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THE ANGORA GOAT.

Two Years Good Progress -- Increase in Numbers and Quality.

There are a good many goats in Texas. They are raised for the wool or hair, the same as sheep. That our readers may know something about the progress of that industry, we copy what follows from the *Texas Live Stock Journal*:

"During the past two years nothing has progressed better or made so great an improvement in the way of stock-raising as has the Angora goat which came into general notice at that time through the efforts of the *Wool-Grower*, and had some doubts about the stock cleared up. At that time the subject opened by the question being asked: Can the common goat be made a profitable fleece-bearing animal by the use of Angora males? and one who had made some sort of a trial, denied the proposition, stating emphatically that the Angora was a humbug, and crossing on the common goat meant raising a fuzzy animal instead of a straight-haired animal; that the profit was not likely to pay for time, trouble, interest, etc. The writer was answered by a number of breeders who had raised the Angora and crossed them on the common goat with far more satisfactory results, and proved conclusively to any reasonable man that there is no good reason why, by breeding the Angora to a common goat, a profitable fleece-bearing animal should not be produced in two or three crosses, so that it became evident that the Angora was not only profitable stock but that there were many more in Texas than any one had supposed, and the business was gradually advancing in importance, and the flocks were increasing in numbers.

"One important point came out in the discussion, because not only was a doubt cast on the ability to produce a fleece by crosses on common stock, but it was asserted that the fleece if raised could not be sold. The *Wool-Grower* investigated the matter, and not only found that the market was active and tangible, but the additional fact was brought to light that the world does not produce sufficient of this product to meet the demand; that the American fleece was preferred; that there was hardly sufficient of it raised to make a market, and only the owners of the larger clips had full knowledge of the extent of the demand and wide range in quotations, as only here and there commission houses made any effort to place it with the manufacturers, while using large quantities depended on the foreign supply rather than the mixture of grades raised in smaller quantities here. In short, a summary of the Angora interest in Texas would be properly stated by saying that it was not extensive nor did the people have confidence in it.

"To-day, however, there is a marked improvement in the standing of the Angora goat here, and it is safe to conclude that the foundation on which it rests will be built on until the Texas clip of mohair will have the same standing as the Ohio clip of wool, respected as to quantity and more respectable as to quality, comparing favorably with the importations from Asia Minor, which now constitute the bulk of the manufacturer's stock.

"Where men have failed to meet their expectations in crossing up the common goat, it can be traced either to the uses of low-grade bucks or from expecting one or

two animals to serve many more does than a common goat would and the expectations have not been realized in consequence. It would be just as reasonable to expect to obtain a herd of high-grade Hereford cattle in a few years by the use of one good bull, as to expect to have a good flock of fleece-bearing goats by the use of one or two grade billies or one really good thoroughbred animal. It is necessary to purchase at least two billies and several nannies to keep up the breeding stock, for as the number of young stock increases the constant drain on the purse for a sufficiency of males would discourage any one, whereas if there is profit in breeding to a two-dollar goat, there is certainly a profit in breeding for a fifty-dollar animal, especially if the cost of the animal would reach that amount, and it had to be purchased if not raised. Properly managed, the grading process is pleasing and satisfactory. One cross, while not producing, as a rule, a fleece-bearing animal, occasionally does astonish the breeder by almost duplicating the Angora stock, while a second cross does produce a fleece of some value, and every subsequent cross brings the stock nearer the standard, and the fleece, increasing in weight, also increases in value, until the average of four pounds of fifty-cent fleeces is obtained as the average in the flock is a fourth or fifth cross.

"Of the hardihood of the Angora, much can be said in their favor. Raised on a good range of mixed grass with brush and timber if located so as not to require herding and jamming around, they can hardly be killed by any weather Texas is likely to experience, and they only require constant attention at kidding and just after shearing, when they should be protected from occasional storms and should be watched to see that their kids are not permitted to remain behind when the does come in off the range.

"We have seen bills of sale of mohair this season which have been returned to owners of Angoras, ranging in price per pound from 20 to 55 cents, the former for what any one not conversant with the business would call trash, and the latter for a fairly good fleece, not extra by any means.

"Altogether the Angora industry is flourishing. The goats are in the hands of men who have faith, perseverance and patience, who are willing to give the matter a thorough test, and they are willing to impart their experience to others, telling what to do and what to avoid. We hope to report in the spring a great increase in this stock and continued good prices for the product."

Lillard's Short-horns.

The successful career of the Short-horn herd of cattle owned by J. W. Lillard, Nevada, Mo., has been something remarkable. No other herd in the West has made better record at the fairs than this herd has this season. The herd won four prizes at the Bismarck fair, five prizes at the State fair at Topeka, five prizes at Sedalia, Mo., eleven prizes at the Parsons fair, and seventeen at the Fort Scott fair. Last year the herd owned by J. W. Lillard made a total of ninety-three entries and won ninety-three premiums at the fairs. He informed the writer that his herd, during the past eleven years, won more premiums than any other herd in the State. This lot of cattle are successful, not because of good care alone, but simply because they possess the best Short-horn blood. By consulting their sale catalogue, it will be seen that a better lot of

highly-bred Short-horns never were offered for sale in Kansas. Parties who have heretofore been content with owning a bull, will soon find that more money can be made by owning a few good Short-horn cows, such as will be offered for sale to the number of sixty-five head, at Davis' stable in Fort Scott, Kas., on Tuesday, October 21. Let every farmer interested in making money with good stock be present.

Nuts for Planting.

Nature's method of growing nut trees is to drop the nut to the ground and cover it with leaves from the tree, which keeps it moist, but allows it to freeze in winter. In the spring it germinates, sends its roots down into the earth and its stem into the air, and, if in a favorable position, ultimately grows into a tree. Where the nuts of the black and white walnut (butternut) and shell-bark hickory can be obtained fresh from the tree near where they are wanted for planting, the planting can be done at once in nursery rows, dropping the nuts in a shallow furrow and covering by simply pressing on them with the foot, firming the earth around them. They being a little below the level of the general surface, the washing in of the dirt will give them all the covering they need. Where so grown in nursery rows, say six to twelve inches apart in the row, they can be taken up for permanent planting at one year old and are then in good condition to be cheaply and safely shipped to any required distance. But such fall planting involves the liability of more or less loss of seed from the depredations of mice and squirrels during winter. If seed is to be kept for spring planting, nature's conditions should be copied as nearly as possible of the nuts above named. If exposed, after gathering, to the sun and air till thoroughly dried, not one in a hundred can be made to grow, as any one has found to his sorrow who has bought dried nuts for planting. The hickory nuts should, as soon as gathered, be spread in a thin layer upon the ground, covered with leaves with brush on the top to prevent their blowing away, and allowed to remain till planting time, or till shipped, as we will speak of further on. Walnuts should, while fresh with the shucks on, be placed in piles or layers, which may be a foot in depth, covered with coarse litter and left to nature's care till wanted for planting or shipment. The greatest demand for nuts for planting will come from localities remote from where they are grown. How to get the nuts safely to the planter is the problem. If gathered fresh and shipped they will be likely to heat and spoil. If allowed to dry they are spoiled; but if frozen in winter they can be safely shipped any distance if kept frozen and on receipt exposed to the same conditions as before shipment. The farmer on the prairies of Dakota or Nebraska who wants nuts for planting and who has friends in a nut-growing district East or South, can direct them to gather and care for the nuts in the manner above described, and when cold, freezing weather comes, ship them to him. Of the remaining nut trees valuable for either nuts or timber, we have the pecan, sweet chestnut and the oaks. It will not pay to plant the pecan outside of its natural home, the northern limit of which is southern Illinois and Missouri. Its nuts, however, require the same care as the shell-bark hickory. It is doubtful if the sweet chestnut can be made to succeed generally on the prairies of the West, but it is worthy of a

trial, both for the value of the nuts and timber. D. B. Wier, who has had large experience in growing nut-bearing trees, expresses the opinion that the chestnut will succeed up to the south line of Dakota, provided the nuts are obtained from some northern locality like New York or northern Ohio. His directions for caring for the seed is to thoroughly dry it after gathering. When freezing weather comes soak it in cold water for a month. Then put into damp sand or soil out of doors to keep till planting time. Freezing will do it no harm. Acorns can be treated much in the same way as walnuts, care being taken to keep them cool and dry enough so as not to germinate in the fall, as they are inclined to do, or they can be planted in the fall in the same manner as walnuts, with a light covering of soil and the earth pressed firmly about them with the foot. A peculiarity of the nuts is that many of them will lie in the ground over one year before germinating. While at A. R. Whitney's nursery at Franklin Grove, Ill., not long ago, he showed five nursery rows of walnuts planted in 1883, which were cleared entirely of the one-year-old trees last spring, but had sent up a good crop from seed that had laid dormant in the soil for a year. On this, as well as on some other accounts, it is probably better to plant the nuts in nursery rows and transplant to the permanent plantation at one year old. Whether it is better and cheaper to obtain the seed and grow the trees or to buy of nurseryman who make a specialty of growing such stock for sale, depends upon the quantity wanted. If small, better buy of the nurseryman. If large plantings are desired and the seed can be obtained of good quality and in good condition, it would be economy for one to grow his own stock. There is, however, this to be taken into account. If one secures the seed this fall it will be very likely to be planted and he will be sure to have the trees. If he depends on buying in the spring he may be short of money or rushed with work, and so put it off for a year, if not indefinitely. *Farmers' Review.*

North American Bee-Keepers' Association.

The next annual session of this Association will be held in the City hall, in Rochester, N. Y., October 28, 29 and 30, 1884. First session to be held Tuesday, October 28.

Essays will be read as follows: "Nectar," by Prof. A. J. Cook, of Michigan; "Wintering Bees," by W. F. Clarke, of Canada; "Marketing Honey," by T. G. Newman, of Illinois; "Foul Brood," by D. A. Jones, of Canada.

The balance of the time will be occupied in discussing these and other topics of general interest, such as "New Races of Bees and their Crosses," "Best Method of Producing Box Honey," "Best Method of Producing Extracted Honey," "Prevention of Swarming," "Artificial Pasturage," "Best Size of Sections," etc.

Reduced rates over the N. Y., West Shore & Buffalo railroad are promised.

If the Bee-keepers of North America take the interest in this meeting that the occasion demands, it will be the most interesting and largely-attended meeting of bee-keepers ever held in the world.

The Secretary is C. C. Miller, Marengo, Ill.

There are only four Chinamen in Paris. The washee washee kind do not dare to go there for fear of having the print of a flat-iron on the back. The working women of Paris would make it hot for them.

The Stock Interest.

PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.

October 20—Northeast Missouri Short-horn Association, Short-horns, Mexico, Mo.
October 21—J. W. Lillard, Short-horns, Fort Scott, Kas.
October 22—First Annual Short-horn Sale of Capital View Stock Farm, at Topeka Fair Grounds.
October 28 and 29—Inter-State Breeders' Association of Missouri and Kansas, Short-horns, Kansas City, Mo.
October 30—Seth E. Ward & Son, Short-horns, Kansas City, Mo.
October 31—Leonard Brothers, Galloway and Polled-Angus, Kansas City, Mo.
November 6—S. E. Ward & Son, Short-horns, Kansas City, Mo.
November 18 and 19—T. W. Harvey, Short-horns, at Fat Stock Show, Chicago.
November 20—Jos. E. Miller, Holsteins, at St. Louis, Mo.

March 18, 1885—A. H. Lackey & Son, Short-horns, Peabody, Kas.
May 20, 1885—Powells & Bennett, Short-horns, Independence, Mo.

Care of Animals.

All good results come from labor in one form or another. Labor is at the foundation of all success. For that reason labor is equal to money. The care, the necessary care of animals is labor profitably employed. Every item in the work of caring for stock is a good investment of paying capital. Good handling is worth more than a considerable percentage of food. And good handling is absolutely necessary to insure good results. Winter is approaching now and these thoughts are specially applicable.

Good care of animals includes a variety of duties and all of them require more or less knowledge of how as well as what to do. We have recently read a long article in the United States *Veterinary Journal* on the management and general care of animals in the army, which contains many useful facts and suggestions that apply with equal force on the farm and range. We quote part of the article and commend it to the careful perusal of our readers. Among other things the writer, in reference to food, says that unsuitability of food, either in consequence of deficiency, overabundance, or improper combination of nutritive, constituents is a very frequent source of disease. This is well shown in the following experiments. Dogs, monkeys, and other animals, when fed entirely on sugar, gum, starch, oil, or butter, died with symptoms of starvation almost as soon as if they were deprived of food. Even bread, when too fine, is insufficient nourishment. Dogs fed on pure white bread lived only fifty days, whereas others living on coarse brown bread were well nourished, and seemed capable of living for an indefinite period. Experiments prove that in order to maintain health and strength it is essential that, in addition to water, food must contain three classes of constituents, viz.: First, nitrogenous, to nourish the muscular and albuminoid tissues; second, hydrocarbons, to supply animal combustion, maintain heat, and assist in assimilation of nitrogenous compounds; third, salines, to supply material for the solid structures, maintain their healthy standard, assist in alimentation and assimilation, conveying new materials into the system and removing old ones out of it. If these various constituents are deficient, absent, or present in undue quantities, health cannot be maintained, and common experience teaches us that animals are kept in the best health on mixed food. As typical foods we have familiar examples: First, milk, as it contains casein (nitrogenous), oil and sugar (hydrocarbons), water and salts (salines); hence young animals thrive best and are maintained in health by the food nature has provided for them. Second, grass, as a food, contains all the necessary ingredients for the support of animal life, whilst hay and straw, which may be called the coarser articles of diet, are necessary. Alone they are insufficient to maintain an animal in

health, as the indigestibility of the large quantities necessarily indigested becomes a source of disease,—as indigestion, heaves, languor, and debility,—or leads to such a condition of the system as to predispose it to succumb to the influences of many ailments. Food may be also bad in quality, as in wet seasons, where it is too watery, and its nutritive constituents washed away, damaged by fermentation, mould, etc. Nothing is more common after a wet season than to see scores of horses suffering from various diseases thus introduced, as diabetes insipidus, induced by some as yet unknown agent developed in the food by operation of the wet, heating, fermentation, or all those operations combined. Again, it is found that foods become ergotized and fatal in their action on the animal body, and that all forage, by becoming musty, acquires unhealthy properties, infected with cryptogamic plants belonging to the *uredo* or *puccinia* species, or moulding (blue mould) when attacked by the *mucor-mucedo*. But if the season be too dry, forage become hard, innutritious, and indigestible from want of moisture as one of its necessary constituents, causing constipation, impaction, with their attendant systematic conditions, unthriftiness and debility, leading to anæmia and death. Food may be excessive or deficient in quantity. The first is followed by colics, enteritis, impactions, and ruptures. As a rule, we find animals partake of food in quantities sufficient to satisfy the appetite and maintain health, but there are exceptions, some animals, habitually greedy, eating voraciously and hurriedly and masticating imperfectly. Many are voracious and long fasting, and the evil consequences of this kind of feeding are a source of many fatalities in army animals, and most fatal diseases of the digestive organs arise from this source alone. Now a little forethought would go a long way. Greedy horses should be fed with hay before grain so as to partially satisfy their craving, and the quantities of grain should be given in smaller allowances and more frequently, dividing into three or more parts. Food defective in quantity or nourishment causes debility, wasting, dropsical effusions, parasites, and even death. The proper judgment of forage requires both a technical education and practical experience, and for this reason the veterinarian should be selected for this office. The present system of forage inspection is a source of advantage and amusement to contractors and loss to the service. An officer is detailed for this purpose (of any arm of the service), whose knowledge of the subject is in the same proportion as that of the farrier and the veterinary supplies before alluded to. The results may be better imagined than described.

And then, it is essential that animals of every kind have exercise. This is necessary in order to maintain healthful conditions. The same writer says that exercise, for at least one hour daily, at a gentle walk (not ridden furiously), is a positive necessity to the horse, and without it he cannot be kept in perfect health. So particular are the French and English army authorities in this respect that I have seen repeatedly large circular spaces cleared after heavy falls of snow, where there was no riding school in temporary barracks, so that their horses should not miss their daily walking exercise of two hours. It improves the appetite and spirits, assists in the excretion of the morbid materials, acts as a stimulant to the skin, limbs, and circulation, and a preventive to cedematous swellings, dropsy of the extremities, indigestions, etc., and maintains all the internal and external organs in a constant state of preparation

for sudden emergencies. But when in degree or continuance it exceeds what the strength can bear or rest can recruit, the functions are exhausted and lose their balance, muscular tone is impaired, nervous excitability takes the place of strength, circulation fails, congestions ensue, the blood is not properly purified, and the various organs are on the brink of disease. This is more particularly the case where animals have previously been allowed to remain without exercise periods, as in army horses. Any experienced cavalry officer can testify how our troop horses, when suddenly called upon, sink in flesh, become easily exhausted, their saddles becoming misfits, with its usual ill results for the first week's march in emergencies.

Want of exercise is a frequent cause of disease. The muscular system, and with it the circulation of the blood, is first to suffer; the movements become sluggish and languid; sweats break out upon the least exertion; there is a general want of condition and tone in all the vital organs, owing to their becoming loaded with fat, and a flabby, fatty muscular degeneration ensues, with swelled legs and extremities, due to debility of the heart and arterial system. The respiratory organs being little called upon, the task of decarbonizing the blood is thrown upon the liver; hence the accumulation of fat and derangements of that organ. Animals in this condition are utterly unfit for sudden and violent exertions. As well might a human being without physical training be expected to run a foot race without evil consequences ensuing.

Salt is a restorative, anthelmintic, anti-septic, atitumpanitic, and tonic, and therefore should be always within reach of every herbivorous animal. It is an actual and physiological necessity to them. One animal may require little, the next one a great deal; but without it perfect health cannot be maintained in horses and cattle. Its importance can be seen from the following physiological facts in connection with it: The serum of the blood containing four to six parts per thousand. It exists in all secretions, and is the chief source of the muriatic acid secreted by the stomach. It largely increases the secretions from the gastric and salivary glands; it promotes the digestion of vegetable food, and renders it more fit for absorption. Hence the greed of salt in all herbivorous animals, and the utility of those salt-licks to which buffalo, deer, and other wild animals resort. In Holland criminals in ancient times were condemned to die by eating unsalted bread, as the severest punishment that could be inflicted. The effects were terrible. These wretched persons are said to have died a dreadful death, literally devoured by worms engendered within their own bodies. In scrofula affecting the glands, skin, and bones, salt has been used externally. It is essential to digestion, a popular and reliable remedy for worms, and food without salt engenders them; and it also possesses the property of preventing more or less alcoholic intoxication. This is well known by the use of salt meats before and after the use of alcohol. Army animals should be provided with salt boxes attached to their mangers, so that they could fully supply their instinctive demand. The present insane method of distribution, periodically, mixed with food, forces one animal to eat more than his system requires, whilst others do not get sufficient, and have to eat the best substitute within reach, viz., dirt, filth, clay, wood, lime, and mud from stable walls, floors, etc.

Horses, like human beings, are constituted with various tastes and requirements. One horse will require a large self-ration whilst his neighbor probably

requires little. All vegetarians should be supplied with their full demand, their food being deficient in this material more or less. For this reason the Indian in his primitive state, being almost carnivorous (flesh containing much salt), never required an artificial supply, and even to the present day he looks upon it as an unnecessary luxury. Instead of the present method of supply, army animals should have it always within reach, so as to suit their different constitutional requirements. Like water, it is found in all the fluids and tissues, excepting alone the enamel of the teeth. Its presence regulates the phenomena of endosmosis and exosmosis, and in the blood it increases the solubility of the albumen and earthy phosphates, and it is more abundant than all other salines combined. Herbivorous animals in their wild condition have an instinctive desire for salt, as shown in the familiar instance of their traveling over enormous tracts of country to reach it. The following experiment shows the importance of a more liberal supply to our army animals. Six bullocks were selected, of the same age, vigor, etc., and were all supplied with abundance of nutritious food; but three of them, in addition, received over one and a quarter ounces of salt daily. With this exception alone, all six were fed and treated alike. The experiment commenced in October, and in the following April their difference became manifest even to the unpracticed eye. The hair and skin, which was tarnished and disordered in the unsalted ones, was smooth and glistening in the others. This became more marked as time advanced; and in October following the unsalted bullocks presented a rough and tangled hide, with patches here and there where the skin was uncovered. Whilst the three bullocks who received salt were fat, sleek, well coated; their vivacity and general appearance of good health presented a marked contrast with the dull, unexcitable aspect of the others. Salt acts as a tonic by exciting the digestive fluids and assisting in the solution of the food; for food which is tasteless, however nutritious, is taken with reluctance and digested with difficulty. The importance of a more liberal salt supply to army animals, and also a different method of distribution than the present one, is obvious.

Sheep Husbandry.

Kansas is well adapted to the raising of sheep, but no conditions without the help of intelligent ownership, will produce good results. In this, as in many other things, the experience of older persons and in other places may be of service to us. Mr. Henry Stewart, of New York, an able writer on subjects connected with agriculture in general, says that a good time to go into business is when a great many other people are going out of it; in that view of the case, he recalls some of his own experience. "I am not a very old man," he says, but I can remember several ups and downs in this business; but the downs only last a short time, and everything gets lovely again very soon. The golden fleece becomes tarnished for a while, but it soon brightens again, and gets as bright and brilliant as ever. Just now sheep are down. Good store ewes are selling in the markets, and can be picked out of droves for \$2.50 to \$4 a head, which may be made to bring a lamb next spring worth more than the cost of the dam, and give a fleece that will pay for their keep, and so stand their owners next summer just nothing at all. This is not bad for a time when a good many sheep owners are wild to get rid of their sheep, and go into something else not half so good. It is thus very clear that this is a good time to begin to keep a

flock. The season of the year is the very best, because it will soon be the breeding time, and one can make suitable arrangements for the next year's lambs. I have now several letters before me from readers of the *Country Gentleman*, asking for information on special points, which I will try to cover as concisely as possible.

