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Hog Cholera.

Kansas Farmer:

We have read everything upon the swine plague that we could procure, and are still learning and open to conviction, and in writing to-day propose to give some of the results of our observation and practice down to the present time in plain language. Our practice in breeding hogs is such that we dread no other disease but the so-called hog cholera, and you can learn in this article how we kept free from it. We believe that hogs can be cured of all other disease just as well as persons can. We have never found any hogs that we could not cure of any other disease that were not too far gone before we reached them, and we believe there are some forms of cholera in Kansas and Nebraska that have been prevented, and that hogs lives have been frequently saved, and that many more may be saved in the future. The reason why one remedy does not answer in all cases is, there are seven distinct forms of it described by Dr. J. H. Detmers, a most distinguished veterinary authority, and some of these forms have never been cured by anybody. Prof. Salmon, of Washington, gives the only satisfactory theory, that all these diseases are caused by germs, and in this he is supported by all the leading veterinarians in their reports. A number of writers have made light of this theory, but have never substituted anything for it that will bear investigation.

With a vast array of authority before us, we read and thought, feeling that if the genuine hog cholera does strike us "we're busted," if we don't know what to do. We spared neither time or expense to learn, and held conferences with our most intelligent breeders who could give us even the shadow of an idea to add to our mite. We formed a plan of defense and action if attacked. We didn't care to have Prof. Salmon send us the germs by mail, as he offered to do, because we knew that these veterinarians had failed to yet find any specific that would kill them that would not kill the life of the hog first. But each form of all these diseases is caused by a different germ. I think I have not seen a case that could not be cured if taken in time, though half the herd would die under the ordinary farmer's care. There are doubtless a number of the so-called cures or preventives given by somebody that has some knowledge of the anatomy of the hog, and the qualities and physiological effects of the remedies used, and are by nature qualified to doctor, that has saved many hogs. It won't do to say there is no cure for some of these forms, because it is not true. Attention to diet, proper shelter and care, have much to do with any disease. The trouble is, we don't know enough to take care of ourselves, let alone taking care of a hog. But the time has come when hog raisers have got to look these questions squarely in the face and learn, or quit the business. "Knowledge doubts, ignorance never does," and when you find a hog raiser that knows all about it, in fact he knows very little; five minutes questioning will generally pump him dry.

The hog is quite as liable to the various forms of disease as man is, though it is not generally acknowledged. During the last three years I have often heard farmers, and exhibitors at fairs, talking about other people's hogs being sick, ignorant of the fact that their own were ailing, and they seem to know it when they commence to die. Not

till then comes the cry—"What shall I do?" Dear experience will teach you that a variety of feed will not cost as much in the end as to continually feed dry corn and dirty water. Corn is naturally binding from one-ninth to one-seventh, and something must be fed to counteract this. Oats, bran, shorts will do this. When you hear of any disease, use extra precautions. Give your hogs soap-suds, rock salt, and some form of charcoal twice a week. If you feed slop, put a pint of crude carbolic acid to each barrel of swill. I have found that feeding one-half teacupful of raw linseed oil twice a week to each hog one of the best preventives known. Sprinkle air-slaked lime in their pens and beds. Keep them clean, if you have to wash them, especially the throat, belly and legs. Do not allow them to run to water, or too many to sleep together. If the cholera is in the neighborhood, shoot every bird or dog that comes from that direction, and never allow yourself or anybody else to come from a diseased herd into your own without changing clothes. Build a few pens half a mile away back, and the first hog that coughs or droops his head, kill him and bury deep or cook him till the heat kills the germs and feed him to the rest, or put him into the wagon and haul him to the back pen where you can doctor. Don't run him, drive him, or in any way scatter the germs of disease about. If the hog coughs, heaves clear to the flank, holds his nose close to the ground, walks as if his intestines were sore, lies square down on his belly, roots up fresh earth to draw the fever out, it is one form of the so-called cholera, and can be cured. Give the half teacup of oil. Prepare a pailful of strong soap-suds, dissolve in it one-fourth teacup of copperas and same amount of crude carbolic acid. Wash him clean. Now the measles can come out, adopting the theory of S. M. Shepherd, of Illinois, one of our most gifted and experienced writers. Shut off feed, keep him warm, and avoid all danger of catching cold, as you would if a person had the measles. I then mix fifty drops of the tincture of gilesemium in ten grains of quinine, adding five teaspoonfuls of water, and give to a full-grown hog in two doses, six hours apart. Keep this treatment up till the fever stops, feeding the oil and charcoal twice a week. If the pig whirls around and acts dizzy, pour coal oil and turpentine over head and shoulders. I have saved over twenty pigs in this way for various persons, when Haas' and Clark's remedies failed. If scurf forms, wash again, feed light, and they will come through, is the belief of W. S. HANNA, Ottawa, Kas.

A Live Stock Commission Firm.

We call attention to the new card in this issue of the wide-awake, progressive live stock commission firm of James H. Campbell & Co., successors to Andy J. Snider & Co., of Kansas City. This firm does business at Kansas City, Chicago and St. Louis. They will receive consignments for either of these leading markets, thus giving their customers unusual advantages in this respect. Shippers of stock should secure their free market report—and mention this paper.

Two Weeklies for \$2.

For \$2 we will send the KANSAS FARMER and the *Weekly Capital and Farmer's Journal* one year. A first-class agricultural paper and a State newspaper for almost the price of one paper.

The Russian Mulberry--What is It?

Kansas Farmer:

The Russian mulberry, as it is commonly called, is a seedling cultivated mulberry brought to this country by the German-Russian Mennonites from south central Russia. It is a cross between the *Morus Tartarica*, *Morus Niger* and *Morus Alba*. When the mulberry (*Tartarica* and *Niger*) were first planted in Russia the same difficulties were realized as are now in attempts to grow the *Japonica* in this latitude; they were too tender to withstand the severity of the winters. It was therefore found necessary to cross those valuable varieties of the mulberry with the native *Alba*, which was a dwarfed mulberry that grew in the mountain districts of Caucasus. By this means hardier qualities were implanted, and the trees, being grown from the seed, became exceedingly hardy and capable of withstanding the most severe winters of Russia. The mulberry was reproduced from the seed and naturally became a mixture of the several varieties mentioned in this article, in which the *Alba* was prominent. This accounts for the dwarfed habits of the Russian mulberry as we now have it.

The *Tartarica* mulberry is an extraordinary fruit-producing mulberry; many trees yield fine fruit for four months in a season. The tree is also of fine form and foliage and of vigorous growth, and according to the judgment of some of the Mennonites who were careful silk-growers, the *Tartarica* mulberry leaves are superior silk-producers.

The *Niger* mulberry is of extreme rapid growth and good foliage, but the fruit is not generally considered palatable; it is very sweet, of fair size and purple in color.

The *Alba*, as stated above, is naturally inclined to grow very bushy and spreads freely in branching near the ground. By attention in trimming, however, it can be grown into fine trees. It is especially adapted for growing in hedges and for wind-breaks. For this purpose there is no tree to equal it. The fruit of the *Alba*—in color white and black—is quite small and insipid, and is of no use as desert.

I have in this article given a correct history and description of what is sold by nursery-men as Russian mulberry, some of whom only a few years past sold this cross of cultivated seedlings exclusively as a fine fruit tree at high prices, which I condemn as an imposition and fraud. The Russian mulberry as a seedling generally is valuable for silk-culture. However, there are trees that border on the *Niger* and *Alba* varieties which have rough leaves that are not desirable for silk-growing, as they contain too little gum and sugar, and the worms do not relish them on account of the harsh down on the under side of the leaf.

If the Russian mulberry is desired for fruit, seed should always be selected from trees of the *Tartarica* variety, and then some will deteriorate and about 25 per cent. will be pollen trees which never bear fruit. The proper way to get the best fruit is to get the grafted *Tartarica*. They bear abundantly the second year from planting and often have a fair crop the first year, if trees are not exposed in transplanting. These annual, ever-bearing mulberry trees should be planted everywhere where people wish good berry fruit, for it is without any exception the most prolific fruit-bearing tree that ever grew out of the ground in this latitude.

Emporia, Kas.

I. HORNER.

[Mr. Horner has had ample opportunity to

thoroughly ventilate the subject named at the head of his article, being personally acquainted with most all of the leading Mennonites among whom he has traveled for several years, and through whom he has been able to trace the Russian mulberry tree to its origin in Russia. It will be seen, on a careful reading of the article, that the genuine Russian mulberry tree is easily obtained. —ED. K. F.]

About Stock Barns.

Kansas Farmer:

Winter has come at last, and finds very few people prepared for it, especially in regard to their stock. There is hardly a good stock barn in this neighborhood (though most every one has a barn), and more than one would think are without even a shed. I have just finished a barn to use for most everything, but for stock I am depending on straw barns, which do better than sheds. Mine are made by setting posts as I want the inside to be, then covering with poles and brush, and at threshing-time the straw is stacked up about eight feet thick on three sides and the top, making a warm and comfortable place for stock by boarding the other side, and is cheap to one that has his own timber lot. By putting boards or poles on the inside to keep the stock from tearing down the straw, it will last two or three winters. One of the great objections I have to them is, when the rains come they leak so bad. This summer I have been studying the plans for stock barns in the *Breeder's Gazette*, and while the plans suit me, the price, at present, is way beyond my purse. Most of them cost from five to ten thousand dollars, and the last one thirteen thousand dollars. I have been figuring on a barn that will do me for some years at least. The barn is to be set on ground with a slight incline to the south, gable end to the west, and the size will be 36x50 feet, eight-foot wall, above ground; the pitch of the roof will be four-fifths; that is, four-fifths of one-half of the distance across. I have put up a number with that pitch that gave better satisfaction than what is called third pitch. The inside of the sills will be flush with the wall, and it will be eighteen inches thick at the bottom. Post on the ends twelve feet, and sides ten feet apart; corner posts 6x6, the rest 4x6, fifteen feet and nine inches to top of long plates. Girts and braces 4x4 and ties for roof 2x6 by sixteen feet. All posts, except the corner ones, have a heavy brace starting above the upper girt and running down to the floor joist, five feet from outside of barn. And the boards on the side go up between the rafters and are nailed on to the sheeting; that makes it tight and holds the roof down to the building. Such a barn has no timbers on the inside to be in the way in handling hay, and, if made well, is strong. Below, through the center, will be a twelve-foot alley-way, with eleven and one-half feet for stock on each side. In the alley-way will be the mangers, and a railroad track to run a flat-car on; at each end a chute to throw down the hay on the car. Plenty of windows will be above and below to give light. On the outside circular sheds, starting from the northwest and southwest corners, to keep the winds off from all points, and protect the cattle, so the change will not be so great when they first come out of the stable, and for all other stock. Such a barn here, at our prices, will cost about \$1,000.

E. W. BROWN.

The Stock Interest.

PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.

May 4—W. P. Higinbotham, Short-horns, Manhattan, Kas.
May 19—Col. W. A. Harris, Crutchshank Short-horns, at Kansas City, Mo.
May 26—W. A. Powell, Short-horns, Lee's Summit, Mo.
May 27—U. P. Bennett & Son, Short-horns, Lee's Summit, Mo.
June 1—Shepherd, Hill & Mathers, Short-horns, Jacksonville, Ill.
Tuesday and Wednesday of next Kansas City Fat Stock Show, Inter State Breeders' Association, Short-horns.

Black Polled Cattle.

A friend writes us requesting an article on the "distinguishing characteristics of the Galloway and Angus breeds of cattle." In response we give him the following, which is copy of an address delivered by F. McHardy before the Kansas Central Live Stock Association, at Emporia, the 31st day of December, 1885:

In searching the history of the different breeds of cattle I find it difficult to trace the history of the Galloways back to their origin. They are the most ancient of the improved breeds. These cattle took their name from Galloway, a section of country lying in the southwestern part of Scotland, where they have been bred for several generations.

