Yards),

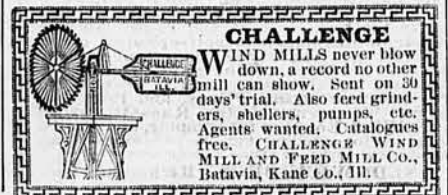
KANSAS CITY

Hart Pioneer Nurseries,

[Established, Dade Co., Mo., 1857; Ft. Scott, Kas., 1865; Incorporated, 1884.]

FORT SCOTT, : : KANSAS.

A full line of Nursery stock, all warranted true to name. No substitution of varieties to our purchasers. Reference: Bank of Ft. Scott. For other testimonials see our catalogue.



CHALLENGE

WIND MILLS never blow down, a record no other mill can show. Sent on 30 days' trial. Also feed grinders, shellers, pumps, etc. Agents wanted. Catalogues free. **CHALLENGE WIND MILL AND FEED MILL CO.,** Batavia, Kane Co., Ill.

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LUCAS & WYNN,

Wool Commission

MERCHANTS,

221 and 223 } **CHICAGO, ILL.**
Kenzie street, }

Consignments solicited. Sacks free to shippers. Cash advances made. Reliable market reports furnished. Information cheerfully and promptly given on application.