

# KANSAS FARMER

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## Mixed Husbandry.

Paper read before the Farmers' Institute at Ellsworth, March 13, 1885, by Rev. L. Sternberg.

If any one imagines that any fool can be a successful farmer he has only to try it to find out that to be a good farmer requires an amount of energy, intelligence and sound judgment that would insure success in any other vocation in life. No other business presses for the solution of more intricate problems, or affords so large a field for instructive experiment.

The conditions of success are neither uniform nor fixed. Soil, climate, latitude, elevation, transportation, and a thousand other things must be taken into account in determining the best mode of farming in any particular locality. As in most other employments, the majority of farmers without thinking out or testing for themselves the best course to pursue, do as others around them are doing. This is better than entirely to ignore the experience and methods of others. If a man comes from the east and thinks he has nothing to learn from western farmers, but has much that he can teach them, he will be apt to get left. But no farmer can afford to be a mere imitator. Every farm has its peculiar adaptations which the farmer must observe and avail

himself of if he would secure the best results. Nowhere is negligence and thoughtless drifting with the current more out of place than on the farm. There are comparatively few really good farmers. When I see one, I feel more like taking off my hat to him than to the highest dignitary in the land.

In farming as in mechanical industries, there is a strong tendency towards the production of a few staples. In Virginia tobacco was crowned king at an early date, subsequently the scepter passed into the hands of cotton throughout the south. In my own county of Otsego, N. Y., on almost every farm the choicest land and all the manure is devoted to the culture of the hop. I well remember the time and place of the setting out of the first hop yard in that county, while now, the hop is the staple product of not only that but of all the adjoining counties. Yet I greatly question whether those counties are as prosperous today as if they had pursued a more mixed husbandry.

In some portions of our country wheat is the staple product. All the labor of the farm is directed to the raising of wheat. When a farmer has once adopted this course

he is apt to go right on with it though the soil begins to show exhaustion by its diminished average yield, and by the more thorough culture required to produce a paying crop. Though the wheat area of our country is immense, yet it is gradually being diminished from the effects of constant cropping while the immense production is such as often to bring the price down below the cost.

In the same locality in any portion of the country the climatic conditions are so varied that no crop can be relied upon as being good every year. In this region we have

growing up into money. Even in the winter seasons, when vegetable growth is suspended, his calves and pigs should be thriving. It is poor policy to haul to market all the grain raised on a farm and leave stock to get through the winter as best they can, or to be without sufficient stock to consume all the coarser grains. It is far better to send all kinds of grain except wheat (and even wheat included, when less than 50 cents per bushel,) to market on foot than in bags. It is surprising how rapidly stock grows up into value. Every farmer should have all the stock on it of various kinds of

## The Illustration.

The illustration presented this week is a good likeness of a representative Hereford bred in the West. Thickset 2d 1543 was bred by G. S. Burleigh, Mechanicsville, Iowa, and has won an enviable reputation as a good breeder and show animal. He has won the first prize in his class wherever shown, and the sweepstakes prize, when only fourteen months old, at the Iowa State Fair; also headed the herd that won first prize as the best beef breed at the same fair. A number of this family of Herefords will

be included in the public sale to be held by Mr. Burleigh, at Kansas City, April 15.

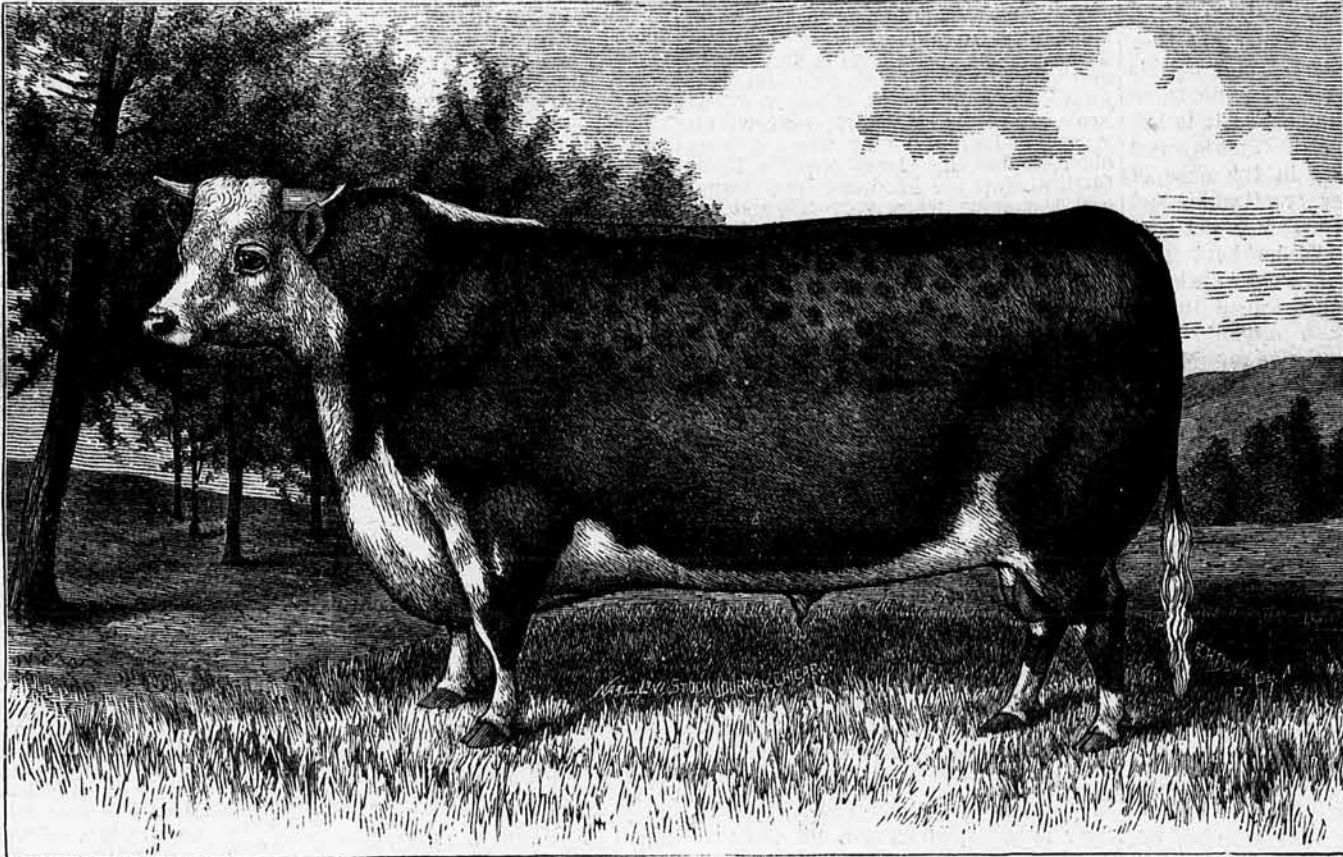
## Inquiries Answered.

Spring wheat will not do well in southern Kansas.

Before oiling any kind of leather it is well to clean it thoroughly and moisten it with water.

Trees may be transplanted almost any time with safety, provided the weather is not too cold, and provided sufficient care is bestowed upon the work.

Cuttings may be set at any time in the spring before the buds are burst. The soil needs to be rich, deeply pulverized and clean. Mulching is good, though we never practiced it much with cuttings. In a dry season



THICKSET 2D 1543.--Bred by G. S. BURLEIGH, Mechanicsville, Iowa.

had failures in wheat, in corn, in potatoes, in oats, etc. In some cases these failures have occurred two or three years in succession. The farmer who places his sole reliance on wheat or corn finds himself in a very tight place in case of failure. There is no season that will not prove favorable to one or more products of the soil. Even in the grasshopper year, when every other crop was swept away, I had a splendid rye crop which carried me through all right. Those who had relied upon other crops in general did not get their seed back. Several hundred dollars were sent me for private distribution among the sufferers. I used the last \$50 in the purchase of seed corn, giving to no man more than a peck. It was all called for as soon as it was published that any one needing it could have his peck.

It is true the failure of that year would not have left our people so destitute had we been an older community blessed with the accumulation of years. But it is always well for a farmer to have several strings to his bow. Even in that year of greatest failure, not only did rye do well, but cattle on the range never did better; for the drier the season the more nutritious the grasses.

The farmer should always have something

the best breeds attainable that it will keep well, and not a hoof more. Too many is worse than too few. A farmer should never forget that his stock needs good shelter and plenty of water as well as a full supply of food, and that his land needs all the manure he can make. There is no soil naturally so rich but that manure will make it more productive, and well rotted manure helps hold the moisture while increasing plant food.

I frankly confess that in farming I have fallen far short of my own ideal; but then, the fact of commencing poor and having to work my way up under a heavy load of debt may be considered as some excuse for my shortcomings as a farmer. It is no small matter to get out on the naked prairie to open up a farm without the conveniences a farmer needs to make his business a means both of pleasure and profit.

"Oh, never borrow trouble,  
My friend, where'er you go,  
For life is but a bubble  
And it ain't worth while, you know."

"Ah, well, I'll let to-morrow  
Take care of itself, I vow  
And the only thing I'll borrow  
Is a dollar from you, now."

The boy who plays truant to go fishing,  
needs the rod more than the line.

it is specially beneficial.

It is not fully settled whether Johnson grass is good for Kansas. Up to this time, most of the experiments have proved to be satisfactory. We incline to think that it will grow in favor among our farmers. It is a southern grass, but we think it can be and will be acclimated.

The bee can draw twenty times the weight of its body. A species of beetle can draw forty-two times the weight of its body.

The number of living specimens known in the animal kingdom is at least 300,000, of which more than nine-tenths are invertebrates.

There was lately described to the French Academy of Science a species of ant observed in the island of St. Thomas. A large fire having been kindled at a certain distance from the ant hill, the ants were seen to precipitate themselves into it by thousands until it was completely extinguished.

"A gentleman from this place several years ago," says the Union Bridge (Md.) Era, "accidentally threw a highly-prized piece of money into the spouting of one of our highest buildings. Not long ago, while he was standing beneath the spouting, an English sparrow dropped the coin from its mouth, letting it fall at his feet."

## The Stock Interest.

### PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.

April 14—James Cunningham, Kansas City, Galloway cattle.

April 22—J. S. Lemon, Short-horns, St. Joe, Mo.

April 23—Col. W. S. White, Sabetha, Kas., Short-horns.

April 29—Geary Bros., Aberdeen Angus, Kansas City, Mo.

May 1—Pettis County Short-horn Breeders, Sedalia, Mo.

May 5—Cass County Short-horn Breeders, Pleasant Hill, Mo.

May 6—T. W. Harvey, Polled-Angus, Kansas City, Mo.

May 8—Miller & Roddick, Herefords and Polls, Kansas City, Mo.

May 13, 14, 15—Jackson County Short-horn Breeders, Kansas City, Mo.

May 18 and 19—Jas. Richardson, Short-horns, Kansas City, Mo.

May 20—Powells & Bennett, Short-horns, Independence, Mo.

May 22 and 23—Jas. E. Richardson, Kansas City, Mo., Short-horns.

May 28—Leavenworth Short-horn Breeders' Association.

June 2—Col. W. A. Harris and the Giffords, Short-horns, Manhattan.

### Treatment of Bulls.

It is a mistake to believe that animals generally must be harshly treated. The master must establish and maintain his position, but that can and ought to be done without cruelty in nine cases of every ten. We agree with an English writer that a bull is quite as amenable to kindness as is any other animal. Firm, yet kind treatment will reduce bulls to obedience, and render them easily managed. From the age of calf-hood they should be regularly handled, and accustomed to the contact of human beings. At about 1 year old they frequently become playful, and this is often mistaken for vice, whereas, when used as above recommended it is but the playfulness of youth. This is toned down by placing a ring in the nose of the bull. Whenever practicable—and there are few cases where it is not so—bulls in service should be kept in a building where the milch cows are kept. Thus they become accustomed to the regular association with human beings and are as docile as the cows. Never strike a bull without reason; they have long memories, and may retaliate when least expected. If disobedient, one quick stroke is usually sufficient, and the animal knows the reason for it. A whip is the best implement to use in connection with a bull. The best way to spoil a bull is to keep him in a place by himself, to feed him through a trap-door, and never to bring him out except when he is wanted for service. When so kept the getting him out is usually a formidable affair. So kept, he grows moody and savage, and it is to such bulls that we usually look for accidents. The attendants should never display fear of a bull. If the latter once perceives that his attendant is afraid of him, and they are quick to see the signs, the man should be replaced, or it is likely mischief will result and the bull be spoiled. Young bulls become playful when about 12 months old; that is the time when they are beginning to want service work. At this time, if you do not keep an eye upon them, they will land the attendant a cropper when feeding, especially if they think he is not quick enough in supplying their food. For this a foolish attendant will thrash the animal, and probably he will take a stick with him every time thereafter that he goes to feed it, and on every such occasion the bull will come in for a few hard whacks. This is just the way to spoil him for life, for he conceives such a hatred of the human race that he is never afterwards safe. The best cure is a ring, and the putting in of the ring is simple, and but the work of a few minutes. Place a rope around his neck, and draw him up gently to the stoop of a gateway. Pass the rope round the stoop, and let it be firmly held. Have ready a round steel chisel, sharpened to a fine point, the chisel being a little thicker than the ring. This should be held in readiness by an

attendant; also the ring (opened), the screw, and a small screw-driver. Don't alarm the bull, but soothe him. With the fingers of the left hand, feel for and draw gently down the proper place in the nostrils, taking care to avoid the bone. With the right hand, guiding the chisel by the fingers of the left, bring the point of the chisel to the place, and pass it quickly and firmly through the cartilage of the nose. Retain the hold with the left hand, take the ring in the right, pass it through the hole made by the chisel and fasten the screw, slipping it round a few times to see that it works easily. If the rope is held firmly by one or two men, and the animal is not frightened to begin with, there is no difficulty in ringing a young bull. If driven up to the spot with blows and loud shouting, then difficulty will be experienced, for the bull will resist to the utmost of his power; the operator becomes nervous, and probably takes off a piece of the bone, or otherwise injures it, spoiling the animal for feeding for some time after that, even if no worse consequences result.

### Tape-worms in Sheep.

In January last, Dr. H. J. Detmers, an Illinois veterinary surgeon, in answer to a letter of inquiry of a Colorado farmer, wrote—

The tape-worm of sheep occurs most frequently in lambs, and is known as *Tenia expansa*. Its head is very small and not armed with hooks; its first joints, or proglottides, those near the head, are rather small and narrow, but grow broader and larger when getting older, so that the oldest ones, or those farthest from the head, are very large, and the same when very old, and the worm, in consequence, very long—many measure as much as one inch across. The worm sometimes grows to an enormous length, and while young worms are much shorter, some old ones are occasionally found which measure fully 100 feet. The single joints or proglottides are more firmly connected with each other than in most other tape-worms, therefore the ripe joints when passing off with the excrements very seldom are single or disconnected, but usually several connected with each other in the shape of a string or tape. It is not yet definitely known in what animal or animals the sheep tape-worm passes its larvæ or soelex stage, but there is reason to suppose that it is in some species of lower animals—insects or snails—which pass this life in the herbage of low and wet places, or in water holes, and are taken up, and with them the worm-brood, by the sheep and lambs when eating at such low and wet places, or drinking water of such water-holes. In comparatively rare cases the same kind of tape-worm also occurs in cattle.

After the worm-brood—that is the lower animals, which contain the embryos of the tape-worm—have been picked up by the lambs—older sheep either do not become as easily affected, or may be, instinctively avoid the herbage and water contaminated with these lower animals. The first symptoms caused by the development of the young tape-worms usually consist in more or less diarrhoea and gastric disorders. Afterwards, after the scoleces or embryo-heads have had time to develop in the good-sized tape-worms, an abnormally enlarged abdomen, cessation of thriit and growth, general anæmia manifested by an extraordinary paleness of the skin and of the visible mucous membranes, more or less rapid emaciation, now and then a passage, which contains strings of ripe tape-worm joints, and very often, toward the end, or shortly before death, a fetid diarrhoea, constitute the principal symptoms. As the affected animal has usually more than one worm—in such cases the intestines are perfectly filled, or even blocked with tape-worms, and as the worms themselves—if old enough before the animal dies—grow to an enormous length, the disease is nearly always fatal; at any rate, but very few animals recover. If the tape-worms present are very numerous, death often ensues long before any plain cachectic symptoms, such as anæmia, emaciation, etc., develops. In such cases the tape worms have blocked up the passage through the intestinal canal. The symptoms on the whole, however, do not show anything characteristic,

different from those of other worm diseases, except that now and then, as already stated, some connected joints or proglottides will pass off with the dung. The post mortem examination and the presence of the tape-worms in the intestines, of course remove every doubt. In many cases—though in some sheep-raising districts at least—other worms, belonging to the *Strongylus* family, are also present, either in the lungs (*Str. filaria*), in the fourth stomach (*Str. contortris*), or in both places, and may accelerate the fatal termination. Whether or not the last named worms are a frequent occurrence in eastern Colorado, I do not know. In some parts of Texas they are a curse to sheep raising.

As to treatment, the old saying that an ounce of prevention is better than a pound of cure, applies as well to this as to most other epizootic diseases. I would therefore advise: (1) To burn in the winter, if possible, the whole range which is to be used as spring and summer pasture for the lambs, and thus to destroy everything on that range that may harbor the worm-brood. (2) To dig wells, wherever it can be done; to water all the sheep from these wells, and to keep them away from all low and wet places, pools of stagnant water, and even from slow and sluggish streams; for all these places, most likely, harbor the above animals of the worm-brood or worm-embryos. (3) To pasture all lambs during spring and summer, if possible, on a range that is not infested, or, in other words, that has not been run over by last year's lambs in the latter part of summer, in the fall, and in the winter.

As to a treatment of the animals already affected: it is advisable to provide for them at the time at which some of them commence to scour (have diarrhoea), easy of access, some licks composed of common salt, and powdered seeds, flowers, and leaves of *Tanacetum vulgare*, to which, if desired, a little tar may be added. If afterwards, the tape-worms, notwithstanding, should develop, it will be necessary to subject every single animal to a special retail treatment, that is, to give to each animal (lamb), according to age and size, from two to three and a half drachms of kousoo, pulo, flor, brayerac, anthel, minthica, with enough water to make a drench. While thus treated, and until the tape-worms have all passed off, the lambs should be kept in an enclosure, where afterwards the excrements and the tape-worm convolutes can be burned.

### Cleveland Bays For General-Purpose Horses.

Regarding Cleveland Bays a correspondent of the *Breeders' Gazette* says that there is a large number of horse-breeders who are not fully satisfied with any of the breeds now permanently before the public, so far as they have tried them, for the production of a large, rangy, stylish horse, suitable alike for the work of the farm and the pleasure of the drive. The draft is too big; the thoroughbred is too light, and the trotter, while not large enough, matures too slowly and takes too much money to develop. The medium weight English Shire produces the model of an all-work horse—low-down, compact, blocky and active, with good form and splendid legs and feet; but he don't quite fill the bill for the fastidious lover of horses who, admiring the blood-like appearance of the thoroughbred and the road qualities of the trotter, requires the weight of a medium draft. Just here comes the Cleveland Bay, combining in remarkable measure the last named qualities.

It is now pretty generally known among horsemen in America that the Cleveland Bays as originally bred were used on the mail coaches of England. They weighed 1,600 and 1,700 pounds, and were remarkable for their strength and endurance, as also for their ability to pull those ponderous vehicles at a good round road gait. During the past fifty years their size has been considerably reduced by a fresh infusion of the blood of the race horse, which has effected an increase in speed without materially reducing their strength, the reduction in size being more than counterbalanced by increased nerve. They may very properly be called the Royal Horse of England and, in fact, of Europe, as the strongest competition American buyers have to encounter is from the agents of the crowned heads and wealthy nobility and gentry who come annually to England to procure the finest specimens of the breed, and which may be seen attached to the handsomest equipages upon the fashionable drives in every city in Great Britain and Europe.

A century's breeding in one direction,

with one purpose in view, has thoroughly established the breed, and their strength of blood is attested by the remarkable uniformity with which the general characteristics of the breed—color, form, style and quality,—are transmitted even to their grade offspring, and any one who will take the trouble to look over a large number of these horses—see, as I have recently, in one stable nearly seventy-five specimens of the breed, and note their uniform size, color and form—will be convinced, as I was, that they are the coming general-purpose horse of America.

### Stock Notes.

Feed so as to make the most money, and to do this feed to make the greatest size in shortest time at least expense.

The poultry may be a source of considerable profit, or an intolerable nuisance, according to the way they are managed and the treatment they receive.

The study of economy in all things, especially in feeding to obtain the largest results with the least expenditure of food, is a most profitable employment.

Prepare a plot of ground now for turnips, beets or other root crops to feed the stock another season. They are absolutely necessary to highest success in modern farming.

In feeding large numbers of stock together, watch that the stronger ones do not crowd the weaker ones away and get nearly all the feed. Always give the weak and thin stock a little extra attention and feed.