The first necessity is the farm. For it is not every farm that is suitable for sheep, although but few are altogether unsuitable. Rolling, and even hilly land is the most desirable surface, and limestone gravel that is dry and free from swamps or low wet places is the best soil. Clear running water that is wholly free from marshy banks or borders, or well water, which is preferable, is indispensable, because wherever there are low wet places, there the much to be dreaded liver fluke and the lung worm are to be found, with lung disorders and foot rot; and these are more troublesome than all the other complaints of sheep put together. The great needs of sheep are dry footing; good grass, or other herbage, rather short and sweet than rich and luxuriant; pure water, pure air, and plenty of it, and shelter from rains and snows. With these needed comforts, and close watching to avoid accidents and dogs, sheep will always belie the old Virginia adage that "they are an unhappy flock," and will pay their way better than any other farm stock.

The second necessary is the master, and he who would keep sheep with pleasure and profit must be patient and persevering; careful, thoughtful and watchful; apt to learn, and prompt to apply what he learns, and endowed with good common sense and foresightedness. More sheep go to the bad because of a neglectful owner, or one whose temper is cross and whose scorn little details, than for any other reason. It is very true that "the good shepherd loves his sheep, and is loved by them," because such a man is thoughtful and considerate of their welfare in every possible way. A man who ever feels like the irascible old Virginian, John Randolph, who said he would go a mile to kick a sheep, should never have anything to do with them; because at first his patience will be tried, perhaps sorely, from unavoidable mistakes leading to accidents, and these are to be taken as they come, and the blame put where it belongs, on the owner, and not upon the sheep, which are as nature made them, and cannot be changed, but must be treated precisely as their natural peculiarities require. Such a man, with such a farm, or one that can be made so, or near it, may get a flock and hope to do well with it. If he fails in some things at first, he will soon learn by experience and succeed.

The third necessary is, to secure a good lot of sheep to start with, and not too many at first. It is always easy to increase the number when one is ready, but not so easy to get rid of a surplus when the excessive number has got the owner into trouble. Fifty ewes and two rams will make a good start. Above all things, pure-bred ewes should be avoided. They are more exacting than the native grades; they cost several times as much money; the fleece is rarely worth more than that of a common sheep, and the lambs are worth no more than those of half-bred sheep. But pure-bred rams are indispensable. For market lambs, the black-faced breeds furnish the best sires. Shropshires, I think, come first, because they are the hardiest; Hampshires are next, because if the owner is very careful in managing his flock, the lambs are larger; South-Downs come next, because the lambs are rather small, and the fleeces are lighter than those of the other two. But

any of these rams will produce good lambs for the market, and good sheep for wool and mutton. Half-bred South-Down mutton is the best in quality, although not quite so large in carcass as either of the others. The long-wool breeds are not so hardy as the black-faced breeds, and are harder feeders. The ewes should be two or three years old, and no more.

The age of sheep is easily known by examining the front teeth. A two-year-old sheep has four permanent front teeth in the lower jaw; these teeth are easily distinguished from the temporary teeth, being broader and larger. A three-year-old has six of these teeth, the last two appearing during the fourth year. In some of the pure-bred sheep, which mature early, the whole eight permanent front teeth appear at about three years of age, and generally these sheep are a few months earlier in their teething than the native sheep or the grade mixed Merinos. When a ewe has the whole eight permanent front teeth, she is at least four years old, or a little less; but then the teeth are sharp and clean, and no sheep older than this should be chosen. Older sheep will have the teeth worn and discolored, but some sheep of Merino crosses keep their teeth for many years, and unless grazed on sandy land or bare fields, may have good teeth at eight to ten years old, and be really profitable even to this age. But such sheep are not very numerous. The rams should be yearlings; that is, in their second year. If the ewes are robust and in good health and condition, there will be more twin lambs with rams not over two years old, than with rams that are older than the sheep. A heavy-fleeced but small ram, as a rule, will be a better sire than a larger one with a light poor fleece. The ram should be well built, broad on the back, with a small head, but broad between the eyes, and should have a bright clear eye. His teeth should be clean and white, and quite free from discolorations, which indicate poor health and constitution. The ewes should be long and deep-bodied, broad-hipped and short-legged. A clear eye, quite free from yellow tinge, and a pink clean skin, indicate good sound health. It is best to have them well woolled on the belly, where many are too light. It is better to pay a dollar more per head and have good ones, although a few less, than more and poorer ones, although cheaper. There will be many chances, if one looks out to buy ewes from passing droves at one's own gate. But where a large market is near by, or within easy reach by railroad, it will be preferable to go there and have a better and more deliberate selection. In such a case it would be well to pay an expert a moderate fee, or take an experienced neighbor to make a selection.

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

MISCELLANEOUS

J. G. D. CAMPBELL, Junction City, Kansas, Live Stock Auctioneer. Sales made in any part of the United States. Satisfactory reference given.

PIG EXTRACTOR, to aid animals in giving birth. Send for free circular to WM. DULIN, Avoca, Pottawatomie Co., Iowa.

A. A. DORSEY & SON, PERRY, ILL., Breeders of Thoroughbred Poland-China and Chester White Swine, Shropshire Down and Merino Sheep, and Short-horn Cattle. Stock for sale.

Agricultural Books,
At Publishers' Prices, Postage Paid.

T. J. KELLAM,
183 Kansas Ave., Topeka, Kansas.

Send in 25 cents for the KANSAS FARMER the rest of this year.

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.

J. M. MARCY & SON, Wakarusa, Shawnee Co., Kas., breed Thoroughbred Short-horns of fashionable families. A few yearling bulls and young cows left for spring trade. Correspondence solicited.

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.

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

HOLSTEIN CATTLE AND SHROPSHIRE SHEEP bred and imported by Jos. E. Miller, Ellwood Stock Farms, Belleville, Ill.

J. W. LILLARD, Nevada, Mo., Breeder of THOROUGHBRED SHORT-HORNS. 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.

E. S. SHOCKEY, Early Dawn Hereford Herd, Lawrence, Kas., breeder of Thoroughbred and High-grade Hereford Cattle.

W. C. MCGAVOCK, Franklin, Howard Co., Mo., Breeder of Thoroughbred and High-grade Hereford and Short-horn cattle. 100 head of High-grade Short-horn Heifers for sale.

F. W. SMITH, Woodlandville, Mo., Breeder of Thoroughbred Hereford Cattle. Dictator 1889 heads the herd. 50 Grade Bulls for sale.

CATTLE AND SWINE.

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

W. W. NELSON & SON, Centropolis, Franklin Co., Kas., breed pure-bred Poland-China Swine. Also Short-horn and Jersey Cattle. Stock for sale reasonable.

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.

HILLSIDE STOCK FARM, W. W. Waltmire, Carbondale, Kas., breeds Thoroughbred Short-horn Cattle. Recorded Chester-White Swine a specialty.

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.

J. E. GUILD, CAPITAL VIEW STOCK FARM, Silver Lake, Kansas, Breeder of THOROUGHBRED SHORT-HORN CATTLE and POLAND-CHINA SWINE. Correspondence solicited.

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

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

SHEEP.



E. COPLAND & SON,

DOUGLASS, KANSAS,

Breeders of Improved American Merino Sheep. The flock is remarkable for size, constitution and length of staple. Bucks a specialty.

C. F. HARDICK & SON, Louisville, Kansas, breeders of REGISTERED AMERICAN MERINO SHEEP, Having good constitution and an even fleece of fine, dense wool. Fine wool a specialty. Come and see our flocks or write us.

SAMUEL JEWETT, Independence, Mo., breeder of American or Improved Merino Sheep. Vt. Register. The very best. Choice stock for sale. Over 300 extra rams. Catalogues free.

MERINO SHEEP, Berkshire hogs and fifteen varieties of high-class poultry of the best strains. Bucks a specialty. Harry McCullough, Fayette, 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 145 lbs to 180 lbs.

A. F. WILLMARTH & CO., Ellsworth, Kas. breed American or Registered Spanish Merino Sheep. "Woolly Head" 695 at head of flock. Choice rams for sale. Satisfaction guaranteed.

SWINE.

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

I. L. WHIPPLE, Ottawa, Kas., breeder of Recorded Poland-China and Red Berkshire swine. Stock for sale at all seasons. Correspondence solicited.

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

POLAND-CHINA SWINE AND MERINO SHEEP.

The swine are of the Give or Take, Perfection, and other fashionable strains. Stock for sale in pairs not related. Invite correspondence or inspection of stock.

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

WM. PLUMMER, Oange City, Kansas, breeder of Recorded Poland-China Swine. Young stock for sale at reasonable rates.

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

POULTRY.

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

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

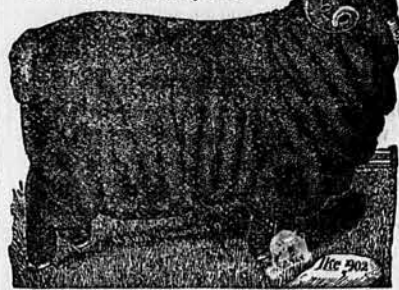
N. R. NYE, breeder of the leading varieties of Choice Poultry, Leavenworth, Kansas. Send for circular.

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

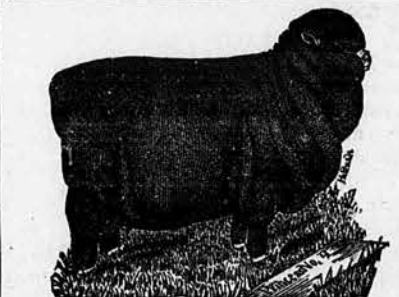
WAVELAND POULTRY YARDS, Waveland, Shawnee county, Kansas. W. J. McColm, breeder of Light Brahmas, Plymouth Rocks, and Pekin Ducks. Stock for sale now. Eggs for hatching in season; also Buff Cochins eggs.

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.

H. V. PUGSLEY,
PLATTSBURG, MO.



BREEDER of Vermont Registered Merino Sheep. The largest flock in the State 850 rams and a number of ew for sale. High-class poultry. Catalogues free



PRINCESS.—Third fleece, 26 1/4 lbs.; fourth fleece, 26 1/2.

R. T. McCULLY & BRO.,
LEE'S SUMMIT, JACKSON CO., MO.,

Breeders of PURE SPANISH MERINO SHEEP—Vermont Register. 400 Rams unequalled for length and quality of staple, constitution and weight of fleece; 240 selected by R. T. from the leading flocks of Vermont, especially for retail trade. The line of blood, coupled with the high character they possess, insures a reproduction of their excellent qualities. At prices to correspond with wool.

Also, Light Brahmas and Plymouth Rock Chickens and Bronze Turkeys. All orders promptly filled and satisfaction guaranteed. Catalogue free.

THE LINWOOD HERD

SHORT-HORN CATTLE



IMP. BARON VICTOR

W. A. HARRIS, Linwood, Kansas. The herd is composed of VICTORIAS, VIOLETS, LAVENDERS, BRAVITY BUDS, SECRETS, and others from the celebrated herd of A. Cruickshank, Sittion, Aberdeenshire, Scotland. GOLDEN DROPS and URS, descended from the renowned herd of S. Campbell, Kinellar, Aberdeenshire, Scotland. Also YOUNG MARYS, YOUNG PHYLLIS, LADY ELIZABETHS, etc. Imp. BARON VICTOR 4284, 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.

Fair Facts.

Special correspondence KANSAS FARMER.

The success of the great St. Louis Fair was not, in some respects, equal to some previous exhibitions, owing in part to the debarring of cattle on account of the pleuropneumonia excitement. Heretofore the St. Louis Fair has been one of the greatest cattle shows on the continent, yet the lack of cattle did not prevent the exhibit of the other departments from being excellent in every respect. The live stock department was well represented by the showing of swine, which was somewhat marvelous, surpassing any late showing in this department. It was estimated that from 1,500 to 2,000 hogs were on exhibition. The number of the various breeds were in the following order: Poland Chinas, Berkshires, Chester Whites, Duroc Jerseys, Yorkshires, Essex and Victorias. The place allotted to swine was filled besides the new pens and the vacant cattle stalls were utilized as well. The poultry department was overflowing and additional coops had to be provided. The exhibit of draft horses was about an average, several of the leading importers being present. The largest number of horses were roadsters. It would be almost impossible to attempt to enumerate or describe the multitude of exhibits in every department of industry. Manufactures of all kinds led all other displays, covering several acres besides filling several buildings. The principal attractions on the grounds were the exhibits at the amphitheater and the zoological gardens; but the attraction that eclipsed all others was the parade on Tuesday night in the city. The Veiled Prophets presented their seventh annual nocturnal pageant, which was witnessed by at least 150,000 admiring people. The Exposition which is being held for the first time at the new Exposition and Music Hall in the city was well crowded during fair week and presents a multitudinous array of attractions well worth a day's visit.

FORT SCOTT FAIR.

The fair at this place was well attended and was quite a success in most respects, the display of farm and garden products being far in excess of any former exhibit, occasioned by the many special premiums offered by the merchants of the city.

The live stock exhibit, with the exception of the horse department (which was quite large), was not so extensive as usual, yet the exhibit of a very fine show herd of Short-horns by J. W. Lillard, Nevada, Mo., and the large Po. and China swine show by Rankin Baldrige, Parsons, were very creditable displays.

THE PAOLA FAIR.

The Miami County Live Stock and Agricultural Association had a representative fair, barring the howling fakirs and gaming devices allowed. The exhibit of corn was remarkably good, as prizes to the value of nearly \$100 were offered. This class of departments was not so well represented in the halls here as at Fort Scott, but the live stock show was good. There were 110 head of swine, I. L. Whipple, of Ottawa, having the largest exhibit of Poland-Chinas. The same breed was also represented by J. W. McDaniel, Hillsdale; O. J. Graham, Edgerton; H. G. Farmer, Brosley, Mo.; E. King, S. Condon and Mr. Bumgardner, of Paola, and J. D. Glenn, New Lancaster. J. H. Ayers and I. L. Whipple also showed some Duroc Jersey swine. The sheep show was small, and that of horses an average exhibit. In the cattle department Short-horns were fairly well represented, and a very fine herd of Polled-Angus was shown by G. A. Whitaker, of Paola. The dairy breeds were represented by a good lot of Holsteins by D. J. Post and J. H. Ayers and a large exhibit of Jerseys by C. C. Blankenbaker, Ottawa, and Carrol & Lyon, Paola.

HUTCHINSON FAIR.

A correspondent writes that the initial fair at this place was not a brilliant success, although the stock show was fair. The sporting element seemed to be in the ascendency, which, with the admission price of 50 cents and the gaming allowed, caused considerable complaint. Our correspondent was disappointed with the results, for such a promising outlook as this fair had.

HEATH.

The great Salt Lake, according to Elder Cannon, contains enough salt to supply America for centuries. All that is necessary in preparing it for the market is to drive to

the edge of the lake with a wagon, and a man with rubber boots on can load it with a shovel. The salt lies on the bottom of the lake in small, coarse crystals. After loading it is taken to a grinding machine, and after being run through it is fit for the table.

From Pawnee County.

Kansas Farmer:

Yours received with subscription prices for FARMER lower than ever, and it does seem as though every farmer and stock raiser should have the paper at those figures. Every one who sees or reads it speaks highly of it, and I would not do without it if I had to give up all my other papers to obtain that one.

The crop here was never so good in all branches as it is this season, but the expense of getting the crops harvested and ready for market has been so great that many find themselves in debt at the present figures. Everything seems to run at about the same old prices except the products of the farmer, and if they are to be sold they scarcely meet the expense of preparing them for the market.

It is strange that more farmers do not see the profit of mixing stock with farming and feed more of their produce. Raise less and feed more. Horses, cattle, sheep and hogs, even poultry will pay better than all grain. There is but little profit in all wheat in a succession of years even with fair prices, and at the present price it would pay far better to feed it to anything than to sell it.

The difficulty with many of our farmers is, they do not know what to feed. There seems to be but few hogs in the county or steers of sufficient age, and then the wheat must be ground. They seem to think that there is no grain fit to fatten cattle or hogs but corn, and that is not a sure crop. Now, the fact is, that sheep are the best kind of stock to feed small grain to. They fatten faster than any other stock and require less preparation. They are perfect grinding mills of themselves, and no grain passes them, be it ever so small or hard and dry, although it pays well to feed them ground or steamed grain. There are plenty of sheep in the country at very low figures, and, although wool is in a close corner, it is bringing as good a figure as any other product of the farm. All things considered it is giving a better return for the money invested than any other, either stock or grain. Sheep give a market for every product, rough or smooth, and their wool and their meat and manure are cash at some price; and the three added together will beat any other kind of stock or grain raising.

We had our first frost last night, and the farmers generally are prepared for it. Corn is mostly in shock and sorghum cut. Most all the hay is in stack. Wheat seeding is greatly in the rear on account of dry weather, and what is sown is doing no good. If this dry weather continues, the acreage will be small in this section. Fruit of all kinds where there were trees have also done splendid, and more trees will be set another spring.

Real estate has gone to high figures, considering the low prices of one and two years ago, and still they come and gobble up the land, good and bad, until there is not an acre of public land and but very little railroad land left. But we say come on; there is still room among the people who are foolish enough to want to go farther west. It has been a hard summer on stock. Heat and flies were never so bad, and the water on the plains created much disease; but the last two months has made a great change, and I have never seen stock looking better than at present. Cattle have fallen off in price, and are somewhat dull. Sheep are beating them, for they were as far down as they could get and are improving.

W. J. COLVIN.

Larned, Pawnee county, Kas.

The Wool Market.

W. C. Houston, Jr., & Co.'s latest wool circular (Philadelphia) says: "The wool market has been quiet throughout September, and present indications are not favorable to an immediate resumption of activity. In spite of the falling off in demand, however, prices have been firm, and wool is held with confidence both East and West. A lull was to be expected after the activity during August, for manufacturers then supplied their wants quite freely, and as the dry goods market has continued to drag, they have not been inclined to further increase

their supplies, hence the wool market has fallen into the usual hand-to-mouth rut and joggled along without much animation. It is quite probable that this state of affairs will continue until after election, and then we look for a better trade generally. It seems to us that the business of the country is in a position to improve as soon as political issues are decided and the commercial community is satisfied that there will be no change to affect existing tariff legislation. There has been going on a contraction in values and production for a long time now, and the turning point should not be far off. Our large crops will be a great weight in the scales just as soon as the improvement is started, and it seems altogether likely that the election will be the turning point. Wool is on a low basis; it is still impossible to import to compete with domestic fleeces, and a revival in general trade would surely result in an improvement in values.

KANSAS, NEBRASKA AND SIMILAR WOOLS.

	Light and bright.	Dark, heavy and heavy.
Fine.....	18a19	15a17
Medium.....	19a20	18a19
Quarter-blood.....	17a18	16a17
Common, Cots and burry.....	15a16	14a15

This, That and the Other.

There are more suicides in Germany than any other country. Limburger cheese and sauerkraut have much to answer for.

Belva Lockwood is the first Presidential candidate who never used a razor. Don't make a mistake and attribute this to youth.

A Boston girl never calls an iceberg "an iceberg." Oh, no! She always speaks of it as "a floating aggregation of tangible fridity."

Ferdinand Ward says that if he had his life to live over again, he would work on a farm. Wouldn't he be lost among honest men?

"Ah, isn't she a duck?" said an admirer, as the doctor's daughter passed. "No doubt," replied a mean wretch; "her father is a quack."

A poet in Germany has been fined \$75 and sent to prison for four months. The editor who printed his verses, it is supposed, will be fined \$750 and sent to jail for four years. If it was a poem on the goat, the punishment will not be any too severe.

A dairyman in Milan keeps an intelligent rooster in his bed-room to wake him up in morning. The bird, in order not to disturb his master's slumbers, refrains from crowing until 6 o'clock, when he emits one loud crow, jumps upon the bed and begins eagerly to peck at the slumberer. He has been taught that his breakfast of corn depends upon it, and he knows when it is 6 as correctly as the clock does.

The year before the introduction of cheap postage into England, the average number of letters written by each person in a year was three. The next year it was seven, it is now thirty-six. In 1839 there were 82,000,000 letters posted, of which about one in every thirteen was franked. In 1840 the circulation rose to 169,000,000, although franking was abolished. At the present time it has reached the astonishing total of 1,280,000,000.

A precious carpet has been destroyed in San Francisco. It had covered the floor of one of the rooms in the mint, and had been used for five years. The dust of the precious metals used in the coinage had, during that period, daily fallen upon it, and when it was taken up the authorities had it cut in small pieces and burned in pans. The ashes were subjected to the process employed with mining dust, and they realized \$2,500. Thus, the carpet, after years of wear, was more precious than when it was new.

Cuttle-bone is not bone, but a kind of chalk once inclosed in the fossil remains of extinct specimens of cuttle-fish. Cleopatra's needle was not erected by the Egyptian Queen nor in her honor. Pompey's pillar has no historical connection with Pompey in any way. Sealing-wax does not contain a particle of wax, but is composed of Venice turpentine, shellac and cinnabar. The tuberose is no rose, but a species of polyanth. The strawberry is no berry, but only a succulent receptacle. Turkish baths did not originate in Turkey, and are not baths, but heated chambers. Whalebone is not bone, and is said not to possess a single property of bone.

Send in 25 cents for the KANSAS FARMER the rest of this year.

Pumpkins and Potatoes for Cattle.

A reader of the *Prairie Farmer* asks "What is the value of potatoes, either cooked or raw, as compared with corn, and does it pay to raise pumpkins for cattle?"