James McDonald, of the *Irish Farmer*, says that it has been a disputed point whether polled cattle should be regarded as the degenerate descendants of the great "Urus," the magnified progeny of the slender "Forgrifous," or the composite produce of the two. There has also been a question as to whether they have been derived solely from the aboriginal wild cattle of ancient Briton, or partly from these and partly from domesticated cattle introduced from the continent of Europe. There would seem to be strong reasons to believe that the latter idea may be correctly applied to several of the English breeds.

With the more truly Scotch races, however, the case is different. It is hardly possible I think for any one who is acquainted with the early history of Briton and with the circumstances bearing upon the original and domestication of British farm stock, to avoid arriving at the conclusion that the foreign element could have had but little to do with the formation of the existing races of Scotch cattle.

In Briton there are three breeds, in the fullest sense of the term, of native Scotch cattle. They are the Galloway, Polled Angus, and the Highlander.

It is right, we think, to regard them as the true lineal descendants of those wild aboriginal cattle that roamed through the forests and marshes of old Caledonia.

The breeding of the cattle has been from time immemorial a principal business of the Galloway farmer. A compiled history of Scotland, alluding to the time prior to and including the reign of Alexander III., A. D. 1249, says: "Black cattle were also reared in great numbers during the Scoto Saxon period, and as the people lived much on animal food, the cattle were all consumed within the land, while their skins were a considerable article of export." Ortelius, the celebrated geographer and historian, who wrote in 1573, says: "In Carrick, (then a part of Galloway,) are oxen of large size whose flesh is tender, sweet and juicy." This brings us to consider the excellence of the Galloway beef which we see was acknowledged and recorded many centuries ago, and which is now quoted in the English market as "Polled-Scotts" and sold at an advanced price over all other beef.

An eminent English butcher, Mr. Joseph Hall, writing in 1883, says: "I have been in business nearly fifty years, and from my experience I think there are no cattle equal to the Polled-Galloway as a beef-producing breed. The quality of beef is superior to any I ever

killed and the offal more profitable." "As to early maturity they are equal to any of the improved breeds." "No class of cattle make such heavy weights with so little bone, and the lean meat cuts so thick and fine in the grain that it pleases both the butcher and consumer."

From the foregoing high authority it is evident that the Galloway is second to none as a beef-producing animal. Although the Galloway is the oldest of the pure-bred breeds of British cattle, their herd book records are very modern. Unfortunately all the papers and documents which had been collected relating to the breed as well as the pedigrees, were lost by the fire which destroyed the Highland Agricultural Society's records in Edinburgh in 1851. Since that time, a few painstaking breeders have kept a record of their cattle, but there was no herd book issued by the Galloway breeders until 1878, when one was issued, edited by their able Secretary, Rev. John Gillespie. No pains were spared to make their record complete and reliable, and no animal was eligible for record until it was passed upon by a committee of old reliable breeders, selected by the Society. The first Galloway herd book published in America was issued in Toronto, Canada, and was edited by Henry Wade and published in 1883, and contains 660 pedigrees. The first importation in Canada that is recorded in this volume was in 1853, made by Mr. Graham. All animals recorded in this volume were either imported or traced directly to imported stock.

There is also in this volume a short history of the Galloway cattle written by David McCrae, of Guelph, Canada. The breeders of these valuable cattle in America are under many obligations to Messrs. McCrae and Wade for compiling and arranging a record of these early importations in this first volume. The second volume of the American Galloway Herd Book is now in the printer's hands, being edited by Mr. M. R. Platt, Secretary, with headquarters at Kansas City, Mo.

You will see by the foregoing that the Galloways are placed in one common family in regard to lineage and for any one to excel as a breeder it must be done on the individual merit of the animal and not on any pretended ancestry. We are not compelled to do as our Short-horn friends are doing—in order to make them fashionable their pedigree must be traced to Thomas Bates.

This fanatic and his followers have done more injury in altering the individual merit of the Short-horn than anything else. They have made lineage the standard of value, and we as breeders may profit by their errors. Let us follow the example of our forefathers and make INDIVIDUAL MERIT the standard of value, and then we shall not be under the necessity of taxing our fellow-breeders to raise the sums necessary to duplicate the premiums at our leading fat stock shows as at Kansas City and Chicago. I do not wonder that these gentlemen are getting alarmed. I really think they are afraid of having their horned pets gored by the irrepressible MULEY. Not so, gentlemen. The Muley has only come to take the place of the Short-horn.

The Galloway is considered the most hardy of the British breeds; with a constitution and vitality second to none. Their vital organs being so fully developed accounts for their superior vitality and endurance. No allegation has ever been made in any well-informed quarter that the Galloway is not an original and distinct breed of cattle and none have a greater power of transmitting their peculiarities than they. They are without a peer in the

power of transmission, and stamping their grand physique, their raven-black color and hornless heads invariably on all breeds. The Galloways are of medium size, short-legged, long bodies, and usually weigh heavier than their general appearance would indicate, and for early maturity and heavy weights compare very favorably with other breeds. The scale of points recently adopted for Galloway cattle are as follows: Color, black with brownish tinge, head short and wide, with broad forehead and wide nostrils, without the slightest symptoms of horns or scurs, eye large and prominent, ear moderate in length and pointing forward and upward with fringe of long hairs, neck moderate in length, clean and filling well into the shoulders, the top in line with the back in a female and in a male naturally rising with age, body deep-rounded and symmetrical shoulders wide and straight, moderately wide above, breast full and deep, back and rump straight, ribs deep and well sprung, loin and sirloin well filled, hook bones not prominent, hind quarters long, moderately wide and well filled, flank deep and full, thigh broad and straight and well let down to hock, legs short and clean with fine bone, tail well set on and moderately thick, skin mellow and moderately thick, hair soft and wavy with mossy undercoat. Aiton in 1811 gave the scale of points similar to the above excepting the color. At that date there were various colors. Since then the breeders have turned their attention to breeding to black color, which is considered the most hardy.

Gentlemen, I have endeavored to give you as much of a description and history of Galloway cattle as my time would admit. There are few shown in America, but whenever shown in competition with other cattle, they have acquitted themselves nobly. Mr. Geo. Hood, of Guelph, Canada, exhibited a herd of Galloways at the centennial at Philadelphia in 1876. He was awarded the first honors. Cattle were there judged by a scale of points and Mr. Hood's herd scaled the most points in individual merit, and was awarded more medals than any herd on exhibition, although Illinois, Missouri, Iowa and New York were represented by their choicest animals.

Mr. A. B. Matthews also carried off the colors on his herd of Galloways, at New Orleans, in their classes, taking first premium besides sweepstakes for the best carcass. I might mention many other premiums that have been awarded Galloways at the leading fairs in the West. However the Galloway breeders do not care to report every premium awarded or every sale effected in order to secure a little cheap advertising, but prefer to remain content with the present standing of their favorites, as the demand keeps pace with the supply and sales are made at remunerative prices.

While the sales of other leading breeds of cattle have lately been unsatisfactory, the Galloway breeders have no cause to complain, having sustained last year's prices wherever sold.

I would say to my Western friends in conclusion, that they would do well to cultivate the acquaintance of the noble Galloway, for he is a GENIAL COMPANION and is sure to benefit you financially whenever he is given a fair trial.

Much has been said and urged against cruelty to animals, yet there are some people who seem to take delight in abusing the noble beasts which do us almost limitless service and are so sensible to kind treatment. Next to man our domestic animals are the most intelligent of all creatures, and a kind master has no truer friend than his horse.

Profit From Sheep.

It is understood very well that Kansas is not Ohio or Massachusetts, and that farm methods are not and must not be the same here in all respects as they are in Eastern and more Northern States. It is also well understood that Philadelphia and other large cities are not near enough to farmers in Kansas to justify the raising of sheep for mutton exclusively; but it is evident that there is a profitable mean between the light carcasses with its fine wool and a larger carcass with coarser though equally merchantable wool. Mutton is growing more and more in demand. The butchers in Topeka sell three times as much mutton now as they did three years ago.

Here are some good suggestions copied from *Farmer and Stockman*, which, though they were not written for Kansas, are helpful and may be studied anywhere with profit. Good keep always pays.

"There is no animal on the farm that returns a larger profit in proportion to the expense incurred than the sheep. One of the mistakes made in keeping sheep has been that of relying exclusively on the wool for profit, overlooking the fact that sheep afford a revenue also from lambs, mutton, and the benefits imparted by them to the soil. The farmers do not seem inclined to give their attention to lambs and mutton, for the reason that unless they can get early lambs the prices are low, while the carcasses of the majority of the sheep do not average 120 pounds live weight, and in endeavoring to secure heavy fleeces and a fine grade of wool the weights are necessarily sacrificed.

"Such methods will not give satisfaction under any circumstances. Our breeds of sheep have been adapted to special purposes, and are numerous. The cost of improvement by the use of thoroughbred rams is very small, and every farmer has an opportunity of securing a profit. In order to determine what could be done with thoroughbreds, a Western breeder selected twin lambs of the Oxford-down breeds, and fed their dam well in order to provide plenty of nourishment. When weaned they were fed on grass in the pasture with grain convenient at all times, the fences being so arranged that the sheep could not get at the grain, the result being that at two months the young ram weighed 67 pounds and the ewe 51½ pounds. At three months the ram weighed 95 pounds and the ewe 77 pounds. July 1st they were weighed again, being exactly four months old, the ram having reached 180 pounds and the ewe 92 pounds. These weights are extraordinary, the young ram at four months exceeding the average of adult common sheep. Other considerations, however, are very important. In the first place the breed was a large one, and it was expected that the lambs would grow fast. Then again they were fed carefully with the object of obtaining heavy weight. But these considerations are for every farmer. It is the duty of every farmer to breed and feed for profit, and, as the weights show, here are the results of intelligent care, indicating what might be done by one and all.

"Early lambs sometimes bring \$10 each, but such prices are not always attainable, as but few farmers have their ewes to lamb in January or February. Nor is it desirable if the winters are severe; but with such lambs as the above they can be born in March or April, and then have a sufficient time to attain a greater weight than the early lambs from the common breeds. It is the difference not only in weight, but

also in price, that makes a large profit instead of a small dividend. The ewe which produced the twin lambs was well cared for herself. She has produced 212 pounds of meat in four months, and also a large fleece of wool, while her own carcass is salable at any time. If our farmers will turn their attention to the production of early or late lambs and choice mutton they will realize larger profits from sheep in proportion to capital invested, than from any other class of stock. It is the production of inferior mutton, as a rule, that keeps prices down; but a choice article will always be appreciated by the public, and the demand will increase. There is no better way of protecting wool than to grow it as a secondary product to mutton; but to make wool a specialty, using small breeds of sheep and paying no regard to early lambs and the quality of carcass, is not a profitable mode of sheep-raising."

Stables for Farm Horses.

Some one very properly suggests that with the exception of a few weeks in summer, when they are at grass, farm horses usually occupy their stable all the year round, so that their quarters should be well adapted to their use.

The length of the stable of course depends on the number of work horses used on the farm, but on no account should the width be less than eighteen feet, for comfort to the horses themselves and convenience to the men who take charge of them. Few stables for work horses are made wider than sixteen feet, and hence few are otherwise than cramped for room. The length of a work horse is about eight feet, the width of the hay rack is about two feet, the harness hanging loosely against the wall occupies about two feet, and the gutter occupies one foot, so that in a width of sixteen feet there is only a space of three feet left from the heels of the horses to the harness to pass backward and forward in, and wheel a barrow and use the shovel and broom.

No wonder, when so little room is given to work in, that cleanliness is so much neglected in farm stables, and that so much of the manure and urine is left to be decomposed and dissipated by heat in the shape of ammoniacal gas, to the probable injury of the breathing and eyesight of the horses, when shut up at night. To aggravate this evil, the stable is often in the basement, with very seldom proper ventilation, while the windows are frequently too small for the admission of light and air. To render the condition of the stable as bad as possible as regards cleanliness, the walls are left unplastered, their rough stones forming receptacles for dust and cobwebs.