The breeders of long-wools do not need to trim the toes of their sheep, but the Merino men must pay attention to this matter, or there will soon be two or three in the flock with sled-runner toes always lagging behind and getting poorer each day. Trim their feet, and they will travel up with the flock.

No one who has not tried raising and feeding turnips to sheep can have a full appreciation of the benefit derived from this cheap food and in the increased thrift of their stock. There can be no doubt of the advantage of the English method of feeding compared with ours, if we compare their immense fat mutton with ours; and in all the feeding districts of the English provinces, turnips are fed in immense quantities.

The Merino is the most hardy constitutioned breed of sheep, and for the purposes of the average shepherd this is an all-important point. There is every reason to believe that they must form the basis for the much talked of sheep for the future, on account of their extreme hardiness. The sheep that shears a good fleece furnishes a fine carcass and can stand the rough usage to which sheep are very often subjected, will have a large percentage of Merino blood in its veins.

Western sheepmen are becoming more and more convinced of the importance of keeping their stock in small flocks, and that it is more profitable to raise sheep in pastures than it is to keep them under herd; and sheepmen are now, in portions of the West, fencing their sheep ranches into small tracts. This will certainly simplify the question of the profitability of sheep raising in the West, for several reasons; but the most important one, perhaps, is that it will enable many more to be pastured on the same amount of land. This is owing to the fact that where sheep are kept in large flocks they trample down and waste much more herbage than they eat, and that by keeping them in small bunches this can be almost entirely avoided.

If your horses have sore shoulders, scratches, cuts or open sores of any kind, use Stewart's Healing Powder.

An intoxicated husband on reaching home seized an umbrella from the rack, opened it, and proceeded to his wife's bed-room. "Are you crazy?" exclaimed the grieved and indignant matron. "No," replied he in an unsteady voice, "but—hic—I supposed there'd be a storm, so I've—hic—come prepared for it."

### Consumption Cured.

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

### In the Dairy.

#### The Creamery in Kansas.

A paper read by Jas. F. Crofoot before the Farmers' Institute at Ellsworth, March 13, 1885.

(Concluded.)

I claim that through the lessening of the expenses of the dairyman and the increase in price received for his dairy product, he can afford to patronize a creamery where he could not afford to make butter for market. The creamery business has advanced far enough in this State to prove that Kansas is naturally well suited for the business. We have cheap pasturage and cheap grain which properly used will yield large quantities of choice butter, and I venture to assert that there is not a State in the Union where dairying can be done at a larger profit than in Kansas. The bad effect of the extreme heat of some of our summer days on the handling of milk and cream, is overbalanced by the purity of the atmosphere. Cream can be handled from long distances without injury.

It might be asked—Why is it, if the creamery business is such a good thing, that so many of the creameries started in Kansas are now idle? I will endeavor to answer the question. They were started just at the close of a prosperous series of years in the dairy business, and at the beginning of the contest between the cow and the hog to determine which is the most suitable for dairy purposes, and also at the beginning of a period of very low prices for dairy products. What has made it doubly hard to establish the business here is the fact that but few of the patrons of the creameries came from dairy countries, and they acted on the principle that it is the food used that produces milk and butter, the cow acting simply as a machine to convert our grass and corn into the form of milk from which we make butter. Therefore the cows are turned out to grass in the spring and milked as long as they can make milk with the help of nature alone, which is during the portion of the year when dairy products bring the lowest prices, and generally extends about four months. About the 1st of September the natural grasses dry up, the cows shrink their milk and are soon allowed to go dry, and are turned out to winter, provided the winter be not too severe; if so, to die. And this is called dairying. The result is, that such dairymen come to the conclusion that because the creamery has not paid them forty or fifty dollars per cow for cream, the business is a failure. In this country the creamery is not only in its infancy, but the dairy business is also in a very crude state of development, and this period of oleo and low prices has a tendency to blast the infant buds. If the prices of 1881-2 for dairy products had continued till the present time, Kansas would to-day be far on the way to a leading position as a dairy state, which she already holds in wheat, corn, wool and meat production. And the time is coming when she will yet take her proper place as a dairy State.

I do not believe there has been an over-production of butter during the last two years. Were butter alone sold as butter, prices would have been much better. I believe that butterine, oleo-margarine, etc., are now seeing their best days. They are a base fraud, not only on the dairyman, but also on the consumer. Not one person in fifty who is using these adulterations know that they are doing so, nor would they eat them if they knew it. The only parties benefited by them are the manufacturers and the middle-men who make large profits by handling them. Will

this small class be allowed always to blast one of the most important industries of the country, and also to prevent thousands of people from eating butter instead of whatever they see fit to feed them on in its place? I think not. Thousands of the citizens of Illinois are now demanding of their Legislature that this wrong be righted. The Legislature of Colorado is also being asked in a strong voice for justice in this matter. And I do not believe that this storm which is rising will be hushed until butter is butter and grease grease to be sold and used for what they are. Then Kansas will take her proper place among the dairy States of the Union.

In conclusion, I will say if the people would handle the dairy as it should be handled, and compare the result fairly with the production of grain for market, they would find that even with the low prices at present prevailing, the dairy would be ahead. They would also keep up the fertility of their land. They must remember, too, that every kind of business has its seasons of prosperity and depression, and if they stay with it during the period of depression, they will be prepared to profit by the better times when they come, which they are sure to do. It takes time to get a first-class dairy of cows together and it takes experience to learn to handle them to the best advantage and the greatest profit.

The American Farmer says: The points of a good cow are a robust constitution, a good appetite, large milking capacity, long milking tendency, rich milk, and an easy milker with a good disposition. She should be a regular breeder, and her calves should possess her good qualities. After these come the points of shape, color and general appearance, along with the pedigree, which latter is of more or less importance as she is thoroughbred and kept for breeding more than dairy purposes. If the former, it is the most important of all her attributes. Every cow has more or less of these qualities, coupled with some objectionable features, and it is a capital exercise to write out the good and bad qualities of every cow in the herd and compare them on paper. It will aid you materially in judging the animals in your herd. If you classify them you will always know which should be parted with first, and save many a subsequent regret.

#### At Public Sale.

In another column will be found the attractive advertisement of a public sale of Hereford, Galloway and Angus bulls, to be held at Riverview Park, Kansas City, on Friday, May 8th, 1885. These bulls are young and of the best strains of blood to be found in England and Scotland, and it will pay our readers to make a note of the sale. Catalogues can be had by addressing Miller & Roddick, St. Denis, Baltimore county, Maryland.

A peculiar article produced by the negroes of Georgia is called by them persimmon bread. Five pounds of it, it is said, will make nearly a barrel of agreeable and non-intoxicating beer. The persimmons are gathered when thoroughly ripe, the mass is kneaded till it is of the consistency of bread dough, made into a cake, and then put into an oven and baked. It will keep all winter and can be used until late in the spring.

#### Trees.

Those desiring anything in the line of shade and ornamental trees, as well as fruit trees of all kinds, would do well to call on D. C. Burson and examine a choice variety displayed on lot 270, Kansas avenue, nearly opposite the KANSAS FARMER office.

It has been proven by actual experiment that beets or turnips can be raised, lifted and stored for six cents per bushel. At this cost they certainly are a profitable food for sheep.

#### Vitality of Great Men

Is not always innate or born with them, but many instances are known where it has been acquired by the persistent and judicious use of Dr. Harter's Iron Tonic.

Never feed much corn to young horses. It only supplies heat and fat. Growing stock needs bone- and muscle-forming foods. Many a colt has been injured for life by getting too much corn.

### 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.

#### CATTLE.

**CEDAR-CROFT HERD SHORT HORNS.**—E. C. Evans & Son, Prop'r, Sedalia, Mo., breeders 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.

**W. D. WARREN & CO.** Maple Hill, Kas., importers and breeders of Red Faced Cattle. Stock for sale. Correspondence solicited. R. R. station, St. Marys, Kas.

**Dexter Severy & Sons** Le and, Ill., breeders of Thoroughbred Holstein Cattle. Choice stock for sale, both sexes. Correspondence 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.

**LOCUST RETREAT FARM.** Bacon & Campbell, Manchester, St. Louis Co., Mo., breeders of HOLSTEIN CATTLE and PLYMOUTH ROCK FOWLS. Holsteins excel in milk, butter and beef. They are the all-purpose cattle. First-class stock for sale. Plymouth Rocks are the farmer's fowl. Pair, \$3.50; trio, \$5.00; eggs \$1.50 for 13.

**BROAD LAWN HERD** of short-horns Robt. Patton Hamlin, 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, Bronze 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.

**WALNUT PARK FARM.** Frank Playter, Prop'r, Walnut, Crawford Co., Kas. The largest herd of short-horn cattle in Southern Kansas. Stock for sale. Correspondence invited.

**A. HAMILTON,** Butler, Mo., Thoroughbred Galloway cattle, and calves out of Short-horn cows by Galloway bulls for sale.

**W. LILLARD,** Nevada, Mo., Breeder of THOROUGHBRED SHORT-HORN. A Young Mary bull at head of herd. Young stock for sale. Satisfaction guaranteed.

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

#### Hereford Cattle.

**SHOCKEY & GIBB,** Lawrence, Kansas, breeders and importers of Hereford cattle. Choice thoroughbreds and high-grades of both sexes always for sale.

**SARCOXIS HEREFORD HERD.** J. Gordon Gibb, Lawrence, Kas., importer and breeder of Hereford Cattle. Stock for sale.

#### CATTLE AND SWINE.

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

**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.

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

**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.

**WOODSIDE STOCK FARM.** F. M. Neal, Pleasant Run, Pottawatomie Co., Kas., breeder of Thoroughbred Short-horn cattle, Cotswold sheep, Poland-China and Berkshire hogs. Young stock for sale.

**D. E. A. M. EDSON,** 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 strain, pure-bred Jersey Red Hogs and Jersey Cattle.

**COTTONWOOD FARM HERDS,** J. J. Malle, 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.

#### SHEEP.

**E. COPLAND & SON,** DOUGLASS, KANSAS, Breeders of Improved American Merino Sheep. The flock is remarkable for size, constitution and length of staple. Buck—a specialty.

Registered Merino Sheep, Bronze Turkeys, Light & Brahma and Plymouth Rock fowls. Eggs for hatching. Catalogue free. B. T. McCulley & Bro., Lee's Summit, Mo.

**G. B. BOTHWELL,** Breckenridge, Mo., has 1,100 Merino rams for sale. 250 of them are registered. His seven best stock rams shear from 27 lbs. to 33 lbs., weigh from 155 lbs to 180 lbs.

**C. F. HARDICK & SON,** Louisville, Kansas, breeders of REGISTERED AMERICAN MERINO SHEEP, Having good constitution and an even fleece of fine, dense wool.

Wine wool a specialty. Come and see our flocks or write us.

**A. F. WILLMARTH & CO.** Ellsworth, Kas., breeders of Registered Spanish Mer no Sheep. "Woolly Head" at head of flock. Choice rams for sale. Satisfaction guaranteed.

#### SWINE.

**S. H. TODD,** Wakeman, Ohio, breeder of Recorded S. Premium Chester White swine and imported Shropshire Down Sheep. Send for circular with price list and particulars. It pays to get the best.

**F. M. ROOKS & CO.,** Burlingame, Kas., importers 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 U. P.-C. E. Cull or write.

**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.

**ROBERT COOK,** I-1a, Allen county, Kansas, importer and breeder of Poland-China Hogs. Pigs warranted first-class. Write.

#### POULTRY.

**GEO. H. HUGHES,** North Topeka, Kas., 14 first prizes (Felch and Pierce, judges) on W. F. B. Spanish. P. Rock cockerels, \$2.50. Eggs, \$3 for 13; 26 for \$5. Prepared shell, 100 lbs. \$3. 12 egg baskets, 90 cts. Poultry Monthly, \$1.

**EGGS FOR SALE**—From Light Brahmas, Buff Cochins and Plymouth Rocks, 15 for \$1.75; 25 for \$3. Also Pekin Duck eggs, 11 for \$1.75; 22 for \$3. Also Eudon Geese eggs 6 for \$2; and Bronze Turkey eggs, 12 for \$3. W. J. McCom, Waveland, Shawnee Co., Kas.

**BRONZE TURKEY EGGS**—\$3.50 per 12. Our Tom weighs over 40 pounds. Plymouth Rock eggs, \$1.50 per 13. H. V. Tugsley, Pittsburg, Mo.

**FAIRVIEW POULTRY YARDS.** Mrs. G. Taggart, Parsons, Kas., breeder of L. and D. Brahmas, B. Leghorns, Houdans, Plymouth Rocks, Langshans, P. Cochins, G. L. Bantams, Wyandottes and B. E. B. Games. Send for price list.

**W. M. WIGHTMAN,** Ottawa, Kansas, breeder of high class poultry—White and Brown Leghorns and Buff Cochins. Eggs, \$2.00 for thirteen.

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

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

**ONE DOLLAR** per thirteen for eggs from choice Plymouth Rock fowls or Pekin ducks. Plymouth Rock cockerels \$2 each. Mark S. Salisbury, Box 991, Kansas City, Mo.

**S. R. EDWARDS & BRO.,** Emporia, Kas., breeders of high-class Plymouth Rocks and Partridge Cochins. Eggs, \$2 per 13. Correspondence cheerfully answered.

**RIVERSIDE POULTRY YARDS**—Plymouth Rock and Partridge Cochins for sale, and eggs during the hatching season. Watson Randolph, Emporia, Kansas.

**GROUND OYSTER SHELLS FOR SALE.** Five pounds, 5 cents per pound; 25 pounds, 4 cents per pound; 200 pounds, 3 1/2 cents per pound. It is the best egg-producer known. Give it a trial and be convinced of its merits. Also Pure Plymouth Rock Eggs for sale—\$2 for 13; \$3.50 for 26. G. H. Flintman, 71 Kiene avenue, Topeka, Kas.

#### MISCELLANEOUS

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

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

**PROSPECT FARM**—H. W. McAfee, Topeka Kas. For sale cheap 10 registered short horn bulls, 1 to 8 years old. Also, Clydesdale horses.

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

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

## HEREFORD CATTLE.

THOROUGHBRED BULLS and HIGH GRADE BULLS and HEIFERS for sale. Inquiries promptly answered.

### WALTER MORGAN & SON,

Irving, Marshall Co., Kansas.

#### THE LINWOOD HERD

## SHORT-HORN CATTLE



IMP. BARON VICTOR

**W. A. HARRIS,** Linwood, Kansas, The herd is composed of VICTORIAS, VIOLETS, LAVENDERS BRAWTH BUDS, SECRETS, and others from the celebrated herd of A. Cruickshank, Stittyn, Aberdeenshire, Scotland. GOLDEN DROPS, and URBYS, descended from the renowned herd of S. Campbell Finellar, Aberdeenshire, Scotland. Also YOUNG MARY, YOUNG PHYLLIS, LADY ELIZABETH, etc. Imp. BARON VICTOR 42824, bred by Cruickshank, and Imp. DOUBLE GLOSTER head the herd. Linwood, Leavenworth Co. Kas., is on the U. P. R. R., 27 miles west of Kansas City. Farm joins station. Catalogues on application. Inspection invited.

Gossip About Stock.

No general round-up by the Cherokee Live Stock association will take place this spring. The work will be done by the neighborhood round-up.

Geo. W. Penney, Newark, Ohio, has engaged a page in the forthcoming volume of the American Berkshire Record for the illustration of his three recently imported Berkshires.

Walter C. Weedon, Kansas City, Mo., has prepared a little pamphlet containing some correspondence of much value to persons interested in polled cattle. We suppose he will send to any person that so requests.

Inglewood is a new town to be built on the south line of the State in Clark county, about fifty-five miles south of Dodge. It is to be a cattle town, has good financial backing and expects to have a railroad the present year.

The Geary Bros., of Canada, this week advertise their forthcoming sale of Aberdeen-Angus cattle to be held at Kansas City April 29. The Geary Bros. are so well known as first-class breeders that all interested in getting good Angus cattle will be present.

The Short-horn breeders of Lafayette, Saline and Pettis counties, Missouri, will hold their Central Missouri series of Short-horn sales April 28, 29, 30, and May 1, at the places designated in their advertisement, and will sell 300 good Short-horns. Send for their catalogue.

The American Clydesdale Association will hold its next annual exhibition at Chicago in connection with the Illinois State Fair. In addition to the liberal premiums to be given in the pure bred classes, the association offers premiums also for best half blood Clydes, by recorded sires.

Pleuro-pneumonia among cattle on the asylum farm near Fulton, Missouri. Several of the diseased animals have been killed, and careful examinations of the infected lungs made by competent veterinary surgeons from Kansas City, and also by the government veterinary surgeon from Washington, D. C. All the surgeons join in an emphatic statement as to the nature of the disease, and all pronounce it contagious pleuro-pneumonia.

A Cheyenne dispatch, of date March 26, says: The Leader to-day completes a series of interviews with leading stock growers of Colorado, Wyoming and Nebraska, gathered here to attend the annual meeting of the Stock Growers' Association. The parties interviewed represent over a million cattle, ranging at widely separated points. All agreed that the past winter had been the finest for many years for both range and trail cattle. The losses will be below the average, and it is estimated variously from 1 to 5 per cent. The larger portion of the losses were trail cattle reaching ranges late in the season.

Referring to the defensive powers of polled cattle, a correspondent says: Those of us who have handled hornless beasts know that the sight of a dog will arouse warlike demonstrations on the part of the muley quicker than anything else, and it is an acknowledged fact, although peaceable by nature, when it does come to the tug of war a muley will thump the everlasting daylights out of anything that wears horns and hoofs. Taking these two facts into consideration, it is reasonable to suppose that the howling wolf and the screeching coyote of the wild west will quickly learn to respect the butting bump on the mallet-shaped muley head.

We would call attention this month to the advertisement of Mr. G. S. Burleigh, of Mechanicsville, Iowa. Mr. Burleigh, as is well known, has long been a breeder of the famous "White faces," and has done much to introduce Herefords in Iowa and adjoining States. His herd contains many prize-winners. Mr. Burleigh's cattle will be sold at public auction in Riverview Park at the stock yards in Kansas City, on the 15th day of April. The catalogue of the sale can be procured by application to him at Mechanicsville, Iowa. There will be sixty head of cattle offered, descended from such old and reliable strains as Lord Bateman, Lord Berwick, P. Turner, Aaron Rogers and others. Those wishing to buy Herefords should not neglect to write at once for a catalogue so they can pick out what they would like. A two-year-old bull "Emperor 2d" 12435,

will be sold, that is reported to be a very fine animal. This sale will come at a very convenient time to buy cattle, as grass will be good enough to turn them out on pasture about as soon as they can be shipped home.

The regular fourth semi-annual meeting of the Cherokee Strip Live Stock association was held at Caldwell last week. The attendance was not large, but such gentlemen as were there meant business and proceeded to transact it at once. The meeting was called to order by President Miller at 10 a. m. He then delivered a short address congratulating the stockmen and members of the association upon their good fortune in not having lost all their cattle during the past winter. He spoke at length concerning the investigation of the lease by the senate committee this winter, and stated that the board of directors had endeavored to discharge their duty to the association in the matter and place the matter of the lease fairly and truthfully before that committee, that a sub-committee from the same body would visit this country during the coming summer for the same purpose, and that they would be called to Washington. The old board of nine directors was re-elected.

From the *Kansas Cowboy* we take the following: "Geo. Anderson returned from his range on the No-Man's Land, last Tuesday. He says his cattle are thin but healthy. Only a few have died. The deaths generally in the neighborhood among cattle have been confined to through Texans.—Brinton & Carl, on the Pawnee, lost a number of horses during the past winter. They died from loco poisoning instead of poverty or exposure. They have lost none for two months past, the horses having been enclosed in pastures and fed during that time.—Nearly all of the stock ranges south of the A. T. & S. F. railroad in Kansas, have been destroyed by the location thereon of settlers, and in a few more months there will not be a range left in this section, of sufficient dimensions to maintain a hundred head of cattle. The stockmen are seeking new locations or making arrangements for the disposition of their herds.—The Comanche Pool have about 300,000 acres of leased lands in the Indian territory, adjoining Kansas. There are 40,000 head of cattle in this pool, which are held in the Indian territory and in Comanche county, Kansas. As the range in Comanche county is being rapidly taken up by settlers, the cattle of the pool in that county are to be removed to the Indian territory and the number of cattle reduced to 20,000. The north line of the range is to be fenced, to prevent the trespassing of cattle on the lands of settlers in Kansas.

Silk Culture.

*Kansas Farmer*:

The warm spring weather is so near at hand when the genial rays of the sun and the gentle showers will unfold the leaves and flowers so carefully hid away during the long cold winter months, that those who are contemplating raising the "beautiful and beneficent silk worm" should at once supply themselves with the seed (eggs) if they have not already done so, either for experiment or profit. It is the wisest course to devote one season to learning thoroughly the business, not that there is anything very intricate in raising a crop of silk worms, but everything to a certain extent is intricate, in an occupation of which we have no knowledge; whereas one season of experiment will make us perfectly familiar with all the details.