The circumstances of each feeder will determine, to a great extent, the question as to whether or not it will pay to grow pumpkins, or other kinds of food for cattle. But inasmuch as the cost of raising pumpkins is generally confined to the planting of the seeds in the field with corn, and to the labor of gathering and cutting the crop for the stock, it is not likely that much loss will result from raising plenty of them and feeding freely to cattle. That they form an excellent addition to the diet of milch cows is too well known to require stating. That great benefit to fattening stock will follow feeding with pumpkins, as from feeding roots, cannot be doubted. And as it seems to be a settled fact that the farmers of the Middle and Western States will not "fuss" with raising roots for farm stock, as long as maize remains the great staple feeding crop, it may be well for them to grow pumpkins as a good substitute, costing little or nothing. But it will scarcely pay to do as thousands have done, produce a large crop of pumpkins and leave them to freeze and rot in the field, while the stock gnaws a half-starved existence from the straw-stack and from storm-bleached corn-stalks. In feeding pumpkins it is better to remove the seeds, as in considerable quantities they act as a diuretic.

Extended experiments have been made with potatoes in feeding, but it would be difficult to say how profitable they would be as food for cattle in different regions and under varying circumstances. Scientific analyses can do something to help decide the question; but it has been found that the practical results do not agree with those which such analyses would lead us to expect. The market value of potatoes and other foods, the cost of production, etc., must be considered in reaching a decision. It is quite clear that with good corn selling at 10 cents per bushel, and potatoes worth twenty-five cents, as has been the case in the West, the latter could not be a profitable feeding crop. But when potatoes sell slowly at 10 cent- per bushel and corn at 50 cents, the difference might be in favor of potatoes.

Book Notices.

Frank Leslie's *Sunday Magazine* for November will prove of equal interest to the young and the old, the reader for amusement only, and the thinker—in fact, to all classes; for in it may be found something to interest all. The opening is a careful study, by the Rev. Geo. T. Rider, of the University system of education as illustrated in the English Universities of Oxford and Cambridge. An article on "Hymns and Hymn Tunes," by D. E. Hervey, is both historical and critical. Dr. Talmage has a trenchant *expose* of the imposture of Spiritualism, and in *The Home Pulpit* he preaches on the Christianized Vote. The Carter Family, Joseph Barnby, and John Francis Barnett, are treated in the *Sacred Musicians* series. A charming Southern story, entitled "Sophy," is contributed by Mrs. Adelaide C. Waldron; and there is a notable article, "Troubadours and Trouveres" with a portrait of Frederic Mistral. The Rev. Geo. W. Nichols contributes a twelfth letter to *The Collection Basket*, this time treating of the remarkable changes in New York since his boyhood. The number is profusely and handsomely illustrated as usual. Price 25 cents a number, \$2.50 a year. MRS. FRANK LESLIE, Publisher, 53, 55 and 57 Park Place, New York.

The Fulton Nursery.

Gates Bros., Fulton, Kas., proprietors of the Fulton Nursery, made one of the most valuable and interesting exhibits of nursery stock at the Fort Scott fair, last week. The display, which attracted considerable attention, consisted of first-class specimens of apple, pear and peach trees, also Catalpa, the Russian mulberry and cedar trees.

Gates Bros. report a large and rapidly-increasing business, and they guarantee satisfaction to their customers. The Fulton Nursery Co. do a wholesale and retail business as growers of choice nursery stock of all kinds, including their specialties of small fruits, the Russian mulberry and the Le Conte and the Kieffer pears. Send for their circulars.

New York Experiment Station.

We are indebted to Dr. E. Lewis Sturtevant, Director of the New York Agricultural Experiment Station at Geneva, for a copy of the Second Annual Report, for the year 1883, submitted to the Board of Control of the Station, January 17, 1884. This Report indicates the amount of labor performed by the director and his assistants, and its principal contents are the following: A statement of the general plan of operations; an enumeration of the results reached by experiments; various results with the many varieties of corn; experiments with vegetables; testing the germinating power of commercial seeds, and of seeds of different ages; the relations of feed to milk, with tests on several cows; analyses of food given them; experiments with cutting the seed, and in cultivating potatoes; the influence of weeds on crops; the analyses by the chemist, of food, milk, sugar, fertilizers, etc.; and a detailed account of the operations of the horticulturist in planting and cultivating a large number of different varieties of vegetables, with descriptions and classification of several hundred sorts.

As the experiment station and its work are looked upon with wide interest by the people of the State, a more detailed account of some portions of the Report may be acceptable to our readers.

The experiments on the relation of the feed of cows and the character of their milk were minute and accurate. The food and the milk were analyzed, the weight of the animals, of their food, and of excreted matter, regularly weighed and examined, and among the important results were these—that the butter which may be obtained from milk depends more on the character than on the composition of the food; that gluten meal and meal fed alone with hay were not favorable to obtaining the full amount of butter in the milk; while the addition of bran to the other food proved advantageous. Measured by figures, while hay and gluten meal gave only 75 per cent. of butter from the fat present in the milk, hay, bran and meal gave over 97 per cent., although containing much less of albumenoid. The interesting fact was discovered that ensilage gave as much butter as the last mentioned feed, and it therefore ranks as an economical food. It is recommended, however, to use it as a supplement to other foods. The churning quality of milk was found to bear no exact relation to its chemical composition, and the churn is therefore the only reliable implement for determining the butter quality of milk in practical dairying.

Experiments were made to determine the effect of salt on the feed of cows, which, although constant, was found to be small. Salt was given once a week, and immediately following there was an increase of about one-third of the water drunk, but no material increase of the food consumed. It can therefore be regarded as of only slight importance.

In the experiments with potatoes, several of the conclusions drawn from the previous year's trial, have not been verified, or have been reversed. The previous year's experiments showed a manifest gain in quantity of the crop from the use of single eyes. The following year ordinary cutting and whole potatoes have both yielded larger crops than the single eyes, the whole potatoes in most cases giving the largest products. Last year a marked difference was found in favor of deeply cut eyes. This year no advantage was found from such cutting over those cut shallow. The trials made with what are termed the "seed end" and the "stem end" of the potato (strictly the apex and base of the tuber), indicated a slight superiority of the seed end in vitality, but the results were not uniform. The conclusion reached was that the eyes on the seed end, rejected by many cultivators, are quite equal in value or rather superior to the other eyes. Mulching the potatoes in a wet season reduced the amount of the crop to about two-thirds of the unmulched potatoes—a serious loss, not likely to occur in a dry summer.

The report does not assign the reasons which probably operated in producing varying or reversed results, to which we may briefly allude. Patches of soil may vary in fertility, composition or texture, the latter often greatly enlarging or diminishing the amount. A slight difference in composition may make all the difference in working between a hard or cloddy soil on one hand, and

a finely pulverized texture on the other, and vary the product 50 or 100 per cent. It appears that single eyes succeeded best in the wet season, as they could not dry up before making a strong growth; and whole potatoes were best in the dry season, the impervious skin preventing shriveling. The condition of the soil, whether wet or dry, doubtless caused the variation in results in the mode of cutting. As the character of the season cannot be known in advance, it is not practicable to prescribe beforehand what course of treatment may be best, and the average must be chosen.

In selecting seed corn, the conclusion reached after many trials is that there is no material difference in the crops obtained from grains taken on different parts of the ear, and that the small tip kernels and those from the central portion and from the base, give similar results. No advantage was gained by frequent cultivation of corn over uncultivated from which the weeds were removed, and in most instances the product was reduced by cultivation from 5 to 15 per cent. This result we suppose to be owing to cultivation packing and hardening the soil, the season being a wet one; the effect of frequent culture having been long since proved a benefit whenever the soil is dry enough to become finely pulverized. In some of the experiments, superphosphate produced no increase of the crop, where applied at various rates from 200 to 1,600 pounds per acre, which result appears to indicate the importance of making such trials in different localities, as soils may vary in composition, and in some instances need no superphosphate, but rather potash, and in others again the reverse. We are familiar with a farming region where superphosphate has more than doubled the wheat crop, while only ten miles away it never produces the slightest effect.

The report of S. M. Babcock, the chemist of the Station, gives full analyses of fifty substances used as food, including hays, fodder-plants, seeds, vegetables and fruits, besides thirty analyses of the stalks of the corn plant at different ages. Analyses are also given of milk, the juice of sorghum, and of corn, and of fertilizers. E. S. Goff, the horticulturist, presents a full and elaborate report. A conspicuous part of the work of this department has been an extensive test of varieties. Seeds have been procured from nearly all the American seedsmen, and from others in foreign countries, and a comparison has been made of their qualities, the flexibility of varieties, and to what extent different names may be synonyms. Much information valuable to gardeners is given under this head.

While minuteness of detail is generally requisite in order to obtain accuracy and prevent error, there are a few instances where it strikes us needless labor has been expended, without promising valuable results, as for example in the twenty-two pages wholly occupied with the weights only of the different vegetable and other seeds in their numerous and slightly varying sorts, amounting to many hundreds in number. Taken as a whole, however, this report of the Station furnishes a large amount of valuable information, which could not be obtained by private or individual labor; and disseminated among farmers it will be worth many times its cost. No better expenditure of public money could be made than the comparatively small amount required to sustain its operations. But it is not merely the direct information brought out that is to be its chief value. The searching accuracy of the experiments, as their character becomes generally known to cultivators, will work a great improvement in individual practice among farmers, and greater care and accuracy will take the place of the random guessing from which many carelessly draw their conclusions. A most important mission of the Station is to teach cultivators the art of experimenting with accuracy; for their aid in repeating trials and testing results on different soils, and under varying circumstances, will be absolutely necessary in establishing conclusions which could not be satisfactorily reached by experimenting in a single locality.—Country Gentleman.

No matter how sloppy the food given to pigs, they should have daily a good supply of clean, fresh water. This is especially needed in summer for pigs kept in pens and with little green food.

Education of Our Boys.

A boy that has no ambition to learn will never turn the world over nor be able to cultivate both sides of a hill. Every boy ought to be ambitious to learn as long as he lives, whether he remains on the farm or whether he goes into other lines of business. There is often difficulty in the way of choosing a course of education when boys determine to go into the learned professions. To such the following article will be of use. It was written by Rev. Dr. McVicar, President of Washburn College, Topeka:

Edward Everett once remarked, that if a youth could read, write, compute, and possessed an accurate knowledge of the construction of the English language, he might be said to be liberally educated. This is certainly a pleasant view to take of the only educational facilities practically accessible to the majority of the people.

While it is obvious that most of our youth never will proceed further than the common school, still, in the case of others, there will be time, the means and the disposition, to pursue a more extended course, and the problem with parents often is, What shall that course of study be?

Many considerations will modify, as respects the individual, any given curriculum. The age, health, aptness to learn, and disposition are to be taken into account. The vocation which a youth intends to follow may properly, in some instances, have a bearing on the studies to be pursued. And yet a serious mistake is generally made in limiting the course of study to the line of a special calling. A boy under twenty years of age hardly knows for what he is fitted. One enters an institution of learning with the intention of becoming an engineer, and afterward concludes to enter the law. Another spends four years in preparation for husbandry, but at the close feels it his duty to enter the ministry. In either case the years of study are not wholly lost, and yet they do not give the furnishing desired. What is needed is such a course of study, as by its discipline and generous culture shall, to some degree at least, fit one for any calling which, on mature reflection, may seem most congenial and obligatory. This broader basis of culture gives youth a freedom of choice as to their vocations at an age when they are usually competent to make the best choice.

That is a radically defective view of education which limits the curriculum to the narrow trend of a single industry. The blacksmith needs more than the knowledge of steel or iron. The husbandman needs enlargement of being as well as the ability to analyze the soil. The Damascus blade had body as well as edge.

A few years since a young man graduated from an engineering course in a leading institution in the East. He had spent four years in elective studies. At the close he remarked, "I have made a mistake. I ought to have taken the collegiate classical course first, and then have applied myself to the study of engineering." He had ample time and means. His regret was a pang of disappointment.

There is a deal of demagogism in the present cry of "the useful" in education. A few stray, unemployed college graduates are often adduced as unanswerable arguments against collegiate culture. It can be easily shown, however, from reliable statistics, that of college graduates, a far larger per cent. than of any other class in society are employed in skilled labor, receive a larger remuneration for their services, occupy higher positions of usefulness, and become mightier factors in the civilization of the world. Not that eminent men, without the training of the schools, have not risen and shed resplendent luster upon human history. George Washington and Abraham Lincoln are notable instances. And yet it is a stubborn fact that, as a general rule, the leaders in the thought and civilization of the world were men of liberal culture. Moses and Paul and Plato and Aristotle were academicians. Those foremost in the grandest reformations—Luther, Melancthon, Calvin, John Robinson, Knox and Wesley—were all men of collegiate culture. Thomas Jefferson, the author of the Declaration of Independence, was a college graduate. It is claimed that solid facts will warrant the statement, that of the whole number of Chief Justices, Presidents, Vice Presidents and Secretaries of State, from the founding of the Republic

down to 1861, fifty-five in all, forty-two, or more than three-fourths, had received a collegiate education; and that of the twenty-six United States Senators from Connecticut prior to 1861, twenty were graduates of colleges; and of the twenty-eight United States Senators from Massachusetts prior to the same date, twenty-three had been collegiately educated.

In view, therefore, of the possibilities of what a boy may become and achieve in the world, the great question in planning for his education, is not what will best fit him for one specific line of employment, nor what will be of more immediate gain pecuniarily, but what will develop the greatest ability, the largest being? That is a cruel restriction which limits the education of a youth to those branches of knowledge which tend simply, as Sir William Hamilton forcibly expresses it, "to qualify a human being to act the lowly part of a dextrous instrument."

Dillon Bro's at Indianapolis.

Dillon Bro's exhibited eleven head of Norman horses at the Indiana State Fair at Indianapolis last week, and were awarded eleven first premiums. In addition to those already reported, they were awarded on the noted premium stallion, Leisure, the sweepstake premium for best draft stallion of any age or breed competing in a ring with thirty as fine Norman and Clydesdale stallions as were ever shown in one ring in any country; also the sweepstake premium of one hundred dollars for best draft stallion and four mares of any breed competing in a ring of eight entries, making one of the grandest exhibitions of draft horses ever witnessed. All the stock that Dillon Brothers have at Indianapolis were shipped direct to St. Louis, and were on exhibition last week at the St. Louis fair.—Bloomington (Ill.) Pantagraph.

A curious botanical specimen is growing in a park at Sonderhausen, Germany, in the shape of a fir tree which bears on one of its main branches what appears to be a second tree—cone-shaped, and not less than twenty-five feet in height and about three feet in diameter. The main tree is over a hundred feet high, with a trunk some ten feet in circumference. It is supposed that a wound made in the branch by a squirrel or an insect has caused a bud to develop, which has produced the secondary tree.

Boston and New England passengers should bear in mind that The Wabash is the only line running a through sleeper from St. Louis to Boston.

IT LEADS ALL.

No other blood-purifying medicine is made, or has ever been prepared, which so completely meets the wants of physicians and the general public as

Ayer's Sarsaparilla.

It leads the list as a truly scientific preparation for all blood diseases. If there is a lurking taint of Scrofula about you, AYER'S SARSAPARILLA will dislodge it and expel it from your system.

For constitutional or scrofulous Catarrh, AYER'S SARSAPARILLA is the true remedy. It has cured numberless cases. It will stop the nauseous catarrhal discharges, and remove the sickening odor of the breath, which are indications of scrofulous origin.

"Hutto, Tex., Sept. 28, 1882.
"At the age of two years one of my children was terribly afflicted with ulcerous running sores on its face and neck. At the same time its eyes were swollen, much inflamed, and very sore. Physicians told us that a powerful alterative medicine must be employed. They united in recommending AYER'S SARSAPARILLA. A few doses produced a perceptible improvement, which, by an adherence to your directions, was continued to a complete and permanent cure. No evidence has since appeared of the existence of any scrofulous tendencies; and no treatment of any disorder was ever attended by more prompt or effectual results.
Yours truly, B. F. JOHNSON."

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Dr. J. C. Ayer & Co., Lowell, Mass.
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WE HAVE Something NEW

Indispensable to every family.
Sells at sight wherever advertised.
I cleared \$12.75 the first day. G. J. White, Ill.
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64 page Catalogue, showing quick sale, large profits, testimonials and valuable hints all free. J. E. Shepard & Co., Cincinnati, O.

The Home Circle.

Be as Happy as You Can.

This life is not all sunshine,
Nor is it yet all showers,
But storms and calms alternate
As thorns among the flowers;
And while we seek the roses,
The thorns full oft we scan;
Still, let us, though they wound us,
Be happy as we can.

This life has heavy crosses,
As well as joys to share,
And griefs and disappointments,
Which you and I must bear;
Yet if misfortune's lava
Entombs hopes dearest plan,
Let us with what is left us,
Be happy if we can.

The sum of our enjoyments
Is made of little things,
As oft the broadest rivers
Are formed from smallest springs;
By treasuring small waters,
The rivers reach their span,
So we increase our pleasures
By enjoying what we can.

There may be burning deserts,
Through which our feet may go,
But there are green oases
Where pleasant palm trees grow;
And if we may not follow
The paths our hearts would plan,
Let us make all around us
As happy as we can.

Perhaps we may not climb with
Ambition to its goal;
Still let us answer "Present,"
Where duty "calls the roll;"
And whatever our appointments,
Be nothing less than man,
And, cheerful in submission,
Be happy as you can.

House-Cleaning Hints.

Mix some plaster of Paris in an old cup with cold water until a not too stiff paste is formed. Fill with it all the cracks and mend all the broken places in walls that are to be whitewashed. This will serve to preserve the walls in good condition, beside adding much to the beauty of their appearance. Mix but little of the plaster at a time, as it sets or hardens very quickly, and soon becomes unmanageable. Use a thin, broad-bladed knife to apply with, excepting where cracks are in the corner of a room, in which case you will be obliged to use your fingers.

For a good common whitewash, take a piece of stone lime as large as a child's head, having it new and entirely unslaked, and put it into an iron kettle that will hold a pailful. Pour over it a few quarts of boiling water at night; cover and let stand till morning; then fill up with water and set on the stove. Add a handful of salt, and stir occasionally till hot. Pour off into a pail, and if too thick, add more water. Allow it to become cool before using, as the smoke will strike through worse if used hot. For a nicer whitewash use Spanish white—about ten pounds for an ordinary room. Pour warm water over it, and let stand for a few hours. Melt four ounces of white glue in a little water and add.

To clean papered walls, tie a soft, dry cloth about a broom, and go over the paper, brushing and rubbing lightly on every part. To paper walls that have been whitewashed, wet the wall thoroughly with strong vinegar or alum water, and when dry, brush it all over hard with a stiff broom. Use a paste made of starch, moderately thick, and apply to the paper cold.

Save up your tea-grounds for a few days before house-cleaning time, then steep half an hour in a tin basin, strain, and use this tea for cleaning varnished wood-work and pictures and looking-glass frames. For cleaning white paint, take a small quantity of whiting on a damp flannel cloth, and rub lightly over the surface, rinsing with clear water, and wiping dry.

Use old tooth or nail-brushes for cleaning the corners of window-sash. If the bristles are worn out at the end, cut off the brush half way, or down to where the bristles are long and stiff. Old brushes are also excellent for cleaning smoky and greasy lamp-burners. Remove the wick, put the burner into a basin of hot suds, and scrub inside and

out with the brush. Afterward scour with fine coal ashes, rinse, wipe dry, and polish with a flannel rag. They will look equal to new. Tea-kettles or other tinware which have become blackened and dull from long use, should also be scoured with coal ashes, from which every bit of coal and coarse ashes have been sifted. Wash after in a good hot soapsuds, and wipe dry. Do not repeat the scouring often, but wash frequently in clean hot suds, with a clean soft cloth, and they will keep bright for a good length of time.

Cover work-tables with oil-cloth. It will save you much scraping and scouring. Cover pantry shelves also, or at least such of them as are most used. Stretch a piece of it back of your kitchen sink, as spatters are much more easily wiped from it than from paper or wall.

Never set ironware in the sink or on the work-table while cleaning it, nor yet on the stove, thus scorching your hands and face while scraping out. Even if you wash these things in an outside kitchen, do not set them on benches or tables there. It is untidy and makes a great deal of disagreeable and needless cleaning. Keep large squares of thick pasteboard hung convenient to slip under pots, kettles, stew dishes and spiders whenever you have occasion to set them down. You have no idea how much "crocking" of benches and tables it will save. Cut a small hole near one corner of the squares to hang up by, and when too much blackened burn up and replace with new; or the pasteboard may be covered with oil-cloth, in which case they can be washed at pleasure and used to an indefinite length of time.

To clean silver or plated ware, wet a soft cloth in kerosene, dip it in whiting, and rub the article all over with this; then wash in suds made of home-made soft-soap; wipe dry and polish with a chamois skin.

Old feather-beds and pillows may be greatly improved by putting them out on a thick, clean grass-plot, or better, on spreading clothes-bars, through a heavy rain, turning them during the time, so that both sides will become washed. Let them remain out till thoroughly dry, turning and shaking them up often, then beat with rods to lighten up the feathers. A good barrel and pounder are great aids in the washing of bedding. Make good warm suds in the barrel, and put in the quilts, one at a time, the best or lightest-colored first. If fearful of colors fading, make your first suds very salty, putting through second suds after; then take out in a tub of clear, slightly warm water, rinse, wring dry through the wringer, and hang upon the line. Turn and handle the bedding carefully, and pound gently so as not to break the quilting or tear and lump the cotton. Woolen blankets may also be pounded out more easily than they can be rubbed in a tub. Have an abundance of water, and it is imperative that it be soft and clear. Make suds of it with good old soft-soap, and not too strong. Have the suds as hot as you can hold your hand in. When pounded clean, wring out and lay loosely in a tub; pour boiling water over it, and let stand till moderately cool, pressing down into the water occasionally with the pounder. Put through the wringer and hang in a good breeze.

Apply a heavy coat of paint on kitchen or pantry floor; this saves the housekeeper a great deal of hard scrubbing. Renew wood-work frequently with fresh paint and varnish; these are great beautifiers, and will save in labor and time fully as much as they cost. A few shillings' worth applied to window and door screens before they are adjusted for the season, will add greatly to their appearance as well as to their durability.—*Susan Busby, in Country Gentleman.*

From Claribel.