Another particular in which most stables are improperly fitted up, is the narrowness of the stalls, five feet three inches being usually all the space allowed for an ordinary work horse. No work horse should have a narrower stall than six feet from center to center of the partitions, in order that he may stand at ease, or lie down at pleasure with comfort.

More than half of the diseases so prevalent among farm horses are due to improper attention to the common laws of sanitation, and farmers would save many times the expense of a properly constructed stable were they to try the experiment. The animals that are so closely connected with the successful working of the farm assuredly deserve better care and attention than is usually given them. The humane man will therefore see that they have light, roomy, well-ventilated stables, where disease will be far less likely to enter,

How Bees Fill Cells.

Dr. D. C. Spencer, Augusta, Wis., said: "In 1880, during a sudden flow of nectar, the bees in my observatory have built a piece of comb as a 'wing' or an 'L' extending from the side of an outer comb to the glass. As the new comb was extended to the glass, it was arranged by the builders so as to have the glass form one side of the last cell, thus affording a rare opportunity for the observer to watch the interesting process of constructing and filling the cells. When the construction of the walls had so far progressed that the cell was nearly ready to receive the honey, a bee approached the further end of the cell and ejected from its mouth a clear liquid, which it spread with its mandibles over the concave surface. This process was repeated several times, forming, when dry, a thin, transparent, varnish-like coating in the end of the cell. This done, the cell was ready for honey. Soon a loaded bee entered and proceeded to the lower edge of the lining just finished, began to peel it up until it was detached a little, then ejected its load beneath and behind the lining, and replaced the lower edge of the portion that had been peeled up and patted it down nicely, leaving a slight convex appearance resembling a blister, filled with one solitary load of nectar. This process was repeated rapidly until this lining was detached entirely, except at its edges, where it still adhered to the sides of the cell, forming a diaphragm, securely holding the honey in its perpendicular position, and being forced along the walls of the cell until it was filled, usually leaving a space between it and the capping; it seemed to acquire additional strength with age, resisting considerable force before giving way. When viewed edgewise, this diaphragm may be distinctly seen with the naked eye, its thickness being about 1-100 of an inch. Its color, when thus seen, is of an amber hue. By means of a hypodermic syringe this cell wall may be pierced behind the diaphragm and the honey withdrawn, leaving it intact; thus fully demonstrating its existence and the 'what and how' of one of the many interesting processes of these wonderful God-given servants—our bees."

Potatoes, if cut fine and sprinkled with salt and bran, make most excellent sheep feed.

Purify your blood, tone up the system, and regulate the digestive organs by taking Hood's Sarsaparilla. Sold by all druggists.

Kind words and a gentle patting on the head will go much further in taming a timid heifer than a score of milk stools.

Clay land is the most retentive of water, and for this reason it is all the more important that such land should be thoroughly drained.

The currant is a fruit well adapted to being grown with other fruit, since partial shade is desirable for them. A rich soil tends to the best results.

Was afflicted with Catarrh and Cold in the Head. I tried many remedies without any beneficial effects; at last I used Ely's Cream Balm, which effectually cured me.—W. H. I. HILLARD, Dentist, Bordentown, N. J.

It is a bad plan to lend tools from the farm. It often leads to ill-feeling. If you do lend them, it is often well to make a minute of the fact, what tools, and to whom loaned.

Nervous Debilitated Men

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

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, \$2.50 per year. A copy of the paper will be sent the advertiser during the continuance of the card.

HORSES.

H. W. McAFEE, Topeka, Kas.—For sale, six extra good Registered Short-horn Bulls. Also Clydesdale Horses. Three miles west of Topeka, 6th St. road.

TWO IMPORTED CLYDESDALE STALLIONS—For sale on good terms. Both noted prize-takers in Kansas and Iowa. Address Robert Ritchie, Peabody, Kas.

THE CEDARS—Trotting stock. Speed, substance, size, color and style, a specialty. Stallions by Ryedyk's Hambletonian, Victor-von-Bismarck, out of dam of Gazelle, 2:21, and Twiligh, out of dam of Charley Camplain, 2:21½, in use. Stock at private sale till February 1st. Annual public sale, third Wednesday in March. Catalogues on application. T. E. Moore, Shawhan, Bourbon Co., Kentucky.

J. M. BUFFINGTON, Oxford, Kas. Importer and breeder of Norman and Clydesdale Horses. Twelve Imported and Grade Stallions for sale.

M. D. COVELL, Wellington, Kas., for fifteen years a breeder and importer of Percherons. Stud Book and High-grade acclimated animals, all ages and both sexes, for sale.

CATTLE.

WALNUT PARK HERD—Pittsburg, Kas. The largest herd of Short-horn Cattle in southern Kansas. Stock for sale. Cor. invited. F. Playter, Prop'r.

W. D. WARREN & CO., Maple Hill, Kas., importers and breeders of RED POLLED CATTLE. Thoroughbred and grade bulls for sale. St. Marys railroad station.

J. S. GOODRICH, Goodrich, Kas., breeder of Thoroughbred and Grade Galloway Cattle. Thoroughbred and half-blood Bulls for sale. 100 High-grade Cows with calf. Correspondence invited.

FISH CREEK HERD of Short-horn Cattle, consisting of the leading families. Youngstock and Bronze Turkeys for sale. Walter Latimer, Prop'r, Garnett, Kas.

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

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 or Sharons and one aged show bull. None but the very best allowed to go out from this herd; all others are castrated.

CATTLE AND SWINE.

PLATTE VIEW HERD—Of Thoroughbred Short-horn Cattle, Chester White and Berkshire Hogs. Address E. M. Finney & Co., Box 790, Fremont, Neb.

H. & R. L. McCORMICK, Piqua, Woodson Co., Kas., breeders of Short-horn Cattle and Berkshire Swine of the finest strains. Young stock for sale. Correspondence invited.

ROME PARK STOCK FARM.—T. A. Hubbard, Wellington, Kas., breeder of high-grade Short-horn Cattle. By car lot or single. Also breeder of Poland-China and Large English Berkshire Swine. Inspection invited. Write.

ASH GROVE STOCK FARM.—J. F. Glick, Highland, Doniphan county, Kansas, breeds first-class THOROUGHBRED SHORT-HORN CATTLE AND POLAND-CHINA SWINE.

Youngstock for sale. Inspection and correspondence invited.

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

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 strains, pure-bred Jersey Red Hogs and Jersey Cattle.

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

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

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

SWINE.

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

POLAND-CHINA SWINE AND MERINO SHEEP.

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

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

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

F. W. ARNOLD & CO., Osborne, Kas., breeders of Poland-China Swine. Stock recorded in O. P. C. R. Combination 4989 (first premium at State fair of 1884) at head of herd. Stock for sale. Satisfaction guaranteed.

POULTRY.

KAW VALLEY APIARY AND POULTRY YARDS.—Hughes & Taitman, Proprietors, North Topeka, Kas.

POULTRY.

EGGS.—For nearly three (3) years I have been collecting choice birds and choice stock, without offering any for the market. I am now prepared to furnish a few eggs of the following varieties. The large White Imperial Pekin Duck, \$1.50 per 14 (two settings); Light Brahma, Plymouth Rock and Rosecomb Leghorns, \$1.25 per 13. Also eggs of the "Kentucky Blues," birds of the finest egg-producing qualities, at \$1 per 13. J. W. Hile P. O. box 237, Valley Falls, Kas.

BRONZE TURKEY GOBBLETS—\$4.00 each. \$5.00 after March 1st. Mrs. E. C. Warren, Eudora Douglas Co., Kas.

MAMMOTH BRONZE TURKEYS—From extra large stock, at \$3 each, \$8 per trio. Pekin Ducks, \$3 per pair, \$4 per trio. Plymouth Rock Chickens, \$2 each. Address H. V. Pugsley, Plattsburg, Mo.

T. S. HAWLEY, Box 153, Topeka, Kas., breeder of

PARTRIDGE COCHINS, BROWN LEGHORNS, PLYMOUTH ROCKS.

Send for Circular.

BRONZE TURKEYS—\$7.00 per pair, \$10.00 per trio. Bred for size and beauty. Alex. Robinson, Tyner, Ohio.

FAIRVIEW POULTRY YARDS—Has for sale 200 Chickens each of P. Rocks, Houdans, L. Brahmas, Wyandottes, B. Leghorns and Langshans. Lock box 754. Mrs. Geo. Taggart, Parsons, Kas.

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

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

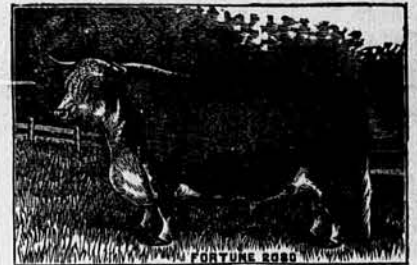
MISCELLANEOUS

S. S. URMY, 137 Kansas avenue, Topeka, Kas., Live Stock Auctioneer. Sales made in any part of the State. Correspondence solicited.

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.

DETLOF & GUSTIN, Veterinary Surgeons, 151 Jackson street, Topeka, Kas. Graduates of Ontario Veterinary college. Special attention paid to the treatment of all Dis-eased Horses and Cattle. Also examined for soundness. Horses boarded while under treatment if required. Horses boarded by the week or month. Vicious, kicking and runaway horses broken and handled to drive single or double. Horses bought and sold. All calls by letter or telegram promptly attended to.

MT. PLEASANT STOCK FARM, J. S. HAWES, Colony, Kas.,



IMPORTER AND BREEDER OF

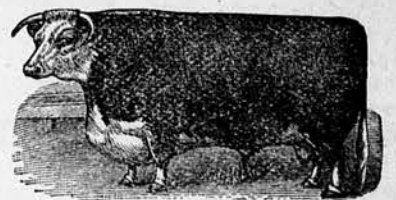
HEREFORD CATTLE.

I have one of the largest herds of these famous cattle in the country, numbering about 250 head. Many are from the noted English breeders: J. B. Greene, B. Rogers, P. Turner, W. S. Powell, Warren Evans, T. J. Carwardine and others. The bulls in service are: FORTUNE, sweepstakes bull, with five of his get, at Kansas State Fairs of 1882 and 1883; 1885, first at Kansas City, St. Louis and St. Joe. Imp. Lord Wilton bull.

SIR EVELYN; and GROVE 4th, by Grove 3d. To parties wishing to start a herd, I will give very low figures. Write or come. My Colony is in Anderson county, Southern Kansas R. R., 93 miles south of Kansas City.

Parties writing to J. S. Hawes will please mention that they saw his advertisement in KANSAS FARMER.

IMPORTED AND KANSAS-BRED HEREFORD CATTLE.



For Sale at Very Reasonable Prices.

Representatives Horace, Lord Wilton, The Grove 3d, and other noted sires. Thoroughbred and high-grade bulls and heifers for ranchmen a specialty. Send for Catalogues.

G. E. HUNTON, Breeder, ABILENE, KAS.

FENCED PASTURES

To Rent and for Sale.

(Being part of the Diamond Ranch, on Diamond creek, in Chase county, twelve miles northwest of Strong city) containing 640 to 3,840 acres.

We offer herds of from 100 to 1,000 head of native and graded

COWS AND YOUNG STOCK

To parties starting in the cattle business.

Twenty Teams of good four-year-old MULES for sale.

Apply at Ranch or write to H. R. HILTON, Sup't, Strong, Chase Co., Kas.

Correspondence.

The Money Question.

Kansas Farmer:

I have read with much interest your recent articles on the silver question, and especially your answer to a "well-read man." I have been thinking a little on that line, and with your permission will lay a few thoughts before your readers.