There has been so much said through the medium of your valuable paper that it would seem further advice would be useless; but there are many who do not comprehend the necessity of sending for the eggs early in the season, and they leave it until the very last moment, when it would have been wiser to have sent during the winter. But in process of time this will be learned, as well as many more important facts connected with the industry.

There is a short time left for those who wish to send in their orders for eggs and book of instruction, which will be carefully sent, selecting the coolest day for transportation. Should the eggs hatch before the leaves of osage or mulberry are out, I will repeat what has been said previously, that the young worms will grow for some time on lettuce leaves, or the wild dandelion; the latter we found a success last spring; in all cases it must be free from moisture. Not long since a representative of the Na-

tional Silk Gowers' Association passed through this State enroute for California. He gave as his opinion that "California would be a giant competitor with any country in the production of fine silks and the silk worm." Arrangements are being made by eastern capitalists for the establishment of a colony of Italian silk raisers near the town of San Jose. If Kansas was as wide awake to her interests in this industry, possibly that representative would not have passed through this State, but would have lingered and learned something of our great facilities for producing silk. No State has any better; yet others are far ahead of us in this interest. The State Fair should be awake to this industry; they offer premiums on all sorts of productions of the farm, garden and household; but nothing for the finest display of cocoons and manufactured silks. Why is this? If the State ignores it of course the people will. When "she fosters it as a nursing mother," the people will believe in it. Send in your orders at once, and make a fine showing of the product at the next State and county fairs, premiums or no premiums.

MARY M. DAVIDSON,  
Junction City, Kas. Silk Culturist.

Kansas Fruits.

At a recent meeting of the Douglas County Horticultural Society, a list of approved fruits for Kansas was voted upon and adopted. A committee of five was appointed to report a list to be recommended, and the following is the list of apples and stone fruits recommended for general cultivation in Kansas:

- Summer Apples.—Early Harvest Red June, High Top Sweet.
- Summer and Fall Apples.—Cooper's Early White, Early Pennock, Keswick Coddling, Maiden's Blush, Lowell, Rambo, Ortley.
- Late Fall and Early Winter Apples.—Jonathan, Grimes' Golden, Baldwin, Rome Beauty.
- Winter Apples.—Winesap, Stark, Ben Davis, Missouri Pippin, Huntsman, Smith's Cider, Minkler, Janiton, Gilpin, Willow Twig.
- Cherries.—Early Richmond, English Morello.
- Peaches.—Amsden, Alexander, Old Mixon, Heath Free, Heath Cling, Hale's Early, Lemon Cling, Stump the World, Crawford's Early.
- Plums.—Wild Goose, Miner, Green Gage, Yellow Egg.
- Pears.—Duchess, Seckle, Bartlett, White Doyenne.
- Quinces.—Orange Champion.
- American Apricots.—Early Golden, Moorpark.
- Russian Apricots.—Griesa, Byram, Dr. Evatt, Prieb, Smith, Remer.
- Grapes.—Concord, Moore's Early, Elvira, Pocklington, Martha, Worden, Missouri Rising.

The committee, including the President and Secretary, offered the following list of small fruits, which was unanimously adopted by the Society:

- Blackberries.—Kittatiny, Snyder.
- Gooseberries.—Houghton Seedling.
- Currants.—Red Dutch, White Dutch.
- Red Raspberries.—Turner, Shaffer's, Reliance.
- Black Raspberries.—McCormic, Hopkins, Souhegan, Smith's Iron-Clad.
- Strawberries.—Crescent, Charles Downing, Miner's Prolific, Capt. Jack, Glendale, Windsor Chief.

Every farmer who reads the above ought to preserve the list. Douglas county fruit-growers know what they are talking about. What they recommend is good.

Wabash Change of Time.

The new change in time of the St. Louis trains is a great accommodation to the traveling public. The morning train now leaves at 7 a. m., has an elegant Wabash dining car attached, serving breakfast out of Kansas City, arriving at St. Louis at 6 p. m., ahead of all other trains. The evening train, the Commercial, Business Man's and Tourists' train, does not leave until 7:35 p. m., giving ample time to get your supper at home or the hotel and go sailing into St. Louis next morning at 6:50, the first train in.

The solid Chicago train still leaves at 6:30 p. m. All trains are equipped with Palace sleeping cars, reclining chair cars and Royal dining cars, making the great Wabash the best route on earth. Call at Ticket office, No. 531 Main street, 1,040 Union avenue and Union depot.  
N. H. GARLAND,  
Passenger and Ticket Agent,  
Kansas City.

We call the special attention of the many readers of the FARMER to the Central Missouri Series of Short-horn Cattle Sales, to be held as follows: Marshall, Mo., April 28; Higginsville, Mo., April 30, and Sedalia, Mo., May 1. All desiring good cattle would do well to correspond with the parties named in the advertisement of the Series, and to attend the sales.

Condition of Trade.

The New York Shipping and Commercial List of March 18th has the following encouraging report on the prospects of business at the great commercial emporium:

"The threatened disturbances of last week have disappeared, and this week opens with the volume of trade not only fairly active, but progressive, as it should be at this season of the year. The conservative course thus far pursued by the new administration is strengthening public confidence as to the sincerity of the claims made in its behalf; there is nothing to arouse apprehension with respect to the future, so far as the material prosperity of this country is concerned; and after struggling for a year through the dangers of shrinkage and depression, we seem to be gradually approaching the open sea that is free from hidden rocks and sunken shoals. The eastward movement of flour, grain and provisions last week is not only largely in excess of the corresponding date last year, but is nearly equal to that of 1883; the railroad earnings for February show but a trifling decrease, considering the interruption of traffic from snow and ice; the exports of wheat and cotton for the crop year from the whole country continue in excess of last year, and the surplus of idle money at this center is slowly melting away. Furthermore, the distributive movement of domestic trade is increasing in many departments, and while dealers do not report an active demand, the absorption of supplies has been sufficient to prevent accumulation. These are the salient features of the situation, and they are not without significance; neither are they neutralized by the obvious, but less important, obstacles that continue to impede more rapid progress. With respect to wheat, reliable returns recently published show that an average of 32 per cent. of last year's crop remained in farmers' hands on March 1st in twelve grain-growing States, and 31 per cent. in other localities. On this basis, the amount of wheat not yet marketed is indicated to be 162,000,000 bushels, which added to the visible supply in the leading markets and in transit of 43,000,000 bushels, makes an aggregate of 205,000,000 bushels, which compares with 150,000,000 bushels as estimated by the Bureau of Agriculture on March 1st, 1884, showing an increase this year of 55,000,000 bushels. As the yield of wheat in 1884 was 92,000,000 bushels more than in 1883, it is evident that the exports and consumption have made considerable inroads upon our surplus of production. If the absorption by export and consumption continues relatively as large until the next harvest, the surplus then will not be larger than will make up for the probable deficiency in the new crop, which it is assumed will exist under the most favorable circumstances, because of the known reduction in the acreage of winter wheat, as well as of the tendency which the unsatisfactory prices realized for this crop will naturally have in reducing the attention at present given to spring wheat culture. The exports of wheat, corn and flour from the whole country thus far this year are 13,900,000 bushels wheat, 4,000,000 bushels corn, and 290,000 barrels flour in excess of last year.

The attention of our readers is called to M. O. Keefe's advertisement of Jerusalem artichokes for hog feed, in another column.

A HOME DRUGGIST TESTIFIES.

Popularity at home is not always the best test of merit, but we point proudly to the fact that no other medicine has won for itself such universal approbation in its own city, state, and country, and among all people, as

Ayer's Sarsaparilla.

The following letter from one of our best-known Massachusetts Druggists should be of interest to every sufferer:—

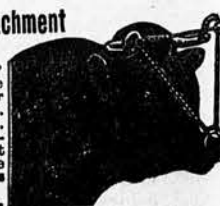
**RHEUMATISM.** "Eight years ago I had an attack of Rheumatism, so severe that I could not move from the bed, or dress, without help. I tried several remedies without much if any relief, until I took AYER'S SARSAPARILLA, by the use of two bottles of which I was completely cured. Have sold large quantities of your SARSAPARILLA, and it still retains its wonderful popularity. The many notable cures it has effected in this vicinity convince me that it is the best blood medicine ever offered to the public."  
E. F. HARRIS,  
River St., Buckland, Mass., May 13, 1882.

**SALT RHEUM.** GEORGE ANDREWS, overseer in the Lowell Carpet Corporation, was for over twenty years before his removal to Lowell afflicted with Salt Rheum in its worst form. Its ulcerations actually covered more than half the surface of his body and limbs. He was entirely cured by AYER'S SARSAPARILLA. See certificate in Ayer's Almanac for 1883.

PREPARED BY  
Dr. J. C. Ayer & Co., Lowell, Mass.  
Sold by all Druggists; \$1, six bottles for \$5.

Ritchie's Safety Attachment

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 application. Enclose stamp for reply. Address  
GEO. W. RITCHIE,  
Arrowsmith, Ill.



**Book Notices.**

**EASTER.**—The ideal Easter design is the symbolic one. Charming as figures of dainty children are, there is no question that the meaning breathed by flowers and buds, by the floating butterfly and singing bird, carry the lesson of Easter into a thousand hearts. In such designs it would be hard to find any to excel in significance and beauty the latest publications after Mr. Hamilton Gibson, and Miss Fidella Bridges. Their names guarantee excellence, and the reproductions are essentially good. Walter Saterlee may be regarded as among the foremost of those who, taking a somewhat lower note, reach the public by more realistic conceptions, and the Easter cards which bear his name form no exception to this rule. L. Prang & Co., 38 Bond street, N. Y.

**OGILVIE'S POPULAR READING.**—We have just received a copy of number sixteen of "Ogilvie's Popular Reading"—price only 30 cents—containing the following eight stories—all complete: "A Golden Dawn," by the author of "Dora Thorne;" "Down with the Tide," by a well-known author; "A Frozen Sea," by Wilkie Collins; "The Dean's Watch," by a popular author; "Barefoot Billy's Fortune," by Gaffer Gray; "Miss Simmon's Boarding-House," by author of "A Bad Boy's Diary;" "Perfect Etiquette," a complete guide to polite society; "A Heart for a Heart," by Boma. All of the stories are printed in large type, with handsome colored lithograph cover, also a handsome colored frontispiece, printed in twelve colors.

The April number of *Dorcas* is an admirable one. In addition to the usual number of patterns and directions for crocheted and knitted articles, there is an article on "The Carving from Colorado Marble," which opens the way for a new industry for women. This magazine takes special pains to bring forward anything new, which may in any way help women to new and better means of self-support. *Dorcas* is a periodical which should be in the hands of every lady in the land who has any taste for art decoration or fancy work. The illustrations are excellent, and the patterns selected with extreme good taste, and written in so plain and explicit a manner that a novice will find no trouble in following them. Newsdealers and postmasters will take subscriptions or furnish sample copies. Subscription price, \$1 per year. Send ten cents for sample copy. Address *Dorcas*, 872 Broadway, New York City.

**This, That and the Other.**

"Do take some more of the vegetables, Mr Blood, for they go to the pigs any way."

"You must join the cremation society," were the first words she said to her husband. "What for?" "I've bought such a lovely vase to hold your ashes. You have no idea how it will set off the mantelpiece."

"If a man wants to own the earth, what does woman want?" inquired Mr. Grap of his better half after a family matinee a few days ago. "Well, my dear," responded the lady in a gentle tone, "to own the man, I suppose."

"Ever had a cyclone here?" asked a Kansas man who was visiting a country aunt in the East. "A cyclone? oh, yes," said his aunt, "Deacon Brown's son brought one from Boston a spell ago, but law! he couldn't ride it. Tumbled off every time he tried."

The following verse is on a tombstone in a Sheffield churchyard, erected above the grave of John Knott, a scissors-grinder:

Here lies a man that was Knott born,  
His father was Knott before him,  
He lived Knott, and did Knott die,  
Yet underneath this stone doth lie.

The Aroostook region in Maine, where great areas of timber have been burned over, is said to be a paradise for honey bees. In this region the fire-weed flourishes throughout July, August and September, while wild raspberry bloom is abundant in late June and July. Both of these plants make a clean, white honey, which captures the premiums at all the fairs without trouble.

A bridge at Lyons, France, has a stone parapet, pierced at intervals for light, forming a passage which plays the part of a gigantic flute. The rush of the air currents through the openings causes the bridge to emit such sounds of music at different parts of its course that "one might believe it haunted by legions of invisible naiads pursuing the passengers with their plaintive melodies."

The topaz occurs frequently in New South Wales. A portion of a large, bluish-green crystal found at Muddes, and now placed in a colonial museum, weighs several pounds. Other specimens weighing several ounces are by no means rare. They are sometimes two inches to three inches long and broad in proportion. The pale bluish-green tint is the most prevalent, though crystals are occasionally found of a slightly yellow color.

"A scientific Frenchman says he has discovered a new process for making artificial brains," said Mrs. Wigglesworth, looking up from the paper she was reading. "Artificial brains!" sniffed Mr. Wigglesworth, scornfully; "that's just like those nonsensical Frenchmen, always fooling away their time making something artificial. What I want is real brains—none of your make-believe nonsense." Mrs. Wigglesworth, as she resumed her paper, demurely murmured that she had noticed it, too, but she never should have dared to speak of it herself.

God pity them both! and pity us all,  
Who vainly the dreams of youth recall;  
For of all sad words of tongue or pen,  
The saddest are these: "It might have been!"

When I was young there seemed to be  
No pleasure in the world for me;  
My fellows found it everywhere,  
Was none so poor but had his share—  
They took mine, too!

**BERKSHIRE HOGS.**

My herd now numbers about Forty Breeding Sows and Four Boars, including representatives of the best families of the day, and also prize-winners at the leading shows of this country, Canada and England. I have now in use in my herd sows that won in England in 1883, 1882 and 1881, and descendants of noted prize-winners previous to that time. The principal bear in use in my herd at present is "Duke of Monmouth" 11361, who won in 1883 the first prize at four leading shows in England, including first at the Royal Show, and also first prize at two leading shows in Canada. He thus won six continuous first prizes without being beaten, a like record I believe never attained by any other boar. I paid \$400 for "Duke of Monmouth." He is a splendid breeder, an animal of great constitution and comes from the same family as my old boar, "Lord Liverpool" 221, for whom I paid \$700, and who is now almost eleven years old and still alive. I have now a splendid lot of pigs from three to six months old, the bulk of which are got by "Duke of Monmouth." I would also spare a few of my sows, young or old, when in pig, and part of my breeding boars. I do not advertise prices as low as the lowest, for I cannot afford to sell as low as those who bought a cheaper class of stock to start with, but my prices are reasonable and within the reach of all who know the value of first-class stock. My herd of Berkshires show as much size as hogs of any breed, and I am sure I can show more quality, activity, constitution and size than is combined in any other breed of hogs. Almost if not every prominent herd of Berkshires in the West contains representatives from my herd, and this alone, considered in connection with the many prizes I have won for ten years past at our largest shows, proves beyond a doubt the quality of stock I am producing from year to year. No breeder of any kind of hogs in the United States or Canada has for several years past bought and retained in his herd so many valuable animals at an equal cost as I have. I have issued a new catalogue this season containing the pedigrees in full of my herd and a limited description of each animal, together with a complete list of prizes won for several years past. This catalogue I will mail free to all who feel interested enough to write for it.

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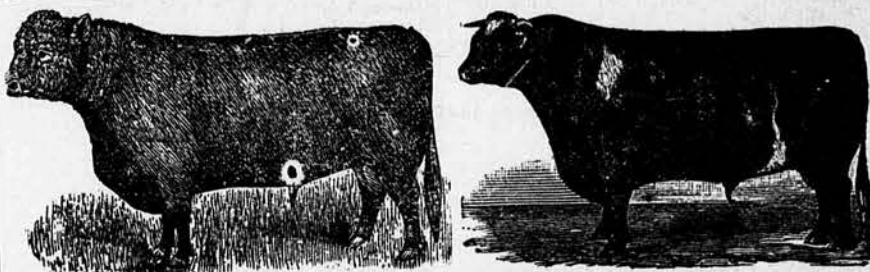
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## The Home Circle.

### The Land of the Afternoon.

An old man sits in his garden chair,  
Watching the sunlit western sky.  
What sees he in the blue depth there,  
Where only the Isles of Memory lie?  
There are princely towers and castles high,  
There are gardens fairer than human ken,  
There are happy children thronging by,  
Radiant women and stately men,  
Singing with voices of sweet attune  
The songs of the Land of the Afternoon.

The old man watches a form of cloud  
That floats where the azure islands are,  
And he sees a homestead gray and loved,  
And a hand that beckons him afar.  
O, cheek of roses and hair of gold!  
O, eyes of heaven's divinest blue!  
Long have ye lain in the graveyard mould—  
But love is infinite, love is true;  
He will find her—yes, it must be soon;  
They will meet in the Land of the Afternoon.

The sky has changed, and a wreck of cloud  
Is driving athwart its troubled face,  
The golden mist is a trailing shroud;  
It is cold and bleak in the garden place.  
The old man smiles and drops his head,  
The thin hair blows from his wrinkled brow,  
The sunset radiance has appeared  
O'er every wasted feature now;  
One sigh exhales like a breath in June—  
He has found the Land of the Afternoon.

A wandering snowflake fell on a high-born  
Lady's hand,  
And a moment lay near a diamond ray, that  
flashed from a golden band;  
Before the tinted white of her tapering fingers  
seemed  
Unearthly fair, with the jewels rare, and  
the circling gold that gleamed.

But all their beauty fled, when that snow-  
wail downward flew,  
And lay so bright that her finger white  
seemed turned to a yellow hue.  
Ah, thus the proud of earth, though in grand  
attire arrayed,  
Lose all their pride when they stand beside  
the beauty which God hath made.

### Climate and Intellect.

A great deal has been said about the effect of climate upon intellect, and not much of the effect of intellect upon climate, or, to be more exact, of the power in mental activity to resist or control climate influences. Some philosophers have held that there is an occult sympathy between mind and matter, and that a great accumulation of mind upon one point—that is to say, the direction of a strong current of desire for or against some operation of nature—would be effective. For instance, if all the people in a wide district suffering under drouth should unite in a common longing, a sincere mental struggle, for rain, that nature would feel the subtle influence through all its being, and rain would come. Unfortunately the experiment has never been tried, for common consent at any moment never has been attained—there is always somebody who has hay out.

But this at least we can say, that it is safer to have the desire of the general mind in the right direction. Now two of the vulgar notions of this latitude are that we need "bracing up," and that snow is a useful product, consequently that the more severe cold weather we have and the more snow, the better off we are. And people go on believing this to their deaths every year. As to snow, there is a sentimental notion of its beauty as well as of its utility. And a good deal can be said for it from an artistic point of view. But we are not placed in this stern world merely to indulge our sensuousness. We are here to make the most of our powers in view of a hereafter; and long life is a duty, besides being, in the Old Testament view, a reward of virtue. It is probably necessary to have snow at the poles in order to keep the poles cool, and insure a proper circulation and change of air round the globe, just as it is necessary to keep the equator so hot that it is as unpleasant to sit on it as on a kitchen stove. Snow, indeed, might do little harm in a land where the sun never shone. But in this region, where the sun does shine, where half the winter days are clear, the only effect of the presence of snow is to fill the atmosphere with chilling moisture, lung fever, pneumonia, and that sort of thing. The pleasanter the weather, the more sunshine we have; with snow on the ground, the worse is our condition. And yet it is in vain to argue this with people. They are wedded to traditional ideas and full of prejudice, and it seems impossible to convince them that snow in this region is harmful. It does no good to demonstrate to them that but for snow we should have a royal winter climate. On a small scale we see occasionally what it might be. There were such days in January last. The snow had disappeared, the sun shone with the light but not the heat (like an electric lamp) of May, and the air was pure, exhilarating, but not damp and grave-like. It would have been perfect but for the chill that came down from the vast snow-fields of Canada, where cold and snow are worshipped and feted all winter. And yet, after such experience, people, convinced, go back to snow. The ignorance of this scientific age is discouraging.

The other vulgar notion is that a hand to-

hand struggle with extreme cold for months does a person good—braces him up. It must be admitted that up to a certain point any struggle or trial is invigorating to the moral and intellectual nature. But we see what too much indulgence in this leads to. The Esquimaux is but little raised above the polar bear and the seal. His whole existence is just an effort to keep alive, to get blubber and skins enough to generate and keep in his body vital heat. He can think of nothing else; he has room for no other mental effort. We see the same thing in the diaries and accounts of the polar exploration fanatics. It would be the most painful reading in the world if it were not so monotonous. Each one tells exactly the same story—the story of his physical struggle to keep alive with the thermometer fifty degrees below zero. Soon the mind has no other occupation than this struggle. It almost ceases to work in any other direction. This is interesting to us at first as a study of the capacity of the human organism to resist the unrestrained attacks of nature. The experience of a person who should in this latitude, in winter, retire to an ice-house, with a hatchet and a supply of frozen hash, a whale-oil lamp, and a fur overcoat and body-bag, and sit on the ice in the darkness, and record his feelings, the gradual lowering of the vital powers, the concentration of the mind upon the numbness of his legs, would doubtless have a physiological interest. But the second experimenter would not interest his readers so much as the first with his narrative.—Charles Dudley Warner, in Harper's Magazine.