Let us have an Annihilation ticket. I almost think it might win the day, for many a drinking man that cannot withstand a treat would be glad if there really was no such thing as liquor; but while he can get it (and he can) he will fall under its effects. I will vote, when ladies are allowed to vote, to have none of it manufactured or imported. That is all the question I want to vote upon.

One lady asking about childrens dresses, has received no consolation, I think the neatest, most durable dress, can be made of waterproof. Get a large pattern of gray or brown, something to wash nicely, and enough of it to make new sleeves when needed; cut some simple way, kilted skirts

are nice and warm; then over this make a plain apron buttoned around the neck, hollowed under the arms, and buttoned just below the waist behind; simply blind, or even hem them. You will find it almost no trouble to wash and iron them; keeps the dress clean, and looks nicely. Make about eight or ten of these, and you will be surprised to see how long that one dress will wear. It will also look much better than a gingham or print dress, that takes just as long to make and after two dressings does not look fit to wear to school. The girl, too, feels dressed up in her pretty school dress.

CLARIBEL.

Superstitions About Children.

A superstition used to exist that a child which did not cry when sprinkled in baptism would not live long. In the west of Scotland, according to James Napier, it was considered unlucky to name a child by any name before the rite of baptism was performed. When children seemed prematurely smart it was believed that they would not live long. Shakespeare puts this superstition into the mouth of Richard III. Bulwer mentions the tradition concerning children born open-handed, that they will be liberal and big-hearted. A character in one of Dekker's plays says: "I am a most wretched fellow; surely some left-handed priest christened me, I am so unlucky."

According to Irish and Scottish fairy superstitions, the elves, though in the main harmless, have the bad reputation of stealing children from the cradle and substituting for them changelings who bear resemblance to the stolen infants, but are ugly little creatures and never thrive. On such a theft of a female infant, who is carried to fairyland, but in the course of years returns to her parents, James Hogg founded his fine ballad of "Kilmeny" (Queen's Wake). In some parts of Scotland it is a popular notion among the lower classes that when a child is for the first time taken into the open air, the bearer of it should give something to eat to the first person met, otherwise the child will be unlucky. The gift is called "the bairn's piece." When a child was taken from its mother, and carried outside the bedroom for the first time after its birth, it was lucky to take it up-stairs, and unlucky to take it down-stairs. It was not considered lucky to carry a baby into a neighbor's house until the mother took it herself; and this it was unlucky for even her to do, until she had been to church.

It was considered unlucky for children to walk backwards while going on an errand. It was deemed unlucky to measure a baby; and if its nails were cut off before it was a year old, it would turn out a thief. It was unlucky for a boy to wear trousers made on a Friday, and to sweep dust over the feet of the girls would prevent them from getting husbands. In Hindostan, when a baby sneezes, the mother snaps her thumb and finger, and repeats aloud the name of one of her gods. When a child casts a tooth, in South Sweden, the tooth is thrown into the fire. In Switzerland it is carefully wrapped in paper and salt inclosed with it before it is thrown into the fire. In Herrick's time, it was regarded as a lucky omen to place a knife near a sleeping child. Good Friday and Easter Sunday were considered lucky days for changing the caps of children.

In the west of England, the fortunes of children are believed to be largely regulated by the day of the week on which they are born:

Monday's child is fair in the face,
Tuesday's child is full of grace,
Wednesday's child is full of woe,
Thursday's child has far to go,
Friday's child is loving and giving,
Saturday's child works hard for its living,
And a child that is born on Christmas day
Is fair and wise, good and gay.

Among some of the tribes of Africa, if two babies come to a family at the same time, they think it a dreadful thing. Nobody except the family can go into the tent where they were born, nor use any of the things in it. The twins are not allowed to play with other children, and the mother cannot talk to any one outside of the family. This is kept up for six years. If the babies live to be six years old, the restrictions are removed, and they are treated like other children.—*The Current.*

Onions are known to be ripe when a large share of the tops fall over. Pull, dry thoroughly, cut off the tops, and sell or store in a dry, cool place, spreading thinly.

Winter in Manitoba.

The snow outside our house was from six to ten feet deep from November to April. I tried to wear boots last November, and one of my feet froze. Moccasins, made by Indians, of moose-skin, are used instead of shoes to cover the feet, which are first cased in several pairs of stockings. For traveling on foot, snowshoes are best. Mittens supersede gloves during the winter, as, if the fingers are separated, they generally freeze.

We were forced to melt snow for all the water we used last winter. The cold was so intense that when melted snow-water was poured from the boiler into a pail, and taken at once across to the stable, the ice on it frequently had to be broken with a stick before the cattle could drink; it froze so hard whilst being carried a distance of some sixty yards in the open air. My husband would sometimes come in from a short visit to the stock-yard with his nose frozen; indeed, it is rather a common sight to see people partly frozen. The part affected turns as white as marble, and loses all feeling. Unless you see yourself in a glass, or are told of it, you are not conscious of being frozen. In this plight it is not best to go near a fire, as sudden thawing is very painful. People generally try friction, rubbing themselves with snow, or better still, with paraffine oil. Occasionally, when one is frozen and far from help, the part frozen, if an extremity, will snap off. My kitten's ears froze and broke off last winter, and a neighbor's pony lost its ears in the same way.

I was surprised when I first found the mustard freeze in my mustard-pot, which stood a foot from the kitchen stove-pipe and two feet above the stove, when there was a blazing fire all day and every day through the winter. Yet the mustard froze between every meal. Bread froze if left for half an hour in a room without a fire. I once left a pitcher full of milk in the kitchen all night, and next morning, on trying to move it, the pitcher fell to pieces and left the milk standing solid in its place. We could buy frozen milk by the pound, frozen so intensely that when I put a lump of it in a tin into the oven, or on top of the stove, the first part that melted would burn to the tin before the rest of it had thawed. I managed to melt it by first chopping the ice-milk into very small pieces. Clothes which had been washed froze before I could hang them on the line to dry. I used to leave them out two or three nights for the snow and frost to bleach, and they always needed thawing and drying again when they were brought indoors. Even after being damped and folded they would freeze together, and when I have been ironing the top of a pocket-handkerchief the lower part would freeze to the table, which was close by a roaring wood fire. Ironing under these conditions is rather slow work.

Such stories must sound almost incredible, except to those who, like myself, have witnessed the facts, though, of course, only in the most severe weather. A bearded Englishman who stayed with us last winter was often forced when he came indoors to thaw the icicles from his moustache, which froze to his beard and hindered him from talking to us. A pail of water left in the kitchen all night would freeze solid to the bottom before morning. This happened every time one was left for two months.

In such a climate every one who can afford it is dressed in fur. The Winnipeg policemen all dress in buffalo coats down to their heels in winter. The keenest wind cannot pierce them.

Winter is, of course, not equally severe throughout. Part of my description applies only to its colder half. But to a woman the most trying part of a winter in Manitoba is not its severity—for you live in a warm house—but its length. Snow lay on the ground last season for six months and a half, and the great lakes were frozen for the same period. This sounds almost unbearably tedious to English ears; and one's eyes grow very weary of the bare, blank whiteness, and long for something green to look at; yet the bright, clean, still frosts, with brilliant sunshine, glorious skies and moonlit, aurora-colored nights have great compensations of their own.—*X. H. B.*

The apple-growing section of Western New York is reckoning on harvesting a crop of 4,000,000 barrels of apples this year. The standard apple barrel is 100 quarts.

Consumptives, call on your druggist and get a free Trial Bottle of Dr. King's New Discovery.

The Young Folks.

Lifted Over.

As tender mothers guiding baby steps,
Where places come at which the tiny feet
Would trip, lift up the little ones in arms
Of love, and set them down beyond the
harm,
So did our Father watch the precious boy,
Led o'er the stones by me, who stumbled of
Myself, but strove to help my darling on;
He saw the sweet limbs faltering, and saw
Rough ways before us, where my arms would
fail;
So reached from heaven, and lifting the dear
child,
Who smiled in leaving me, he put him down,
Beyond all hurt, beyond my sight, and bade
Him wait for me! Shall I not then be glad,
And, thanking God, press on to overtake?
—Helen Hunt Jackson.

CAUGHT IN THE CANON.

Perilous Straits of a Rio Grande Train in the Royal Gorge.

Within the past week the inhabitants of the mining districts located about Leadville and further up in the region of the clouds have received a mild and generous touch of nature which they call delightful summer weather. There is a hazy, half-way geniality in the atmosphere as long as the sun shines. At night fires are lighted for comfort. This is the beginning of summer there, and with the increasing temperature the snow begins to melt away, forming thousands of little brooklets which ripple down the mountain sides and course through the valley till they reach the bosom of the Arkansas river. Within the inclosure of mountain ranges which surround Leadville and rise so many thousand feet above it, that the city seems to be in the shadow of these stupendous heights, the Arkansas river begins its journey to the Southern seas. Ordinarily it is a placid stream, its even way disturbed only by the tortuous route and jagged rocks of the Grand canon. But this recent small touch of summer sunshine, so mild that a visitor in Leadville would feel half chilly under its influence, has converted the stream into a raging cataract. As the snows continue to melt the waters rush down the mountain side, adding their strength to the growing torrent. The water in the canon was never known to be as high as it has been within the past week.

The Denver & Rio Grande passenger train which left Leadville Tuesday evening at 7 o'clock was delayed nine hours. Upon reaching Salida it was ascertained that there was a great flood in the Royal gorge. The Leadville-bound train two hours before had passed safely through the stream, which was running eighteen inches over the track. But the stream was rising rapidly and every moment becoming more wild and threatening. Under instructions, the Denver-bound train remained till daylight in Salida. At Parkdale there was another delay, and then the train went gliding down through the canon. All the way down the water came rushing, roaring and splashing against the rocks, bringing huge waves that twisted the driftwood and other debris of the flood against the solid rock walls of the canon, and brought them almost beneath the wheels of the cars. There was a cautious approach to the Royal gorge. Three hundred feet above the little bridge which spans the narrow chasm the track was covered with water. A hundred feet ahead of the cars the waters splashed against the rocky walls two feet above the road-bed. Here the train was stopped. Fifty feet further was the danger point. Here the water was a foot deeper still, in the narrows between the smooth and massive solid rocks. By instruction from Mr. Osborn, the roadmaster, the train moved back to dry ground, and the passengers drew a "long breath of relief."

A second effort was made to swim the flood. The engine approached nearer the awful cataract and again backed out. Upon dry ground again there was a pause and painful suspense. The passengers and the train men were willing to make another trial. Every minute the flood was swelling and what might be done must be done quickly.

In the meantime a long freight train, which could not possibly back out of the difficulty, had glided down and stopped a few

feet in rear of the sleeper. Then again the train crept along through the surging waters. The pilot of the locomotive dropped down into the deepest water. It had reached the cataract of the Royal gorge. The water rose six inches above the axles of the drivers. There was a sudden stop. "We cannot pass," said a railroad man who was a passenger. "Impossible," said another. "I must get through to-day," said one, "my business compels me." "Oh," sighed a frightened man of nervous temperament, "if I had only taken the South Park, as I intended in the first place to do, I would be safe." "Suppose," said an angular, dyspeptic-looking man of middle age, "we should be washed out over on the other side and should turn over?" "Den ve vould all pe angels," replied a round and ruddy-faced Teuton, who somewhat resembled Charles Reick, of Jewell Park. "All sorts of angels," chimed in another unsanctified creature, as he glanced around upon the group of pale faces. For the first time during the thrilling period of half an hour, there was a smile upon the lips of the anxious and agonizing passengers.

The train started forward again. Then stern men looked thoughtful and began to speculate on the chances of life and death. The platforms were crowded with men and women. Half the number clutched to the railing on the riverside, which was the side of certain death. The other half clung to the railings next to the solid walls of the chasm, where there was only the possibility of life, and at every foot of movement each looked into the face of his neighbor to give or receive some word of encouragement.

While all these things were going on in the train among the passengers, the officers were making assurance doubly sure. Roadmaster Osborn, a man of great courage, descended from the pilot of the engine, and with a strong pole braced himself against the current and the waves, feeling his way for every step, and at the same time feeling his way along the track to be assured that the rails were there and in place. Conductor Graham and the rest of his train men took their positions on the pilot with poles to clear the track of driftwood, for, in the terrible cataract which swept down in this narrow space, confined by awful and stupendous heights, where without the sound of raging waters the echo of a whisper might be heard; in the midst of all this turmoil and terrific force, there came branches of trees, logs and cross-ties which were swept by a whirlpool across the road. Engineer Swisher was cautious and sensible. He let his engine creep down deeper and deeper into the water, every five feet bringing the train to a standstill. But now the worst had come. The train was swimming like a boat, as it were, in the deepest waters—like a ship in a storm, with fretful waves lashing against its sides. The engine had glided into water covering its axles and rising six inches above them. Down went the coaches till the steps sank in the water. Here was the crisis. It was not the tide alone. The train and its human cargo came in the midst of a raging cataract, like the ripples of Niagara, like the terrors of Lodore, where the waters plunged and tumbled and swirled about, where the waves rolled and broke and splashed against the granite walls, as with the threat of destruction. Inch by inch the train crept along through the terrible place, and at last glided out upon dry ground.

"Saved!" cried a nervous passenger. "I thought we'd get through, but it was an awful close call!" said another. "There was one thing saved us," said a railroad man, "and that was that the track in the gorge is laid on solid rock. We had the rock of ages to cling to. If we had gone down we would have hid ourselves in the Rock of Ages, sure enough."

There was a singular character on that train. He was a German philosopher. Before reaching the flood he was absorbed in a book. During the three attempts to pass through the water there was a movement of every person on the train through the cars to and fro, except by him. This stolid Teuton sat firmly in his seat, his eyes upon the book, without looking at the people, glancing out the window or seeming to be conscious of the situation.—Opinion.

The Arabs in the desert, we are told, are only allowed to drink once in two days, and water is their only beverage. What splendid Prohibitionists they would make.

Underground Forests.

WOODBINE, N. J., Sept. 8.—About four miles south of this place, on the Cape May peninsula, lies the straggling and dingy village of Dennisville. Many of its 3,000 inhabitants live in small cottages, almost huts, on a narrow road between two great swamps. These swamps cover an area of more than ten square miles, and though the desolate waste appears valueless for any industrial purpose, it was long ago discovered to contain the means of comfortable support for the village that had sprung up in its midst. Slow changes through long periods of time, with perhaps a sudden catastrophe, have submerged countless gigantic trees, which, when unearthed, exhibit surprising soundness, and are in a condition to be made at once into a marketable commodity. These buried trees are the *Cupressus Thyoides senaperivirens* of the botanists, or the evergreen white cypress or cedar; and on parts of this immense swamp are now growing large trees of the same species, their roots imbedded in several feet of mould, the most which must have been deposited on the prostrate forest before these new trees began to grow.

But the exhumers of saw-logs think little of geological theories when all his physical powers and the shrewdness gained by experience must be put forth in plying his unique avocation. He starts out with sharpened iron rod, and prodding through the soft earth or mud soon meets with the object of his search, generally several feet below the surface. By careful probing he easily determines whether it will be suitable for his purpose. An excavation is begun directly over the desired tree by sawing through the roots and mud, in the same manner but hardly with the same ease as in cutting ice. After digging a trench and cutting away the the useless top and roots, the log, often of enormous girth, is loosened and rises by its own buoyancy to the surface of the water which soon nearly fills the ditch. The logs thus procured are generally sawn into two-foot lengths and split into shingles and staves. This laborious industry, requiring great perseverance, experience and skill, has flourished for seventy years past, though always prosecuted under great disadvantages. The treacherous surface of the swamp makes machinery inapplicable, and long intervals of water and mud must be bridged over with boughs and bark, before the shingles can be conveyed to market.

As the largest and best trees and those lying near the surface are sought for, and as the impracticability of drainage would make any attempt to dig for the next lower stratum of trees unprofitable, it may be foreseen that these persistent delvers in the sunken forests of this locality will in the next generation find their occupation gone, as seems to be the case already in the much larger though more nearly exhausted cypress swamp across the bay in the lower part of Delaware and extending over the border into Maryland. This Delaware swamp covers and partly underlies an area of twenty-five square miles. The continued dryness of some summers occasionally, however, induce the veteran shingle-hunters to recommence their search for logs; the large cracks in the dried earth almost certainly indicating the locality of a suitable tree. In former years enormous stacks of shingles were made in this swamp, and besides covering most of the buildings in Sussex county—before a railroad was built—myriads were teamed to Milford and other places and shipped to dealers in all the large cities of adjoining States. Directly over large portions of this swamp are many trees of large size growing in a thick bed of earth, on the layer of fallen trees beneath. Since the sale and partition of this region some farms have been extended to long distances over this area. Forest fires are generally supposed to burn above ground, but here the dwellers on the borders of this magazine of combustibles sometimes discover the swamps to be on fire—not only smouldering but fiercely raging, so that the surprised farmer finds that in a single night the consuming element has formed a fiery cavern under his corn field, and bursting through has left a hole large enough to swallow his barn. In rambling through this dismal region when the hidden trees are burning on has the best opportunity of estimating the immense deposits of vegetable matter that have accumulated. The bright glow of embers sometimes reveals a lurid cavern fifteen or twenty feet deep, of enormous extent, with

the fire spreading in all directions, and occasionally eating through the surface and looking like a young volcano, engulfing one of the abandoned huts of the shingle hunters.

About Dogs and Monkeys.

The monkey is generally supposed most nearly to resemble man, but there are points in which the dog comes closer to us. For example, restlessness of mind. A dog requires excitement, and has a craving for the interest of outward objects. Feed him well, and shut him up alone in an apartment, and he will suffer under ennui like a fine gentleman, and become troubled and uneasy for want of occupation and amusement. If the window be left open, he will find resource in looking out of it, and will divert himself with the passing scene, and take a lively concern in the doings of the other dogs in the street. This is a pleasure which we trace in no other animals, and it is not, indeed, observable in all dogs. Newfoundland dogs appear peculiarly prone to it. They are eminently social. We shall never forget a Newfoundland dog belonging to a provision dealer, with whom we had a street acquaintance. It was his business to go about in the wagon, as a protector of the good things therein, and as he rode along streets, most manifest and most lively was the interest he took in the moving scene. No duchess in the land ever lounged in her carriage with a more luxurious or a more graceful air than our friend exhibited in the wagon. His favorite attitude was lying with his fore-paws dangling over the front, and his great head lolled on them. Any long stoppage, we remarked, made him uneasy; and he displayed his pleasure when his carriage was again in motion, by dancing from side to side like a parrot on its perch, and uttering a quick bark of satisfaction.

The curiosity of dogs is another quality which they have in common with our kind. No matter how fatigued a dog may be, if he is taken into a strange apartment, he will not lie down to rest until he has taken a survey of the room and smelt of every article in it. Dogs, as we have before attempted to prove, are rogues and cheats like men, and they are also murderers, with a consciousness of their criminality. In packs of hounds it is not very uncommon to find a dog killed by his comrades, and we once heard a fox-hunter describe his visit to a kennel after one of these assassinations. Half a dozen of the long-eared bow-wows were squatting on their haunches in one corner with particularly grave faces, which meant to speak an innocence that was unluckily belied by the spots of blood on their coats. While he was examining the body of the deceased, they kept yawning and licking their chops with their long red tongues as if they had no manner of concern in what was going on; but it was evident that they were by no means easy in their minds. The dogs which bore no marks of the fray, and which were presumed to be innocent, moved about as usual with quite a different air.

Southey once wrote an elaborate article, showing how dogs syllogized, displaying the reasoning faculty of human beings. Among other illustrations he gave was that of a dog who loses sight of his master, and follows by scent till the road branches into three; he smells at the first, and at the second, and then, without smelling farther, gallops along the third.

In roguery, the monkey resembles the human species more closely than the dog. Let any one visit the monkeys in a menagerie at feeding time, and he might imagine himself at the Stock Exchange of New York, so universal and unprofitable is their system of overreaching. Outside the bars of each monkey's cage, and in the very center, is a pan which is filled with his appointed mess, and it comes to pass that no monkey eats his own supper. Each endeavors to rob his neighbor, and in the attempt, leaving his own unguarded, he is himself robbed by his neighbor. As in committing the theft they are obliged to stretch out their arms to the full extent, and with an awkward inclination, half the spoil is spilt by the way, and the whole simial society consequently loses half its meal by its roguery. The speculative man is not more foolish. The cunning strokes of trade are not more impolitic.—*American Cultivator*.

FAMILY PORTRAITS. All kinds of pictures in CRAYON, INK, WATER COLORS or OIL. Send stamp for price-list. J. A. SHEPARD, Lakeside Bldg. Chicago.

THE KANSAS FARMER

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KANSAS FARMER CO.

H. C. DeMOTTE, President
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A person may have a copy for himself one year free, by sending us four names besides his own, and five dollars; or, ten names, besides his own, and ten dollars.

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TO SUBSCRIBERS:

The letter "d" represents Vol. XXII (1884) on our subscription books. When the number following this letter (d), on the label of your paper, corresponds with the number of the FARMER (which you will find to the left of date line on first page), your subscription expires with that issue of the paper. For instance: If "d 52" appears on the label, your time expires with No. 52 of this volume (1884). Then your paper will be discontinued. You should renew at once.

The KANSAS FARMER till New Year for 25 cents.

It is time that late potatoes were lifted in every part of the State.

The general business situation is about the same as it was when last reported.

It is admitted by all well informed persons that General Butler's strength is increasing every day.

A serious drought is reported in southern Tennessee and northern Alabama. But little rain has fallen in that region since July.

We have two papers by experienced persons on Poultry. One of them will appear in our next issue; the other will follow the next week.

The State election in Ohio took place yesterday, but our paper was in press before the voting was completed, so that we cannot give the result.

Governor Sheldon, of New Mexico, in his report to the President calls attention to the conflict between cattle men and sheep men in the Territory, and he recommends legislation on the subject.