It is the duty of every government to furnish its citizens with a sufficient circulating medium. In accordance with this principle, the people, who are the government in this country, invested Congress with the power to coin money. And in accordance with that power Congress has decided that a dollar in gold shall consist of 25 8-10 grains standard gold, coined and properly stamped, and that $41\frac{2}{3}$ grains of standard silver, coined by the government and with a certain stamp, shall be a legal dollar. Congress has also provided other dollars and certificates made of paper that pass at par with either the gold or silver dollars. Now, does it not follow that as these dollars, made of different materials and very widely differing in value, are absolutely of equal value as money? or, if any difference, it is in favor of the paper—as being more convenient. Therefore, the value of money does not depend on the material of which it is made—or the amount of material in the unit. It certainly would be very foolish to maintain that the size of our paper dollars should be doubled. It is equally foolish to say that more metal should be put in a dollar.

Further, if it is the duty of a government to manufacture a sufficient amount of money, and gold and silver cannot be obtained in sufficient quantities, then it should and does use nickel, copper and paper. And if I have reasoned correctly, in the interest of economy it should always use that which costs the least. But some of your readers, with bated breath, will now cry out—"Greenbackism," "flat money," etc. Well, be it so. If the government can fiat ten cents into a gold dollar, twenty cents into a silver dollar, and four cents into a nickel, why not ninety-nine cents into one cent's worth of paper? The value of money does not depend on the material of which it is made, but on what it will buy; or, in other words, the amount in circulation will regulate the prices of products. As evidence of this, consult the history of prices in gold in California from 1848 to 1852 and prices in the 60's in paper money, when the circulation was fifty dollars *per capita* with present prices, the actual circulation at present being only about six dollars *per capita*. It therefore follows that, other things being equal, prices will rise or fall with the amount of money in circulation.

If this be true, we are now prepared to see why bond-holders, National banks, fund-holders, and those who live on fixed incomes desire to strike down the silver dollar, and if successful in that, they will then demand the retirement of the greenbacks and our present silver certificates. Why? Simply because it will increase the value of their holdings and decrease the value of things they wish to buy. If this reasoning is correct, it would be only natural to find every man not belonging to the classes enumerated above to favor the continued, if not free coinage of silver, as a matter of self-interest, that prices might be kept up by plenty of "honest money." And I assert that any money that the government makes a full legal tender is *honest money*. The war greenback was not honest money, simply and only because it was not a full legal tender. The standard silver dollar is a full legal tender, and therefore an *honest dollar*. And an honest administration would pay it out as fast as coined on all its obligations, and would require the bond-holder, also, to take it, for it is so written in his bond. Though the war greenback was not honest money, yet it was considered good enough for the soldier, and therefore it should have been good enough for the bond-holder, but it was not so considered. The contract was changed from one payable in currency to one payable in coin, either gold or silver, of our present standard. The same men who fleeced the government out of a thousand million dollars by that change of contract are now striving with the full force of the administration and the combined power of the Eastern wing of Congress to again

change the contract so that it will be payable in gold only, and again rob the people out of another thousand million dollars, and make it impossible ever to pay the national debt, and reduce fifty millions of free American people to a condition little better than slaves.

Can any man contemplate this diabolical scheme without feeling a righteous indignation toward the perpetrators of it, and a look of some disgust for the mullet-heads who, contrary to their own interest, are by their ignorance aiding the conspiracy, or with folded arms and self-complacency are crying out, "You can't, you can't do anything?"

C. BISHOP.

Notes and Queries from Russell County.

Kansas Farmer:

The storms of the past two weeks have caused a good deal of damage to stockmen and farmers. Nearly every one has lost some stock, and some have lost heavily. It is impossible to tell at this time (the 15th) just the amount of loss in the county, but it will reach a good many thousand dollars and include all kinds of stock. The storm commenced New Year's day and continued until the night of the 3d, making a fall of fourteen inches of snow, with a heavy wind from the northwest all day the 4th, but it did comparatively little damage except blockading the roads, for the weather was mild (at no time more than 10 deg. below the freezing point), with the 5th and 6th pleasant and warm; but during the night following the 6th, the wind changed to northwest, blowing a gale, accompanied by a heavy fall of snow with the mercury 10 deg. below zero, making it impossible to haul feed and scarcely possible to feed from a stack. A good many people were badly frozen in trying to care for their stock. The mails on the star routes have been delayed over a week, and are not regular yet. Stock of all kinds were in extra good condition when the storm commenced, which will make the loss less than it would have been otherwise. The storm has been especially hard on the settlers that got here late last fall.

Our crops last fall were the best we have ever raised, taken as a whole. Land has been in good demand the past year, and government land is nearly all taken. There are a few pieces vacant yet. Railroad land is fast changing hands and rising in value. The number of months of school taught in the county this year is nearly double what it was two years ago. Timber of all kinds made a good growth last year, and if all the fruit trees that were set out last year are properly cared for, Russell county will be independent of eastern Kansas in a few years as far as fruit is concerned. There are a few orchards old enough to bear in the county, and they matured fruit enough this year to satisfy the worst grumblers that apples, plums, cherries, grapes, gooseberries and currants can be successfully grown here. Pears have not been tested here yet. Peach trees grow well enough, but the winter seems to spoil the fruit buds thus far. There is considerably more than enough wheat unsold yet in the county to furnish bread for the inhabitants, and the corn crop is not half sold. There is plenty of feed to carry the stock through a long hard winter yet, so that in spite of the terrible storms we have been through, the county is in a prosperous condition.

I would like to ask you a few questions on the political issues of the day which I think interests every farmer in the State:

- (1) Will there be anything done at this extra session of the Legislature to help the sugar industry of Kansas? If not, why?
- (2) Are our Representatives in Washington in favor of giving us lumber free of duty? If not, why?
- (3) Is our Governor using his influence to enforce prohibition?
- (4) Are there open saloons in Topeka and Leavenworth? If there are, why?

Will some of your contributors kindly inform me as to the relative value of German millet and sorghum for feed and which exhausts the land most?

RUSSELL COUNTY FARMER.

[Answers to Above.—(1) No. Because the session is not a regular session. There is a general desire that it be short.

(2) All our Representatives at Washington are in favor of free lumber, as we understand.

(3) He is. Governor Martin is in earnest

sympathy with the law, and we believe that by the time his first term ends, the law will be more respected in the excepted cities.

(4) There is not an open saloon in Topeka; but in Leavenworth there are a good many. The local officers will do nothing there. The Attorney General began work in that city last summer, but was headed off at every turn. He finally succeeded, however, in obtaining an injunction against four rum-holes, and Judge Brewer, of the United States Circuit court, only a few days ago decided, in an Atchison case, that cases of that kind have no place in Federal courts. The Attorney General began proceedings in Atchison because the local officers would do nothing. It was one of his cases that Judge Brewer passed upon. Our information from Atchison is, that the law has finally got on top, and that there are no open saloons in that city now. Atchison is the Governor's home. The Attorney General, last week, gave notice to the mayor of Leavenworth, and to the County Attorney of that county, that unless they proceed at once to close up the dram-shops there and enforce the law, he will move against them in the Supreme court to remove them from office. And he means business. Later.—The suit has been commenced.—Ed. K. F.]

Letter from Marshall County.

Kansas Farmer:

In common with every other portion of the State, we are feeling the effects of intense cold combined with abundance of snow. Stock is doing as well as could be expected with the mercury located among the twenties. There have been many losses of hogs from the so-called cholera, many farmers losing almost their entire stock. Many remedies have been tried, but none have proved of any value. Where healthy hogs have been taken from herds, partially affected, and placed in pens isolated from where hogs have been kept, they have not been affected; and while there may be no sure remedy for the disease, a very good preventive is to keep as many pens or lots as possible and allow the hogs to stay in a pen but a few days at a time. Where such a plan has been adhered to there have been no losses.

Marshall county is becoming famous for her high-bred cattle. The Herefords, Polled-Angus, Short-horns, Aberdeens and Holsteins have numerous representatives. The Hereford Association of this county recently made a sale of 200 high-bred bull calves to Texas parties. Half-blood calves of that breed are selling for April and May delivery at from \$30 to \$33, which is probably \$12 to \$15 more than common grade calves will bring.

JAMES MONTGOMERY.

Silk Culture.

Kansas Farmer:

In silk culture, as in any kind of business, the first thing requisite is a correct idea of its true character and merits. A misrepresentation of the character of so important an industry as silk culture is a grievous error, as it only tends to stimulate the prejudices of those who are embittered against it because of the wholesale swindle known as the *Morus Multicaulis* craze of scarce a half century ago. Every precaution should be taken to give only the unflinching facts relating to the silk industry. The question of pay is the first taken into consideration by the individual who would embark in any new line of operations. The inquiry is important, and no individual of ordinary intelligence will venture into new industrial fields unless prompted by a hope of remuneration for labor bestowed.

There have been some very foolish attempts made by designing and ignorant speculators in giving gross misrepresentations of the profits of silk culture, some having made an estimate of from \$600 to \$1,000 per acre net profit. Such was the exaggerated view of thousands of people who were duped by the *Multicaulis* fraud, who mortgaged their homes, and some even their last cow, to invest in *Morus Multicaulis* cuttings at an exorbitant cost. But alas, their sad disappointment upon awaking to the fact that there was no market in the United States to offset their cocoons; and still worse, that the famous palm-leaved silk *Multicaulis* was not the proper food for the latitude—being frozen to the ground in severe winters—and in addition to all this, based their hopes on a false idea of profits; the work of silk-raising

was suddenly abandoned, leaving nothing behind but the venom trail of disgust.

This serious mistake made by our forefathers must not now be made the standard by which the merits of the industry shall be measured, but rather serve as a valuable educator to those who now are having a mania for the development of the industry.

That silk-growing is very profitable for the time required to produce a crop is an indisputable fact. This, however, depends upon nature's support by a proper soil and climate and the scientific modes of operation, and a home market to offset the crop when produced. The following is an estimate of profit in silk culture given by one of our prominent authors. It is reliable on conditions expressed: "One acre planted to proper producing mulberry trees, if well arranged, two or three years after planting, furnish enough food to feed 160,000 worms, which should produce at least 250 pounds of good reeling cocoons, dry, worth \$1 per pound, besides about fifty pounds of inferior cocoons, worth 50 cents per pound. This would be \$275 per acre, and can be produced by three active ladies in four to five weeks."

It will be seen by the above estimate that there is a vast profit in growing silk, and this fact becoming known by many of our ambitious ladies who live in different parts of our State, are planting well-arranged mulberry parks with a view of early embracing the advantage of the silk industry.

The prospective government flature at Newton, Kas., will be established the coming season, if the urgent appeals of the friends of the movement will have weight with the Department. There is now a bill before Congress for additional appropriations, and the Sericultural Bureau at Washington has given a conditional promise to aid the work.

The remarkable success of many who have attempted to produce cocoons in Kansas (especially central and southern Kansas) has created a deep interest in silk-growing, not only in Kansas and other parts of the United States, but even in Europe, among the Swiss and French. Kansas is being talked of as a successful field for future operations in the silk industry, and doubtless the national want will prompt its early development. I. HORNER, Silk Culturist.

Emporia, Kas.

Shelter and Feed for Dairy Cows.

Kansas Farmer:

It would be useless to enumerate the advantages to be derived from providing shelter for dairy cows during the inclement season of the year. It is unquestionable that a certain amount of food will produce a greater flow of milk and keep the animal in better condition when fed in a warm stable than when fed out-of-doors during cold weather. Supposing, therefore, that all who are in any way interested in dairying, have long ago provided comfortable quarters for their cows, here are a few suggestions as to the best way of managing them. When the object is to obtain milk in winter, if water can be supplied in the stable, I would seldom turn them out at all. And if necessary to turn them out to water, I would let them out twice a day, say from ten to fifteen minutes. Cows like to be humored a little in regard to watering. They will not drink as readily as horses, and should be allowed plenty of time. When cows are not giving milk, and it is desirable to have them eat coarse fodder, they should be turned out for several hours during the day; they will eat this class of fodder much better in the yard than in the stable. If weather is stormy they will be better in the stable; and at all times, if they should seem cold and are not eating or enjoying themselves, let them be immediately tied up. Ordinarily, the best means of promoting the best flow of milk is to feed a warm bran mash twice daily. With dry fodder or hay feed beets, carrots, etc. Salt regularly. W. O. K.