### A Touching Scene.

Entering the depot at Columbus a short time ago, to take the train for Kansas City, my attention was attracted by crying that indicated deep sorrow. Upon inquiry as to the cause, the sheriff who stood near answered that he had just brought a convict to the depot to take the train for the penitentiary, and that it was the parting of his wife and children. The man was about 50 years old, had been drinking, when some rowdy associates came to his house; he ordered them away, and when they did not obey he fired on them and killed one of them. He was sentenced for ten years to the penitentiary. His wife sat beside him, his daughter almost a young woman stood to one side, a little boy probably eight years old stood before him gazing into his face, tears streamed from his eyes, and he cried as if his heart would break, a little girl of perhaps four years old sat on the mother's lap, while the poor man held his babe perhaps 15 months old. This was the group. The weeping husband taking his final farewell of his heart broken wife and weeping children was the saddest sight I ever beheld. For one rash act, committed under the influence of strong drink, this man who from what I saw loved his family, was torn away from them and deprived of his liberty. His wife lost a husband and was left poor in the world with a large family. The children lost a father at a time when they needed him most. As the poor man was torn away and took his place in the car manacled to another criminal, and was hurried away from all he held dear on earth, toward the gloomy walls of his prison, a sadder and more disheartened countenance I never beheld. For days the terrible and touching scene was present in my mind. It was a powerful lesson on the danger of intoxicating drinks, and the crime of the government in allowing such temptations to be put before men.—Western Friend.

### Feeding the Lambs.

One of my neighbors shows a great genius in amusing children. Her home is their favorite resort, the one first recognized by the native infantile mind, and the goal of the earliest attempts at running away. She lets them set up housekeeping in a dry-goods box, turned up in a corner of her kitchen; make an ocean in her dish-pan to sail their chip fleets upon; and seldom fails to send a child home happy over some simple trophy of its visit. It may be only a fried cake or cookie in some fanciful shape, the cover of a small tin can to serve as a bake-dish; or perhaps the can itself made into a miniature pail by punching some holes at the top and inserting a wire for a handle. Paper hats, dolls and fans are produced in abundance, but her parables are really masterpieces. She makes them by folding a newspaper fan-fashion, slipping the center into a slight split in the top of a stick, then spreading the paper open and fastening it into a circle by pinning the covers together. We often see quite a brigade out with these imitations, holding them up as proudly as if they were rich combinations of whalebone, silk and fringe. One real umbrella which, owing to a broken rib or two, and general shabbiness, was given up for the children's use must have caused more pleasure than any diamond that ever sparkled. Then she makes turtles of raisins and cloves, and makes them stick around on a frosted cake or cookie in a way to bring a certain delight to the unsophisticated infant. A large raisin flattened, four cloves inserted, forked end outward for the feet, one with the sharp end outward for the tail, and one containing the berry for the head, is the formula.

It is a simple thing to amuse a little child, but many people who succeed in great things, fail in this. To write stories, to draw pictures, to sing songs, or to construct toys to suit the undeveloped mind, requires a peculiar gift. Hans Christian Anderson was great in his way, and my neighbor is in hers. She will need no marble monument,

for she will be remembered by many for many years as one who was kind to children and loved to consider their little needs.—Ex.

### Household Recipes.

**Baked Potatoes.**—Pare and slice raw potatoes very thin; put them in a baking dish and cover well with milk; add pepper and salt and bake until nicely browned. Do not put the potatoes in water after they have been sliced.

**Hickory Nut Maccaroons.**—Two cupfuls of hickory nut meats; beat them fine in a mortar, and add two cups of sugar, four tablespoonfuls of flour and three eggs. Mix well together and bake on well-greased paper. Put only a little of the mixture in each place.

**Lemon Rice Pudding.**—To two-thirds of a cup of rice, boiled and cooled, add the well-beaten yolks of three eggs, salt, a teaspoonful of butter, three tablespoonfuls of sugar and the grated rind of two lemons, with milk enough to make very moist. Bake forty-five minutes. Use whites of eggs and juice of lemons for frosting, and brown.

**Mashed Potatoes.**—A new way to warm over mashed potatoes is to add one tablespoonful each of chopped and scalded onions and chopped parsley, with salt, pepper, nutmeg and four ounces of grated Dutch cheese; mingle well; put into a hollow dish in dome form; strew a little grated cheese and bread crumbs over; add a few small pieces of butter on top; bake a light brown in a moderate oven.

**Baked Eggs.**—Take five eggs and put the yolks in a bowl and stir with a little salt and pepper. The whites should be beaten to a stiff froth, and if there are more whites than yolks, the dish is so much better. After the whites are stiff as can be, pour the yolks over them and mix lightly with a spoon, then turn all instantly into a hot baking-dish with a little melted butter in the bottom and bake immediately.

**A Good Sauce.**—A good sauce to go with plain fruit puddings is made by mixing up one cup of brown sugar, one cup of best molasses, half a cup of butter, one large teaspoonful of flour; add the juice and grated rind of one lemon, half a nutmeg grated, half a teaspoonful of cloves and cinnamon. When these are all stirred together, add a teacup of boiling water; stir it constantly, put it into a saucepan, and let it boil until clear.

**Cold Fowl.**—Cold fowl left over from dinner may help to make an excellent side dish; cut it into rather small pieces, put a large lump of butter into a saucepan, and brown the meat in that; sprinkle pepper and salt and some flour over it, and when the meat is brown add half a pint of stock, which need not be very rich to be good, a pint of peas (canned ones); heat to the boiling point and then serve. Mushrooms may be used in place of peas, and the proportions given above may be regulated by the quantity of fowl which you have.

### Bathing and Baths for Farmers.

Among all the appliances for health and comfort to mankind we think we may safely say there is nothing so well known, so useful, and withal so comforting, and yet so little practiced, so carelessly and thoughtlessly neglected, as judicious bathing. The skin of the human body, from head to foot, is a network of pores. One cannot put a finger on a single place without covering several hundred little openings, which ought always to be kept free and clear of obstructions. As evidence of the truth of this statement we need only call to mind the great drops of sweat so often seen gathering on one's face and other parts of the body in warm weather—especially during times of over-exertion. Those pores are the openings into minute tubes or channels, which lead through unseen meanderings into the sanctum of life within.

The dust which comes in contact with animals covered with hair is mostly kept out, and the perspiration conducted away from the pores of the skin by those hairs; hence bathing is not so essential with them as with mankind, whose bodies are practically denuded of such protection. The glutinous mass of perspiration, dust and filth, which gathers on the surface of the body, naturally covers and clogs the pores and often enters them and poisons the system. To remove that filth frequent ablutions and occasional immersions in water are exceedingly desirable, and usually indispensable to health and comfort, consequently every family should have a convenient bath—and a full bath too—of some kind, not only for general neatness of person, so desirable to every individual of taste and culture, but as a means of preserving health, and in many cases, especially under the advice of a good physician, as the safest, pleasantest and one of the most powerful and efficient means of combating diseases.

Directed by good judgment and wise counsel, a bath is a valuable auxiliary to other remedies, and it can be used when internal remedies cannot. In the long catalogue of diseases to which flesh is heir, scarce one can be named in the treatment of which a bath is useless. To those blest with good health, a bath, as a common sense appliance, gives thrift and growth to healthy functions, a brightness and delightful serenity, a clearness of mind and buoyancy of spirit. It is certainly a blessing to both mind and body. For the mental worker, it is a nerve tonic. A thorough immersion in water of proper temperature will calm and give strength and tone to his whole system.

The indoor laborer who gets but a scanty supply of fresh air, needs a bath to obtain those invigorating elements so common to the open air.

The outdoor laborer—especially the farmer—who works with heroic energy all day long, unavoidably gathers on the entire surface of his body a complete prison-wall of dust and thickening, gummy perspiration; and when his day's work is done, he needs then more than any other thing, not only a wash, but a good, luscious, full bath to fit him for a clean bed and a refreshing sleep.

Finally, every one needs a bath at times and every human habitation should contain something for a complete immersion in water, and since convenient and efficient portable baths at comparatively low figures are now extensively advertised for sale, there is little excuse for any one to be without this priceless benefit.—Western Rural.

Only in dreams thy love comes back,  
And fills my soul with joy divine.  
Only in dreams I feel thy heart  
Once more beat close to mine.

Only in blissful dreams of spring,  
And sunny banks of violets blue,  
The past folds back its curtain dim,  
And memory shows thine image true.

### The Duty of State Legislatures.

Legislatures in every State should regulate the sale and use of the many poisons resorted to by women in their desperation to obtain a beautiful complexion. There exists in Dr. Harter's Iron Tonic every requisite to accomplish the object without injuring health or endangering life.

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Rockford, Ill.

## The Young Folks.

### Play You do not Mind it.

Some youthful housekeepers one day  
Were getting supper in a way  
That was delightful, really;  
The grass a velvet carpet made  
Beneath the glowing maples' shade;  
No room so charming nearly.

Then Flossy brought a napkin red;  
"I'll make a lovely cloth," she said,  
But when she came to try it,  
Alas! 'twas not quite large enough  
To hide the table, slightly rough,  
'Twas useless to deny it.

The rueful looks of blank dismay  
Began to chase the smiles away,  
So meagre did they find it.  
Till outspoke sunny little Nell:  
"We'll leave it so, 'tis just as well,  
And play we do not mind it."

The joyous smiles returned once more,  
Too soon the dainty feast was o'er,  
And shadows gathered thickly;  
A star shone silvery in the west,  
Warning each merry little guest  
To seek the home fold quickly.

The lesson is as plain as day;  
A cloud may rise above your way,  
The sunshine is behind it;  
When things go wrong and others frown,  
Just put all vain repining down,  
And play you do not mind it.

### Christmas in the Rocky Mountains.

In the "Mining Gulch," away up 9,000 feet, I find a real "No-man's land," a mining camp where never a Christmas tree was appropriated for a festival, although abounding in most inviting forms. The little ones never had a Christmas! The older ones brought remembrance of the happy time from "Father-land;" from New England firesides; from Canada and other christian homes. To lose it all in their forgetfulness of all else in the search for gold! Christmas was approaching. With my heart filled with the memory of joyous reunions, I look down the mountains, over the great plains, and witness the busy, loving preparations for a "Merry Christmas." With a sigh I look from that picture to this. I view the landscape o'er, canvassing all the possibilities of inviting Santa Claus to our mountain top. Discouragement met my inquiries in all directions, save from the eager, expectant little ones. They put their trust in my ability to do as I would. The "weather-wise" predicted high winds with drifting snow, rendering roads impassable, as a "blockade" was the rule at Christmas times. The mail even stops, sometimes for weeks.

The poor miners had been realizing a "panic," even here! They could hardly afford the necessaries of life, which must be garnered for the coming "snowing in." Cold and hunger—the gaunt shadow upon the wall—left from other times, makes the most improvident thoughtful. So no hope, or promise of a merry time for the children. They could wait! The little squirrel had gathered his stores, and gone into winter quarters; the cattle and horses driven to the plains to live as best they may; all mining appliances were "laid in;" wood, in thousands of cords, was piled like great walls around the "works." The log cabins must have new plastering and chinking. A miner remarked, "the snow will be forced through an inch board," so furiously does the wind blow. "Banking up" every habitation, is the rule, for we are up in the "snowy range," where the wind makes the "best time on record." You will see we were "hedged in" on every side. What chance was there for a Christmas?

I wrote of our need to some friends; back came a noble response:—"O yes, we will help." A Sunday school in New York, headed by my little neighbor, Anna Murray (niece of the Governor of Utah), took in the situation, and most thoughtfully and lovingly prepared a box of 100 pounds, and sent it by express. It arrived at Penn Gulch station, three and one-half miles distant. By this time the prediction of a blockade was being fulfilled. Our hearts almost misgave us, for "so near and yet so far" was too much for Christmas nerves. But luck for us! Some of the mining appliances most necessary, gave out. They must be obtained, if by forced marches through snow tunnels. We knew then that Christmas would come even to "No-man's-land."

"The Christmas box, the Christmas box has come!" was echoed from mountain top to mountain top. Anticipation was on tip toe. We gathered a little here and there until all, to a certainty, could enjoy their first Christmas. Storms held us "weather-bound" until the very ushering in of Christmas day, when the sun—as if in sympathy with us—burst forth in a cloudless sky, and the winds as if rebuked by Divine power, were stilled. The older ones exclaimed, "The storm and the winds approve, and why not we?" and *mirabile dictu!* every miner quit work, and came to rejoice and be glad. Such a gathering never was known in the history of the "gold diggings." Early in the morning all gathered to celebrate the day. The school house—a log cabin of one room—had been trimmed with evergreens and kinnikinnick, with its lovely red berries; the rough logs hidden by an artistic "Rocky Mountain Decorator." Then the tree—a real beauty—was placed in the center. Then the opening of the Christmas box. Never

did the words appreciation, admiration and anticipation stand for more. Dolls, tops, brought forth exclamations of delight. Closer pressed the crown. Horses, wagons, cars, animals, curious and rare; toys—ever so much longed for—picture books, slates, bright pictures for decoration; Christmas cards of all designs; collars, ribbons, pocket handkerchiefs, and ties; candies, nuts, raisins, and handsome bags to hold these; white ornamented bags of popcorn. Everybody interested and happy. Old and young exclaiming, "beat's all!" "how much more?" "enough for all creation!" and much of Rocky Mountain slang, innocently uttered. It meant no disrespect. It was the best they had. Like their personal decorations—a coat brought from the "Father-land"—one a souvenir of a twenty-five years ago wedding. Two white shirts were conspicuous; the miner's blue flannel is the customary attire. Mothers and children did their best in personal adornment, but oh, such a funny crowd. You would have thought we were masquerading, dear readers. It was a rare and happy Christmas celebration.

The best was kept until the last of the feast. Papers, magazines, and books, were then arranged upon the teacher's desk. This was to be our winter's feast; the starting point of a circulating library. "All trees from little acorns grow," and this little planting must grow. There are no books here; not a Bible, though a few worn testaments. We have two large Bibles now in the library. The box had enough testaments for all, and they were gladly received.

Dinner was then announced; for those who had pushed their way through such drifts of snow must be fed. The table had been set facing the tree, where our guests could feast greedy eyes, as well as hungry stomachs. The children were served first, for it was their day. It was a right royal feast. No turkey, no fresh fruit, no esthetic adornments, but good mountain fare,—coffee, stewed antelope, and canned fruits and vegetables. There was no cake, as eggs were not to be had. All did justice to this unusual feast; the scraps were gathered up that nothing be lost, to lunch the little ones before leaving for home, for this was a full day's merry making.

Dinner over, all awaited the grand climax of their lives, receiving gifts from a real Christmas tree. You should have witnessed the wild delight. Order was called. "Children, why do we celebrate this day?" "To get my doll," cries a little tot. "No, my horse and top," says toddlekins, both in a breath.

"Yes, but why?" was insisted upon. No response. They had not the remotest idea of any significance but a good time. The old story ever new, of Christ a babe in the manger, was told, with an effect never to be forgotten. Neither will the distribution of gifts. All were satisfied with their goodly armfuls; whistles were tried; harps raised a tune; wagons were rolled; puzzles worked out, and the great mystery of Christmas solved. The absent ones were all remembered, and the older ones received a substantial souvenir of the one happy Christmas in the Rocky Mountains.—*Woman's Magazine.*

### A "Lightning-Rod" Anecdote of Lincoln.

The following is taken from Arnold's new "Life of Abraham Lincoln:"

"In 1836, Lincoln was again a candidate for the legislature, and in this canvass he greatly distinguished himself. On one occasion there was to be a public discussion among the opposing candidates, held at the court house at Springfield, and Lincoln, among others, was advertised to speak. This was his first appearance 'on the stump' at the county seat. There lived at this time in the most pretentious house in the town a prominent citizen with the name of George Forquer. He had been long in public life, had been a leading whig, the party to which Lincoln belonged, but had lately gone over to the democrats, and received from the democratic administration an appointment to the lucrative post of register of the land office at Springfield. Upon his handsome new house he had lately placed a lightning rod, the first one ever put up in Sangamon county. As Lincoln was riding into town with his friends they passed the fine house of Forquer, and observed the novelty of the lightning rod, discussing the manner in which it protected the house from being struck by lightning.

"There were seven whig and seven democratic candidates for the lower branch of the legislature, and after several had spoken, it fell to Lincoln to close the discussion. He did it with great ability. Forquer, though not a candidate, then asked to be heard for the democrats in reply to Lincoln. He was a good speaker, and well known throughout the county. His special task that day was to attack and ridicule the young man from Salem. Turning to Lincoln, who stood within a few feet of him, he said: 'This young man must be taken down, and I am truly sorry that the task devolves upon me.' He then proceeded, in a very overbearing way, and with an assumption of great superiority to attack Lincoln and his speech.

"Lincoln, however, stood calm, but his flashing eye and pale cheek indicated his indignation. As soon as Forquer had closed, he took the stand and first answered his opponent's arguments fully and triumphantly. So impressive were his words and manner that a hearer believes he can remember to this day, and repeat some of the expressions. Among other things, he said: 'The gentleman commenced his speech by saying that this young man, allud-

ing to me, must be taken down. I am not so young in years as I am in the tricks and trades of a politician, but,' said he, pointing to Forquer, 'live long or die young, I would rather die now, than, like the gentleman, change my politics, and with the change receive an office worth three thousand dollars a year, and then, continued he, 'then feel obliged to erect a lightning rod over my house to protect a guilty conscience from an offended God.'

"It is difficult to-day to appreciate the effect on the old settlers, of this figure. The lightning rod was the first which most of those present had ever seen. They had slept all their lives in their cabins, in conscious security. Here was a man who seemed to these simple-minded people to be afraid to sleep in his own house, without special and extraordinary protection from Almighty God. These old settlers thought that nothing but the consciousness of guilt, the stings of a guilty conscience, could account for such timidity. Forquer and his lightning rod were talked over in every settlement from Sangamon to the Illinois and the Wabash. Whenever he rose to speak thereafter, they said, 'There is the man who dare not sleep in his own house, without a lightning rod to keep off the vengeance of the Almighty.'

### Shad and Their Habits.

"In the spring," said Fish Commissioner Blackford, of New York, recently, "the young man's fancy lightly turns to thoughts of broiled shad. It's generally around St. Patrick's Day that shad make their first appearance in the North river, and there is a tradition among Weehawken fishermen that the saint was himself a mythical shad-ow," and even as the commissioner spoke he inadvertently stuck the lighted end of his cigar in his mouth. Recovering quickly from the surprise which this act occasioned, he resumed:

"The experts tell us that the temperature of the water governs the appearance of shad in the rivers and harbors along the Atlantic coast, so that there is really no accurate method of determining when they will appear. Observations taken in 1881, '82 and '83 showed that on an imaginary plateau out in the deep sea, extending from the capes of the Chesapeake to the Delaware breakwater, the temperature of the water was much higher than in the rivers and bays along the shore. The presumption, therefore, is that schools of shad belonging to the Chesapeake, the Delaware and the North rivers have their common winter quarters on this plateau. When the shore water, as the season advances, becomes warmer than the ocean water, the shad migration into continental waters begins. If the northern area should be warmer than the southern, then an unusual proportion of shad will be thrown into our waters. If, on the other hand, cold waters should sweep down from the northern rivers, then the shad will make a dead set for the Chesapeake and our fisheries will prove a failure. Warm rains and the absence of snow in the mountains at the beginning of the fishing season will also determine the movements of these fish. If, in the early spring, they get up to the mouth of a river and find the water warm, then a tumultuous rush of shad and herring takes place up the river and the markets will be glutted. I trust this will prove the case this season."

"How about the southern shad?"

"Well, those are not possessed of the flavor of our fish, because they are natives, so to speak, of the southern waters. They are not the migratory shad of that imaginary ocean plateau to the north. These southern shad begin to run in the St. John's river, Florida, in the middle of December. They are running as high up the coast now as the Cape Fear river, in North Carolina. Owing to the cold weather of this winter they have been shipped and reached here in excellent condition. At present the Florida roe shad can be had for fifty cents and the North Carolina roe for \$1.50. The male shad from Carolina brings only fifty cents. But you will have to wait until the high hats and shamrocks bloom before you see shad what is shad."