A fast freight line has been established by the St. Louis & San Francisco and the Atchison, Topeka & Santa Fe companies. The time to San Francisco is to be six and a half days from Kansas City, seven days from St. Louis, and eight days from Chicago.

We are receiving a good many names of persons for whom sample copies of the FARMER are asked. Our friends can help us in this way a great deal. Everybody that sees the paper likes it; hence these sample copies are all so much good seed sown in good ground.

War has actually begun between France and China, though but little fighting has been done up to date. Two short engagements have taken place, the Chinese troops giving way in both instances. The war is on account of the French occupation of Tonquin—formerly Chinese territory.

Some of the closed iron establishments in Pennsylvania are opening up again. It is generally believed that wages will be a little lower next year than they were last, because the demand for iron manufactures is not as good as it was last year. The pressure is felt in England as much as it is here.

Taking Care of Winter Apples.

Fruit of any kind that is intended for keeping a long time ought not to be bruised in handling. Wherever the surface receives a sudden blow or any local pressure that changes the natural condition, that particular place soon becomes discolored, and decay sets in at once. One damaged and decaying apple will injure a great many of its fellows. If the decaying of one does not hasten a similar condition in others close to it, we all know that it spoils their taste and destroys that delicate fragrance which so much distinguishes sound and healthy apples. If clean, sound, well preserved apples are removed from a barrel or bin and compared in smell and taste with others that are partly rotten, the difference will be recognized without any argument. There is a staleness, sourness, a mouldiness about the damaged fruit that it is impossible to get rid of. They are like bad habits in men. They spoil the whole individual and affect more or less all their neighbors.

Apples intended for winter keeping ought not to be shaken from the trees unless the ground about the tree is heavily coated with grass, or unless hay or straw are first laid under the branches. And then, the shaking should be light so as to let only a few apples fall at one shaking, the object being to prevent the apples from falling against one another, and thus becoming bruised. But there is a valid objection to shaking the tree, no matter what precautions are taken. In falling, some of the apples will drop against limbs and become torn or bruised.

The only safe way to secure the fruit in good condition for preservation is to remove it by hand, one apple at a time. Have two ladders, one longer than the other, using the longer one for the outside and higher branches, the shorter one for the inner and lower ones. The picker will provide himself with a sack suspended about his shoulders. When he takes hold of one apple, let it be on the under side raising it a little so as to remove the stem from the limb and not from the apple. Then deposit it quietly in the sack. When the sack is filled, or is full enough to empty, it may be let down with a light rope, if the picker so prefers, or if it is better for any other reason.

It is not best to gather winter apples when they are wet from rain or dew. They ought to be perfectly dry, and as soon as possible after gathering they ought to be laid on a floor in some dry, well ventilated room, as an upper floor in a barn or wagon shed. And when they are housed for the winter it ought to be in a dry and cool place. A damp cellar is not a good store-house for apples, nor, indeed, for any kind of fruit or vegetables. But it often happens that a cellar is the only place one has for these things. In such case, there ought to be a frame-work set up and lined with clean, bright straw or hay. This acts as an absorbent to take up moisture, and fruit will come out of it in much better condition than it will if left continually exposed to the damp odors of the cellar. Keep it covered all the time with the straw.

When pits, or out-door cellars are used, first lay clean straw or hay on the ground, then place the apples gently on the straw in a long pile neatly topped out, cover with straw or hay, over which throw six or eight inches of earth, and cover the earth with a coating of thatch, or, simply, long straw well combed down so as to carry off the rain as it falls. This will keep the fruit dry. If, after pitting, the weather should be too warm for good fruit keeping, make a few small openings on opposite sides of the ridge and near the bottom. Let these remain

open during the day, and close them at night. Let them be closed all the time in cold weather.

In preparing the pit, do not dig a hole. Let the apples lie above and not below the surface. The earth for covering will be taken out close to the pit, so that when done, the pit will descend regularly from the top down into the surrounding ditch. Then when rain falls, the straw covering will carry the water down from the pit into the ditch. Let the ditch be made even and regular on the bottom and outside so that there will not be any little hollows to hold water. And as soon as the pit is completed and the ditch dressed up, then make an outlet from one end or side of the ditch to act as a drain to carry off all water that falls into the ditch. That will keep the pit dry and the fruit will do well.

When it is time to begin using the apples, open a hole on the south side at the bottom and near the lower end of the pit. Remove by inserting the hand; and as soon as the apples are removed within easy reach of the hand, fill the opening with straw and re-cover, and open another hole on the opposite side, and clean out the pit of what fruit remains at that end. Then fill in the empty space with straw, and begin again, a little further along, on the south side. This is the method when the apples are being used only for family purposes. When the whole pit is to be removed for sale, then, the better way is to begin at one end by removing the outside covering and then take off enough of top earth to get to the straw next the apples, then pull off with a strong rake, or push or lift off with a fork.

Saving Potatoes.

Potatoes ought not to be left in the ground after they have their full growth. They are in constant danger from rains and cold. The time to harvest any crop is when it is ripe—before rather than after. If potatoes are left in the ground too long, they may take on the "second growth," or a cold wave may come along and freeze them. Either case is bad. The writer of this once lost a crop of very good potatoes by freezing. They had been left in the ground just one day too long, and their owner who had been bragging a good deal about his fine potatoes, was compelled to buy from better farmers what he needed for his family use the next year.

The matter of removing potatoes from the ground in time, is particularly important in Kansas. Changes of temperature from warm to cold, are frequently sudden here. Last week, one day at noon, women carried parasols and men walked the streets in shirt sleeves. At sunset overcoats were comfortable, and the next morning showed smoke from first fires of the fall. Every person living in Kansas has observed similar changes. The first snow of the season, nearly always comes when we did not expect it twelve hours before. Sometimes the temperature at these early seasons is not very low, and sometimes it is low enough to injure potatoes that are lying near the surface of the ground. At any rate it is not good farming to leave potatoes in the ground after they are ready to be removed.

And when they are lifted, it ought to be done, if possible, when the ground is dry, so that but little earth will stick to them. They ought to be handled carefully, so as not to be bruised if they are to be kept for winter use. They do not require as tender handling as apples do, because they do not bruise so easily. But due care should be taken that they are not injured in this way, because rot sets in first at the bruised spots. After being taken out of the ground they ought not to lie in the sun long, and

they ought not to lie on the ground over night. They should be placed on a dry and covered floor in piles not too deep for perfect ventilation, and they must be protected from frost. It is not well in Kansas to put potatoes away for the winter very early, because, although we have occasionally frosty days, the general condition of the atmosphere in fall and early winter is mild—too warm for large quantities of potatoes that are deeply covered. It is better to keep them until December in some safe place where they are dry and uncovered, or covered but lightly, so as to have the benefit of a free circulation of fresh air. But they must be kept out of the sunshine, and they must also be protected thoroughly from freezing. A good way is to lay them on straw on a barn or shed floor—wood, or, if earth, it must be well drained and dry, and cover lightly with wheat or oat straw. The object is to keep the potatoes dry and cool and free from danger of freezing.

When winter comes so that we need not expect any high temperature for a month or two, then put them away for winter. As to method of winter care, we refer the reader to our article in another place in this issue on "Taking Care of Winter Apples." The suggestions there made concerning the care of winter apples after gathering are applicable to potatoes.

The Centralia Fair.

Centralia is a neat looking town in the southern part of Nemaha county in a good farming region. The farmers of that township and the people in the town united for the purpose of holding a fair. The time agreed upon was the 9th and 10th days of the present month.

Upon special invitation the editor of this paper was present an hour or two on the 9th. He was very kindly received by the officers and people, and takes this method of thanking them for their many attentions and courtesies.

It was not a close corporation, but a voluntary coming together of the people to get better acquainted with one another and to show and see what they were doing. Mr. A. C. Durland was selected to act as president, Henry Lohmuller, vice president, L. L. Robinson, secretary, and A. L. Coleman, treasurer.

We congratulate the people there upon their condition as shown by the exhibits.

Grains of different kinds and vegetables were very good. Corn, potatoes and beets were specially good. Fruit of superior quality and size was spread out on a long table. The orchards in that township are not more than a dozen years old from planting, and the fruit shown at this fair was fully equal to the best fruit exhibited in the State fair a month ago.

The ladies had done their part as they always do. They had a tastefully arranged display of choice house and garden plants, and a good variety of needle and crochet work. There were some beautiful specimens in this department. One crazy quilt was shown that was made by a lady who has passed the line of three score years and ten allotted to average mortals.

We commend the spirit of the Centralia people to farmers everywhere in the State. Here was a home institution, not overridden by jockeys and gamblers. The people themselves did all the work, and it was cleanly and well done. The expense was but a trifle and the good done will not pass away with the fair. The people deserve much credit for their enterprise, and the KANSAS FARMER wishes them all many more years of prosperous life in which to work and grow.

Gossip About Stock.

The frosts of last week did not damage stock interests. No Texas fever after frost.

J. T. Wrinkle, Plattsburg, Mo., bought the sweepstakes boar at the St. Louis Fair, and will be used at the head of his herd.

The most noted breeder of Chester White swine in Ohio has a card in this week's issue. The name of S. H. Todd, Wakeman, Ohio, is familiar.

Parties interested in the purchase of representative and first-class Duroc Jersey swine should consult the card of G. W. Stoner, LaPlace, Ill.

Dairymen and poultry raisers should examine the card of the "Locust Retreat Farm," Bacon & Campbell, proprietors, St. Louis county, Mo.

Any person desiring to know the rules and regulations of the Chicago Fat Stock Show, should write to the Secretary of the State Board of Agriculture, Springfield, Ill.

Sheep men having stock for sale may find it to their interest to carefully examine our Two-cent Column on the 16th page. For cheap and effective advertising this column has no superior.

Stewart & Boyle, Wichita, report the sale of eight Poland China boars last week, and state they have quite a number of good sows bred to the premium boars, "Kentucky King" and "Challenge," for sale.

W. W. Waltmire, Carbondale, Kas., writes us to announce that he will sell thirteen unrecorded Short-horns at the sale to be made at the Topeka fair grounds, Oct. 22, at the time of the combination Short-horn sale.

C. S. Eicholtz, Wichita, Kas., sold at public sale a draft of twenty-eight Short-horns from the Oakwood Herd, making an average of over \$100 each. Six bulls averaged \$121.66 and twenty-two cows and heifers averaged \$100.

The name of J. E. Guild, in Kansas, is a sufficient guaranty in case of stock. He is going to sell some Short-horns pretty soon. Look up his advertisement in this issue of the FARMER, and then attend the sale if you want to buy any of that class of animals.

Don't forget the first annual combination Short-horn sale to be made at the State Fair grounds at Topeka, Oct. 22. Messrs. Guild & Waltmire make a very desirable offering of forty head of good and useful cattle. Let every farmer and breeder that can be present come.

We have received the sale catalogue of Short-horn cattle to be sold by S. E. Ward & Son at the Kansas City Fat Stock Show, Oct. 30. The catalogue represents the strains of Short-horns that are very much sought after by breeders. W. T. Hearne, of Lee's Summit, Mo., also sells a draft from his herd at the same time and place. Send for their catalogues. See ads.

The report of the Chief Inspector of Stock of New South Wales, made from the reports of thirty-five sub-inspectors, shows that in fourteen days they made 209 inspections, and found over 1,000,000 acres infested with rabbits, which 210 men are employed to destroy. Nearly \$1,500,000 has been spent by the government of three colonies and immense sums by private persons, but little headway seems to be made.

The Premium Merino Flock of R. T. McCulley, Lee's Summit, Mo., again swept off the best premiums at the great St. Louis Fair, winning eight out of the fifteen premiums offered for their breed of sheep, including the \$100 prize for best flock. They have in three years at this fair won \$700 out of the \$900 offered. This in connection with their great success at other fairs has induced them to name their flock the "Premium Flock of Merinos." They expect to go to the World's Fair at New Orleans with this flock.

It is generally conceded that Col. Robert Holloway, Alexis, Ill., is one of the largest representative breeders and importers of the famous Clydesdale horse. This year he made the following remarkable record at the leading fairs: At the Illinois State Fair at Chicago he won twenty-eight premiums, in some of the classes winning first, second and third prizes, including both of the grand herd prizes for stallion and five mares. At the St. Louis Fair last week he exhibited in every class, winning a prize in each class, including all the first premiums but two and all the prizes offered for Clydesdales except

four. In this issue he offers 175 head for sale.

The managers of the Kansas City Fat Stock Show offer premiums for Holstein cattle ranging from \$75 down to \$10.

October 24th is the date for an important cattle sale near Topeka by Messrs. Benton & Case. 175 cattle are offered. See advertisement on page 16.

The most important Short-horn sale of the present year will be that of the Inter-State Short-horn Breeders' Association of Missouri and Kansas, to be held at River View Park, Kansas City, Oct. 28 and 29, during the Fat Stock Show. The offerings are required to be representative specimens of the Short-horn breed; that is, they are to be examples of what Short-horns really are in weight, fineness of form and beauty of make-up, as well as purity of pedigree. Some of them we have seen, and we can assure the enterprising breeders of the West that here is their opportunity to add new blood to their herds that will tell in their improvement for all the future.

While some people in America call all horses imported from France Normans, it is a fact that there is no breed in France called by that name by the French people; the name Norman, therefore, is purely American. The principal breeds of France are known as Percherons and Boulonnais. The Percherons are the most highly prized of all French races, and all departments of France go to the Perche for stallions to improve their local breeds. The Percheron Stud Book of France is published under the authority of the French Government and admits only animals of pure Percheron origin and birth, established by their pedigrees and the pedigrees of their ancestors for generations. The fact that no recorded pedigrees can be furnished with any of the more common breeds of France, explains the eagerness of many importers in insisting that all horses imported from France are alike, and that pedigree are useless.

It is a well-known fact that what a man gives for a horse over from \$500 to \$800—the price of a good grade—is paid for purity of blood; and where the seller is not able to give the recorded pedigree of the animal sold as evidence of additional value, he has no right to ask it. With these facts before him no intelligent man will buy a horse imported from France unless he is recorded with his pedigree in full in the Stud Book in France, and the importer furnishes with his bill of sale the French certificate of registration, as this is his only guarantee of safety, a large number of horses of unknown blood being imported to this country and sold as pure-bred.

A Sample Copy.

We have a letter from a friend who happened to see a sample copy of our paper. We copy what he says by way of showing how quickly good seed takes root when it is sown on good ground. The writer says:

Have just run upon a sample number of the KANSAS FARMER of August 20 left at Bismarck fair for free distribution, in which you offer the paper till New Year's '85 for 40 cents. If you can send me all the issues from that date will gladly forward the money. This is the first number I have seen. I like it. My wife likes it and must have it. On account of some articles likely to be continued would like the paper without interruption from date of August 20. If this is a fair specimen think I could get club easily.

We hope our friends will aid us what they can without special trouble by sending us names and postoffice address of persons who do not take the KANSAS FARMER and who might be persuaded to do so by seeing a copy of it. We send a sample copy to any person who desires to see the paper. When you send the name, please state that it is for a sample copy of the FARMER. If the name only appears, we would not know what it means. We are sending out a great many copies now to persons who are not subscribers, and we are getting a good many names of persons who want to try it to the end of the year.

Inquiries Answered.

ROOT GRAFTING.—Will you please to give through the columns of the FARMER the *modus operandi* of root grafting, time to cut scions, time to graft, and also how to proceed after grafting?

—The cion is a bit of a branch of the previous year's growth, cut to three or four inches in length. It ought to be cut close beyond a bud at both ends. It must be taken from a healthy tree and from a perfectly matured branch. It is better to cut from the top branches of a bearing tree. They may be selected and removed any time after the leaves fall, and are bound together in little bundles and buried in sand in a cold and dry place until needed for use. A good place to bury them is on the north side of a house or wall, and have the ground thoroughly drained. They must be kept in perfect condition so as not to become dry and wilted. Seedling roots are used. They are long, running down, with a few little side roots. These are removed and the tap root cut at the collar; that is, the place where the root and stem are distinguished. Cut the root about four inches long from the collar, and wash it clean. Use two knives, one for the rougher and dirtier work, the other for the grafting process. Have this one sharp, with a smooth, straight edge. For grafting, cut upwards a slant shave off the upper part of the root, so as to have a smooth straight face about three-fourths of an inch long, coming out nearly at the bark on the side opposite where the blade was started in. It is well, then, to cut a notch in the face cross-wise, forming a lip or shoulder. Cut the upper end off square. Do all this cutting, straight, true and smooth. Prepare the cion so as to fit the root cuts neatly. The lip or shoulder is to hold the pieces firmly in place, and prevent their slipping. Cut the cion so that the base of the lower bud will come in contact with the root. Fit the cion on the root carefully, and see that the inner bark of both pieces comes together exactly on one side of the graft; then close up the cuts with grafting wax, and wrap with grafting cloth securely. Grafting wax is made of resin, 2 lbs., beeswax 1½ lbs., raw linseed oil 3 gills. Grafting cloth is made by soaking cotton cloth, thin muslin or calico, in the grafting wax or composition when hot; or it may be applied with a brush. Paper is just as good. Cut or tear into narrow strips and wind around the graft. Planting root grafts is done by the use of a dibble—a pointed stick, say about eighteen inches long, the point being covered with an iron shoe. The iron is not necessary, but it works better than wood and lasts longer. It ought to be large enough to make a hole an inch or so in diameter at the top. Stretch a rope where the row is to be, then make holes with the dibble, set in the root and press the earth compactly together about it. If the trees are to be removed at one year's growth, set them about one foot apart; if they are to remain two years, set them at least eighteen inches apart in the row. If cultivation is to be done with horses, make the rows as far apart as corn rows; if by hand, they may be closer. Cultivate thoroughly, just as corn is worked. Keep the ground soft, level and perfectly clean. Remove all succors as they appear, and pinch off all lateral shoots that interfere with the growth of the stem. This is meant for the first year. After that, use good judgment as to pruning.

OUR CLUB RATES.

We respectfully ask attention of our readers and friends to our new club rates printed at the head of the first column of the 8th page of the paper. While the old price, \$1.50 a year, is maintained for single subscribers, it is sent for ONE DOLLAR A YEAR to members of clubs where five persons unite, and still less where eleven subscribers join.

We want to get a greatly increased subscription list. We are sending out a good paper. We want to make it better, and we want to get paid for it. One dollar a year is low enough for any good paper.

Persons not accustomed to receiving the paper may send in twenty-five cents and try it till the last of the year and then come in clubs. It does not matter when the club is sent; if you are already subscribers, the time will be extended a year beyond the time already paid for.

THE MARKETS.

By Telegraph, October 13, 1884.

STOCK MARKETS.

St. Louis.

HOGS Receipts 3,900, shipments 1,300. Market dull. Yorkers 4.90a5.20, packing 4.90a5.15, butchers 5.25a4.45.

CATTLE Receipts 1,400, shipments 1,000. Market steady. The offerings were mainly range cattle, the top grades of which were firm. Poor stuff was very dull. Exports 6.40a6.75, good to choice shipping 5.85a6.30, common to medium 4.50a5.50, Colorado steers 4.00a4.75, grass Texans and Indians 3.25a4.25.

SHEEP Receipts 900, shipments 300. Market steady; good grades firm. Common to medium 2.25a3.00, good to choice 3.25a3.75, extra 4.00, lambs 2.50a4.00, Texas 2.00a3.25.

Chicago.

The Drovers' Journal reports:

HOGS Receipts 20,000, shipments 8,000. Market was slow and weak and 10a15c lower. Rough packing 4.85a5.15, packing and shipping 5.20a5.70, light 4.60a5.35, skips and grassers 3.75a4.50.

CATTLE Receipts 12,000, shipments 3,000. The best fat natives were firm; all others are 15a20c lower. Exports 6.60a7.00 good to choice shipping 5.90a6.50, common to fair 4.00a5.60, Texas 3.40a4.10.

SHEEP Receipts 2,000, shipments 800. Market steady and firm. Inferior to fair 2.10a3.00, medium to good 3.00a4.50.

Kansas City.

CATTLE Receipts 4,807. Good natives were scarce and steady, and grass Texans were dull and 1a15c lower. Exports 6.00a6.40; good to choice shipping steers 5.65a5.90, common to medium 5.00a5.40, feeders 3.70a4.30, cows 2.60a3.25, grass Texas 2.80a3.25.

HOGS Receipts 3,931. The market was weak and 5a10c lower. Lows averaging 220 to 315 lbs sold at 4.85a5.30, bulk at 5.00a5.15.

SHEEP Receipts —. Market nominally unchanged. Fair to good muttons 3.00a3.25; common to medium 2.25a2.50.

PRODUCE MARKETS.

St. Louis.

WHEAT Lower, but fairly active. No. 2 red 77½a78½c cash, 77½a78c October, 79a80½c Nov, 81½a82½c Dec, 91½a91½c May.

CORN Opened firmer, but weakened and closed ½a¼c lower than Saturday. No. 2 mixed, 50a50½c cash and October.

OATS No. 2, 26½a26½c cash.

RYE Nothing done.

BARLEY Steady 60a75½ for prime to fancy.

Chicago.

WHEAT Lower. Market opened ½a¼c lower, fell ¼c with scarcely any reaction, and closed 13½c below Saturday. October 75a76½c, closing at 75c.

CORN Good demand and unsettled. Cash 56a56½c, Oct 56½a57½c.

OATS Cash 27a27½c.

RYE Easier at 54c.

BARLEY Dull at 62c.

FLAXSEED Firm at 1.35½.

Kansas City.

Price Current Reports:

WHEAT Received into elevators the past 48 hours 52,106 bus, withdrawn 38,961, in store 544,463. Wheat was the cheapest to day for the crop when Oct wheat was sold at 55½ and 55½c. A good deal of Nov wheat was sold ¼c lower at 57c. Dec was nominal and lower.