Washington, Kas.

From Reno County.

Kansas Farmer:

We had a severe storm on the 7th inst. that was very hard on stock that was not sheltered. A good many farmers lost from two to twenty-five head of hogs, and some a few head of cattle. Hog cholera is spreading considerable, and the losses are large. There are very few fat hogs now in this neighborhood. Thomas Robertson, of Lincoln, brought to Hutchinson, a day or two ago, the finest lot of hogs ever raised in Reno county. There were forty-seven head in the bunch, and they weighed 21,180 pounds, or averaging 451 pounds. "Tom" can now wear the hog belt of Reno county. Thompson & Co. purchased them, and paid \$3.45. J. R.

Hiawatha Institute--January 14th, 1886.
Special correspondence KANSAS FARMER.

FIRST DAY.

The meeting of the farmers of Brown county at the court house was attended quite largely, notwithstanding the weather was stormy and cold. The President not being present at the appointed hour, a President was appointed *pro tem*, and the meeting adjourned until after dinner.

Beginning at 1:30 o'clock, the session was opened by the reading of a paper by Peter Pfeiffer on "Corn; its Successful Raising and Economical Disposition." This was followed by one on the same subject by H. F. Mellenbruch. The papers were rife with the experience of practical men and were followed by general discussions among the members of the institute. Almost every point one can imagine was discussed, including the seed, its preserving, planting, and the working of the corn after it is through the ground.

Hogs, the diseases and difficulties attending their successful raising and fattening. This subject was taken up and discussed very fully, papers being read by Eli Zimmerman, John Springer and others. The discussion was one of great interest, and very exhaustive as to methods of cure, in particular.

Small grain--their places in farm economy, and their profitable consumption on the farm, was of considerable interest. A paper on that subject was read by Andrew Carothers. Following this came meadows and pastures, the varieties of grasses adapted to Brown county. This most important subject elicited something from almost every one present.

SECOND DAY.

Public highways, their proper construction and repairs, came up this morning. Under the above head was discussed the advisability of seeding the roadsides with grass seed, upon which a paper was read by Mr. A. A. Frink.

At 11 o'clock, comparative profits of our various farm animals, in the present condition of the farmers of the county, was discussed, by Mr. J. M. Boomer, Mr. T. J. Elliott and others.

In the afternoon came discussions upon farm vegetables and fruit gardens, by Mr. Moyer and others.

Last but not least, in interest or importance, came a discussion upon neatness and taste in arranging the farm, also beautifying the home by the planting of trees, shrubs, and the cultivating of flowers, by Christ Isley, W. C. Bechler and others.

The executive committee for the coming year are Mr. Fuller, Andrew Carothers, and Dr. Harvey Seburn. W.

Gossip About Stock.

The losses of live stock in the region of Garden City has been general and severe.

A Victoria, Ellis county, stockman lost over 100 head of stock during the late storm. Severe losses are generally reported in that county.

Salina Herald: D. B. Powers came down from Ellsworth Tuesday. He reports heavy losses among cattle, sheep and hogs, one party losing a thousand head during the three days of the storm. The loss among range cattle is still greater.

Newton Republican: Captain Spivey is in from the West. He reports great losses in stock. Cattle and sheep wandered with the storm to the wire fence by the side of the railroad and there perished by hundreds and thousands. He saw 1,500 dead sheep at one place.

Ellsworth Democrat: H. C. Adams, although well provided with sheds and feed, lost 600 sheep by the recent storm, the sheep crowding together and piling up on one another in the sheds, making it almost impossible to take care of the number. Mr. Adams has over 6,000. The sheep did not die from the cold, but from being smothered.

Winfield Courier: Mr. S. P. Strong reports big losses of sheep in Rock township last Thursday night. Arthur Swain lost 150 head. J. F. Williams lost 100 head. John Snyder lost 100 head, and John Stalter lost a large number. Andrew Lawson also had a small loss. Mr. Strong, out of his big herd, didn't lose a sheep. He had prepared the best of shelter.

Beloit (Mitchell county) Public Record: John Arkebaur, on Little Oak creek, lost

thirty-two hogs by freezing. John McGannity had thirty hogs frozen to death. John and Mart Ryeball lost sixteen hogs by freezing. Twenty-two horses belonging to Hiram Coble were frozen to death. Quail, prairie hens and rabbits in large numbers are reported to have been frozen.

Kingman correspondent in the Wichita Eagle: No loss of life is reported from any part of this county, but cattle, hogs and sheep have been frozen in all directions. One man lost forty-five out of ninety head of fat steers. This seems to be the largest loss to any one man. At the Bell ranch 100 head of sheep and forty head of hogs were frozen. D. Richardson lost fifteen head of hogs. On the Cuddy ranch some of the stock cattle were frozen, number not given.

This, That and the Other.

The highest point ever reached by man was by balloon--27,000 feet.

Cincinnati has two women watchmakers who are in business for themselves and each of them doing well.

An English astronomer considers that his fox terrier has the intellectual development of a child 2 years old.

Cases of lead-poisoning in Paris have been traced to bread and flour, a miller having filled up certain holes in his millstones with lead.

A French lion-tamer is providing a new "sensation" for Parisians in allowing them to accompany him in the lion's cage at the rate of 100 francs the trip.

When time which steals our lives away,
Shall steal our pleasures too,
The memory of the past will stay,
And half our joys renew. --Moore.

"Tommy Atkins" is generally accepted now as the typical name for an English soldier, just as John Bull is for an Englishman, and, curiously too, the first Guardsman wounded in the Soudan was Sergeant Atkins.

The last remaining tollhouse on the old Philadelphia turnpike was torn down last week, and for the first time in fifty years the great thoroughfare between Philadelphia and Pittsburg was open its entire length without charge to the public.

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

Three and One-half Millions in Horses.

This vast sum comprehends the value of the Percheron horses that have been imported from the best breeding districts of France by Mr. M. W. Dunham, of "Oaklawn Farm," Wayne, Illinois. The numbers imported and collected at this establishment during the past two years aggregate 1,000 head, nearly all recorded with pedigrees in the Percheron Stud Book of France. From it great numbers have been distributed to all parts of the United States and British possessions, contributing largely to the prosperity of the agricultural industries of those countries.

Topeka Seed House.

A KANSAS FARMER representative called at this well-known establishment last week and found everything being put in readiness for the early spring trade. They now have on hand a full line of fresh garden seeds direct from the various special growers of the same, procured from all parts of the country. Field and grass seeds are now being received in unusually large quantities. The Topeka Seed House has gained their deserved popularity and business because of their practical knowledge of the business and demands of the trade. Readers desiring pure, reliable garden or field seeds of any kind adapted to this climate, will do well to address, for catalogue, S. H. Downs, manager, Topeka, Kas.

The writer purchased a Murray's Slating Blackboard recently from the Central School Supply Agency, and it has convinced him that Murray's Plaster Slating is the best material extant for this purpose. See their ad.

"If!"

"Stand back, gentlemen! Clear the track!" shouted the police, and as the quickly-gathering crowd surged back, steamer No. 4 came up the street, the magnificent black horses striking fire from the pavement.

But hold! A wheel comes off! the steamer is overturned, and the brave firemen are picked up bleeding and senseless!

An investigation revealed the fact that in oiling the steamer that morning the steward had neglected to put in the linch-pin. A little neglect on his part had caused a loss of a half million dollars. The busy marts of trade are full of men who are making the same fatal mistake. They neglect their kidneys, thinking they need no attention, whereas if they made occasional use of Warner's safe cure they would never say that they don't feel quite well; that a tired feeling bothers them; that they are plagued with indigestion; that their brain refuses to respond at call; that their nerves are all unstrung. --Fire Journal.

The art of opening letters addressed to other people and refastening them so that no one will know, is a profession in Spain. In the postoffice they have a dark chamber, where experts inquire into things, and these have long since given up the use of steam for opening gummed communications. Even red-hot platinum wire for letters sealed with wax is out of date. The favorite means is with a knife sharper than a razor, which is run along the bottom of the envelope. The letter having been extracted and then replaced after the officials of the post-office have learned what is going on, a fine line of liquid cement is drawn along the opening, the slightest pressure conceivable is applied, and the letter is as whole as ever.

Hood's Sarsaparilla

This successful medicine is a carefully-prepared extract of the best remedies of the vegetable kingdom known to medical science as Alteratives, Blood Purifiers, Diuretics, and Tonics, such as Sarsaparilla, Yellow Dock, Stillingia, Dandelion, Juniper Berries, Mandrake, Wild Cherry Bark and other selected roots, barks and herbs. A medicine, like anything else, can be fairly judged only by its results. We point with satisfaction to the glorious record Hood's Sarsaparilla has entered for itself upon the hearts of thousands of people who have personally or indirectly been relieved of terrible suffering which all other remedies failed to reach. Sold by all druggists. \$1; six for \$5. Made only by C. I. HOOD & CO., Apothecaries, Lowell, Mass.

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

"BURLINGTON ROUTE"

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

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The Home Circle.

Two Poor Old Souls.

'Tis Christmas night; the streets are bright,
And many windows are alight,
And mirth seems monarch everywhere,
For sounds of laughter fill the air.
But in a little room which knows
No gleam save what the fire shows
Sit, gazing at the glowing coals,
Two poor old souls.

Round them no happy children press
With words and smiles of tenderness;
To them no friends bring greetings gay—
Their friends are dead or far away,
Or else forgetful. At their gate,
Foot-deep in snow, no singers wait
To cheer with quaint and jolly trolls
These poor old souls.

And yet two-score of years did he
Do much to add to Christmas glee
With pictures drawn with cunning art
By skillful hand from gentle heart,
And she has told of Christmas time
A hundred tales in prose and rhyme.
Now recompense no creature doles
These poor old souls.

And many a feast, in days gone by,
They've spread, when fortune lingered nigh,
And they but little knew of care,
And bade their comrades come and share;
And there—how joyous was the scene,
The walls all hung with Christmas green!
Their healths were drunk in brimming
bowls.

These poor old souls.

But, ah! they faltered in the race,
And newer life sprung to each place,
And seized the wreaths they'd not resigned;
And thus, disowned and left behind,
In time too brief they were forgot.
Alas! it is the common lot,
And will be while earth onward rolls,
For poor old souls.

Left and forgot, until once more
Their names are brought the world before,
And then, perchance, some one will tell
How such a picture pleased him well,
Or such a story gladness shed
Upon his children as they read;
But this will be when Death's bell tolls
For two old souls.

—Margaret Eyttinge, in *Harper's Weekly*.

Dressing Children Fashionably.

I often read about dressing children warm instead of fashionably. A great many entertain the idea that if children are fashionably dressed they are not warmly clothed. There are a great many who permit their children to go out quite thinly clad to face the cold winter winds, but it is not the fashionable mother of to-day. The fashion means the prevailing mode or style, such as are issued in a great many magazines, and has reference to warmth, to physical protection, as well as to cut and combination of materials and colors.

It is not considered stylish now to complain continually of poor health, or to allow our children to become invalids by neglecting to care for them by insufficient clothing. I have been a subscriber to one of the leading fashion magazines for a number of years, and I have noticed every winter that considerable space was devoted to the necessity of dressing warm, always advising that the children be supplied with knit goods, flannel or Canton flannel for undergarments. As for dresses, flannel, cashmere or velvet are wisely mentioned, for when properly made and well lined they are the warmest materials for dresses. One can not very well help but get a very thick cloak for children now. Cloaks for girls are about as heavy as boys' coats, and, as, that is what Dame Fashion dictates, that is what the merchants must keep for sale. There are nice stockings, soft and warm, made of Saxony yarn, with legs long enough to reach far above the knees, and with overshoes, leggings, and mittens with long snug wrists. I maintain that if we undertake to dress our children fashionably, or as the fashion papers suggest, we can not well avoid dressing our children warm. Mrs. E. W. Brown.