### I was that Boy.

Blanche K. Bruce, whose signature as register of the treasury now graces every national bank bill, was very popular while he was in the senate, although he is of African descent. Unobtrusive, attentive to business and modest, he conquered the prejudices against his race and was treated with marked courtesy by his associates. One day, after he had been a senator for two years or more, Senator Bogey, the aristocratic descendant of one of the old French families of St. Louis, took a seat by his side, saying: "Mr. Bruce, I have a bill here I want you to vote for. It is one in which I have a great personal interest. It has nothing political in it. Look at it and tell me what you think."

Bruce laughed as he said: "Senator Bogey, I hope we shall arrange this more satisfactorily than our last business transaction." "Our last business transaction? What do you mean?" "Don't you remember meeting me before my coming to the senate?" "Most decidedly, no." "I think I can refresh your memory, Senator. Some twenty years ago you were one day running down Olive street in a hurry to catch a steamer. You were carrying a very heavy valise. The day was very hot. Don't you remember the colored boy who came up and offered to carry the valise down to the levee for a quarter? You ran along with the boy, soon the wharf-boat dock was reached.

The boat was just swinging out. You ran and jumped on board. You called for the valise. The colored boy put the valise behind his back and called for his quarter. You hunted, fished out a quarter and tossed it ashore; but the gap was too wide to toss the valise. The captain had to stop the boat and back up before you could get your valise. Do you remember that?" "Well, I should say I do." "I was that colored boy."

A gentleman made his way into the bed-chamber of one of his friends, and found him fast asleep with a pair of spectacles upon his nose. "What!" cried he, awakening him, "do you wear your spectacles while you sleep?" "Oh!" replied the other, "I am so near-sighted that without my glasses I could see nothing whatever in my dreams."

A fish auction in Holland is one of the oddest things in the world. As soon as the boatman reaches port with a load of fish, the fact is announced by the sounding of a gong. Those desiring to make purchases repair to the beach, where the fish are piled up in little heaps. The owner then proceeds to auction them off. Instead of letting the purchasers do the bidding, as is done in this country, he does it himself. He sings out a price at which he will sell the lot. If no one takes it, he comes down by easy stages till within what the purchasers are willing to pay.

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Every boy that is old enough to handle a hoe ought to have a piece of ground to cultivate for himself. It is a good training school.

A delegation of clergymen called upon the President last week and presented a petition asking for action to suppress polygamy in this country.

Our information as to the condition of winter wheat in Kansas does not justify us in changing the opinion stated last week. The condition is not good.

The farm machinery advertised by J. E. Porter, Ottawa, Ill., is well worth examining. It would be well for our farmer friends to send for his catalogue.

If there is yet remaining any trash about the premises, remove it at once. It is a pity to taint this delightful spring air with the sickening odors of such filth.

The boomers have not yet taken possession of Oklahoma. The new President agrees with his predecessors, that that country is not yet subject to white settlement.

In Virginia peanuts are called peanuts; but in North Carolina they are called "ground peas," in Tennessee "goobers," and in Georgia, Alabama and Mississippi "pinders."

Some Cowley county farmers recently organized the Farmers' Co-operative Milling Exchange, for the construction and operation of a flour mill "doing an exchange and general milling business." The mill will be built and operated at Arkansas City.

President Cleveland is said to have great respect for his dead mother. When he was a boy she used to take him to hear Rev. Byron Sunderland, a Presbyterian, preach sometimes. That was in Buffalo, N. Y. Mr. Sunderland now preaches in Washington city, and the President attends his church.

A Southern paper thinks that ere long "peanut flour" will be an important production of the South. Virginia is set down this year for 2,100,000 bushels, Tennessee for 250,000, and North Carolina at 135,000 bushels, these being the chief States engaged in their cultivation, and those in which it was first introduced from Africa.

So many cattle are injured by dragging them out of muddy places that the Cowboy wisely asks: "Why can't a portable derrick, with appliances for elevating the animal bodily from the mire and landing it safely and harmlessly on solid ground, be invented? We have patent branding pens and patent car loaders. Now let us have a patent cow-bogged extractor."

## BASIS OF RAILROAD CHARGES.

The position that the basis of railroad charges properly is the cost of railroad building must be abandoned. It seems reasonable, but it is not. No such rule is adopted in any other business. A merchant, for instance, does not mark his goods to correspond to the cost of the building in which he sells them. One man may sell goods in a fifty thousand dollar building and another may sell the same kind of goods in a two thousand dollar house, and if there be any difference in the prices asked for the goods in the two houses, the more costly one gives the lower.

Nor is the capital invested in a road a proper basis upon which to build rates of compensation. The capital may be real or much of it may be unreal or fictitious. That is to say, the papers and books may show a capital stock of ten million dollars, when in truth the building of the road did not cost one-half that sum. Corporations sometimes do what is called watering their stock—increase their wealth on paper by simply declaring officially that their capital stock is increased so many shares worth so many dollars apiece. Then, business is done on the basis of the increased (watered) stock or capital, instead of the real. Suppose the actual cost of building a railroad is one million dollars, and the owners of the stock want to make money and yet appear to be charging rates that are very low when the capital invested is considered; they may appear to be receiving only one-half their real gains by doubling their capital stock on paper. If 6 per cent. profit is made on one million really expended, by making the capital two millions, the same income would appear as 3 per cent.

As long as this idea of rating compensation to railroad companies according to what is, or what appears to be, the capital invested, is entertained and acted upon, there can be no permanent adjustment of difficulties growing out of intricacies and complications of the business and conflict of real and fictitious interests. As we have before pointed out in these columns, railroad companies do not deal with one another on such bases. In pools and combinations for division of trade, no attention is paid to capital invested or to cost of construction. Half a dozen different companies may agree to divide the through business between Kansas City and Chicago, but the division is not based upon capital or cost of building the roads; it is a simple division equally among the contracting companies. If there are six companies in the pool, and the total amount of money received by all of them on the business is six million dollars, each one of the six companies receives one million of it and pays its own expenses.

The true principle is that established long ago, and is what the lawyers call *quantum meruit*—that is, how much is it worth. In all cases of disputed wages or payment for services rendered, the question submitted to the court is—"What are the services reasonably worth?" And in confining the testimony of witnesses to that particular inquiry, nothing is said or allowed concerning the cost of any outfit employed or how much money is invested in it or what amount of capital stock the books show. If the dispute be over services in digging a ditch, nothing is said about the cost of tools or machinery used. What is so much ditching worth in that locality, and that is determined by what persons usually charge for such work. If a farmer hire two men to plow corn and one of them comes wearing a pair of two-dollar gloves, eight-dollar boots, and a forty-dollar suit of clothes, must the wages correspond to the dress of the dude rather than to his work? If a

merchant has goods at a distant railroad station to be hauled to his store, does he pay more to a freighter that has a thousand dollars invested in a team and wagon than he does to another that has only two hundred and fifty dollars so invested?

If cash or capital is to be the basis of compensation, the people would be compelled to pay for all the extravagance and waste, to say nothing of fraud, in railway building and speculation. As matter of fact, a road may have cost the stockholders twice as much as it ought to have cost, and this without any fault on their part. The public ought not to pay for waste, whether caused by ignorance, misfortune or fraud. This is a selfish, almost cruel world, and measures of compensation are not those of sympathy or charity or friendship, but of cold, calculating business. What is the work worth?

On the cost theory, there could never be anything like a system of transportation established. A continuous line of shipment from New York to Topeka, for instance, may include five or ten different railroads, each costing a different amount for building. It would be a troublesome matter, indeed, to adjust the compensation for the entire haul according to the capital invested in the different roads. The roads themselves do not so treat the matter.

Nor would such a method of compensation be just to the railroad companies, because while an equal service is rendered, the more expensive road would receive correspondingly larger pay. If it be worth one dollar to haul a ton a hundred miles, what does it matter how much or how little the means of transportation cost? We do not mean to say that cost of railroad building has nothing to do with the amount of compensation to be received for services rendered. The point we make is, that the true rule—*quantum meruit* is determined by other considerations.

What, then, are those other considerations? Suppose a new town is started at a point forty miles from the nearest railroad station, and there is no change in that respect during a period of ten years. All the transportation between the two places is done by "freighters." A rate per pound, per hundred pounds or per ton is established and is made uniform. How is that done? Who fixes the scale and upon what basis? The citizens of the town for whom the freighting is done have very little to do with fixing the rates; indeed, it may be said they have nothing to do with it, but the thing is done and they accept it as reasonable. The rates are fixed by the persons who do the work, and a five-hundred-dollar team receives no better compensation unless it hauls more goods than a team that costs half as much or less. The freighters soon settle down to a rate of compensation that they consider fair, and their employers, the people of the town, are satisfied, because, reasoning in the same way, but from a different standpoint, they come to the same conclusion. Every ordinary man knows what is the average cost of things in ordinary use. They know what a day's work is worth and why; they know what it costs to keep a horse and why; they know what an average wagon is worth; they know the value of harness; they know how far an average team when loaded will travel in an ordinary day; and, looking at these things in a reasonable way, the people conclude that the rates established by the freighters are reasonable.

The same rule, precisely, operates in railroad building. The railroad men themselves fix reasonable rates among themselves. The people are not consulted about the matter, yet they never complain of rates made in competition

unless they think they are imposed upon by unjust discriminations against them. Rates that the companies fix for themselves must be sufficient, allowing themselves to be judges; and there is no better or fairer way to ascertain what is reasonable compensation than that adopted by the roads, because, in the nature of things, the rates agreed upon will be those which are satisfactory to the company whose line is most favorably situated for doing the business cheaply. It would not enter into any combination that would injure its business, and for that reason the terms agreed upon are likely to be fair. The only reason why it would listen to overtures at all is that it would avoid the going below living rates by competing roads. Railroad companies, like individual persons, soon get down to fair and reasonable rates. Such things are settled in time, settled fairly, and by the conduct of the persons or corporations that perform the work.

Taking this idea as the basis of our reasoning, one may easily foresee the final adjustment of all the present troublesome difficulties in the transportation problem. A system may thus be established, and that as fast as the legislators learn how.

When trees have been shipped a great distance, they ought not to be set out immediately after arrival. They ought to be "heeled in" a few days in moist ground, or the roots ought to be soaked in tepid water several hours. Mr. Robert Douglas says that few planters could be made to believe that more trees are injured by being packed too wet than are injured by being packed too dry. I am of the opinion that more trees are injured by heating than by drying. And he gives some remarkable instances of shipment of trees long distances and after planting with good results. He tells of trees sent safely to California, China and the Punjab, after much delay in transit, and concludes with the following experiment: "We took a strong, tight box, lined it with strong paper, and during the winter packed 1,000 Catalpa speciosa trees, twelve to eighteen inches in height, in dry moss, kept them in the packing-house during the winter, and in the spring moved them into a small building we use as a tool-house, with a large window on the south and another on the west, into which the sun had free access, believing that this would be as trying a position as they could be placed in en route to China. In October, just one year from the time the trees were dug, we opened the box and sent a few to two or three friends, who pronounced their vitality perfect. We immediately headed up the box. When winter set in we moved it again into the packing-house to secure it against frost, and in the spring, eighteen months from the time the trees were dug, we again opened the box and planted twenty trees, after soaking them in tepid water, and they made, apparently, as good growth as trees newly dug."

This is said to be an excellent mixture to keep on hand: Kerosene, two quarts; linseed oil, one gill; resin, one ounce. Melt the resin in the linseed oil, and add to the kerosene. Coat all steel or iron tools, wherever bright, with this when they are to lie idle, if for only a few days. It will not take half a minute or half a teaspoonful of the mixture to coat a plow, when one has finished using it, and it will prevent all rust and save half a day's time in cleaning it when it is again needed, besides saving the team many thousands of pounds extra pulling. Coat the iron work of the mowers and reapers with it when they are put away for the winter. A little rust is only a little thing, but it makes much difference in the aggregate.



**Civil Service Reform.**

President Cleveland is surprising a great many people by his acting in conformity with the declarations of his party platform on civil service reform. He is not removing faithful officers simply because they are not Democrats. If they have done and are now doing their work well and do not put their party before their country, the President does not care to push them out before their term expires. When a vacancy occurs he will fill it, and every person expects him to appoint a member of his own party.

There are a great many persons clamoring for office and he does not encourage them. The other day a delegation waited upon him asking that he appoint certain persons named to certain places. He asked them: "Are the men in the offices not of good character?" He was informed that there is nothing against the men on the score of character or qualifications, but "they are Republicans." "When will their terms expire?" asked the President. "In two years." "Call and see me then," he added.

This is a very hopeful sign. President Grant, a dozen years or more ago, recommended a change in methods of appointment, and upon his suggestion a Civil Service Commission was appointed, the result of which was that party politics now have nothing whatever to do with the appointments of a great many subordinate offices. Persons now get into clerkships in all the departments upon certificates of qualification from the board of Civil Service Examiners, and when applicants are examined the board does not know their party affiliations. Much has already been done by way of improving the civil service and getting it out of party politics, and Mr. Cleveland's course is strengthening the public sentiment on the subject.

When the people demand a change of administration and put another party in power, they expect all Cabinet officers and ambassadors to foreign countries and other assistants of the President to be of the same party; but they do not want every postmaster, every Custom House officer, and every clerk in every department to be pitched out and a person of opposite politics put in, regardless of qualifications. The civil service has grown to be a great system of duty, requiring skill and special training. There are persons now on duty that have been there since before the war. Their worth is hardly to be estimated, and because of their experience. And the work to be done by these persons has no relation to party. It is Government work, to be done in precisely the same way, no matter what party is in power. For that reason, fitness alone, not opinions, is the standard of qualification, or it ought to be. And that is what civil service reform means. The number of officers and clerks and other assistants below the Cabinet and Ministry, is not far from a hundred thousand. In the post office there are upwards of sixty thousand. If this vast army of workers is to be changed as parties change, it becomes a permanent corrupting force. Let the true doctrine—fitness, be established, so that a new hand goes into the public service through the Government gate and not through the party hatchway, the people will understand that the public business will not be disturbed by a change of administration, and parties will be more candid, officers will have more freedom, and many scandals will be avoided.

From a Southern paper we learn that Virginians are beginning to turn the peanut into flour and say it makes a particularly palatable "biscuit." In

Georgia there is a custom now growing old, of grinding or pounding the shelled peanuts and turning them into pastry, which has some resemblance, both in look and taste, to that made of coconut, but peanut pastry is more oily and richer, and, we think, healthier and better every way.

**Value of Sorghum Seed.**

Farmers in Kansas and throughout the West are learning more about the value of the sorghum plant every year. The blades make good fodder; indeed, by sowing or planting thickly, the entire stalk may be grown as a tall, sweet grass, and all of it made into excellent hay. When stalks are well matured, they produce good sugar and sirup, and the leaves make the best of fodder, while the seeds may be used for feed of beasts, and it may be put into flour and used in the kitchen for bread.

As to the value of seed alone, Dr. Peter Collier, late of the Agricultural Department at Washington, says that in large districts of India fully nine-tenths of the inhabitants subsist on sorghum seed; that in the immense territory known as Turkestan sorghum is the chief cereal, because, owing to the prevalent droughts, no other grain can be grown; that in the northern part of China, whose inhabitants are in America popularly supposed to live on rice, sorghum is grown exactly as corn is here and used for the same purposes; that he has secured from China, India and South Africa seventy-three varieties of sorghum seed, which are entirely new to this country, all of them extensively grown in their native soils and not one of them ever cultivated except for the seeds and forage. "Indeed," he says, "it is probably true that for the past thousand years the seed of sorghum has furnished food in greater abundance for man and beast than have wheat and corn combined." He then goes on to argue that the seed of sorghum grown in this country can easily be made to pay the entire expense of cultivation, leaving the stalks to be crushed for sugar or sirup and afterwards, in the pulp, to be used for ensilage or for paper making. With all these engaging qualities, it does seem strange that sorghum has not been handled in a manner to develop its usefulness, and the ill-success that has attended its culture thus far naturally casts a doubt on the glowing anticipations indulged in by its admirers. Still, it must be remembered that it takes a long time to adjust the various agencies necessary to carry out such a plan as that contemplated by Dr. Collier. If sorghum seed is as valuable for food as corn, it is manifestly a great waste to raise the plant for sugar alone. It is so few years since the seed of the cotton plant began to be utilized that it need surprise no one to hear that the value of the sorghum crop may be largely increased in the same manner. The nutritious quality of the seed is well known, but farmers are not generally aware of its availability as a grain, nor do they comprehend how easily a market could be made for it were it to offered in any quantity.

**About Planting Corn.**

It may be said that there are two methods of planting corn in Kansas, the old, the common way, and listing. The latter is growing popular in the western part of the State, and has some advantages. When ground was plowed in the fall deep, or if it be intended to plant in ground that produced corn last year and if the ground was well cultivated and is clean now, or if it be wheat or rye stubble and can be cleaned off by raking and burning, listing is in order in any sandy or loose land. The philosophy of listing is that the seed is planted deep enough

that in working the growing corn, soil may be thrown to and around the stalks every time and yet leave the ground level when the corn is "laid by."

In low, flat, wet or hard ground, listing is not good, but where the soil is loose, warm and well drained, it is an improvement on the old method, and this is true particularly in climate and soil such as we have in the western counties of this State. The best work is done where the lister runs enough deeper than the planter or drill to have a good deal of loose earth to drop the seed in. This, we think, is very important. Corn will grow if dropped on the hard bottom of a furrow and covered with soft and moist earth; but it will grow better if it is dropped in loose earth and then properly covered. For this reason it is better to plow in the fall deep what ground we expect to list in the spring.

As to planting the old way, it is better to plant in freshly-plowed ground. That is to say, that the surface ought not to have been unmoved long before planting, and for several reasons, but particularly because the ground becomes harder and dryer, and weed and grass seed germinate and may get the start of the corn. Fresh plowed ground is best always for corn. But a very shallow plowing, indeed, a mere working with a good cultivator may be sufficient. If the ground was plowed well in the fall, or if it is soft and clean, it may be enough to plow shallow or cultivate deep enough to destroy any weed or grass plants already started and at the same time freshen up the surface for planting.

Where soil is loose, it is well to press it up on the seed compactly. A roller following the planter is a good thing for this purpose; and where planting is done by hand, the foot or hoe may be pressed upon the covering with much advantage. This, however, as all other things to be done or omitted on the farm, needs the exercise of good, sound discretion. But it is always important to plant in loose ground.

**The Elements of Our Nation's Strength.**

An address delivered by S. H. Thomas, before the Farmers' Institute at Ellsworth, March 13, 1885.

They all spring from the soil. There can be no civilization where the soil is not cultivated. Civilization never belonged to nomadic life. The Asiatic hordes that swept over Europe from the plains of Asia, had no civilization. Alike with the American Indian, they passed from country to country consuming the natural products of the soil, and moving on as rapidly as they were consumed. Wherever nations, or communities, or tribes have halted long enough to cultivate the soil, from instincts of self-preservation, there agriculture gave a basis to civilization. Nations that have lived chiefly on commerce, have had to sell the fruits of their labor in exchange for bread that was raised by other countries from the soil.

The first institution ever established in the world was that of a family. Out of these primeval forces have sprung communities, laws, governments, religion, civilization, and the great multiplicity of the different vocations of life.

And here we again find another prominent feature of our national strength looming up prominently from all others, viz.: That of agriculture—the tilling of the soil, as it was the first, and is yet the most prominent occupation of man. It has been the chosen occupation of the great and good of every age. All the wealth of the world comes from the soil; hence, it follows that the wealth of the nation, and the aggregate wealth of the world depends on an exact ratio to the amount of labor well directed and intelligently performed on the soil; and the products of the soil fix the value of everything else. Now, it is not enough to raise bread out of the earth. But the question comes up, how much bread and meat, and fruit and clothing can be brought out of a given area of ground in the best condition

and with the least labor and least injury to the source of production?

This principle of modern science, as applied to agriculture, has only begun to be understood, even by the ablest agriculturists. And just in proportion as knowledge on these subjects, is multiplied, exactly in the same proportion wealth will be increased, and all the arts that adorn and embellish civilized life will be advanced. In this business, as in all others, the first thing to do is to discover mistakes and then remedy them. This can only be done by thorough investigation on the part of the progressive farmer. I am aware that the hardest obstacle to overcome in disseminating correct views on agriculture is not preconceived impressions, which by some might be called prejudices, but the actual dissemination, in too many instances, of false views. The time has come, when the best intellect of this nation is brought to bear in collecting and diffusing as widely and as rapidly as possible all the knowledge that the human race possesses in reference to this the greatest of all material questions—How to till our soil. Yet, notwithstanding all that has been said, it is an undeniable fact that there is no profession in life to-day which offers so little to attract the promising youth of our country as farming. This has been long a neglected matter. Farmers, it is time to awake from the lethargy into which we have fallen, and by a determined effort rise to the plane in which we should live, and gain for ourselves the respect of all who are assisting in building up the highest type of true American civilization.

**THE MARKETS.**

By Telegraph, March 30, 1885.