CORN Received into elevators the past 48 hours 11,589 bus, withdrawn 11,127, in store 54,778. Early deliveries of corn ruled firm to day, but the late ones were weak. No. 2 Mixed, cash 42c bid 43c asked. Oct first half 5 cars at 43c. Oct 5,000 bus at 39½c.

RYE No. 2 cash, no bids nor offerings. Oct 40½c bid, no offerings.

OATS No. 2 cash, 23½c bid, 24½c asked.

BUTTER The supply of butter from the country very light but quality so poor as to be almost unsalable.

We quote packed: Creamery, fancy fresh made..... 28a29 Creamery, choice " "..... 28a27 Choice dairy..... 18a20 Fair to good dairy..... 14a15 Storepacked table goods..... 14a15

EGGS Western buyers were in our market late Saturday and bought everything they could get and left orders to be filled out of to day's receipts. We quote at 17c and firm.

CHEESE We quote eastern out of store. Full cream: Young America 14c per lb; do twin flats 13c; do Cheddar 13c. Part skim: Young America 8a9c; flats 7½a8c; cheddar 7½a8c. Skims: Young America 6a7c; flats 5½a6c; Cheddar 5½a6c. APPLES Consignments of Missouri and Kansas choice to fancy 1.50a2.00 @ bbl, common to good 1.00a1.25 @. Home grown from wagons 35a50c per bus for shipping fruit.

POTATOES We quote home grown in a small way at 40a45c @ bus. Consignments in car loads. Early Rose 30c, White Neshannock 32a35c, Peach-blows 40c.

SWEET POTATOES Home grown 50c for red per bus; yellow 75c @ bus.

TURNIPS Home grown 35c per bus, by the wagon load.

SORGHUM We quote consignments in car loads: old dark 10a15c @ gal, new good 20a25c, do fancy syrups 35a40c.

In the Dairy.

More About Soiling.

The *Western Rural* is good authority on this subject. In a recent issue it replies to a correspondent thus:

An Iowa correspondent writes that a western agricultural journal that he reads, denounces soiling as a "barren idealism," and says that it speaks from experience. Perhaps the same journal might argue in the same way that an agricultural journal could not be successfully conducted. If men's failures, or at least some men's failures are to be allowed to settle the impracticability of methods, we are in a bad plight indeed. Soiling is perfectly practicable, and can be made thoroughly successful. To doubt it is evidence of knowing nothing at all about the subject. We have already cited instances in these columns, which have been a marked success, and not because—as one luminously wise three-by-six journal puts it—the men who tried it were rich. It makes no difference whether they were rich or poor as long as they could keep more cows upon a less number of acres—and keep them just as well—than can be kept on a larger number of acres by the common method of pasturing. We observe that one of our exchanges affirms that cows will not keep up the flow of milk under the soiling system. That is exquisite nonsense. We are not prepared to say that a cow will ordinarily give more milk under the system, because a cow usually will give a full quantity of milk upon good pasture. But the conditions under soiling are more favorable to milk production than they are under the common system, and a cow will give more milk with soiling on a less amount of food than she will on pasture. There is no disgrace at all in being ignorant of what soiling will do, for it is a subject that has received very little general attention. But it is highly absurd to pronounce the system a failure after the careful experiments that have been made. We do not need to go back to Mr. Quincy's time to learn what soiling will do. Some of the most experienced men of our times are earnest advocates of the system. Among them may be numbered Louis F. Allen. Three experiments have been described by him of keeping animals upon a quarter acre of green clover. First he kept four horses, equal to about twelve cows, fifteen days on that quarter of an acre. Second, he kept six cows and five horses on a quarter of an acre for fourteen days, and third, he kept eleven cows for sixteen days. The clover was cut only once. In all three of these experiments the tax upon the quarter of an acre was about what it would be if a cow was fed through the pasturing season. These experiments were upon land that was in the very best condition, and the clover was most luxuriant. It must be admitted that ordinarily these results are better than can be achieved. But it shows what can be done all the same under any circumstances.

But Mr. Allen conducted experiments upon a larger scale. He selected stock that would be considered equal to about thirty-five cows, and soiled it from the 20th of May to the 1st of December. He did not measure the land from which the grass was taken, or rather grass, oats and some corn, for these were all fed—but after soiling this stock through the season named, he had a surplus of sixty-five tons of hay. He says: "Now had those animals been pastured upon those hundred acres, nothing would have remained, and the food would have been insufficient in the driest part of the season. He says that at that time the surplus would have purchased twenty-seven head of cattle like those

he had been feeding and one horse. Soiling certainly paid then, did it not? And if so then, why not now? We admit that wages are higher now than at the time when these experiments were tried—double in fact. But that will leave a very handsome margin still. The actual expense of labor in soiling thirty-five head of cattle would to-day not be over two hundred dollars at the outside, and now if the saving was in cash, \$835.75—as it was in his case after deducting every possible expense—the net profits of the system now would be at least five hundred dollars, after deducting the expense of labor, the expense of saving the hay, and every other expense. If it were true that the cows gave less milk, here is enough to cover the loss of considerable milk. But the aggregate profits are not yet reached. In his case he saved a hundred dollars' worth of hay in the very best of condition. Of course all of this would not have been lost, if the animals were on pasture, but a good deal of it would have been.

There is positively no argument against soiling. All intelligent experience shows that animals that are soiled do as well in every respect as those that are pastured. Their health is just as good. Their growth is just as satisfactory, and if milch cows, their yield of milk is just as good, as when on pasture. Prof. Stewart calls especial attention to this fact in his experiments. Mr. Allen does the same thing. Mr. Allen found that the animals that were soiled did better than those that were pastured. So far as milk is concerned his experience showed better than we have ever claimed. He says that a cow that is soiled will average one-tenth more milk than one that is pastured. If pasture was good and plentiful through the entire season we do not think that this would be true. But then it is not as a rule; and when it is not, we have not the slightest doubt that the soiled cow would give the most. It does not answer for a man to set his own opinions against such facts as careful experiments by practical men have fully established. If there is anything that is well established it is that soiling will pay, and it is more than likely that the agricultural journal to which our correspondent refers is actuated more by the desire to combat what some other agricultural paper says than it is by a desire to give its readers the truth.

Teaching a Calf to Drink.

There is a bit of humor in the following that every person raised on a farm will appreciate. It first appeared in the *Irish Farmers' Gazette*:

Those who have had the mournful experience know that there is nothing more trying to the temper than the operation of teaching a young calf to drink. The process is familiar to every man who has brought up a calf from infancy. You seize a pail of warm milk, go into the stable, catch the calf by the ears, back him into a corner, and bestride his neck. The idiot rather likes this, and while you are reaching for the pail he employs his time in slobbering the lower corners of your jacket. You discover what the blockhead is about, and box his ears. You can't help it. You feel that way, and let him have it. But the calf can't tell you for the life of him why he has been struck, and he gives a sudden and unexpected "founce." He believes he will go and stay on the other side of the stable, but he doesn't announce this beforehand. He starts on the impulse of the moment, and you can't tell just when he arrives there. You ride along with him a little way. But the laws of gravitation are always about the same. Your legs, one on each side of the critter, keeps up with the calf for about a

second, but your body doesn't. You side over the calf, and your back kisses the floor. Your head is soaking in the pail of milk. When you fall you are mad—uncommonly so. Milk runs from your hair, and imprecations out of your mouth, and you solemnly declare that you will teach that calf to drink or break his neck. The calf doesn't know of this resolve, and he glares at you in a stupid fright across the stable. He was not aware that he was the cause of your downfall, and wonders ignorantly what is the matter. You don't try to explain it to him, but furiously catch him by the ears, look back over your shoulder at the milk pail, and back up toward it, dragging the calf after you. The calf is out of wind, and you haven't a particle of grace left in your heart. You are astride the calf's neck, and jamming the fingers of one hand into his mouth, you place the other on the back of his head and shove his nose into the pail, fully resolved to strangle him if he don't drink. The calf holds perfectly still—ominously so—and there is silence for the space of half a minute, at the end of which time the blockhead, who hasn't drank a drop, suddenly makes a splurge, knocks the pail over; you are again reduced to a horizontal from a perpendicular, and when you arise the excitement is intense. You have been soaked with milk, "slobbered" on, and hurt. Not a drop of milk has gone down the brute's throat, and there he stands glaring at you, ready to finish you with another free ride whenever you want to go. With an affidavit you seize the empty pail, and hobble out of the pen, fully resolved to let the four-footed foul starve; and thus endeth the first lesson.

If, on any particular piece of ground weeds have taken possession and have gone to seed, or are growing as fast as good weather will permit, mow them down at once, let them dry, and then burn them. Weeds impoverish land faster than useful crops do.

Now is the time to treat Catarrh of long standing. Ely's Cream Balm reaches obstinate cases, where all other remedies fail. It is not a liquid or snuff and is easily applied. Price 50c.

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MR. A. NICHOLS, of this place, says he suffered from Catarrh for years. He purchased a bottle of Ely's Cream Balm of us. He is now almost cured, and says you cannot recommend it too highly. We are selling more of Ely's Cream Balm than of all other catarrh remedies, can hardly keep a supply on hand.—EVERS BROS., Druggists Independence, Iowa.

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The Veterinarian.

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

Bog spavin or distention of the capsular ligament of the hock joint cannot be removed and the horse worked. Best treatment for one just come on is rest, pressure and cold water; afterwards fire and blister. If of long standing the fluid should be removed with an instrument for the purpose, then fired and blistered.

The horse that kicks while being groomed, usually does so from being ticklish, although some do it from habit, and in either case mean no harm. Men used to handling horses generally know how to keep out of danger with such a horse. If he is in earnest, let him get a rap, and he will learn better; such a horse is not very objectionable. Many horses kick in the stable, as soon as the lights are put out and the men are gone. They merely kick at the stall posts, but with what intention "no fellow can find out." Idleness, we conclude, first induced them to do it, and habit to keep it up. It is a bad trick, for it not only keeps them from their rest, but disturbs other horses. A strap buckled around the pastern, to which is attached a piece of chain, about a foot long, usually stops this practice. If it does not, let the horse go loose in a roomy box-stall. Some horses have a habit of kicking on being mounted, but this is not an indication of their being kickers in any other way, or any presumptive evidence of vice. It is an acquired habit of which, probably, they will never be broken; correction would be likely to spoil their temper, and probably induce them to kick at us instead of, in the air.

Heaves is a disease of the respiratory organs, confined chiefly to mature horses, and limited almost entirely to places where clover hay is used. It is unknown on the plains, says an exchange, except in horses brought from the East and already affected by it. The change of food, however, soon removes the effects of the disorder, except when the animal is hard driven. At first, the cause of the ailment is probably mechanical; but improper food, etc., doubtless soon affects the lungs, so as to produce the symptoms known as heaves. The chief causes of the malady are feeding on dusty or masty hay and grain and on food of a bulky character. One form of it is sometimes caused by a hard gallop or other severe exertion after a full meal. Prevention is the only means of avoiding constant trouble from the ailment, for from its very nature there can be no permanent cure for it; although it may be considerably eased and relieved by suitable feeding, yet the trouble will return on the first provocation. The means of prevention suggest themselves when once the causes are known. Avoid dusty food of all kinds and masty hay or grain, or breeding from diseased horses, for the disease is readily inherited. To alleviate the trouble, the food should be nutritious, but given in condensed form, a little at a time but often, and regularly, say four or five times a day. Oats, beans, wheat straw, chaff, turnips or carrots, with a little hard-stalked hay free from dust and moistened, together with clean, cured cornstalks, have all proved satisfactory; but the feed should be chiefly grain and grass in summer, and grain and roots in winter. Water should be given sparingly. Arsenic in small doses is a favorite remedy with dealers; as in nearly all cases it effects a temporary cure more or less complete, it enables them to palm off an unsound as a healthy animal. They usually begin with three grains a day, increasing to five in a week, and continue for three or four weeks, giving from 10 to 12 grains daily towards the end. As

the appetite is morbidly ravenous, leading the affected animal to eat litter, etc., the bedding should be removed by day, and the horse muzzled by night. A lump of rock salt at one side of the manger and a chunk of chalk at the other, have proved beneficial.

WM. THOMPSON.

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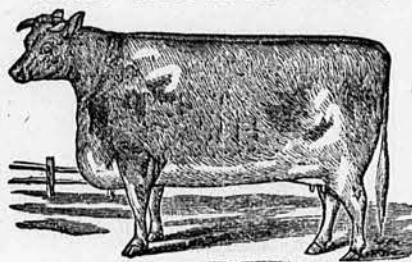
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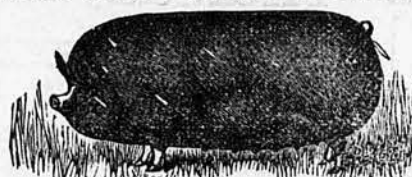
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My herd now numbers about Forty Breeding Sows and Four Boars, including representatives of the best families of the day, and also prize-winners at the leading shows of this country, Canada and England. I have now in use in my herd sows that won in England in 1883 1882 and 1881, and descendants of noted prize-winners previous to that time. The principal boar 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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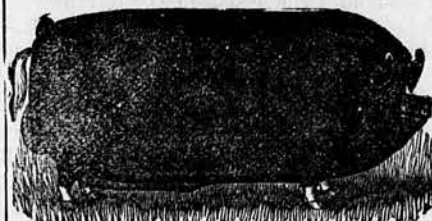
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M. E. KEAGY,
Wellington, Kas.

A PEOPLES & CO., West Chester, Pa., breeders and shippers of Thoroughbred Chester-White, Berkshire and Poland-China Pigs, and fine Setters, Scotch Collies, Fox Hounds and Beagles.

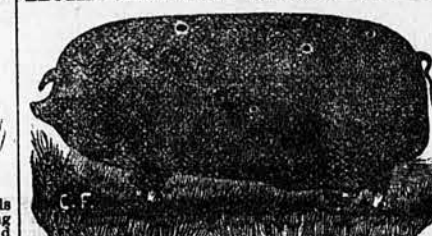
Send stamp for Circular and Price List.

"KING STEVENS"
VOL. 5.

THOROUGHbred POLAND-CHINAS

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

Acme Herd of Poland Chinas



Fully up to the highest standard in all respects. Pedigrees, for either American or Ohio Records, furnished with each sale. All inquiries promptly answered. Address STEWART & BOYLE, Wichita, Kansas



RANKIN BALDRIDGE,

Parsons, Kansas,

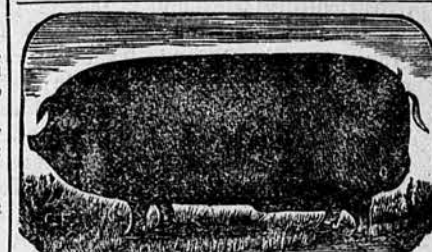
Breeder of Pure Poland-China Hogs. This rd is remarkable for purity, symmetry and good breeders. Black Jim, a prize-winner, bred by B. F. Dorsey, heads the herd, stock recorded in Central Poland-China Record. Correspondence invited.

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.

ROME PARK STOCK FARM, located seven miles south of Wellington, S. mner Co., Kansas; Rome depot adjoining farm. I have 35 breeding sows—Poland-China and Large English Berkshire swine. Also 230 high grade Short-horn cattle. Stock recorded in Ohio and American Records. The animals of this herd were and are prize-winners and descendants of prize-winners, selected with care from the notable herds in the different States without regard to price. The best lot of sows to be seen. Am using six boars—Corn-shell 2d, Kansas Queen, Kansas Pride, Cora's Victor, Ohio King, Hubbard's Choice, sweepstakes. Orders booked for Spring Pigs. Address

T. A. HUBBARD,
Wellington, Kansas.

Poland-China and Berkshire HOGS.



We have for sale a fine lot of Poland-China and Berkshire Pigs, from 2 to 6 months old. Ours is the largest herd of pure-bred swine in the State, and the very best mixture 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 pigs 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.

Improved Poland-China Hogs



We have been breeding Poland-China Hogs for twenty years. The long experience obtained has enabled us to select none but the choicest specimens for breeding purposes. We now have

Hogs of Quick Growth,

Easily fattened and early matured, showing a great improvement in form and style, especially in the head and ears.

Our breeders consist of the finest lot of Sows and three of the best Boars in the State, being descendants from the best families in the United States. Those wishing choice pigs should send orders in early as there is a very large demand for stock. Mail orders filled with dispatch. Pedigrees furnished with all hogs sold.

S. V. WALTON & SON,

P. O., Wellington, Kansas; Box, 207.

Residence, 7 miles west of Wellington, near Mayfield.

D. M. MAGIE COMPANY, OXFORD, BUTLER CO., OHIO, Originator and Headquarters for Magie or Poland-China Swine. 751 head sold for breeders in 1883. Have shipped stock to Seven Foreign Countries. Send for Circulars.

Horticulture.

Horticulture for the Masses.

A paper prepared and read by B. F. Smith, of Lawrence, Kas., before a joint meeting of Franklin and Douglas County Horticultural societies.

The good book tells us that very soon after Noah descended from the ark he planted a vineyard. It will be remembered that he was about one hundred years in building the ark, so he must have been quite an old man when he began his horticultural pursuits. But in these latter days one should begin early in life to reap all the benefits to be gained. Yet it is better to begin late in life than not at all. The average farmer is a grower of grain, grass, cattle and hogs, and counts all his benefits in the above products in dollars and cents. He fails to see any advantage in horticultural pursuits outside of the market value of the horticultural product. He does not consider the matter of engaging in horticultural growth for pleasure and recreation.

Agricultural life alone is one of unceasing toil, and where much stock is grown the seventh day is forgotten and man becomes more or less brutish. With a combination of agricultural and horticultural pursuits farmers may have more leisure for the study of the great truths connected therewith, which is of itself a pleasure.

Horticulture among the masses in this State is making progress which one will readily see by visiting our State and county fairs. Still there are a few whose soul and heart's desire is to grow more fat hogs and steers.

I will point out a few of the fruits, plants and trees that the masses of farmers should grow.

The first I may name is the strawberry. It is first to ripen in the spring and make glad the hearts of the children. It will draw a bigger crowd of admiring friends around the market stands than any other fruit ever raised. It will bring a large number of birds, and they will sing more sweetly during strawberry time than any other season of the year. Plant the strawberry this fall or in the early spring time in well prepared soil, then follow with clean culture during the growing season, and you may have luxuries fit for kings.

To follow the strawberry is the raspberry and blackberry, both healthful fruits. Every farmer should have, at least, a half-acre of each; they are as easily grown as a crop of corn. Soon after the departure of the blackberry, the grape comes on the stage. It is a fruit as old as the hills, or the pyramids of Egypt. A fruit that is so often mentioned in Holy Writ should be grown on every farm, yet in our own Douglas county, not one farmer in five has a bearing grape vine. There is no fruit in all our land more easily grown than the grape. Its insect foes are not so destructive as are those of the apple, pear or peach.

The masses should consider the healthfulness of the grape, not in the sense, however, of its being turned into wine, but as a dessert fruit to be eaten from the vine and on the table in all its virgin purity. The above fruits may be styled the luxuries of the horticultural department. We come down to the staple fruits, the apple, peach, pear and cherry. The masses of farmers should endeavor to grow these fruits for commercial purposes. Apple and pear tree growth is slow but sure when their insect enemies are kept at bay. Our State is not yet old enough to declare the lifetime of an apple tree in Kansas, where proper attention has been given. We know of some trees thirty years old yielding profitable

crops. To be on the safe side, however, it would be well to plant a few apple trees every year. Then if the older trees are somewhat neglected and pass away, the new ones are on hand to take their places.

Peaches and plums are not a sure crop every season, but no farmer's home is complete without a few of them.

The cherry and pear may be considered a sure crop. Climatical changes rarely destroy the entire crop. With the latter the blight is the most serious hindrance to its culture.

Having feasted on the fruits long enough, let us go over to the shade of those trees and consider another order of horticulture for the masses of Kansas farmers. First, some one or two of the different kinds of evergreen trees should be grown about the house and yard. The red cedar, which is very cheap, makes, when properly trained, a highly ornamental tree, both for shade and beauty. They also may be grown in groups of a dozen or more, or along roads through the farm, to great advantage, rendering a half or quarter section of land very attractive as well as adding several dollars per acre, should the owner wish to sell. This matter of cedar tree planting in groves about the farm, and along roads through the farm, and along fences by the highway, is worthy of the consideration of every farmer in Kansas. Farms are continually changing hands, and they will always sell for ten times the cost of growing the trees. Real estate agents are glad to have on their books, farms to sell, with orchards well laid out with all the varieties of fruit and a yard well set with evergreen trees. Such farms usually sell without the assistance of a real estate salesman. The well kept horticultural department made the sale and should have the credit for it.

Let one go to any real estate agent in Ottawa or Lawrence and take a look over the farm property they have for sale, and with a few exceptions you will find the farms they have to offer devoid of any healthy horticultural growth. Such farms are not quickly sold because the owner had neglected the horticultural department of his farm. If we sum up the whole subject the masses will find that the horticultural pursuit is a profitable branch of farming, in this that our minds are benefitted, that the recreation it affords is rest to the body and growth to the soul, that the children are more contented with their homes, and that there will be more love at home. Then let us have a horticultural department on every farm. Train up one of the older boys or girls to oversee it. Let each child as soon as it is old enough plant a long-lived forest tree or a grove of evergreen cedars; let them cultivate and care for them, knowing that these groves or trees are to be called Mary's or John's grove, then when the children grow up to middle or old age they will ever look with pride and pleasure on those great trees they planted when they were babes, and they will cherish the memories of their fathers and mothers who taught them the love of horticultural pursuits to the latest day of their lives.

YORK NURSERY COMPANY
(Established 1870). Nurseries and Green Houses at FORT SCOTT, KANSAS. Largest Stock of Nursery and Green House Plants in the West. BEAUTIFULLY ILLUSTRATED CATALOGUE now ready. Mailed to applicants free.