"Væ Victis."

Without a doubt, poesy entered the first poet's soul through the agency of the grand scenes of nature which his eyes feasted upon and plaintive melodies which played upon his ear. The sublimity of the mountains, the great panorama of stars, the roar of the tempest and cataract, the veins of fire that crashed through the heavens, all had their share in forming the finest modes of expression that was ever given to the will of man. The first poet did not have poetry to imitate and plagiarize. His verses were his own thoughts and were perfectly original.

Poesy (or poetry) being once established,

became a common mode of expressing thought, but the thought was not original. So it is at this day, one poet getting themes from another. The poem which gives this article a subject, while fine in some particulars, betrays imitation, which persons having read a wide scope of poets will readily notice. As a proof to the foregoing statement we would direct readers to Poe's "Haunted Palace" and Longfellow's "Beleaguered City," the former bearing the greatest semblance. In both "Haunted Palace" and "Væ Victis" there is a large building beside a river, and both have shady greens and spirits and angels thereabout; both have a king, in one, "King of Echoes," in the other, "King of Flowers." There are also minor points of resemblance in the two poems. When Apollo usurped God's enchantment lyre, he never could bring forth from it such sweet strains as its rightful owner.

LARA.

Hints on Underclothing.

There are few matters concerning health that are more completely misunderstood by the average man or woman than the subject of underclothing. As now is the time at which it is important to begin to exercise special care to avoid taking cold, it will not be out of place for me to say a few words on this important question.

In the first place, I may say that in our climate some kind of underclothing should be worn by man, woman and child all the year round, summer as well as winter, though, of course, it should vary in character with the season. There are, doubtless, many who wear nothing of the sort, winter and summer, and who have thus far escaped all ill consequences, or at least think they have. In all probability, however, they are deceiving themselves. They may not yet have suffered any serious inconvenience from that neglect to properly clothe themselves, but they are quite certainly, even though the process goes on slowly, weakening their resisting powers, and are hence rendering themselves less capable of bearing up against the attacks which morbid influences are constantly making. Every year finds them more apt to suffer from slight ailments, each one of which debilitates the system; advancing age makes them more susceptible, and at last pneumonia, pleurisy, dysentery or some other serious disease strikes them down. The changes in our climate are so sudden and severe as to require all the vital strength of the organism to combat them, and if the body be not properly protected the danger is greatly increased. Even with all the care that can be exercised the barriers are often broken down.

There are many men and women within my personal knowledge who cannot, even for a single day, omit their customary woolen shirts or drawers without contracting a cough, or becoming subject to rheumatic or neuralgic pains. One of these is a gentleman holding a high office under the Government of the United States. He dislikes the sensation of wool next to his skin, and has repeatedly tried to harden himself to the point of being able to dispense with the thick flannel shirt that his wife insists on his wearing. As often, however, as he has made the attempt he has been obliged, after a few hours' abstinence, to return to the disagreeable garment. For a gentle reminder comes to him in the form of a slight stitch in his side while he is sniffing the fresh morning air on his way to his office. By the time he has gone a few blocks, whether on foot or in his carriage, it is painful for him to breathe, and the suffering goes on increasing till he is forced to go home and put on the protecting shirt, very much to his wife's delight at the fulfillment of her predictions.

There is a widely-prevalent idea that silk is the best substance from which to make underclothing, and I have known many poor girls to stint themselves in the necessities of life in order to save enough money to purchase silk undergarments. But silk is not the best material with which to make underclothes, so far as concerns their health-preserving qualities, whatever may be its advantages so far as beauty and immediate comfort are concerned. The chief object of underclothing is the retention of the natural heat of the body in such a way that low temperatures and sudden changes will not affect the surface. Several years ago I performed some experiments which went to show beyond a doubt that silk is below wool in its

power to prevent the loss of heat from the body and very little superior to cotton. Indeed, nothing is in this respect preferable to wool, and of this material all underclothing meant for winter use should be made. In summer a mixture of wool and cotton called merino may be worn, but even in very hot weather silk is not desirable, for it is not such a ready absorber of the perspiration as is wool, and hence allows the body to be kept in a state not very remote from that known as parboiled. Wool, however, taking up as it does the moisture from the body, exposes it to the action of the atmosphere, it is evaporated, and the process being a cooling one, keeps the skin from becoming overheated.

Rabbit skins, cushions of various kinds and the so-called "protectors" worn over the chest are horrible affairs, as they prevent the escape of the excretions from the skin and hence facilitate the collection of dirt as well as impeding the proper exercise of one of the most important functions of the body. I have frequently seen persons, men and women, divest themselves of a half dozen layers of skins and pads before I could get at the naked chest to examine it with the stethoscope. The odor was disgusting, and the effect upon the organs they were supposed to protect certainly deleterious. No underclothing should ever be so thick as to prevent the free passage of the cutaneous excretions and the atmospheric air. The skin requires ventilation as well as do the lungs. Chamol-skin undergarments, "perforated or unperforated," are abominations.

A notion exists that red is a particularly advantageous color to give to the undershirts and drawers worn in very cold weather. There is no foundation in fact for such an idea. It has been said that the dyestuff used for the purpose of producing the color in question is more irritating to the skin than the other substances employed; but even if this were true, and I am strongly inclined to question the correctness of the statement, it would be no reason for using red-colored undergarments in preference to brown or white. It is not irritation of the skin that is wanted when we put on underclothing, but protection from cold and sudden vicissitudes of temperature. When it is necessary to irritate the skin it is better to make use of a mustard plaster, or a blister, and not to divert the clothing from its proper objects. Underclothing should be made of white material. Theoretically, black would be preferable for winter use, as it is a better non-conductor of heat and a better absorber of moisture than any other color, other things being equal; but it would probably be difficult to get people to clothe themselves in clothing of this color, or to find the necessary article in the shops. Whatever color be worn, the garments should be frequently washed, as the exhalations from the skin cling with great tenacity to woolen materials. They should never, after having been taken off at night, be put on again till they have been thoroughly aired in the open air. —William A. Hammond, M. D., in the *Clothier*.

Household Recipes.

Roasted Rabbit.—Young rabbits are, of course, best, and are easily known by their smooth, sharp claws. After skinning, let them lie in water fifteen minutes or so, to draw out the blood; stuff with dressing prepared as for poultry. Baste frequently while roasting. When done, make a brown gravy. Serve with it cranberry sauce or currant jelly. Some use sausage-meat in part for the dressing, but we always prefer the ordinary bread crumbs.

Chicken Pie.—A young fowl is better than a chicken for this pie. It must be fat and be cut up in small pieces. Place it in enough cold water to cover it. Add an onion cut in halves, a bay leaf, a teaspoonful of salt, and a saltspoonful of pepper. Place it in a closely-covered kettle where it will simmer—but not boil—for three hours, or until tender. If convenient, this may be done the day before. Make a very rich biscuit dough. Roll it out quickly, spread it thinly with butter, fold it over, roll it out again nearly half an inch thick and line a flaring but deep earthen baking-dish with it. Turn a small teacup over in the center of the dish, arrange the chicken about it, having drawn out the larger bones and removed the onion and bay leaf. Taste the liquor and see if it be sufficiently salted and peppered. If oysters are

plentiful, twenty or thirty raw ones may be put in between the pieces of chicken. Add a cup of butter, cut in bits and properly distributed. Turn over it the chicken broth, and if there is more than enough to cover it sprinkle flour over the mass to absorb it. Cover with a crust in which cross slits have been cut at the center. Just before it is placed in the oven—which should be just as soon as its crust can be made ready—spread over it a tablespoonful of softened butter. Bake one hour. If the oven be very hot set a trivet under the dish and cover the top of the pie with a thick paper. Serve the pie in the same dish that it is baked in. If this dish be not attractive fold a napkin about it daintily, and set it upon a large pretty plate or platter.

Mince-meat for Pies.—Boil five pounds of lean and juicy beef until tender, and whilst boiling keep closely covered; when cold chop it very fine; chop very finely three pounds of nice beef suet; seed three pounds of raisins, and chop; three pounds of well-washed and dried currants; two pounds of citron cut into thin slices; grate only the oily part of the rind of six fresh lemons; two tablespoonfuls of ground cinnamon; six good-sized nutmegs, grated; one teaspoonful of salt; one teaspoonful of ground white ginger; chop finely fourteen good-sized Pippin apples; mix these well together; then put it into a stone jar; cover it with good French brandy and wine; three parts brandy and the rest wine; this must be kept in a cool, dry place, and improves by keeping. A little good cider is quite an improvement, added just as it is baked.

Plum Pudding.—One-half pound of kidney suet, half pound of raisins (Smyrna and Malaga mixed), half pound of fresh bread crumbs, one tablespoonful of flour, six ounces brown sugar, four ounces orange peel and citron mixed, a little salt, one-fourth of a grated nutmeg, a pinch of pulverized ginger, half dozen eggs, a small cup of sweet cream and one of currant jelly. This is sufficient for a good-sized pudding. Stone the raisins and soak them in the melted currant jelly. Now trim the beef kidney fat and chop it very fine, with one spoonful of flour; mix it well with the crumbs of bread, brown sugar and the eggs; then add the raisins, the salt, nutmeg, ginger, and last of all, and after it is all well mixed, add the cream. Spread all this in a large napkin, well buttered, fold up the corners of the napkin and tie to the level of the pudding, so as to make it round; then plunge the pudding into a saucepan of boiling water, and let it boil at least four hours—a constant boiling. Take out and let drain in a sieve; cut it from the top so as to keep on a level; then turn it out on a dish, removing the napkin carefully, so as not to disturb the fine part of the pudding. Sprinkle with a little alcohol. You may apply a match to the pudding when it is on the table. Serve the sauce separate. This pudding may be cooked in a mold, the mold buttered, and the pudding tied in a napkin, also well buttered. Boil four hours. Cranberry sauce should be made the previous day. To one quart of washed berries add one teacupful of water and cook in an enameled or earthenware vessel. After boiling has begun permit them to cook steadily just ten minutes, then add one and a half or two teacupfuls of granulated sugar, according as the taste be acid or sweet. Stir five minutes, or until the sugar is freely intermingled, and turn out into a mold. If the fruit is fine it will form into a jelly, which will be preferred for not having been strained.

There is always sunrise somewhere!
Though the night be round thee drawn,
Somewhere still the east is bright'ning
With the rosy flush of dawn.
What though near the bat is fitting,
And the raven croaks his lay,
Somewhere still the sunbird's greeting,
Hails the rising of the day!
—Nathan D. Urner.

CHRONIC CATARRH.—I have suffered for years from Chronic Catarrh. Six weeks ago I was induced to try Ely's Cream Balm. Relief was instantaneous, and continued use has resulted in an almost complete cure. —S. M. GREENE, Book-keeper, Steamboat Co., Catskill, N. Y.

Tomatoes raised on a poor, light soil will have less growth than those raised on rich soil, but they will ripen a week or ten days sooner.

The Young Folks.

Ignis Fatuus.

One night of old a sailor bold
Put to sea in stormy weather,
In light and dark, he and his bark
Had braved the deep, long years together.

"I go," said he, "beyond the sea,
To seek a home in distant Aiden—
A home beside the swelling tide
Midst balmy breezes perfume-laden.

"Where doubts nor fears e'er come—nor
tears,
Nor sore unrest—'life's fitful fever'—
But peaceful joy, without alloy,
Shall gently row me down life's river."

When morning light dispelled the night
His bark stood out upon the ocean;
And far away, through storm and spray,
His fate was watched with deep emotion.

O'ercome at last by surging blast,
Despite his hope and stern endeavor,
Toward the skies he raised his eyes,
And sank beneath the waves forever.

And since that time, in every clime,
His fate is spoken as a warning;
But few, indeed, will ever heed
The lesson of that stormy morning.

Just as of old, the sailor bold
Was lured by hopes so falsely given,
So now and aye do we essay
To find on earth the joys of Heaven.