**STOCK MARKETS.**

**Chicago.**

The Drovers' Journal reports: HOGS—Receipts 17,000; shipments, 6,000. The market was weak and 5c lower. Rough packing 4 30a4 55; packing and shipping, 4 50a4 75; light, 4 30a4 70; skips, 3 50a4 25. CATTLE—Receipts, 8,000; shipments, 2,000. The market was slow; common 10a15c lower; fat and heavy firm. Cattle averaging 1,050 to 1,550 lbs. 4 25a5 25; do, 1,850 to 1,600 lbs, 5 50a5 92 1/2. SHEEP—Receipts, 6,500; shipments, 1,500. The market was 10a20c lower. Common to medium, 2 50a4 25; good, 4 40a4 70.

**Kansas City.**

CATTLE—Shipping steers, 4 35a4 65; stockers and feeders, 4 20a4 50. HOGS—Choice assorted, 4 25a4 30; mixed, 4 10a 4 25. SHEEP—The receipts of sheep to day were large. It has been several weeks since so many common sheep were on sale. Buyers bid up to last week's prices. Good sheep are in first rate demand, but the common quality made a slow market to day.

**PRODUCE MARKETS.**

**Chicago.**

WHEAT—March, 75 1/2a76 1/4c. CORN—Cash 37 1/2a40 1/2c. OATS—Cash 80c. RYE—Dull 6 1/2c. BARLEY—Dull, 62a63c. FLAXSEED—Firm, 1 38 bid.

**St. Louis.**

WHEAT—March, 85 1/2c. CORN—March, 39 1/2c.

**Kansas City.**

Price Current Reports: WHEAT—Received into elevators the past 48 hours 8,407 bus. withdawn 11,443 bus. in store 561,091. Wheat was off again to day with fair trading. Cash and March No. 2 red were 1/2c lower to sell April sold 1/2c lower. May opened 1c lower at 66 1/2c and closed at 66 1/2c. CORN—Received into elevators the past 48 hours 8,316 bus. withdrawn 12,496 bus., in store 144,121. Market to-day was weak and dull excepting June options which were in fair demand. Cash, no bids nor offerings; April 31 1/2c bid. BUTTER—Receipts light. Choice rolls scarce and firm. Creamery slow on off stock and moderate demand for best grades. We quote packed: Creamery, fancy fresh made..... 28a29 Creamery, choice " "..... 26a27 Creamery, fair..... 22a24 Creamery, inferior to common..... 15a18 Choice dairy..... 19a20 Fair to good dairy..... 12a14 Storepacked table goods..... 12a We quote rolls: Good to choice, wrapped..... 16a18 Good to choice, unwrapped..... 10a12 EGGS Receipts on Sunday 30 cases; on the early expresses 400 cases. City trade buying freely. Trading to shippers slow. Market steady at 10c. CHEESE—We quote new eastern out of store—Full cream: Young America 14c per lb; do twins or flats 13 1/2c; do Cheddar, 13 1/2c. Part skim: Young America 9a10c; flats 8 1/2a9c; cheddar 8 1/2a 9c. Skims: Young America 6a7c; flats 5 1/2a6c; cheddar 5 1/2a6c. Old or sharp 1 to 4c lower as to quality. Kansas and Missouri part skim flats 7a 8c; skim flats 5c. POTATOES—We quote home grown in a small way at 75a80c per bus. Consignments in car loads: Early Rose 60a62c, White Neshannock 5a60c, Peachblow and other choice varieties 60a63c, Colorado stock 70a73c. Early Ohio 80c. Strictly choice seed potatoes 10a20c higher. SWEET POTATOES—Home grown 1 15a1 20 for red per bus; yellow 1 20a1 25 per bus. Seed potatoes 3 50a4 00 per bus. TURNIPS—We quote from wagons at 60a75c; consignments not wanted. CASTOR BEANS—Quoted at 1 40a1 50 per bus. FLAX SEED—We quote at 1 22a1 25 per bus upon the basis of pure.

**Horticulture.**

**Wind-breaks on the Farm.**

Every farm in Kansas needs protection against winds; not that wind in itself is any more dangerous in this State than in any other, or that there is any more wind in Kansas than there is in any prairie region, but because the action of wind on the soil and on animals here is more or less injurious to the farmer, as the particular circumstances may be.

The force and power of wind is much affected by the density of the atmosphere, and this is affected by altitude; that is to say, the air in a low valley is heavier than the air on a high mountain. The denser atmosphere of the valley is more powerful when moved than is the mountain air, and because it is heavier. The principle is the same as that which governs the relative effects of heavy and light projectiles, as musket and cannon balls, flying timbers, etc. An inflated balloon could not injure any ordinary hard structure by being thrown against it, because it is light; but the same bulk of heavy material going at the same velocity would be very destructive.

The surface of Kansas is higher than that of Pennsylvania, for instance, and therefore the atmosphere here is lighter than it is there, and for that reason our winds are less destructive at an equal velocity than winds are in Pennsylvania. The "worm" fences in all the old States are often badly shaken up and blown away by winds. Our Kansas farmers often have very frail structures doing duty as fences and they are rarely moved by winds. The pioneer shanty in Kansas is a light box made of pine boards. It would seem that it could not face any wind of ordinary force, but it shakes a little and stays there. It is not the force of the wind, then, that we need protection against, but, as indicated above, its effects on soil and animals are serious to the farmer.

As to effect of wind on soil, it may be considered in two relations—(1) as to evaporation, and (2) as to actually moving the soil and blowing particles away. If any person does not understand how wind affects evaporation, let him consider why he appears to perspire more freely in a close room than he does in a room through which a current of air is passing; or why he does not seem to sweat as much on a windy day as on a still one in the same field and under the same temperature; or why, when he is warm and in a still place he fans himself. Evaporation produces coolness. Ice is manufactured in warm climates by means of evaporation. By wearing thin clothing, and that cotton, in warm weather, perspiration is evaporated more readily; hence one is cooler than if he wore a heavy wool suit buttoned closely. He would perspire freely, and as the sweat could not get to the surface readily to be evaporated, he would soon become exhausted from the effects of heat caused by suppressed evaporation.

If one will open a door between two rooms, one of which is heated and the other cold, and set a lighted candle or a burning taper on the floor in the middle of the door-way, he will observe that the flame is being blown into the warm room. If, then, he will hold the flame at the top of the door-way, he will observe the flame is blown into the cold room. The lesson is, that heated air rises and that cold air is drawn toward warm places. In summer, when the air is warm, the coolness of the soil goes up into the warmer air above it. There is a continuous effort of the moisture in the earth to get up into the hot air above. Every person has seen cracks in the earth as the ground becomes dry—

hard ground. Those cracks are as chimneys for the escape of moisture in the soil. When the earth is pulverized well and deep there are no such openings for the escape of moisture, and hence evaporation is not so rapid; still the tendency is the same, and the hotter and dryer the surface dust is made, the faster will the moisture below come up to saturate the dry earth above. It operates like a dry sponge or towel when one part of it is placed in water. It soon absorbs as much as it will hold, and if the temperature is high enough the evaporation from the towel or sponge will be much more rapid than it will be from the surface of the water itself, and the process can be greatly accelerated by letting a continuous current of warm air (wind) pass over it.

In short, evaporation on a farm is much more effective when wind is blowing than when the atmosphere is still, and there is to nothing stop the wind, though we may check its work in this respect a little by wind-breaks that will produce comparative stillness on the lee side.

As to moving the soil, every farmer in Kansas understands that. Our soil is generally very fine, and when the ground has been plowed and the top earth pulverized with harrow or roller, a strong wind in a dry time soon removes a great deal of it. This is not a common thing; that is to say, it is not a continuous, everlasting fact. But such things do happen when conditions are favorable. We have seen the heavens lurid with dust blown from fields, the air was full of soil, and the temperature was in the nineties. There may not be half a dozen instances of this kind in a year, and they may be of short duration; but about the equinoctial periods and in August or September, if there should be unusual dryness at those times, dusty days are to be expected. And the quantity of soil removed is large enough to be a serious affair sometimes.

There is no way to prevent this kind of soil movement but to roll the wind over the field, and that can be done only by a wind-break. If a person will stand in a grove or forest on a windy day, he will feel no effect of the wind, though by looking upwards through the openings among the trees, he may see play of the wind and watch the drift of dust and light articles, as straw, leaves, shingles and the like. A wind-break has the effect to raise the wind above it. A field sufficiently protected in that way would retain its soil as to winds.

Stock is affected by winds. As in summer, so in winter, it makes them colder. In time of rain, sleet and snow, wind increases the effect of cold. This every person understands, though he may not have thought about it. Wind has an effect equal to several degrees variation in temperature. To test this, let a person thinly clad stand a minute on a cold and windy day in a spot protected from wind, then go out into the wind and stand a minute. The temperature is the same in both positions, or very nearly so, but the effect in the wind is much more serious. This fact is suggestive of the remedy—a something to break the wind.

A high hedge fence is a good wind-break, but a grove of trees is better. There ought to be a break of some kind on every farm. A grove of trees forty or fifty feet high on one side a square quarter section would be ample protection provided there is a similar grove on the next farm. But it is better to plant hedges in the beginning for they will be more effective the first few years. And they ought to be set out in rows east and west every twenty rods. In the meantime, let trees be grown in strips eighty rods apart, beginning on the south side.

Trees are easily started—some of the

best varieties for the purpose, as Russian mulberry and others, may be grown readily from cuttings if the soil is in good condition. Russian mulberry, cottonwood, box elder and silver maple grow from two to six feet the first season from cuttings. Seed is better, of course.

To clean marble, brush off the dust with a piece of chambray, then apply with a brush a good coat of gum arabic, of about the consistency of thick mullage; expose it to the sun or wind to dry. In a short time it will peel off; if all the gum should not peel off, wash it with clean water and a clean cloth. If the first application does not have the desired effect, it should be tried again.

**Johnson Grass Seed.**

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"Calvert, Texas, May 3, 1882.

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**Ayer's Cherry Pectoral**

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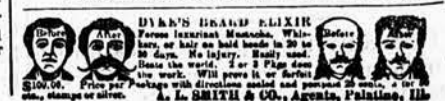
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### The Veterinarian.

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

**Cow Sick.**—I have a cow that was taken sick February 18th. She eats everything that is put before her. She is lying down and cannot get up; her limbs seem to have no strength in them. She is ten years old, and not in very good flesh; skin tight. Please advise. [Give 40 drops of tincture of nuxvomica three times a day on the tongue. Apply golden blister to the spine, from root of tail to forward part of the loins. Keep bowels relaxed, give strengthening food in abundance. Turn her often and work her legs with your hands as often as you have leisure. Bend them by pushing her foot toward the body, then draw the leg out straight again, and so on.]

**LAME COLT.**—I have a large colt which became lame. Would limp a few steps at a time first. There seemed to be soreness in the stifle joint. I used a liniment which seemed to help him, but there still seems to be stiffness. When standing in the stable he will, at times, raise the leg up high and look around at the stifle joint. He favors the leg. What can I do for it? [It may be a sprain in the stifle joint. If so, your treatment should be continued. The looking back and raising the foot would indicate spavin or ring-bone; both of these cause pain, and a horse affected with either will act as described. A spavin comes on the inside of the hock joint. A thoroughpin goes through the hock-joint, a curb comes just below the cap of the hock, a ring-bone comes just above the hoof.]

**RING-WORM ON BULL.**—On the neck of my Jersey bull there is a bare spot about the size of two silver dollars. It is not sore, but destitute of hair. I attributed it to the collar, but to-day I noticed the cow that stands in the stall next to the bull has some of the same spots on her neck. The cow seems to be annoyed by them, for she rubs her neck against things, apparently to relieve an itching. The bare spots on the cow are inclined to be a little raw, and look something like mange on a dog. She calved last July, and is now milking about five quarts of milk per day. She is fed about six quarts of bran twice a day, along with hay. She is in a good, warm stable, and is bedded with wheat straw. She seems in perfect health every way else. [The disease is due to vegetable parasites, and is commonly known by the term ring-worm. A light dressing of Moore Bros.' golden blister will destroy the parasites and cure the animals.]

**GLANDERS.**—Suppose a horse has the glanders and another takes it in the shape of farcy, is it curable? Please give a short description of the different kinds of farcy or any unmistakable symptoms of glanders till the horse is dead and post mortem examination? —What is the matter with my pigs? I have had a good many taken with what I would call bloody piles. They are about eight or ten weeks old. [In fully-developed glanders, the lining of the nostril becomes purple—a thin odorless discharge from the nose. As the disease progresses, the discharge becomes thicker, sticks in water, and the discharge is offensive. The nostrils become sore, the legs swell, hide bound, appetite fails, horse grows poor, sores spread over the body. There is but one cure. It is a serfuleous disease leading to glanders, symptoms similar to the above. Nasal gland, which comes from distemper, pink-eye, taking cold etc. is frequently taken for farcy, and will eventually run into that disease. In the early stages of the above diseases they are not contagious, but later they are. It is difficult to tell when that time arrives. In all cases we should first isolate and treat the animal. Drusy is often called water farcy, milk farcy etc. (2) Give the hogs charcoal, golden seal, May apple root, sulphur and saltpeter in equal parts. Salt food well.]

#### Wants the Facts Known.

MR. EDITOR: I and my neighbors have been led so many times into buying different things for the liver kidneys and blood that have done us more harm than good, I feel it due your readers to advise them, when an honest and good medicine like Dr. Hartner's Iron Tonic can be had. Very truly,  
AN OLD SUBSCRIBER.

An Indiana farmer banished slops from the pig pen and gave his swine clear, pure water instead. He never had such firm, solid meat to put up before, he says.

Nothing is gained by selecting grape vines more than two years old. Older vines suffer more by being transplanted, and will fruit no earlier.

The fecundity and excellent nursing quality of the Merino ewes give them the first place in breeding for early lambs, says the *National Stockman*.

The wool business is not likely to be overdone in this country, as we do not supply our demands, and the market will increase as rapidly as the supply.

It is said that eggs from mature hens are much better for hatching purposes than those from young ones, as a larger proportion of them are likely to prove fertile.

#### YOUNG MEN!—READ THIS.

THE VOLTAIC BELT CO. of Marshall, Michigan, offer to send their celebrated ELECTRO-VOLTAIC BELT and other ELECTRIC APPLIANCES on trial for thirty days, to men (young or old) afflicted with nervous debility, loss of vitality and manhood, and all kindred troubles. Also for rheumatism, neuralgia, paralysis, and many other diseases. Complete restoration to health, vigor and manhood guaranteed. No risk is incurred as thirty days trial is allowed. Write them at once for illustrated pamphlet free.

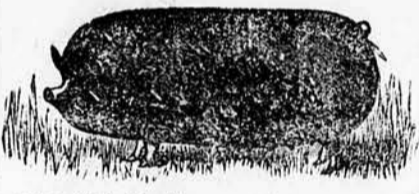
In pruning, it is well to cover the wounds with oil or white lead or grafting wax or shellac. Even the cut part of small branches had better be so treated.

It is Dangerous to tamper with irritating liquids and exciting snuffs. Use Ely's Cream Balm, which is safe and pleasant and is easily applied with the finger. It cures the worst cases of Catarrh Cold in the Head and Hay Fever giving relief from the first application. All druggists have it. Price 50 cents. By mail 60 cents. Ely Bros., Owego, N. Y.

I have been bothered with catarrh for about twenty years. I could not tell how many different remedies I have tried, and none seemed to reach my case like Ely's Cream Balm. I had lost my smell entirely for the last fifteen years, and I had almost lost my hearing. My eyes were getting so dim I had to get some one to thread my needles. Now I have my hearing as well as I ever had, and can see to thread as fine a needle as ever I did, and my smell is partly restored, and it seems to be improving all the time. I think there is nothing like Ely's Cream Balm for catarrh.—Mrs. E. E. Grimes, 67 Valley St., Renovo, Perry Co., Ohio.

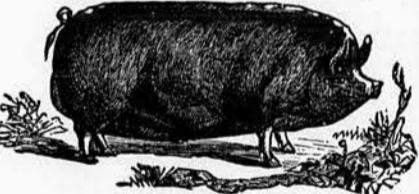
#### PLEASANT VALLEY HERD

Pure-bred Berkshire Swine.



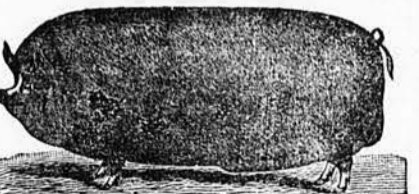
I have thirty breeding sows, all matured animals and of the very best strains of blood. I am using three splendid imported boars headed by the splendid prize-winner Plantagenet 2919, winner of five first prizes and gold medal at the leading shows in Canada in 1881. I am now prepared to fill orders for 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.

JAMES ELLIOTT  
Abilene, Kansas,



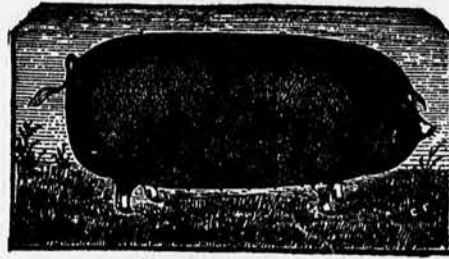
Breeder of HIGH CLASS BERKSHIRE SWINE. My herd is composed of twenty breeding sows of the leading families known to me, headed by Earl of Carlisle 10459. My hogs are noted for size, uniformity, fine heads, broad hams, great depth, with short, strong legs. They are perfectly marked, having good coats of hair; with quality of bone that enables them to carry great weight, combining quick and easy feeding qualities. Stock all recorded in A. B. R. I am now prepared to fill orders for pigs, of either sex. Prices reasonable. Correspondence and inspection invited.

PURE-BRED  
Berkshire & 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.



### TIMBER LINE HERD

HOLSTEIN CATTLE and POLAND-CHINA PIGS.

We have on hand 100 head of fine pigs for sale now and for spring trade. Also a fine yearling Holstein bull and a few grade Holstein cows for sale. Splendid milkers. We guarantee satisfaction. All correspondence answered. Inspection invited.

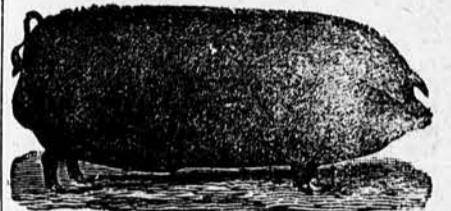
W. J. ESTES & SONS,  
Andover, Butler Co., Kas.

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.

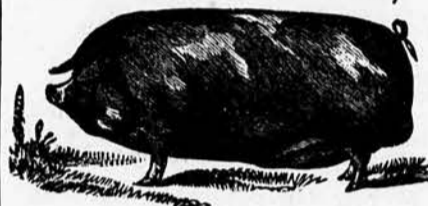
### Poland-China and Berkshire HOGS.



We have for sale a fine lot of Poland-China and Berkshire Hogs, from 2 to 6 months old. Ours is the largest herd of pure-bred Swine in the State, and the very best strains of blood of each breed. If you want any of our stock write us and describe what you want. We have been in the business many years, and have sold many hogs in this and in other States, and with universal satisfaction to our patrons. Our hogs are fine in form and style, of large stock, quick growth, good bone, hardy and of wonderful vitality. Our Poland-Chinas are recorded in the American Poland-China Record.

RANDOLPH & RANDOLPH,  
Emporia, Lyon Co., Kansas.

### Dr. Thomas Blackwood,



Breeder of POLAND-CHINA SWINE. My Poland-China herd has a pedigree over 75 head. My stock is first-class, all registered, and guaranteed just as represented. Choice breeding stock, not akin, of both sexes, for sale at all times at reasonable prices. All correspondence promptly answered. For full particulars and prices, address,  
THOMAS BLACKWOOD,  
Care Center, Kansas.

### THOROUGHbred POLAND-CHINAS

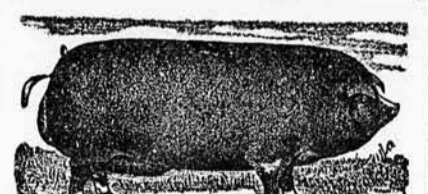


As produced and bred by A. C. MOORE & SONS, Cento, Ill. The best hog in the world. We have made a specialty of this breed for 38 years. We are the largest breeders of thoroughbred Poland-Chinas in the world. Shipped over 700 pigs in 1883 and could not supply the demand. We are raising 1,000 pigs for this season's trade. We have 165 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.



ISAAC WOOD, Oxford, Kas.—BONEBEE—The sweetest head of the Southwest for three consecutive years. Comprising the blood of all the popular traits of the day. Six years' pedigree. Pigs furnished not of kin. Quality of stock and pedigree first class. Prices low, and favorable rates by express to all points. Pigs of all breeds ready to ship, and orders taken for future delivery. Satisfaction guaranteed. For history of the breed see Vol. IV, page 31; Vol. V, page 47, and Vol. VI, page 37, Ohio P.-C Record.

### Acme Herd of Poland Chinas



Owned by STEWART & BOYLE, Wichita, Kansas.