1883-1884. THE LARGEST AND MOST EARLY PEAR. Ripening in Central New York early in Sept. and sells at highest prices. Send for list of Original Tree, 100 yrs. old. Headquarters for old. Kieffer Pears, Parry Strawberries, Wilson, Jr., Blackberries, Marlboro Raspberries, Grapes. WM. PARRY, PARRY P.O., N. J.

CONCORDIA BANNER NURSERY,

Concordia, Kansas.

Friends, and Everybody:

As I do not wish to weary your good patience with a long advertisement, I only beg leave to say, that I am now prepared to furnish you with almost anything in the Horticultural line that has ever been introduced on the face of the earth. And will sell you any varieties and any size of fruit, shade, ornamental and evergreen trees, small fruit, shrubs, plants, vines, roses, bulbs, cuttings, grafts, hedge plants, etc., until November 1st, at less than half price. And such as Russian Mulberry, Catalpa (speciosa), Soft Maple, Berberry, Sweet Chestnut, Roses, Grape Vines, Currant, Gooseberry, Strawberry, Blackberry, Raspberry and Apple, all of which one year old I have an unlimited quantity and will sell at your own prices. All thrifty and first class.

I came to this place in 1870, and have been in the business ever since, and propose to remain in the business; and therefore I will send you such stock as will be a credit to you, and a living advertisement to myself.

Will you please write me a letter or a postal card, and let me know what you need, at once, and oblige your most obedient servant.

AMBERSE MARTELL, Proprietor,
Concordia, Kas.

Forest Tree Seedlings and Red Cedars!

An Immense Stock! Low Prices! Hardy Catalpa, Box Elder, Maples, White Ash, Red Elm, Cottonwood, Sycamore, Yellow Willow, Tulio Tree, Red Bud, Dogwood, Transplanted Red Cedars from 6 inch to 5 feet; Small Fruits, including Gregg Raspberry, Dewberries and the famous "Old Iron-Clad" Strawberry; Peach Pits, Apple Seeds and Black Walnuts. Write for price lists, with list of stock, colored.
A. D. BAILEY & HANFORD,
(On Ill. C. & R.) Mukanda, Jackson Co., Ill.
N. B.—Young and healthy live stock of all kinds taken in exchange for above stock at lowest prices.

Branch Valley Nursery Co., Peabody, Kas.

The Russian Mulberry and Apricot specialties. Nurserymen and Dealers, write for wholesale prices.
E. STONER & SON.



500,000-STRAWBERRY PLANTS-500,000.

OLD SORTS—Wilson, Crescent, Chas. Downing, Capt. Jack, Miner's Prolific, Charles's, Cumberland, etc. NEW SORTS—Jas. Vick, Daisy, Miller, Daniel B. son, Atlantic, Connecticut Queen, Indiana, Leaning's White, etc.

300,000-RASPBERRY PLANTS-300,000.

OLD AND NEW—Hansell Hopkins, Marlboro, Reliance, Cuthbert, Gregg, Southigan, Thwack, Turner, Smith's Iron-Clad. Send for price list of fifty varieties.
B. F. SMITH,
Lock Box No. 6, LAWRENCE, KANSAS.

IMPORTANT PUBLIC SALE

—OF—
Choicely-bred Imported
GALLOWAY
—AND—
Polled-Angus
Cattle,

To be held at Riverview Park, Kansas City,
FRIDAY, OCTOBER 31st, 1884,
(During the Fat Stock Show.)

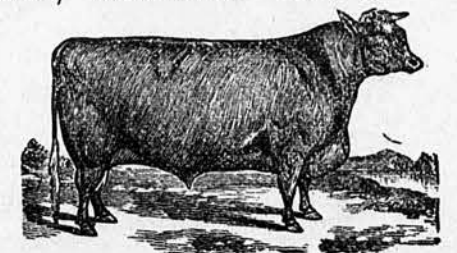
The Property of the Leonard Brothers, Mt. Leonard, Mo., and Walter C. Weedon, Kansas City, Mo.

This offering will consist of Bulls and Heifers of both breeds, and are a very choice representative lot selected from the best herds in Scotland. Stock will be on exhibition previous to sale.
Col. L. P. MUIR, Auctioneer. LEONARD BROTHERS, Mt. Leonard, Mo.
WALTER C. WEEDON, Kansas City, Mo.
For Catalogues (ready October 20), address WALTER C. WEEDON, Kansas City, Mo.

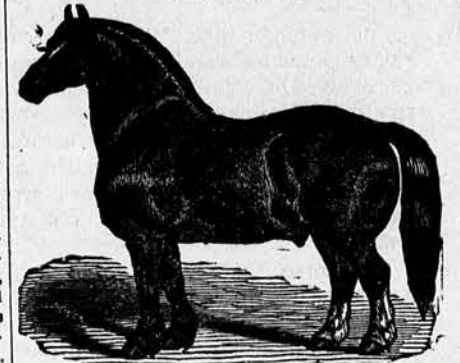
SETH E. WARD & SON, WESTPORT, MO.,

—Will Sell on—
Thursday, October 30, 1884,
—FORTY-FIVE HEAD OF—
SHORT-HORN CATTLE,
AT RIVERVIEW PARK, KANSAS CITY,

Consisting of Craggs, Rose of Sharon, Wild eyes, Velvets, Mazurkas, Victorias, Fletchers, Farmington Roses and Young Marys. All the cows will either have calves at foot or be in calf to the Duke of Cornwall or 961, a pure Craggs bull, or Barrington Bell Duke 498, a pure Fletcher bull. The right to sell bulls reserved till day of sale.
At the same time and place, W. T. Hearne, of Lee's Summit, will sell 15 head of well-bred young red bulls just ready for service.
Catalogues ready October 20, and may be had on application.
Col. L. P. MUIR, Auctioneer.



—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.

M. W. DUNHAM Wayne, Du Page Co., Illinois, HAS IMPORTED FROM FRANCE Percheron Horses valued at \$8,000,000, which includes

75 PER CENT OF ALL HORSES Whose purity of blood is established by their pedigrees recorded in the STUD BOOKS OF FRANCE, EVER IMPORTED TO AMERICA.

STOCK ON HAND:
150 Imported Brood Mares
250 Imported Stallions
Old enough for service,
100 COLTS
Two years old and younger.
Recognizing the principle accepted by all intelligent breeders that, however well bred animals may be said to be, if their pedigrees are not recorded, and cannot be authentically given, they should be valued only as grades, I will sell all imported stock at Grade Prices when I cannot furnish with the animal sold pedigree verified by the original French certificate of its number and record in the Stud Book in France. 140 Page Catalogue sent free. It is illustrated with Six Prize Horses of the Exhibition of the Societe Hippique Percheronne of France, 1884; purchased by M. W. Dunham and drawn from life by Rosa Bonheur, the most famous of all animal painters.

The Poultry Yard.

Poultry Keeping for Profit.

Feeding and watering poultry are generally much neglected by those who keep fowls. The active foraging of fowls and their patient and uncomplaining habits tend to encourage neglect on the part of their owners, and they consequently suffer more from this cause than from any other to which they are subjected. Fowls possess a very active physical organization. Their digestive apparatus works with surprising rapidity. An ounce of corn is swallowed early in the morning, and in two hours the crop, which is a part of the stomach, is empty and the food is in process of conversion into an egg, which is laid within twenty-four hours. The egg product of a good hen in a year—and the most of it is laid in the six spring and summer months—amounts to about seventeen pounds, or three times the weight of the fowl. To perform all this a hen requires a high and vigorous organization, and this she naturally possesses, for the temperature of a bird's blood runs from 108 deg. to 110 deg., which is about 10 deg. more than that of any quadruped. This excessive temperature and great activity of the reproductive organs causes a correspondingly large consumption of food, and water is included in the term food.

The rapid digestion of food in a fowl's stomach calls for an almost continuous supply. Regularity of supply is of the greatest importance when the consumption is so rapid. If the supply is not regular there is a great loss. There is not only waste of energy, but a waste of time in restoring this waste of power, and it is on this account that so many fowls merely live along and do not produce eggs as freely as it is expected, although the quantity of food is supposed to be quite liberal. The system of sending the fowls to roost with a full belly and keeping them all day hungry and thirsting for food is to blame for much of the shortcomings of the hens.

The quantity of food required by an animal is estimated as about 3 per cent. of the live weight daily. This merely supports life; all increase of weight, or any product whatever, must be supplied by an extra allowance, so that twenty hens weighing one hundred pounds would need three pints of solid nutritious food daily to live, and do no more. This is equal to three-twentieths of a pint for a hen. Two-twentieths, or one-tenth of a pint, or about one and one-half ounces of food is, then, required every day for the production of eggs, the total daily food requirements being one-fourth of a pint, and this is the established rule, from long experience, among poultry keepers. One quart of corn or other grain for eight hens is the regular daily allowance given in at least two meals, and it has been found that a flock of hens, when supplied with a constant provision of grain before them, will consume this quantity and no more, in addition to what small things in the shape of flies and other insects, grass, etc., they may pick up.

But it has been observed by all feeders of animals that not only is the necessary healthful appetite for food maintained, but digestion and assimilation—which is conversion of food into blood, flesh, and animal products—are greatly aided by a diversity of food, and, moreover, that a certain ratio must exist between the carbonaceous elements of the food, as starch and fat, and the nitrogenous elements, as albumen, gluten, etc. This ratio should be about five of the former to one of the latter, and there are few foods which are made up precisely in these proportions. Corn, for instance,

contains too much starch and oil, while flesh contains too much albumen and fibrin. Wheat, on the other hand, contains almost the identical elements that blood and flesh contain, with the needed carbon to sustain the animal heat, so that if one grain food alone should be selected it should be wheat. This, however, would be open to the other objection that one single food soon becomes distasteful and the appetite is cloyed. Moreover, feathers and eggs contain much sulphur, and the egg shells are made of lime, and these, of course, must be supplied in the food.

It is therefore necessary to be more particular in the selection of food for hens than for any other animal, and they cannot have too great a diversity of it. Corn, wheat, barley, oats, buckwheat, turnips, cabbage, animal flesh, broken bones, grass, clover, all need to be supplied; while insects, seeds of weeds, and particularly mustard and rape, or other foods which are rich in sulphur, are all required in order to supply the indispensable needs of a flock of hens that are expected to lay eggs. And the daily allowance should be so regulated that at least one-quarter of a pint of the grain should be given every twenty-four hours. Finally, as 75 per cent. of a hen, or an egg, is water, and as the hen grinds her own food in the gizzard (a part of her multiple stomach) by the help of coarse gravel, an abundant supply of pure water and of gravel must be provided for her, or she cannot properly perform her natural functions and satisfy her owner.—Henry Stewart in N. Y. Times.

Why They Die in the Shell.

From the investigations we have made, and with the co-operation of those who are operating incubators, we have become inclined to the opinion that one of the difficulties of artificial hatching is that the temperature is kept too high about the nineteenth or twentieth day. Some of the best results have been secured when the heat was maintained at 104 deg. and even at 106 deg. at time of hatching, but later trials show that at the start the heat should be rather high, about 105 deg., and then allowed gradually to reduce to 102 deg. When the heat is high the moisture should be supplied plentifully, as the greater the temperature the more moisture required to saturate the air in the egg drawer. Should the heat be high about the time of hatching, a fever heat is created, and the chick becomes exhausted by reason of the heat, the lack of oxygen, and insufficient moisture. Too much or too little heat causes the chicks to come out weak, and as the chick for the first ten days is not easily killed, either by heat or other causes, after the second week the moisture must be amply provided, the eggs cooled well every day, the heat kept at 102 deg., and the turning done promptly twice a day.—Ex.

Alarming Weakness in Men.

Without the least expense for medical or other treatment, young, old or middle-aged men who are weak, nervous and prostrated, from whatever cause, can be quickly and permanently cured. Method of cure new, remarkable, simple and infallible, and approved by the most intelligent patients and physicians. The opportunity is one of a lifetime, and those interested are advised to apply at once, enclosing self-addressed stamped envelope for all particulars, to Anti-Medical Bureau, 9 Dey street, New York.

Try the KANSAS FARMER. Twenty five cents will get it till New Year.

THE BIGGEST THING OUT Illustrated Book Sent Free. (new) E. CASON & CO., 120 Fulton St., New York

AGENTS Coin Money who sell Dr. Chase's Family Physician, Price \$2.00. Specimens free. Address A. W. Hamilton & Co., 401 Arbor, Mich.

STRAY.

HEIFER—Taken up by the subscriber, September 28, 1884, a dark red heifer with a little white between her fore legs; supposed to be 1 year old; no marks or brands visible. The owner can have her by proving property and paying charges. L. T. LUCE, Bryant, Kansas.

THE STRAY LIST.

HOW TO POST A STRAY.

BY AN ACT of the Legislature, approved Feb 27, 1886, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisal, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice. And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper free of cost, to every county clerk in the state to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5.00 to \$50.00 is affixed to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the FARMER for a violation of this law.

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 a stray must immediately advertise the same by posting three written notices in as many places in the township, giving a correct description of such stray.

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

The Justice of the Peace, all within twenty days from the time such stray was taken up, (ten days after posting) make out and return to the County Clerk, a certified copy of the description and value of such stray. If such stray shall be valued at more than ten dollars, it shall be advertised in the KANSAS FARMER in three successive numbers.

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

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

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

In all cases where the title vests in the taker up, he shall pay into the County Treasury, deducting all costs of taking up, posting and taking care of the stray, 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 October 1, '84

Sumner county—Wm. H. Berry, clerk.

MARE—Taken up by J. M. Buffington, in Oxford tp, August 15, 1884, one dark brown mare, branded with Mexican or Texas brands on left jaw, shoulder and hip; valued at \$25.

COW—Taken up by M. B. Roberts in Ryan tp August 27, 1881, one pale red cow, unknown brand on right side; valued at \$20.

Labette county—F. W. Felt, clerk.

PONY—Taken up by Chas. Owing, Neosho tp, September 1, 1884, one sorrel pony mare 13 hands high 13 years old, branded on left shoulder with letters N M C; valued at \$25.

Reno county—W. R. Marshall, clerk.

PONY—Taken up by Jas. F. Mudge, in Medford tp, September 8, 1881, one bay mare pony, white stripe in face hind feet white, left ear off, long scar on left shoulder, branded on right hip and cheek; valued at \$25.

Sheridan county—Wm. Stevens, clerk.

STEER—Taken up by Harry Woolley, in Kenneth tp, July 27, 1884, one roan and white steer, has the ends of both horns cut off; valued at \$75.

Jewell county—W. M. Stephens, clerk.

MARE—Taken up by —, in Ionia tp, September 5, 1884, one dark bay mare, 13 hands high, 13 years old, branded on left shoulder with letters N M C; valued at \$25.

A \$40 TWENTY-SIX SHOT FOR \$12

WEIGHT 9 LBS.

LENGTH OF BARREL 22 TO 28 INCHES.

SHOOTS ACCURATELY UP TO 1200 YARDS.

GOOD WITH SHOT AT 100 YARDS.

EVANS' 26-SHOT SPORTING MAGAZINE GUN

SHOOTS TWENTY-SIX SHOTS IN SIXTY SECONDS,

With Either Ball or Shot Cartridge, Without Removing from the Shoulder.

It is the Best Gun in the World For Large or Small Game, as it can be Used Instantly as a Rifle or Shot Gun.

NO HAMMER IN THE WAY. THROWING DOWN THE GUARD EJECTS LOADS AND COCKS.

The Evans is without exception the most accurate, longest ranged, easiest loaded, quickest fired, best constructed, simplest and most perfect breech loading gun in the world. It is 44 calibre, centre fire, 22 to 28 inch barrel, engraved Black Walnut Stock, and sighted with graduated sights up to 1200 yards.

Good for all Large Game 1,200 Yards | Good for all Small Game 100 Yards.

with Shot Cartridge at | with Ball Cartridge at

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13 years old, star in forehead, ringbone on right hind foot; valued at \$10.

Anderson county—A. D. McFadden, clerk.

BULL—Taken up by D. J. Parsons, of Welda tp, August 22, 1884, one red-roan bull, 1 year old, half-inch rope around horns; valued at \$20.

Kingman county—Charles Rickman, clerk.

HEIFER—Taken up by J. E. Milliken, in Belmont tp, August 25, 1884, one red yearling heifer, light underslope off ears; valued at \$14.

HEIFER—By same, one roan heifer, 2 years old, no marks or brands; valued at \$15.

HEIFER—By same, one white 2-year-old heifer, no marks or brands; valued at \$20.

Harvey county—John C. Johnston, clerk.

HORSE—Taken up by J. H. Sanders, in Burrton tp, September 7, 1884, one bay horse, 15 hands high, hind feet white, 5 years old; valued at \$10.

PONY—By same, one iron-gray mare pony, branded with heart on left shoulder, 5 years old; valued at \$40.

Douglas county—Joel S. White, clerk.

MARE—Taken up by Francis Walters, in Leecompton, September 5, 1884, one bay half-pony mare, no marks; valued at \$25.

Strays for week ending October 8, '84.

Dickinson county—Richard Waring, clerk.

MARE—Taken up by James Middleton, of Buckeye tp, September 18, 1884, one roan mare, small size, 10 years old or more, about 13 or 14 hands high, no marks or brands visible; valued at \$40.

Ottawa county—W. W. Walker, Jr., clerk.

COW—Taken up by Abraham Griffy in Morton tp, September 5, 1884, one rather small size red cow, about 5 years old, both ears cropped, short slit in left ear, figure 8 branded on right hip; valued at \$5.

McPherson county—E. L. Loomis, clerk.

HORSE—Taken up by Henry T. Jontz, in Mound tp, September 1, 1884, one brown-bay horse, about 14 hands high, 10 years old, harness mark on neck, saddle mark on back, white star in face, knot in left fore foot; valued at \$45.

Harvey county—J. C. Johnston, clerk.

4 CALVES—Taken up by Jacob Becker, in Pleasant tp, (P. O. Newton), September 4, 1884, four heifer calves, 6 months old, red with white spots; valued at \$20.

Johnson County—Henry V. Chase, Clerk.

CALF—Taken up by —, one red steer calf, both ears cropped, a little white on each flank; valued at \$12.

Butler county—James Fisher, clerk.

MULE—Taken up by H. B. Hulbert, in Fairview tp, September 16, 1884, one light bay or sorrel horse mule, halter mark on nose, branded F on left hip and an indecipherable brand on same hip.

Leavenworth county—J. W. Niehaus, clerk.

HORSE—Taken up by E. T. Gish, of Delaware tp, September 15, 1884, one light bay horse, about 15 1/2 hands high, 6 years old, left hind foot white, snip face, saddle marks, had halter on when taken up; valued at \$100.

Nemaha county—R. S. Robbins, clerk.

STEER—Taken up by E. H. Myers, in Rock Creek tp, September 25, 1884, one roan steer with red neck, letter R branded on left hip; valued at \$45.

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Against Fire, Lightning, Tornadoes and Wind Storms.

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The Busy Bee.

Hunting Wild Bees.

Wherever there is timber in any considerable quantity there are pretty sure to be more or less of wild swarms of bees, which, with a little effort, can be found and their honey secured. If in a small-sized tree, and it is not broken in the fall, a section containing the swarm can be sawed out, taken to the house and set up, and thus a start made in the bee business. If any of our boy readers have an idea that there are any wild swarms near them, we advise them to carefully read the following directions for hunting them, from one of our exchanges, and then see if they can be found. Owners of bees who have lost swarms will be quite likely to hunt them up without any urging on our part:

The sequel to the going off of the bees in summer is the hunting of them in the fall. It is entirely worth the while to lose one of the later swarms, for the sake of the pleasure of looking for them after they shall have laid up their store of honey. Bee-hunting is the poetry of sport, and has a sufficient reward, even if no tree be found. The rich, warm September days is the time chosen. The honey-yielding flowers are nearly all gone by this time, and the bees roam far and wide in quest of food. If the bee-hunter has no previous intimation of the probable whereabouts of an escaped swarm, he begins operations in the vicinity of any large wood. His principal appliance is a small box with a glass lid, into which he nicely fits a piece of comb filled with honey. The first honey-bee he discovers leisurely probing some thistle-head in a remote field or on a hill, he gently sweeps into his box, watching its movements through the glass lid. The bee, at first alarmed, struggles to get out, but, catching the smell of honey, forgets its captivity, and, like a true Yankee determined to make the most of every mishap, falls to taking its fill. The box is then placed upon a stump or rock, the lid gently withdrawn, and the hunter steps back a pace or two to watch the bee take flight, which it does in about one minute—that is, as soon as filled with honey. Rising a few feet in the air, it circles around two or three times, takes its bearings, and strikes a bee-line for home. If it goes towards the woods or mountains, the chances are that it belongs to a wild swarm, and the hunter eagerly waits for its return; if toward the settlement, or a farmhouse, another bee is procured and experimented with as before.

In case a bee cannot be readily found, the usual mode of proceeding is to heat a flat stone and burn upon it some refuse comb or honey. The scent will soon attract a bee, when it may be treated as above described. If the tree is anywhere within half a mile, the bee usually returns in about fifteen minutes, always accompanied by one or more of his fellows, to whom, by some mysterious language, he has communicated the secret of the box of honey. These fill themselves, and depart as before. Returning, they bring others, and these again bring others; and thus, in a short time, a line of bees may be established. The hunter follows them into the woods, and keeping the direction, marks the trees for a long distance. In many cases he finds his prize without much further trouble; but in as many cases he is obliged to cross-line them—that is, establish a second line at an angle with the first; where the two lines intersect each other, he may confidently expect his search to end. Changing his base of operations, therefore, to another field

or hill half a mile or more distant, if the lay of the land permits, he seeks to line them as before, and thus determine the immediate locality of the tree, with top more or less decayed.