And in the strife to reach a life
Of our ideal and contriving,
The good we miss of what's in this
And perish in our useless striving.

A North Carolina Ooon Story.

It wasn't many Saturdays ago that a number of gentlemen standing on the streets at Greensboro discussed fox hunting, bird hunting and kindred sports. Each one had told a story, remarkable in a high degree, when the climax was reached by one of the gentlemen, who told the following story:

"Coons!" said he, with a sneer. "You don't know anything about coons in this country. Why, you ought to go to southwest Georgia. I lived there once, and my favorite pastime was coon hunting. Early one morning I started out with my dogs for a hunt. The morning was damp and heavy, and we hadn't gone far before the dogs struck a trail and away they went. How beautiful it was! Through the underbrush they rushed, crashing, barking, the sounds coming to us like low music on the morning air. It wasn't many minutes before the long howl of the leading dog told us that he had treed.

"We put out after them, going through the swamps and down into a canebrake. There we came upon the dogs all clustered about a cypress log. They smelled it, and then all started back as if they didn't know what was to pay. We drew near and endeavored to urge them on. But they wouldn't urge. We went up to the log, and it seemed to be moving. I didn't know what to make of it. The sides of it rose and fell as regular as the beat of a clock. We finally cut into it, and there it was packed with coons. We killed 140, and I don't know how many got away."

"What made the log move?" innocently asked a bystander.

"Oh, plain as day. The coons were packed so close that every time they breathed the log would expand."

There was a ghastly silence, and the crowd moved away.

"It wasn't a good day for coons, either!" he yelled after them, and putting a fresh chew of tobacco in his mouth he walked rapidly in the direction of the "cotton bourse" on Wall street, and in a moment more was buying the fleecy staple with a serene and unmoved countenance.—*Greensboro Herald.*

A Formal Call in Persia.

The manners of the courtly occupant of this Teheran mansion are guided by an etiquette that is indeed a "law of the Medes and Persians, which changeth not." The visitor sends notice an hour or two previous to calling. If the visit is one of importance notice is sent the previous day. You will go in a fashion suited to your social position and the rank of the host. Whether on horseback or in a carriage, you will be accompanied by a number of mounted attendants. As you approach the house, servants, mounted or on foot, come forth to meet you, and one returns with speed to announce your coming. A dozen attendants escort you to the reception-

room. According to your relative rank the host meets you at the foot of the staircase, at the door or at the upper part of the room. The question of seats is one also requiring the utmost circumspection in observing the various shades of rank. If your rank is superior to that of the host you are invited to occupy a sofa alone, at the upper corner, while the host sits on a chair or on the floor at your right. The left is more honorable than the right in Persia. If of equal rank he occupies the sofa with you; but if you are inferior then the positions are reversed. The upper corner of the room is in any case the most honorable position. If a number are present of various ranks each one knows his place at a glance. The passing of refreshments is also a matter of undeviating strictness, the number and quality depending upon the time of day and the character of the guest. The kalia, or water-pipe, offers a fine opportunity for a display of Persian manners. According to precept and custom a Mohammedan cannot smoke the same pipe with a Christian, and, except on rare occasions when the host is a man of progressive views, a separate pipe is furnished for a European visitor. But among Persians it is the custom for the highest in rank to receive the pipe first, offering it to each in turn before smoking it himself. For an inferior to accept the offer is an incredible offence against good manners. But each in turn after this ceremony takes a few whiffs at the pipe, all taking care to eject the smoke from the bowl before offering it to the next. The attendants on such an occasion leave their shoes at the door and retire backward.—*S. W. G. Benjamin, in the Century.*

Interesting Paragraphs.

Near Bombay, on the Island of Goa, there is a singular vegetable termed the "sorrowful tree," because it only flourishes in the night. At sunset no flowers are to be seen, and yet after an hour it is full of them. They yield a sweet smell, but the sun no sooner begins to shine upon them than some of them fall off, and thus it continues flowering in the night during the whole year.

One of the leading articles which the Polynesian Islands send to this country is copra, which is simply the dried meat of coconuts. The natives break the nuts into small pieces, which, after exposure to the tropical sun, turn to a dark brown color. Copra is used in the manufacture of candles to a large extent. Besides pomades and coconut oil, copra furnishes a volatile oil which is used in the manufacture of perfumery. The importation of copra into the United States is yearly increasing.

A dog belonging to a Wanaqua, N. J., lad, had for a long time been in the habit of picking up his breakfast and running away with it instead of eating it. The boy followed him on Friday, and the dog led him a round-about trip, evidently to tire out his pursuer. Finally the dog lay down and waited for the boy to go away. The boy started abruptly as if to go home. The dog then ran very fast and disappeared in a covert, where investigation revealed a decrepit and emaciated old dog, who was eagerly devouring the breakfast.

At Wilkesbarre there has recently been manufactured a wire rope one mile 500 feet in length, and two and a half inches in diameter. Its total weight is thirty-two tons, and its tensile weight has been tested up to ninety-two tons. It is made of six strands of wire rope, each a little over three-fourths of an inch thick, and composed of nineteen wires. These six strands are wound round a hemp rope, which, though not supposed to add strength to the cable, gives it flexibility. The iron used is all of the best Swedish variety. Such a cable is estimated to be capable of hauling up the planes 8,000,000 or 9,000,000 tons of coal before being worn out. It cost \$4,000.

The Japanese dentist performs all his operations of tooth-drawing with the thumb and fore-finger of one hand, and thus he never terrifies his patients with an array of steel instruments. The skill necessary to do this is only acquired by long practice. But, once it is obtained, the operator is able to extract about half a dozen teeth in thirty seconds without once removing his fingers from the patient's mouth. The dentist's education commences with the pulling out of pegs that have been pressed into soft wood; it ends with the drawing of hard pegs which

have been driven into an oak plank with a mallet. It is said that no human jaw can resist the delicate but powerful manipulation of the Japanese dentist.

The small venomous serpents of Oriental countries have always been in vogue as a means of suicide, the asp of Cleopatra recurring to every one's memory as a prominent example. In certain parts of Bengal there is said to be a race of gypsies, one of whom, for a fee, will furnish a small cobra to any applicant, "and no questions asked." A man who desires to commit murder procures one of these reptiles and places it within a bamboo just long enough to let the head protrude a trifle at one end and the tail at the other. Armed with this deadly weapon the murderer creeps softly to his enemy's tent at dead of night, cuts a hole in the wall, and introduces the bamboo. The tortured reptile, careless upon whom it wreaks its animosity, strikes its fangs into the sleeper, then is withdrawn, and the assassin steals silently away.

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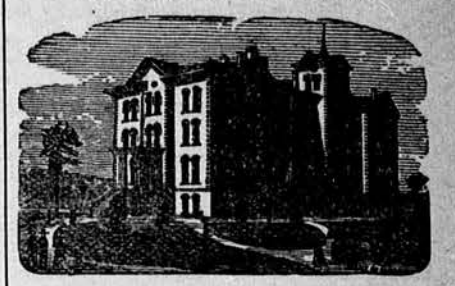
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Mr. L. W. Blake, the subject of the above sketch, with the *Evening Chronicle*, St. Louis, Mo., in answer to the inquiry of a reporter, said: "For seven years I had been ailing with catarrh, and during that time have been treated by six eminent physicians, without success. Some doctors told me I had consumption. For the past three years I had a continual discharge of mucous droppings in the throat, a cough and pain across my forehead. Added to that was loss of memory, voice, appetite, roaring in the ears, and a general feeling of wretchedness. About five months ago I consulted Dr. Turner. To day I am as well as ever, have gained twenty pounds, and don't detect a trace of my old trouble. Yes, sir, I would be pleased to answer, by letter, any person suffering from that dread disease."

Louis Turner, M. D., has offices at 819 Washington avenue, St. Louis, Mo., and has, in a private and hospital practice of over thirty years, treated with wonderful success all curable cases. Treatment of deformities and surgery a specialty. **Not necessary to see patients.** By my original system of consultation, I can treat patients by mail as successfully as in personal consultation. Patients can consult me by mail on all diseases of the Blood, Stomach, Liver, Bowels, Heart, Nerves and General Debility, and all diseases peculiar to the sexes. No exorbitant charges. Consultation at office and by mail one dollar. **Send One Dollar for a full consultation by mail, on receipt of which I will thoroughly investigate your case. Medicines furnished free to patients.** If you are sick or ailing, write me. No letters answered unless accompanied by 4 cents in stamps. Address all letters to **Dr. Louis Turner, 819 Washington Avenue, St. Louis, Mo.**

THE KANSAS FARMER

ESTABLISHED IN 1863.

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The KANSAS FARMER, the State Agricultural paper of Kansas, is also the official State paper for publishing all the Stray Notices of the State, and is kept on file in every County Clerk's office.

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Address **KANSAS FARMER CO.,**
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The condition of the winter wheat is reported good in all the great wheat-growing States.

The Legislature of Kansas convened in special session yesterday to apportion the State for Senators and Representatives, pursuant to a provision of the constitution.

People ought not, unnecessarily, to take chances on the weather during the winter season. Some preparation for cold weather should be made before it comes, and every one ought to be prepared to stand at least one surprise. The wreck of the late storm is a dreadful warning.

The committee appointed by the Legislature last winter to investigate the operation of the stock laws passed at the special session in 1884, report in favor of the Chairman of the Live Stock Sanitary Commission keeping his office at the State capitol, and of establishing a chair of veterinary science in the State Agricultural College.

General John Newton, Chief of Engineers, United States army, originator of the plan and director of the work, has prepared a complete account of the operations for the removal of the obstructions at Hell Gate, from their beginning to the explosion of Flood Rock, in October last, which will appear with full and new illustrations as the leading article in the February number of *The Popular Science Monthly*.

One Week Longer and a Dollar.

So many requests have reached us from subscribers and club agents asking for a little time to complete clubs, that we have not cut off our delinquent "t 52's" and will not do so for one more week. This, surely, will give time enough. And club agents who have not yet completed their clubs, but expect to do so soon, may send in at once the names and money already obtained, and we will wait a reasonable time for the rest. Be sure to remind us, when you send other names, that they belong to your club.

And we will allow any club agent, after his club is full and forwarded, to send in additional names at the club rates.

And here is an offer that is new and important. Any of our subscribers for 1885 who have renewed for 1886 or will renew under any of the above

propositions, may send the names of any number of their friends with one dollar for each and we will book them for the full year. But the work must be done during this month, January, as the offer does not extend beyond that time, and the names must be those of new, not old, subscribers.

Bad Work of the Storm.

Last week's storm was much more destructive in Kansas than was at first supposed. Several days the roads were blockaded so that we could obtain but little information from the West. Our exchanges relate many instances of loss of animals from cold. A Mr. Adams, of Ellsworth, lost over five hundred head of hogs, and Amos Howell, Atchison county, lost three hundred head. Bogart Brothers, Ford county, lost 1,400 head of sheep. One man in Ellsworth county lost five head of fat steers. A Cowley county farmer lost fifteen head of cattle. A Mr. Postlewaite, of Saline county, lost seventy-one head of cattle. A large number of hogs froze in that county. A Mitchell county man lost twenty-two head of horses, and a good many hogs were lost in that county. Hogs froze in Republic county.

But this is not all. A considerable number of men and women were frozen in the far western counties. One report says twenty men in Hamilton county died from freezing. The Garden City *Sentinel* tells of a number of cases. Will Johnson and R. M. McVay found the dead body of Elmer E. Smith four miles southwest of Scott City, and about six miles from his claim house, which he was trying to reach when overtaken by the storm. A Mr. Ford, who had started for a load of hay, was found dead twenty miles from home. Two sisters named Boetcher were frozen. They with their mother, aged 60 years, started to a house less than a mile away and succeeded in getting within a few yards of the house, where they were all found Friday morning. The old lady was alive and will recover. A mother and two small children were frozen to death in their claim house. Their supply of food and coal was exhausted and the father had started to Garden City for coal and food, but he is missing, and it is supposed he is lost on the prairie. Two men were found in Greeley county. They were on their way home and perished within a few rods of their house. H. O. Ward and George Chapman, of Syracuse, and Isaac Staffle, of Windom, Kansas, started for Greeley county. They were caught in the storm twenty miles out. After turning their teams loose they started to walk back. Chapman perished with cold shortly after starting, and Staffle got within five miles of town and died. Ward got in at 4 o'clock Thursday morning with both feet frozen and will lose them. A man named Higgs was found dead within 250 yards of a house where he would have been sheltered had he found it. Several instances of severe freezing of feet, legs, and arms are given.