At the head of our select herd of 25 matured sows, stand two noted boars, Kentucky King 201 and Challenge 4939, both prize-winners, and for individual merit unsurpassed in the state or elsewhere. Stock of all ages generally on hand for sale. Pedigree "gilt-edge," prices reasonable and satisfaction guaranteed. Address STEWART & BOYLE, Wichita, Kas.

REGISTERED  
POLAND-CHINAS.  
62 Page Illustrated  
Manual. Sent free  
on application to  
Shepard & Alexander,  
Charleston,  
Illinois.

### MEADOW BROOK HERD



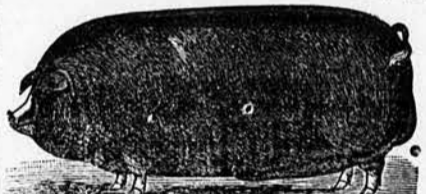
OF POLAND-CHINA SWINE.

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



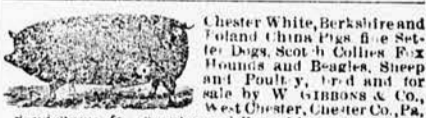
S. V. WALTON & SON,  
Box 207, Wellington, Kansas,

Breeders of IMPROVED POLAND-CHINA HOGS of the highest type. All well pedigreed. Correspondence solicited.

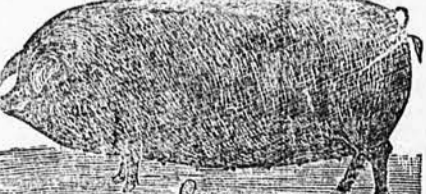


RANKIN BALDRIGE,  
Parsons, Kansas,

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



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



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

### The Poultry Yard.

#### Breeding and Care of Poultry.

A Michigan poultry-keeper, F. W. Grinnell, some weeks ago gave the readers of the *American Poultry Yard* a sketch of his experience in the business, and much of it is of special interest to Kansas people. He says:

The first thing in breeding chickens is constitution, and a strong one, too; this implies a full development of muscle and bone. Then when you have this made and well riveted together you are in shape to get up steam for the "egg race." To feed for the best development for eggs, requires oats, wheat, corn, buckwheat, ground bone, oyster shells, and plenty of green food, grass is one of the best; while some are inclined to feed corn meal quite heavily, I would not be in favor of it, as it will not make as good bone as some of the other grains. I think for the best development of your bird for egg production nothing is better for breakfast than one-third coarse corn meal, one-half coarse oatmeal, and one-sixth wheat bran mixed with hot water enough to wet it thoroughly and not make it sticky. You also want to feed meat occasionally. Now, if you follow up regularity of feeding with more or less variation of food for the other feedings except morning, your chicks by the 1st of November will be in shape to commence laying if they were April hatch. The more exercise they have up to this time the better. (provided they do not run in the wet.) Exercise will develop the muscle and bone.

Now comes a time when you can make your feed stronger in all except the corn, giving plenty of meat, ground bone, ground oyster shell, and plenty of green food, cabbage, carrots, turnips, etc., and pure water and plenty of it. If you can keep your cockerels separate from the hens all the better. Care should be exercised not to over-feed, give just enough and no more. Keep your hens employed in looking for things, idleness leads to mischief with chickens as well as boys. They will scratch a floor of dirt over twenty times in a day for a kernel of wheat. A good plan is to cover up some grain with dirt or straw, and let them dig it out. After November first would feed warm feed in the morning and give them warm water. Cooked vegetables are relished by your fowls, seasoned with pure cayenne pepper. I will add here if you want good quality of eggs and healthy fowls feed only pure grain, do not feed trash. You can never depend on all kinds of fuel to make steam, and whatever the character of your feed is thus will be your egg, as the egg draws from all parts of the system in its formation. Study the requirements of your birds and give them what they ask for and the eggs will reward your labors.

I have referred to a plan for feeding with reference to eggs. I will not say anything now about the market, as that is somewhat secondary to the egg, but if your birds have been handled as I have directed any surplus stock will be good enough for any table and far better than the majority of poultry in our markets.

In reference to feeding for the show ring, you are very apt in your desire to win the prize to feed a food which tends to fatten your fowls at the expense of the development of your bird in muscle and egg formation, as well as endanger the constitution of your birds. It is very seldom that birds which have been fitted thoroughly for the prize ring ever breed well. The number of eggs diminished, and also they do not hatch. There is always trouble with show animals in breeding.

Who would sacrifice their good breeders for a few dollars premium they might win, and the honor? Not I! I would rather gain a reputation of having a good egg strain than have the honors of the show ring. I have been there and know full well the cost of fitting and the loss of animals. It doesn't pay, people want fowls that will breed and lay plenty of eggs and no matter what breed I keep I should aim for eggs, and select breed, and care for my birds with reference only to this very important point. I wish to call attention to one more important point in connection with handling fowls, viz., cleanness, which if neglected will always result disastrously. First, keep your house clean and free from vermin. There are two kinds of lice which are very troublesome at times, one is the large grey louse, living and multiplying

on the bird, the other is a parasite which breeds in the droppings on the underside of perches, in any crack or crevice, and when once established in your houses are very difficult to destroy. They are very small, not larger than a small pin head when fully grown, and when first hatched are seldom noticed with naked eye; in color they are a reddish brown and as they grow assume a bluish tinge. I have seen them on the underside of the perch when it would look like one solid mass of blue parasites. They go up on the fowls at night and give them no rest, but at times they are so thick that they will kill your birds in a very short time. Another is the scale louse, which lives and breeds under the scales on the feet and legs, while they are so minute as not to be seen with the naked eye, yet they annoy your fowls very much and always leave the legs rough, the scales standing out at times like the cornice of the house. No chicken, no matter how well fed, can be kept in condition for egg production, if you allow these pests to occupy the hen-house and prey upon your birds.

You may now ask how shall we keep them off or get rid of them if they once take a foothold.

Where your houses are kept clean and the perches are rubbed over with kerosene oil often, a little sulphur put in the dust-box and an occasional sprinkling of house and ground with carbolic acid, you need not have any trouble with them; don't wait until they appear, make your premises distasteful to vermin before they give you a call.

My rule is to sprinkle my houses and grounds once in ten days with crude carbolic acid and water in proportion of a large tablespoonful to ten quarts of water; also, I rub my perches over as often as I sprinkle, with a cloth saturated with kerosene oil, lard and sulphur.

This mixture, formed of equal parts in weight, when mixed thoroughly forms a heavy cream, which you can keep for months. I also rub a little on each bird with my finger, on top of the head, under the wing and between the legs.

Another remedy equally as good and very simple is to give your birds a sponge bath of kerosene, which consists simply in saturating a sponge in oil and then squeezing out all that you can, and then go over your birds, lightly touching every feather (not the skin) with the sponge. Lice and kerosene don't agree.

If you follow out the above plans, you will not be troubled with lice or blue parasites. For the scale louse, wash your birds' legs with strong soap suds with a little carbolic acid in it, wipe them dry, and then rub their feet and legs thoroughly with the lard and sulphur mixture, and they will not annoy you.

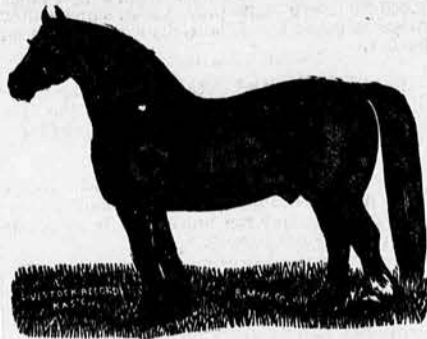
Of the diseases of poultry, among which are roup and cholera, I will not now say much, only that if your premises are clean, and your birds properly cared for, you will not often be troubled with any disease. One point about disease is that it generally appears in a crowded yard, therefore don't try to do too much. Keep a few birds and keep them well. I often hear it said my birds are all right, but they don't lay. The facts in such a case are, your birds are not in condition. What the trouble is I could not tell without knowing how they had been cared for and seeing how they looked. Remember this, that ninety-nine cases out of a hundred when hens don't lay, the trouble is vermin—look out for them.

In conclusion let me say that take any good egg producing strain of fowls, and care for them from the egg to six months old as I have indicated, and they will give you eggs and plenty of them.

If you are successful with your fowls you will find it work and study, study and work day after day, and three hundred and sixty-five in a year; thus with continual effort you will reap the reward of your labors in the finest eggs and chickens ever seen.



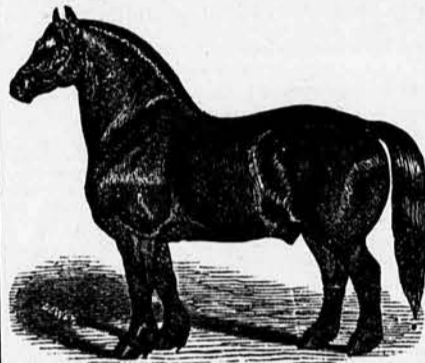
H. V. PUGSLEY, Platt-burg, Mo., Breeder of pure Merino Sheep. Registered in Vermont and Missouri Registers. Largest flock in the State. Plymouth Rock chickens and Bronze turkeys. Catalogues free.



JOHN CARSON, Winchester, - - Kansas Importer and Breeder of Clydesdale & Percheron-Norman Horses.

On Ice stock for sale. Also some fine Grades. Correspondence solicited and satisfaction guaranteed. I have some Jacks for sale.

PERCHERON NORMAN, CLYDESDALE and ENGLISH DRAFT HORSES.



H. BENNETT & SON Importers and Breeders, Topeka, : Kansas.

All stock registered. Catalogues free.

River Side Stock Farm.

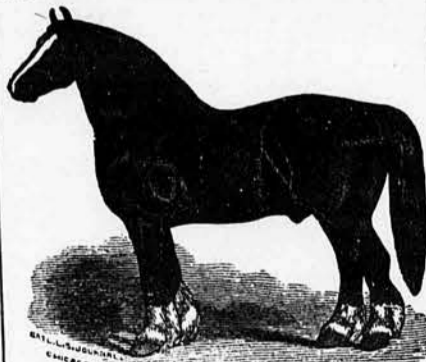


DEGEN BROTHERS, Ottawa, Ill.,

Importers of NORMAN HORSES. Large selection of imported stallions and mares—50 head imported this season. We are also breeding full-blood and high-grade Normans. Having purchased the old State Fair Ground, we are fitting up one of the best sale barns and breeding establishments in the State, and will be pleased to show our horses to visitors. Correspondence invited. DEGEN BROS., Ottawa, Ill.

### OVER ONE HUNDRED CLYDESDALE, ENGLISH DRAFT AND PERCHERON NORMAN

Stallions and Mares arrived in August '84.



Another importation just received, ages range from two to four years old. Our stock won fifteen premiums at the Iowa State Fair of 1884; also sweepsakes on Clydesdale stallions and sweepstakes on Percheron-Norman stallions. 300 High-Grade Mares, in foal to our best noted horses, for sale. Advantage offered to customers at our ranch: Many years' experience in importing and breeding. Immense collections, variety of breeds, enabling comparison of merits. The best of everything. A world-wide reputation for fair and honorable dealings. Close proximity to all the through railroad lines. Low prices consequent to the extent of the business. Low rates of transportation and general facilities. Visitors welcome at our establishment. Ranch 2 miles west of Keosau, Keokuk Co., Iowa, on the C. R. I. & P. R. R. 15 miles west of Washington, Ia. SINGMASTER & SONS, Keosau, Keokuk Co., Iowa.

### —175 HEAD OF— IMPORTED CLYDESDALES Now on Hand.



The largest importer of Clydesdale horses, the largest breeder of pure Clydesdales. 37 Mares now in breeding. Moderate prices. No equal opportunity can be found elsewhere to buy matured Stallions or young Stallions and Mares, all ages. Persons invited to examine the stock. Correspondence invited. For particulars, call on or address ROBERT HOLLOWAY, Alexis, Ill.

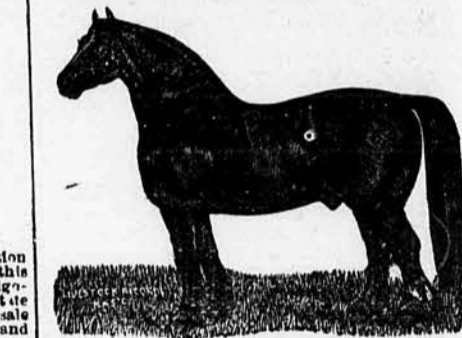
### HEFNER & SON, Bethany, Missouri,



Importers and Breeders of NORMAN & ENGLISH Draft Stallions.

We keep on hand a choice lot of Imported and High-Grade Stallions which are offered for sale at reasonable figures. Time given if required. Call on us.

### F. J. JOLIDON & SON, Elvaston, Hancock Co., Illinois,



IMPORTERS OF Normans, Clydesdales and English Draft Horses.

Two importations of 1884 now on hand, and another large importation to arrive soon. Having personally selected these horses from the best breeding districts of Europe, we offer a superior lot of these horses, unsurpassed in breeding and individual excellence. All persons in search of first-class horses will save money by calling on us. Prices low, terms easy. Elvaston is on the Wabash and St. Louis & Pacific R. R., 2 1/2 miles east of Keosau, Iowa, and fifty miles west of Bushnell, Illinois.



CRESS BROS., NORTH HILL STOCK FARM, Washington, Tazewell Co., Illinois, importers and breeders of Clydesdale, English Draft and Norman horses. With our recent addition of a large importation August 20th, together with those previously on hand, we have now one of the finest studs in Illinois. CLYDESDALES made a specialty. Quite a number of them have distinguished themselves both in Europe and America as prize-winners this season. All are superbly bred. Visitors welcome, and all parties in need of such high class stock would do well to give us a call and save money, as we will convince you when you call. Send for catalogue. Reasonable prices. Terms easy.

# THE STRAY LIST.

## HOW TO POST A STRAY.

BY AN ACT of the Legislature, approved Feb 27, 1885, 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 appraisement, 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 said notice." And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper free of cost, to every county clerk in the state to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5 00 to \$50 00 is inflicted on 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 year.  
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 he fails for ten days, after being notified in writing of the fact, any other citizen and householder may take up the same.

Any person taking up an estray, must immediately advertise the same by posting three written notices in as many places in the township, giving a correct description of 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 of the trial, 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 appraisement.

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 March 18, '85

Reno county—W. R. Marshall, clerk.  
COLT—Taken up by Vincent Baker, in Loda tp, January 28, 1885, one fair-size black horse colt, few gray hairs in forehead, 10 months old.

### Strays for week ending March 25, '85.

Lyon county—Roland Lakin, clerk.  
FILLEY—Taken up by J T Kirkendall in Emoria tp, Feb 14, 1885, one 2-year-old iron-gray filley, white face; valued at \$50.

HEIFER—Taken up by A P Walstrom, in Waterloo tp, one roan yearling heifer, white on belly, no marks or brands; valued at \$12.

2 STEERS—Taken up by E J DeLong, in Tremont tp, Dec 5, 1884, two red and white spotted steers, one a yearling and one 2-year-old, no marks or brands; valued at \$25 and \$30, respect vly.

STEER—Taken up by J W Morgan, in Fremont tp, Feb 19, 1885, one light roan yearling steer; valued at \$25.

Jefferson county—J. E. Best, clerk.  
STEER—Taken up by Richard Spence, in Delaware tp, Nov 1, 1885, one light red steer, some white spots on sides, star in forehead, no marks or brands, 1 year old spring of 1884; valued at \$15.

Osage county—G A. Cottrell, clerk.  
HEIFER—Taken up by J W Nicolay, Pop Corn P O., Feb 9, 1885, one light roan heifer with red ears, no marks or brands; valued at \$15.

Wabunsee county—H. G. Licht, Clerk.  
STEER—Taken up by Margaret Krinitz, P. O. Bismark, March 4, 1885, one yearling steer, under bit in left ear, dim brand on right hip not discernible; valued at \$10.

Brown county—G. I. Prewitt, clerk.  
STEER—Taken up by F Cashman, in Powhatan tp, one red steer, 1 year old, white spot in forehead, no other marks or brands.

Greenwood county—A. W. Hart clerk.  
STEER—Taken up by Wm Launders, in Eurka tp, March 2, 1885, one white 2-year old steer crop and under-bit in right ear, ears light yellow. Light yellow spots on side of neck and on shoulders; valued at \$20.

PONY—Taken up by W O Claycomb, Salem tp, March 2, 1885, one brown mare pony, 13 or 14 hands high, heavy mane and tail, branded on left hip and shoulder with an indistinct brand supposed to be a h p anchor.

HEIFER—Taken up by John Willis, in Bachelor tp, Feb 7, 1885, one red yearling heifer, with white on face and belly, some white on tail, no marks or brands; valued at \$10.

STEER—Taken up by D Cravens, Bachelor tp, Jan 2, 1885, one roan-speckled yearling steer, white on back and belly, no marks or brands; valued at \$18.

### Strays for week ending April 1, '85

McPherson county—E. L. Loomis, clerk.  
2 GEELDINGS—Taken up by J. W. Moore, in Cattle tp, March 5, 1885, two gelding, each about 16 hands high and weighing about 1,000 pounds each, one is a light bay and the other a dark bay, no visible marks except harness marks, both had on leather halters—one with short rope, the other with short chain attached; valued at \$125 each.

Smith county—J N. Beacorn, clerk.  
COW—Taken up by B. O. Williams, in Lincoln tp, one pale red cow, point of right horn broken off, white spot on belly, thin in flesh; valued at \$25.

Russell county—H. C. Hibbard, clerk.  
STEER—Taken up by J J. Johnson, in Fairview tp, February 15, 1885, one deep roan yearling steer, no marks or brands.

## STOCK FOR SALE!

I offer for sale, on reasonable terms for payment, the following described property:  
3,500 BEST GRADE OF MERIN SHEEP—All bucks and ewes. Have been well wintered, are healthy and in fine condition.  
75 HEAD THOROUGHbred DURHAM COWS and Bulls—All pedigreed and of best strain.  
250 HEAD OF GOOD NATIVE GRADE COWS, 25 HEAD OF GRADE BULLS.  
50 HEAD OF HORSES.  
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This sale will include about 40 Cows and Heifers and 20 Bulls and Bull Calves, representative of the best blood in England, descended from the best herds of Lord Bateman, Aaron Rogers, Philip Turner, R. S. Burton, Thos Nott, T J. Carwardine, Major Carlyon, and other noted breeders of the choicest pedigrees and individual merit. As I am moving out of the country the BEST will be sold. A herd that I have spent 15 years in breeding and collecting. The Anxiety Bull, Troubadour 10220, has proved himself, as a breeder, the peer of any bull living. Emperor 2d 12435, is a wonderfully good two-year-old.

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L. P. MUIR, Auctioneer.

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## PUBLIC SALE

—OF—

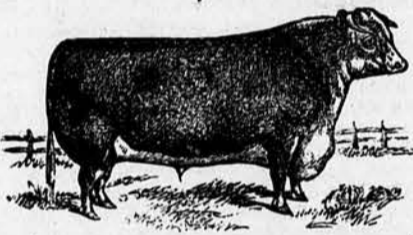
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—AT—

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—ON—

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—AT—

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TUESDAY, APRIL 7, 1885,

ON OUR FARM, one mile east of town, under tent. The offerings will consist of 47 females and 13 young bulls, descendants of Imported Rose of Sharon, Bracelets, Rosemary Goodness Alice, Maud (Crags), Maid Marions, Agatha, Red Rose, Branch Young Mary, Phyllises, Louans, etc., crossed up with some of the best sires in America. For individual merit, color and breeding they are hard to beat. Bulls extra good and of suitable age. Lunch at 11 o'clock. Sale at 12:30. Conveyance free to farm. Catalogues now ready, with full particulars as to terms and full, noted pedigrees, which can be had on application to  
H. D. AYERS & SON,  
Col. L. P. MUIR, Auctioneer.  
BRECKENRIDGE, MO.

## IMPORTANT

## PUBLIC SALE.

50 Head Pure-bred Imported

# GALLOWAY

BULLS AND HEIFERS,

—AT—

Riverview Park,

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The Property of JAMES CUNNINGHAM & SON, Dalbeattie, Scotland. These cattle have been selected with special reference to the Western market. They are all recorded in both the Scotch and American Herd Books, and embrace some of the best Galloway blood. Among the Bulls being the prize-winners VINDICATOR OF CLOSEBURN 1876, BRITISH HERO 1877, MARKSMAN OF DAUMLAURIG 1878, and many others from prize-winning ancestors. The Heifers are descended from some of the choicest strains, and are all in calf or with calf at foot. Stock now on exhibit at Riverview Park, Kansas City, Mo. Catalogues ready. Address  
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Live Stock Exchange, Kansas City, Mo.

Col. L. P. MUIR, Auctioneer.  
TERMS OF SALE:—Cash or approved bankable paper. N. B.—Remember it was a GALLOWAY which gained highest honors on the block at New Orleans.