The finding of a wild swarm, however, is not so easy and simple a matter as it may appear to be on paper. In the first place, the hunter is much more apt to get hold of a hive-bee, than the representatives of a wild swarm. This consumes time. Or, if he captures one of the latter without delay, it is not an easy matter, in the majority of cases, to establish a reliable first-line. A bee is a small object to follow with the naked eye; and then, the wind may cause it to deflect from its course, and thus mislead the hunter at the outset. The native bee-hunters of Australia attach some white cottony substance to the bee, which not only retards its flight, but makes it a more conspicuous mark for the eye. I have heard of our bee-hunters sprinkling the bees with flour for the same purpose.

But the most novel and ingenious device I have ever heard of, is the sprinkling of them with sulphur. A young farmer in one of the interior districts of the State of New York, who takes an occasional spare day to look up bees, writes me he has tried it with marked effect. It seems to enrage the bees, and set them in a perfect uproar; so that not only may they be followed through the air more readily by the sound they make, but the whole swarm is presently humming at a fearful rate. He says he has heard the uproar when twenty rods from the tree. And, contrary to what one might expect, instead of being driven away from the hunter's box, the bees come thicker and faster. The swarm is thoroughly waked up, and presently in the wildest state of excitement.

To get a sufficient base for the triangle, in most localities, is another difficulty when two lines have to be established; or, worst of all, the tree may be a mile or two away.

It is fascinating sport, however—the great bright days, the slightly hills and remote fields, and the eager search through the woods, with sharp scrutiny of the old trees.

If the tree is much decayed, the comb is often fearfully broken up and much of the honey wasted by felling it, which course, however, has no alternative. The bees that have escaped the deluge of honey come pouring out into the air, ready to make war upon anything. They are sometimes effectually disposed of with a match and a little rye straw; but the safest and wisest plan is immediately to stop up all openings but one, leaving in this room enough to enter a pipe-stem; then give them a few puffs of tobacco smoke. This deadens them instantly, and renders them quite harmless.

Bee trees are sometimes found by persons walking in the woods on a bright day of early spring while the ground is yet covered with snow. The bees induced to come forth by the warmth and the sunshine, are blinded by the snow, and fall to the ground near their retreat.

The Vicksburg Herald says there are a great many young men and women in that city who are trying unsuccessfully every day to obtain some kind of employment. The editor says it is sad to see so many willing people denied the privilege of earning a livelihood.

Southwestern Virginia was needing rain badly last week. A Lynchburg dispatch of the 1st inst. stated: The weather is very oppressive. The thermometer has scarcely fallen below 90 degrees, night or day, for a week. The drouth throughout Piedmont is without parallel. In parts of southwestern Virginia grazers are driving stock into

Tennessee for water. Small streams are drying up. At many places forest trees are dying and many forest fires are raging.



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It is a disease of the mucous membrane, generally originating in the nasal passages and maintaining its stronghold in the head. From this point it sends forth a poisonous virus along the membranous linings and through the digestive organs, corrupting the blood and producing other troublesome and dangerous symptoms.

Cream Balm is a remedy based upon a correct diagnosis of this disease and can be depended upon.

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Apply into nostrils. Price 50 cts. at drug gists; 60 cts. by mail, registered. Sample bottle by mail 10 cts.

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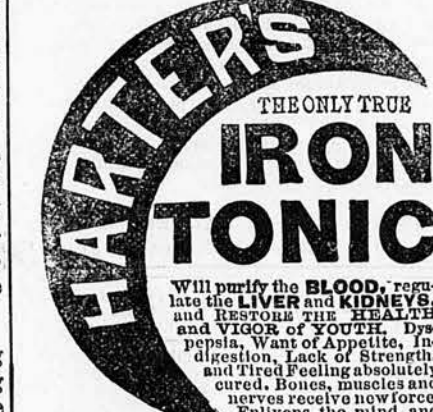
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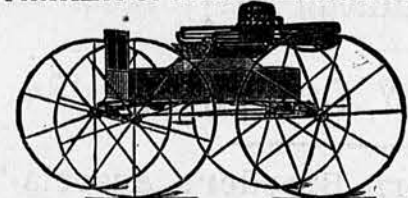
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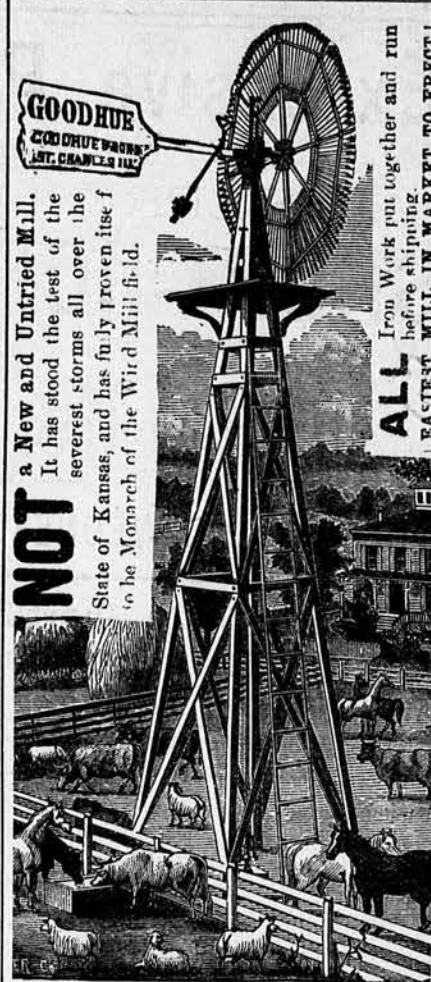
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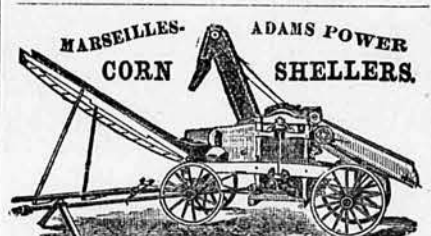
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The Parker Repeating Breechloading Shot Gun.
Equal in Capacity to 4 Double Barreled Shot Guns. Shoots 8 Rounds with one Loading. 3 Patents.
The question has long been asked, Why cannot a Repeating Shot Gun be made on a similar principle as the Winchester and other Repeating Rifles? After years of experimenting we have solved this difficult problem, and we now offer, as a result of this great achievement, the Parker Repeating Shot Gun, pronounced by all sportsmen who have tested it to be far excellence the greatest discovery yet made in firearms. It will supersede all other shot guns, and is even now causing a stampede among gunners, who purchase it at sight. Description: The Magazine holds 8 Rounds; can be loaded in 30 seconds, and the Rounds are ejected in 15 seconds. It is Breechloading with Automatic Shell Ejector, which throws the fired shell and reloads itself at the same time by the simple Lever Movement. It also has the Patent Magazine Cut Off, and can be instantly converted into a Single loader if desired. The Locks, Mountings, and Heel Plate are made of the very best Steel, and Case Hardened. The Barrels are of uniform length, and made of the Finest Blued Steel and guaranteed U. S. Government Proof. Stock is of selected Walnut, oiled and polished. The Ammunition can be procured from dealers. Its parts are so substantially connected it will never get out of order. The action is so simple even a boy can comprehend and handle with perfect safety. We caution gun buyers against irresponsible firms who deceptively advertise and offer bogus, altered, and toy guns, dear at any price, and unsafe to shoot. We send with each gun our warranty, as follows:
Read Our Warranty. The Parker Magazine Repeating Shot Gun, Breechloading Shot Gun, as offered by us, we warrant to be as represented in Out and Reading, and also to be made of the finest materials, and hand made. If found otherwise, we will refund money or satisfactorily exchange for other guns. Signed, Parker & Co.
We will offer a limited number of these excellent guns at \$13.00 each (the first cost), as per special and limited coupon offer. Our reasons for doing so are manifold; we want to quickly and immediately place and distribute this season a certain number over the United States. Our experience is, one single gun, when shown around and handled by a sportsman, will sell dozens in his vicinity. This is our main reason in making the big reduction, as we well know duplicate orders at our Regular Rates will follow the sale of one gun sold this way. This is where we make our profit, as no sportsman will hesitate to invest \$23.00 for this superior of all shot guns when he sees it. It sells itself, and shows double the value.
WEIGHT 7 1/2 to 9 LBS. BORES 12 to 16
ACCURATE REPRESENTATION
WE CHALLENGE THE ARMOURERS OF THE WORLD FOR ITS EQUAL IN RAPIDITY OF ACTION, BRILLIANT EXECUTION, ACCURACY, BALANCE, & COMPACTNESS. LIGHT RECOIL, PRECISION AT LONG RANGE HEAVY OR LIGHT SHOOTING.
Our Special and Limited Offer. Upon receipt of this coupon and \$13.00 before Nov. 25, 1884, we agree to securely pack and box free of all charges and ship to any one address in the United States One Parker Magazine Repeating Shot Gun, Breechloading Shot Gun, with one dozen Loaded Shells free. But after Nov. 25, 1884, and up to Jan. 1, 1885, the price will be \$18.50. After Jan. 1, 1885, the standard price will be \$23.00. Only one gun will be sent to any one person at \$13.00. Our object is distribution, and to get the gun at this price you must cut out this coupon and return it to us with your order.
So as to give our entire attention to the sale of this Repeating Shot Gun, we will close out our stock of Fine Double Barreled Breechloading Shot Guns at prices from \$12.50 upward, worth double.

CHALLENGE WIND MILL AND FEED MILL CO.
BATAVIA, ILL.
Manufacturers of Geared Wind Mills.
For Grinding Grain, Cutting Feed, Shelling Corn, Pumping Water, and running all kinds of Machinery. Also Feed and Meal Mills, Pumps, Etc. Agents wanted for all unassigned territory.



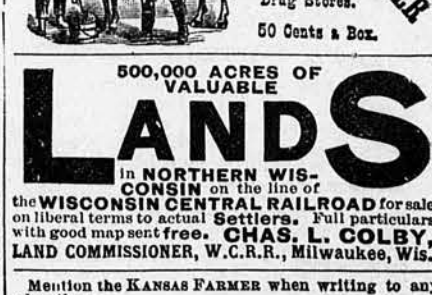
STEWART'S HEALING POWDER

Cures all Open Sores on Animals from any cause. At Harness or Drug Stores. 50 Cents a Box.



500,000 ACRES OF VALUABLE LANDS

in NORTHERN WISCONSIN on the line of the **WISCONSIN CENTRAL RAILROAD** for sale on liberal terms to actual Settlers. Full particulars with good map sent free. **CHAS. L. COLBY, LAND COMMISSIONER, W.C.R.R., Milwaukee, Wis.**
Mention the KANSAS FARMER when writing to any advertiser.



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.

WANTED—200 Grade Merino Ewes. Address L. S. Cox, Walker, Mo.

85 MERINO RAMS—For sale at satisfactory prices. Address W. S. Stewart, Nevada, Mo.

GEO. W. STONER, La Place, Ill., breeder of representative Duroc Jersey Swine. Superior boar pigs for sale.

FOR SALE—10,000 Cuthbert Raspberry Plants. Very low. Plants warranted true to name. Fred Eason, Fruit Grower, Leavenworth, Kas.

FOR SALE—Or will trade for Sheep, Ranch of 840 acres, 3 1/4 miles from town. Also, will sell cheap, 20 choice Merino Rams or will trade for ewes or Wethers. Address Geo. M. Truesdale, Agent, Riley Center, Kas.

A. H. HENDRICKS, Hazel Green, Wis., offers at low rock prices recorded Jersey Duroc Pigs. Sows bred to order. Write me before you buy.

KANSAS HOME NURSERY, Fruit, Ornamental Trees, and Grape Vines. New Fruits grown and their comparative value ascertained for the West. A. H. Griesa, box 671, Lawrence, Kas.

S. H. TODD, Wakarusa, Ohio, breeder of Recorded Shropshire Down Sheep. Send for circular with price list and particulars. It pays to get the best.

LOUST 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.

200 SHORT-HORNS—I have been breeding Short-horn cattle for twenty-seven years in Kansas, and on account of old age, I wish to close out my entire herd, in lots and at prices to suit purchasers. A visit or correspondence desired. Address S. S. Tipton, Mineral Point, Anderson Co., Kansas.

FENCE MATERIAL CHEAP!

Iron posts and barbed wire, complete, on cars at Topeka, from 40 to 75 cents per rod, or posts alone, in quantities to suit. Cheap, to close out stock. For orders or particulars, address

SOUTHWESTERN FENCE CO., Topeka, Kas.

BERKSHIRES.

We have for sale at reasonable rates an extra fine lot of Berkshire Pigs of all ages. Write us, telling just what you want before you buy, and get our prices and terms. Very Low Rates by Express. **CHAS. ELLIOTT & SON**, Bladensburg, Knox Co., Ohio.

Thoroughbred Merino Rams FOR SALE.

Young, sound and healthy. Bred on "CAPITAL VIEW SHEEP FARM," near this city, and fully acclimated. Our prices will be satisfactory. Our references—our former patrons. Correspondence solicited. **BARTHOLOMEW & CO.**, Topeka, Kansas.

Farm, Garden & Ornamental FENCING.

We are manufacturing the ANTI-MONOPOLY FENCE. The only perfect farm fence made. It is light, strong, durable, cheap and perfectly portable. Send for circular and price list.

DEMING & RENCH, Topeka, Kas.
First door west of Kansas Avenue, on Second street.

PUBLIC SALE OF IMPORTED French Stallions and Mares

Aged from 2 to 5 years,
AT BLOOMINGTON, McLEAN CO., ILL.,
Thursday, October 16th, 1884.

Send for catalogue. **J. E. HARDING & CO.**, Importers, Bloomington, Ill.

FRANK CRANE,

Formerly of the firm of A. A. Crane & Son, Oco, Ill.

COMMISSION AGENT

—For the Sale of—

HEREFORD, POLLED ANGUS, GALLOWAYS, SHORT-HORN.

And Thoroughbred and Grade Cattle of all breeds.
Carload Lots a Specialty.

Stables, Riverview Park. Address **F. P. CRANE**, Stock Yard, Kansas City, Mo.

Lee's Summit Nurseries.

BLAIR BROS., PROPRIETORS,

Lee's Summit, Missouri.

To our Patrons, Orchardists and Planters:

We would respectfully call attention to our heavy supplies and most excellent quality of Nursery products, consisting of Apple, Peach, Pear, Cherry, Plum, etc., Berries and Grape Vines of the various sorts. Also Ornamental and Shade Trees, Plants, Roses and Shrubs, Hedge Plants, Forest Tree Seedlings and Evergreens, from 6 inches to 4 feet. Prices low.

Special attention is called to the fact that our agents are furnished with written certificates of authorized agency signed by us. We insist upon our patrons requiring agents to show their certificates, so as to avoid any mistakes or deceptions.

Orders sent by mail promptly attended to:

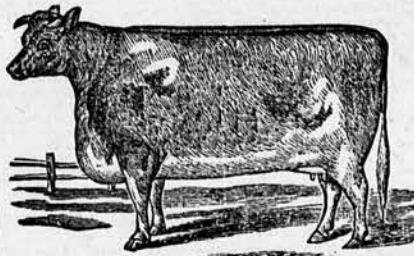
BLAIR BROS., Proprietors,
Lee's Summit, Mo.

PUBLIC SALE

175 HEAD OF CATTLE

—INCLUDING—

40- SHORT-HORNS -40



Friday, October 24, 1884,

At the Farm of A. H. CASE,
8 MILES NORTH OF TOPEKA, KANSAS,
On the Holton road.

Besides the Thoroughbred Short-horns there will be 150 High-Grade and Full-blood

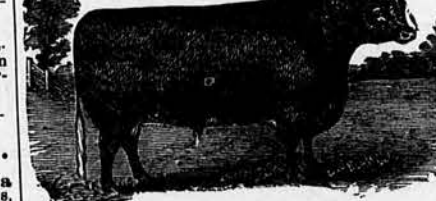
COWS, HEIFERS, and BULLS.

Sale begins at 10 a. m. Address **BENTON & CASE**, Topeka, Kas.

A. J. HUNGATE, Salesman.

FIRST ANNUAL COMBINATION SALE

—OF—



Short-Horn CATTLE

—FROM—
Capital View Herds, Silver Lake, Kas.,
M. Waltmire, Carbondale, Kas.,

At the Fair Grounds, Topeka, Kas.,
At 1 o'clock p. m.,
WEDNESDAY, OCTOBER 22, 1884,

40 Recorded Short-Horns,

Consisting of JOSEPHINES, ROSEMARYS, PIORAS, MISS SEVERS, RED PRINCESSES, PINEAPPLE, BLOSSOMS, AMELIAS, BUNNYFACE, &c.

These animals are of superior individual merit, good colors, and in good breeding condition. Fashionably bred Bulls at head of both herds. Catalogues ready October 10.

TERMS:—Cash, or four months time on approved notes with 10 per cent. interest.

S. A. SAWYER, J. E. GUILD, Silver Lake,
Auctioneer, Manhattan. M. WALTMIER, Carbondale.

PUBLIC SALE OF IMPORTED

English Draft Horses!

AT KANSAS CITY, MO.

I will have on sale at S. S. Grant's Barn, near Fat Stock Show, from the 27th to the 30th of October,

Eight Head of English Draft Horses.

Two Stallions and six Mares—four of the Mares being safe in foal, and one yearling and one Filly Colt, all of which have taken ribbons at the fairs this fall. Each one is a good individual animal.

Will give a credit of 12 months at 8 per cent. interest. None but good paper taken. A discount of 8 per cent. will be made for cash on delivery of stock.

P. MOORE, Parsons, Kansas.

SPECIAL NOTICE!

To all who are suffering from private diseases of any kind—Nervousness, Night Dreams, Loss of Manhood, and all Affections of the Kidneys and Urinal Organs. We have **INFALLIBLE REMEDIES** for all the above named diseases. Patients treated entirely by correspondence. Medicines sent everywhere free from exposure. Terms very reasonable. Address with stamp, **F. W. BAILEY, M. D.**, Topeka, Kansas.

A PRIZE

Send six cents for postage, and receive free a costly box of goods which will help all, of either sex, to more money right away than anything else in this world. Fortunes await the workers abroad. At once address **TRUE & Co.**, Augusta Maine.

PATENTS! Thomas P. Simpson, Washington, D. C. No pay asked for patent until obtained. Write for inventor's guide.

Extensive Public Sale!

—OF—
REPRESENTATIVE
SHORT-HORN CATTLE,

—AT—
River View Park, Kansas City, Mo.,
—ON—

TUESDAY AND WEDNESDAY, OCT. 28 & 29, '84,

The Inter-State Short-horn Breeder's Association of Missouri and Kansas

Will sell ONE HUNDRED HEAD OF WELL-BRED SHORT HORN CATTLE, consisting of Bulls, Cows and Heifers. The offerings will be fair and honest specimens of the Short-horn breed, both in pedigree and individual worth, and will represent all the popular families and tribes, including some fine specimens of Cruickshank, Bates and Booth-bred and topped animals. No unworthy animal, if known, will be offered or sold. All the offerings included in our catalogue will be true to pedigree—will be recorded or eligible to record, will be sound, and the females warranted to have been regular breeders in the past.

A breeding list will be furnished on the day of sale.

TERMS:—Cash, or acceptable bankable paper.

Catalogues can be had on application to **W. L. HARDING**, Secretary, Kansas City, Mo., after October 1st.

Cattle can be seen in stalls at Fat Stock Show grounds after October 25.

S. C. DUNCAN, } Executive
A. J. POWELL, } Committee.
A. H. LACKEY, }
W. L. HARDING, Secretary.

COL. L. P. MUIR, Auctioneer.

Great Short-horn Sale!

—AT—
FORT SCOTT, KANSAS.
—ON—
TUESDAY, OCT. 21, 1884.

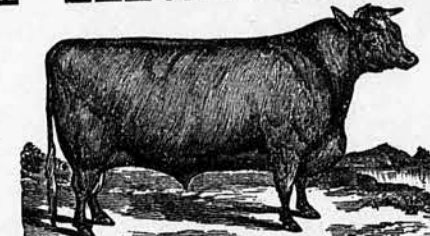


ABOUT 70 RECORDED SHORT-HORNS,

—Consisting of—
Young Marys, Josephines, Adelaides, Peries, Carolines, Rose of Sharon, And several other good Families. Also the Bates Bull, 11th Duke of Kirklevington, No. 51,125. For catalogues apply to **J. W. LILLARD**, Nevada, Mo.
L. P. MUIR, Auctioneer.

FIRST ANNUAL SALE

Short-Horns



By the Northeast Missouri Short-horn Association,
AT THE FAIR GROUNDS,
MEXICO, MO., OCTOBER 20th, 1884.

The breeders of Northeast Missouri will offer ABOUT SEVENTY HEAD OF REGISTERED SHORT-HORN CATTLE, consisting of such noted families as Young Marys, Roan Duchesses, Adelaides, Arrabellas, Britannias, Illustrations, Rose of Sharon, Rose Marys, Benny aces and other noted families. About 40 young Bulls and 30 Cows and Heifers constitute the lot. No by-bidding allowed by the Association. Write to **S. P. EMMONS**, Mexico, Mo., for Catalogue. **MEXICO** is on the main lines of Chicago & Alton and Wabash railroads. Sale positive, no reserve, and made under cover.
Col. J. W. JUDY, Auctioneer.
S. P. EMMONS, Secretary, Mexico, Mo.
Attention is called to the following sales: Oct. 21 Pike Co. Breeders, Short-horns, at Louisiana, Mo.; Oct. 22, Wm. Prichet, Frankfort, Mo.; Oct. 23, John Lewis, Camp Point, Ill.

A fine opportunity to attend four sales at small expense.

FAY CURRANT CRAPES BEST STOCK IN THE WORLD
HEAD-QUARTERS.
SMALL FRUITS AND TREES. LOW TO DEALERS AND PLANTERS. EVERYTHING FIRST-CLASS. FREE CATALOGUES. **GEO. S. JOSSELYN**, FREDONIA, N. Y.