## The Busy Bee.

### Spring Management of Bees.

A correspondent of the *Country Gentleman* says:

Bees that are in the cellar that are quiet, and show no signs of diarrhoea, need not be removed until pollen can be gathered. If part of the bees were wintered upon their summer stands, watch can be kept of these, and when they begin to bring in pollen, those in the cellar can be carried out. Some bee-keepers who winter their bees in this manner carry out the colony when they think there is pollen to be gathered, and when this colony does bring it in, they carry out the rest. If the bees are uneasy or show signs of dysentery, they should be taken out the first warm day and allowed to fly. If they are clustered closely, their bodies not distended, and no dark yellowish or brownish spots are seen on the frames, combs or about the entrance of the hive, the bee-keeper may rest assured that the bees are wintering perfectly, and there is no necessity of disturbing them. It will do no good, and may arouse them to an activity that will work injury. Instances have come to the writer's knowledge in which part of the colonies were carried out for a flight, and those that were removed subsequently suffered from diarrhoea, while the others were free from it. Such disturbance sometimes incites the bees to brood-rearing, and the consequent consumption of pollen results in bee cholera.

After the bees have enjoyed a purifying flight, they should be returned to the cellar, and, if necessary, they can be carried out again, although bees that have become so weakened that it is necessary for them to have two flights in the latter part of winter, will usually dwindle away in the spring, and not prove very profitable; in fact, it is the opinion of some apiarists that "spring dwindling" is the result of imperfect wintering. The bees' intestines may not become loaded to repletion, and as there has been no discharge of fecal matter in the hive, the bee-keeper can truthfully say that his bees have not had the diarrhoea; but the bees have become so weakened that it requires only the cold winds of spring and the drain on the vital forces caused by brood-rearing to kill them.

After the bees are set out in the spring, the brood will increase much faster if the hives are surrounded with several inches of chaff, or some similar material which will retain the heat. If the apiary is a small one, and Langstroth frames are used, it may be profitable to confine the bees to only as many combs as they can cover, giving more combs only when they become crowded for room. The snigger and closer they can be packed up, the more brood they can care for, as a less number of bees are needed to keep up the heat, and a larger number can be spared to labor in the fields. The packing can be allowed to remain until the colony is populous and the weather quite warm.

If the bee-keeper is desirous of increasing the number of his colonies, he can, if he finds strong ones queenless, send South for queens, and introduce them, keeping the queenless colonies supplied with a little brood taken from others while waiting for the queens to arrive. The brood will make the bees contented, and prevent any trouble from laying workers. If the queenless colonies are weak, or the bee-keeper has as many as he wishes, it is better to unite the queenless with those having queens. The combs of a queenless colony can be carried with the adhering bees to the one with which it is to be united, and hung in the hive alternately with those in the hive; the bees are so mixed up that they seldom quarrel, and the queenless bees are so glad to find themselves again in possession of a queen, that but few of them will return to the old location. A queenless colony can usually be successfully united with another colony, by simply shaking the queenless bees down in front of the hive containing the colony with which they are to be united.

Stimulative feeding in the spring sometimes results advantageously, and sometimes not. It induces the bees to spread out, and start a large amount of brood, and, if the weather continues warm, and the honey harvest comes early, something is gained by stimulative feeding in the spring; but, if a warm spell of weather is followed by a cold "snap," the bees, unless well pro-

ected, and crowded upon a few combs, are obliged to form themselves into a compact mass in the center of the hive, the brood that is outside of the cluster becomes chilled and dies, and the condition of the colony is decidedly worse than it would have been had no stimulation been resorted to. It is doubtful if anything is ever gained by very early stimulation; the bees should be well protected, have plenty of sealed honey, and a laying queen, and then left undisturbed and unfed until the weather is warm. If the bees lack stores, and there are no combs of sealed honey to give them, it will, of course, be necessary to feed them. To do this, empty combs can be filled with sugar sirup, by pouring the sirup into a basin that has a large number of small holes punched in the bottom, the basin being held about two feet above the comb, which is laid down flat. When one side of the comb is filled, it can be turned over, and the other side filled, and after the combs have been hung up, and allowed to drip, they can be given to such colonies as need feeding.

Each bee-keeper should know when to expect the honey harvest in his locality, and should so manage as to have his hives overflowing with bees at its commencement. Before and after the harvest, bees are consumers, not producers; so a hive full of bees in early spring is not so desirable as a colony only sufficiently strong as to be able to increase its numbers to the desired degree, by the opening of the honey harvest. From the laying of the egg until its development into a bee is twenty-one days; from the hatching of a bee until it is old enough to labor in the fields is about fifteen days; hence, brood-rearing should be going on very briskly five or six weeks before the opening of the honey harvest, that stimulative feeding will prove profitable, if ever, and, when commenced, it should be continued until the harvest begins.

In early spring, bees sometimes desert their hives by "swarming out," as it is termed. They issue in the same manner as does a swarm, and usually join some other colony in the yard. This abnormal swarming is caused by queenlessness, lack of stores, weakness (in numbers), encroachment of mice, etc., in fact anything that disturbs or renders uncomfortable the bees. If they are furnished with good warm hives, have plenty of good stores, a laying queen, and are in such condition that they can rear brood, they are happy and contented and seldom try to better their condition by migrating.

When bees commence rearing brood they need water, and, when in the cellar, the want of water is often the cause of uneasiness. After being placed upon their summer stands, many bees are lost in early spring by being obliged to bring water on cold, windy days. Many bee-keepers have reported excellent results from giving bees water in the cellar when the bees were uneasy, and from confining them in their hives on cold, windy days, after they had been placed upon their summer stands, and furnishing them water. A wet sponge at the entrance of the hive, in the cellar, will furnish the bees with water.

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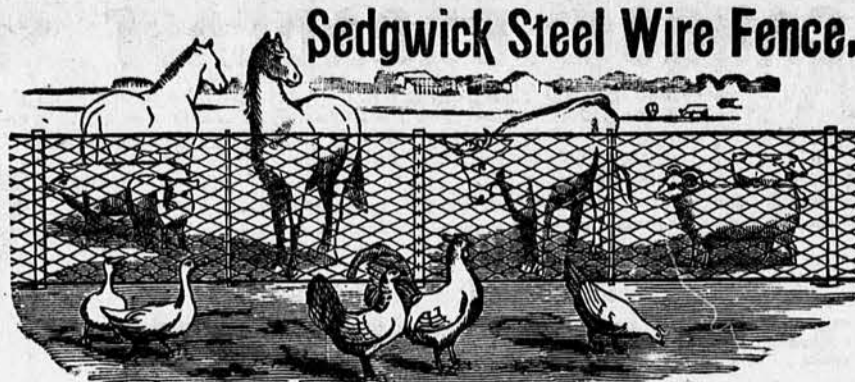
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Adjusts itself to any Horse's Neck, Has two Rows of Stitching, Will hold Hames in place better than any other Collar.  
None genuine unless stamped "SPOONER PAT."  
Ask Your Harness Maker For Them.  
**MANUFACTURERS.**  
**J. B. SICKLES SADDLERY CO.**  
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To obtain Government Lands free—that are suitable for general farming and stock raising purposes—before change of laws as per bills now pending in Congress.  
**320 IN THE DEVILS LAKE,** TRIBUTE TO U. S. LAND OFFICE AT DEVILS LAKE, DAKOTA.  
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**NORTH ACRES**  
Over 2,000,000 Acres of R. R. Lands in Minnesota at the low price of \$3.00 per acre and upwards. Sectional Map and full particulars mailed free to any address by C. H. WARREN, Gen'l Pass. Agent, St. Paul, Minn. and Manitoba R. R., ST. PAUL, MINN. **FREE**

**WELLS, RICHARDSON & CO'S**  
NEW IMPROVED  
**BUTTER COLOR**  
Used by best Creameries and Dairies BECAUSE it is the Strongest, the Purest, the Brightest and the Best. IT WILL NOT  
Color the Buttermilk or Turn Rancid. It contains no Acid or Alkali. It is not our old Color, but a new one prepared in refined oil, that it cannot change.  
**MAKES**  
BEWARE of imitations, and of all other oil colors, for they get rancid and spoil the butter. See that our trade mark, dandelion blossom, is on the box, and the signature of Wells, Richardson & Co., is on the bottle and TAKE NO OTHER. If the dealer does not keep it, write us to know where and how to get it without extra expense.  
Sold by druggists, grocers and merchants. Four sizes, 15c. 25c. 50c. \$1.00.  
**WELLS, RICHARDSON & CO.,** Burlington, Vt.

**CONSUMPTION.**  
I have a positive remedy for the above disease; by its use thousands of cases of the worst kind and of long standing have been cured. Indeed, so strong is my faith in its efficacy that I will send TWO BOTTLES FREE, together with a VALUABLE TREATISE on this disease, to any sufferer. Give express & P. O. address. DR. T. A. BLOOM, 121 Pearl St. N. Y.



Cahoon Broadcast Seed Sower in Operation.

No. 2 Drill—Reduced price \$10, former price \$12; Combined Drill, Wheel Hoe Cultivator and Plow combined—Reduced price \$12, former price \$15; Double Wheel Hoe Cultivator and Plow—Reduced price \$8, former price \$10; Single Wheel Hoe Cultivator and Plow—\$6; Fire Fly Plow—\$3. Steel Standard Combined Horse Hoe—Reduced price \$10, former price \$12; Steel Standard Plain Horse Hoe—Reduced price \$9.50, former price \$11; Steel Standard Plain Cultivator—Reduced price \$6.75, former price \$10.

Goods packed, ready for shipment, and delivered at Express office or Depot, upon receipt of money at above reduced prices. Order early. If you don't understand the goods, send for full descriptive pamphlet. Every Farmer, Professional or Amateur Gardener should have one or more of the above Tools.

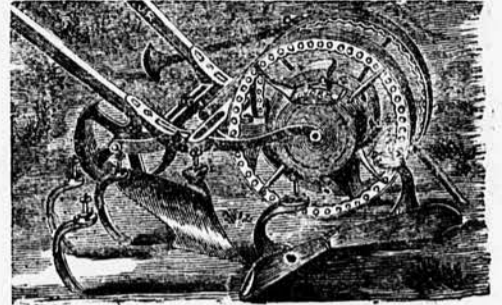
Send for Descriptive Circulars of our Dain Improved Automatic-Hay Stacker and Gatherers (our own manufacture). Also our line of Hay and Heavy Machinery.

## Great Reduction in the Price of CAHOON BROADCAST SEED SOWERS.

This is the best HAND SEED-SOWER ever put upon the market, and thousands upon thousands of them have been sold. The price was \$10 each when they first came out, and never was less than \$6, until now we are able to offer them at \$5 EACH, shipped to any point in the country by express, charges prepaid. EVERY FARMER SHOULD HAVE ONE. and can afford to now, as \$5 pays the entire cost. The price soon saved, as seed can be sown accurately and not a grain need be wasted. It sows equally well in the wind. Sows Wheat, Oats, Rye, Buckwheat, Flax seed, Clover seed, Timothy, Alfalfa, Millet, Hungarian, Sorghum, Hemp, etc., at the rate of four to eight acres per hour. Directions accompany each machine. Order at once.

## Great Reduction in Prices of PLANET JR.

Garden Drills and Cultivators.



Planet Combined Drill and Cultivator.

TRUMBULL, REYNOLDS & ALLEN, Kansas City, Mo.



## SEEDS! SEEDS! SEEDS!

THE LARGEST AND BEST STOCK OF FIELD, GRASS AND GARDEN SEEDS IN THE WEST.

5,000 Bushels Red Clover, 5,000 Bushels Timothy, 10,000 Bushels German Millet, 10,000 Bushels Kentucky Blue Grass, 5,000 Bushels English Blue Grass, 5,000 Bushels Common Millet, 10,000 Bushels Orchard Grass, 5,000 Bushels Red Top, 2,000 Bushels Alfalfa. Johnson Grass, Sorghum, Tree Seeds, Hedge Seeds, in Large Quantities. ALL NEW CROP. Send for Prices.

NOTICE WHAT OUR PATRONS SAY ABOUT OUR GARDEN SEEDS:—"Not a single ounce but what gave entire satisfaction and were everything we recommended them to be." "Parties sent East, had no success, bought our seeds, and gave them great satisfaction." "The only strictly reliable seed sold in town." "Will buy no other," etc. Notice the testimonial of the "Kansas City Times," which represents over 1,000 families. No other Seed House can show such a record:

OSAGE MISSION, KAN., July 27, '84.—T. R. & A.: Duty to you requires us to say that the seed we bought of you gave perfect satisfaction in every particular; were considered the only strictly reliable seed sold in this town last season. It gives us pleasure to make this statement. CHAS. C. COFFINBERRY & SON.

OSBORNE, KAN., Aug. 10, '84.—T. R. & A.: Your seeds have given us and our customers the best of satisfaction. SMITH & HATCH.

HARPER, KAN., Aug. 13, '84.—T. R. & A.: Have sold your seeds for three years. Have always found them to be just as you represented them, fine and true to name; and in fact, most of the farmers will buy nothing else. Very truly yours, WILSON & BAUMSTARK.

ARROW ROCK, MO., July 20, '84.—T. R. & A.: The garden seeds I bought of you gave entire satisfaction; all came up and gave great satisfaction to my customers. SALISBURY, Mo., July 17, '84.—T. R. & A.: We liked the seeds bought of you this season, very well. No complaints from any of our customers. Several persons bought of us, after planting several times, seeds bought of other parties, without success, and found our seeds all right. We think another season we will do a good business selling bulk seeds; as this was a new method to our people, this year, they were slow to "catch on." Yours truly, HUTCHINSON & DAVIS.

OFFICE KANSAS CITY TIMES, Nov. 20, '84.—Messrs T. R. & A.—Gents: We wish to say that from the thousands of packages of your garden seeds sent to our subscribers the past season as premiums, we have not received one complaint although they were guaranteed, while garden seeds procured from an Eastern house the year before were very unsatisfactory, and we had complaints from all sides. Your seeds will do to stand by. ANDREW CLARK. KANSAS CITY TIMES.

SHERMAN, TEX., Aug. 12, '84.—T. R. & A.: I take pleasure in saying your seeds have given entire satisfaction. I guaranteed them to my customers, and upon inquiry find they were in every instance as represented. Respectfully, J. R. COLK.

FALLS CITY, NEB., Aug. 6, '84.—T. R. & A.: Have found your seeds first-class in every respect. Our customers have been well satisfied with them, and we like to handle them better than the unreliable seeds in the market. Yours, W. W. WARDELL.

If you have not used our Seeds, try them, and you will use no other. Our 1885 Catalogue, now ready, Sent Free. Address TRUMBULL, REYNOLDS & ALLEN, Seedsmen, Kansas City, Mo.

**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**—Pekin Combined Lister and Drill. Used one season. Price \$15. Address H. H. McGlothlin, Pleasanton, Kan.

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

**FOR SALE**—Registered Holstein Bull, one year old. Wm. Snow, Manhattan, Kas.

**FOR SALE**—Six Berkshire Boar Pigs, ready for service. Thos. Pawling, Louisville, Kas.

**FOR SALE**—Young Elm Trees, Leaming Seed Corn, Mammoth Bronze Turkeys and eggs. J. A. McCreary, Emporia, Kas.

**JACK FOR SALE**—7 years old, good foal-getter, weight 800 pounds. P. Pawling, Louisville, Kas.

**FOR SALE**—Almost new 6-horse-power engine. Weighs 990 pounds. Price \$150. W. R. Fish, Topeka, Kas.

**SEND TO F. E. Marsh**, Manhattan, Kas., the veteran breeder, for pure-bred Fowls.

**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.

**Fellow Farmers:**  
I have a limited quantity of Jerusalem Artichokes, which I will sell at \$1.25 per bushel while the supply lasts. M. O. KEFFE, Wheaton, Pottawatomie Co., Kas.

**Holstein Cattle.**  
Thoroughbred and High-grade Bulls, Cows and Calves, for sale on Dairyville Stock Farm, Eagle township, Sedgwick Co., Kas. Inquiries answered by J. SIMON, Agent, Sedgwick City, Kas.

**50 HIGHLY-BRED SHORT-HORNS**  
At Public Sale, Dexter Park, Chicago, Illinois, Friday, April 17th, 1885.  
Send for Catalogue. Address, F. J. BARBEE, Paris, Bourbon Co., Ky.

**THE PLUMB STEAM TILE DITCHER**  
Cuts from 10 to 25 rods per hour, 10 inches wide, 4 feet deep. Works well in all soils, and grades the bottom PERFECTLY. For circulars address THE PLUMB DITCHER WORKS, Streator, Ill.

**IMPORTANT PUBLIC SALE**  
—OF—  
45 Head of Choice Pure bred **ABERDEEN-ANGUS** BULLS and FEMALES,  
—AT—  
Riverview Park, Kansas City, Mo.,  
—ON—  
WEDNESDAY, APRIL 29th, 1885.

The property of—  
**The Geary Bros. Co., Bothwell, and Geary Bros., London, Canada.**

This offering comprises some of the choicest representatives of the breed, from the **CRICAS, PRIDES, PRINCESS, LADY IDA,** And other noted Families.

The Females have calves at foot or are in calf, and are exceptionally well bred. The Bulls are choice yearlings and two-year-olds, and are a splendid lot of animals.

They will also sell two car loads of choice ANGUS GRADE BULLS at the close of sale of pure-bred stock. Sale positive. Catalogues ready.

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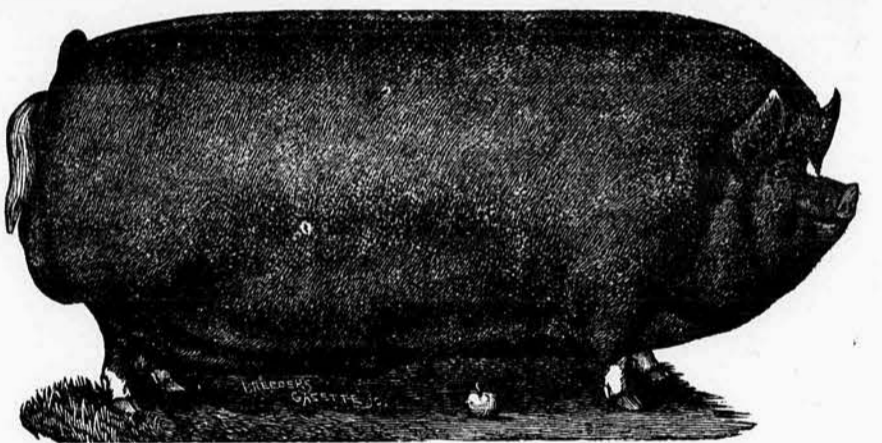
Mt. Pleasant Stock Farm, Colony, Anderson Co. Kansas.

**J. S. HAWES**  
Importer and Breeder of **HEREFORD** Cattle.

I have one of the largest herds of these famous cattle in the country, numbering about 200 head. Many are from the noted English breeders, T. J. Carwardine, J. B. Green, B. Rogers, W. S. Powell, Warren Evans and P. Turner. The bulls in service are "FORTUNE," sweepstakes bull with five of his get at Kansas State Fair 1882 and 1883; Imp. "Lord Wilton" bull "SIR EVELYN" own brother to "Sir Bartle Frere;" Imp. "DAUPHIN 19th," half brother to T. L. Miller Co.'s "Dauphin 18th;" and "THE GROVE 4th," by "The Grove 3d."

To parties wishing to start a Herd I will give very low figures. Write or come.

## Manhattan Herd of Berkshires



SOVEREIGN DUKE 3819.—(From Life, by Lou Burk.)

SOVEREIGN DUKE 3819, at head of famous Manhattan Herd. Among many other honors, elsewhere, this splendid sire won five blue ribbons during two successive years at the great St. Louis fair, including sweepstakes as best boar of any age or breed, each year—a record never attained by any other boar.

At the St. Louis and other leading fairs of 1882, the Manhattan Herd sustained its well-earned prize-winning reputation of former years by winning a majority, over all competitors, of the premiums competed for, being 13 sweepstakes and 68 prizes for that year.

Until the present time I have been unable to supply the demand from some fourteen States and Territories for my swine, but I now have about 40 very choice young Boars and Sows old enough to use, that I will sell at prices to suit the times.

A case of Cholera has never occurred in my Herd, which has come through the past severe winter in very thrifty condition. Twelve different families of Sows and five noted Boars in use. Satisfaction guaranteed. Send for Catalogue to

**A. W. ROLLINS, Manhattan, Kansas.**

**GALBRAITH BROS.,**  
Janesville, Wisconsin,  
Breeder and Importers of **Clydesdale Horses**  
Have at present on hand a splendid collection of stallions and Mares of all ages, and every animal guaranteed. Our buying facilities being unequalled, we can offer our stock cheaper than the same quality can be bought at elsewhere. Send for illustrated catalogue. Correspondence solicited. Visitors welcome. Janesville is 91 miles from Chicago by the C. & N. W. railroad, and 30 miles from Rock Island by the C. M. & St. Paul railroad.