Nothing equal to this was ever before reported in this State within our memory, and yet the temperature was not as low as it was many times before during other winters. It was colder last winter and the cold continued longer. But the reason of all this exposure is not hard to find. The fall had been mild and almost continuously pleasant. A snow storm in December came, but it was not cold nor destructive, and it lasted but a short time. There was not enough of it to scare anybody. This January storm came on like a rushing wind. Nobody expected it; nobody was prepared for it; therefore, everybody was caught in it.

Co-operation Among Farmers.

The philosophy of a logging bee or a barn-raising is very simple. One man alone is not able to lift his big logs and put them on piles to burn them, nor is he able to lift the timbers and put them in frames for the barn, so he calls his neighbors to assist him. Together, they make short work of it. The same principle may be made very serviceable to farmers in many other ways. A neighborhood may need something which no one farmer can procure or effect, but if all or a majority unite in the effort, the work can be done. One man may not be able to buy a corn planter, but two, three or half a dozen neighbors can join and pay for one without feeling it. So of a reaper, a thrasher, a sirup factory. Men want to improve their stock, and they must have pure-bred males to begin with if they would have the best results. It may require more money to buy a good bull and stallion than a small farm is worth, but if a dozen or more farmers co-operate in the matter, every one of them can be helped to start. If twenty persons thus unite, every one of them has the help of nineteen other persons as strong as himself. When a little further along, fifty or a hundred farmers may join forces and establish a store or bank. If a store, every stockholder receives interest on his investment by a reduction on the usual prices of the goods he buys. He pays cost price only, while non-stockholders pay the customary or usual price. If a bank, stockholders have advantages that could not accrue to them as individuals operating alone.

Co-operation adds strength to any undertaking. Many hands make light work, the old saying is. So, when expenses are divided among a number of persons they fall lighter on individuals. So, too, though one person's strength or influence be small and of little force, if it be joined with others it counts. Go into larger fields, where men need great power or influence, they can get it only by co-operation with others. General Grant could have done nothing without his great army. Farmers need protection, sometimes, aye, continually, against the unjust encroachments of other classes; they can get it only by co-operating. They must combine their efforts. One man alone may cry aloud and spare not, but nobody hears him until he marches with an army.

Farmers are holding meetings of various kinds during the winter season. Let them consider this subject; they will find none more important.

Why the Legislature Met.

A great many people did not read the Governor's proclamation calling the Legislature together in special session, or they have forgotten its contents; at any rate, there is considerable inquiry about the matter. We can do no better than produce a copy of the instrument, in order that our readers may be fully informed. It is as follows, (dropping the formal part:)

"Section 2, article 10, of the constitution of the State of Kansas, requires that 'a new apportionment shall be made in the year 1866, and every five years thereafter, based upon the census of the preceding year.' Section 20, article 2, directs that 'the Legislature shall provide for taking an enumeration of the inhabitants of the State at least once in ten years,' and that 'the first enumeration shall be taken in A. D. 1865.' This enumeration of the inhabitants of the State has been made, under provisions of chapter 67, session laws of 1875. The constitutional provision, requiring a new apportionment to be made in 1880, can only be complied with by convening the Legislature in special session. The act passed at the session of 1885, 'making appropriations for the current expenses of the State reform

school, for the fiscal years ending June 30, 1886, and June 30, 1887," was not presented to the Governor for his approval before the adjournment of the Legislature, and therefore did not become a law. Chapter 137, session laws of 1885, "An act to create the nineteenth judicial district," provides that the counties of Sumner, Harper, Barber and Comanche, shall comprise the said judicial district. Chapter 71, session laws of 1885, "restores and recreates the counties of Meade and Clark, and defines their boundaries." Chapter 119, session laws of 1885, "An act to regulate terms of court in the sixteenth judicial district," provides that the counties of Clark and Meade, *until organized*, are hereby attached to the county of Comanche for judicial purposes." The counties of Clark and Meade have since been reorganized in compliance with the provisions of section 1, chapter 63, session laws of 1876. They are, therefore, not included in any judicial district, and are thus left without courts for the trial of causes. Chapter 37 session laws of 1885, "making appropriation for the current expenses of the State asylum of idiotic and imbecile children," makes such appropriation for the fiscal year ending June 30, 1886, only, although in its title reciting that appropriations are made for the fiscal years ending June 30, 1886, and June 30, 1887. Chapter 118, session laws of 1885, creates a "bureau of labor and industrial statistics," defines the duties and powers of this bureau, and fixes the salary of the commissioner, but no appropriation was made for the payment of the commissioner's salary, and the legal expenses of his office."

Crop, Stock and Weather Reports.

The KANSAS FARMER Company has begun the organization of a reporting bureau for the purpose of obtaining reliable information concerning the condition of crops, stock, weather and farm work in every county in the State, at certain specific dates. The object is to gather in all this information direct from the farmers and all at the same time, so that the condition of the whole State at any particular time may be seen at a glance and be given to the people in one issue of the FARMER.

This will be a new and very useful feature of the paper. The reports will come from responsible sources out among the people, so that they will have the force of official documents. Our readers will all know how things compare in the State, because the reports will cover the same period of time in all parts of the State.

The reports will be exceedingly valuable to persons who are interested in Kansas, but live in other States. The first report will appear on the 3d day of March, covering the whole winter so far as weather is concerned, and the condition of stock, and of wheat, and the forwardness of farm work the last week in February. Reports will follow on or about the first days of April, May, June, July, September, November and December.

Patents to Kansas People.

The following is a list of patents granted Kansas people for the week ending January 15th, 1886; prepared from the official records of the Patent office by Mr. J. C. Higdon, solicitor of patents, Diamond building, Kansas City, Mo.:

Roller mill feeder—Ephraim C. Keyser, of Abilene.
Gage for weather-boarding—Wm. Ervin, of Argentine.
Upright steam heater—Wm. F. Boswell, of Atchison.
Car coupling—David M. Harris, of Douglass.

Farmers' Institute at Hiawatha.

In another place will be found a brief report of the proceedings of the Farmers' Institute at Hiawatha, Brown county. We have not room for the papers read, five of which are on file, but they will appear as fast as we can find room for them, beginning next week.

The State Board of Agriculture.

This important body had an interesting meeting last week. Major Sims was re-elected Secretary without opposition, as he ought to have been. The Major is a conscientious, painstaking man, a practical farmer, and every inch a gentleman. All the old officers were re-elected: Wheeler for President, Johnson Vice President, Francis Treasurer.

The committee on credentials found the following named gentlemen entitled to represent their respective Societies at this meeting:

Cherokee County Agricultural and Stock Association, F. J. Losey.

Clay County Agricultural Society, W. W. Walton.

Coffey County Fair Association, J. E. Woodford.

Cowley County Fair and Driving Park Association, S. S. Linn.

Crawford County Agricultural Society, J. J. Beesley.

Dickinson County Agricultural and Industrial Association, James Culbertson.

Doniphan County Agricultural, Horticultural and Mechanical Association, Wm. Chapple.

Western Kansas Agricultural Fair Association (Ellis county), P. W. Smith.

Jefferson County Agricultural and Mechanical Society, J. F. True.

Jewell District Fair Association, J. S. Foster.

La Cygne District Fair Association, O. D. Harmon.

Nemaha Fair Association, E. Williamson.

Saline County Agricultural, Horticultural and Mechanical Association, Thomas Anderson.

Arkansas Valley Agricultural Society, F. D. Foutz.

Summer County Agricultural and Mechanical Association, T. A. Hubbard.

Washington County Exposition Association, C. W. Aldrich.

Washington County Live Stock, Agricultural and Mechanical Association, Levi Spradling.

There being five members of the Board whose term expired with the present year, the following named gentlemen were elected:

James Culbertson, of Dickinson county; T. M. Potter, of Peabody; L. M. Pickering, of Cherokee county; S. J. Carter, of Coffey county; J. F. Martin, of Cowley.

After the election of officers, the Secretary announced that at previous meetings of the Board, it had been customary to have papers read upon topics of agriculture and stock-raising, and to have the discussion of the same thrown open to the house, but that as he had requested of each member of the Board to furnish a paper for the December report of the Board, he had not deemed it wise to call for the papers at this time. He had asked Dr. Holcombe, the State Veterinary Surgeon, to read a paper on "Hog Cholera" at the evening session, and announced that the reading of the paper and discussion of its merits would be the order of the meeting.

Dr. Holcombe's remarks will be published in the KANSAS FARMER next week. It is an important paper containing many valuable suggestions, results of a considerable experience. The reading of his paper was listened to with intense interest by the gentlemen present, and elicited a spirited discussion.

J. F. True believed that it was of the utmost necessity that something be done by the Legislature, and believed that the Board should prepare a recommendation to the Legislature on the subject, for, he said, it would never be stamped out by individual effort. There must be united action to secure strong laws on the subject.

Hon. A. P. Collins, of Salina, said

that he came from a country where there had been great ravages among the hogs. He said that some time ago, during an overflow of the Solomon river, large numbers of hogs were swept down. They afterward found that hog cholera existed up the river, and that in every instance where the hogs were confined along the stream, they were allowed to go down into the water and were swept down stream. The carcasses were gathered up by renderers and rendered, thus allowing the infection to spread without limit. He believed, also, in some very strong action being taken, and that a very severe penalty should be inflicted upon any person hauling cholera-diseased hogs about the country for any purpose.

Mr. Clappell, of Sedgwick county, gave an account of the results flowing from the lack of very stringent measures being taken to confine the disease. He said that some forty or fifty fine hogs of his had been sacrificed by his neighbor allowing one of his disease-stricken to mingle with his own, turning it loose to range at will with sound animals. He related another instance where he had been a very severe loser through the negligence and eternal carelessness of neighbors, who took no care to confine their diseased stock, and did not take the trouble to bury those that had died, but allowed dogs to eat of them, and thus spread the disease.

Mr. Johnson, of Greenwood county, said that the cholera ravages among hogs in his county had not been so very severe, and that in all cases where the disease had broken out, it had originated with foreign hogs, brought in from other counties and States.

Mr. Potter, of Peabody, thought that the cholera could be carried by almost anything. He related a case in which he believed that the disease had been conveyed to droves of hogs by means of buzzards, eating of the carcasses in one section, and flying to others, being impregnated with the parasites.

Mr. Carter, of Coffey, said that there was no way to get rid of the disease except by passing some very stringent law to stamp it out. He said that the question was of vital importance, and he believed that it would be better for the State to lose every hog in it and be without hogs at all, for fifteen months, if then the farmers could be guaranteed there would be no diseases among hogs for the next ten years.

President Wheeler said that it was his observation that the hog cholera always originated along streams. He thought that there would be difficulty in enforcing a law which proposed to stamp out the disease. In his opinion, if the sanitary conditions were well regulated, there would be no breaking out of the disease, unless by introduction from foreign sources.

The following resolutions were unanimously adopted:

Resolved, By the State Board of Agriculture that we recommend the passage of a law preventing the shipment or driving of hogs into Kansas from any other State under heavy penalty.

WHEREAS, The art of agriculture is the parent and precursor of all arts and its products the foundation of all wealth; and

WHEREAS, The number of persons engaged in agriculture excels that of all other occupations, or comprises 51 per cent. of our entire population, yet this majority is and always has been without representation in cabinet positions; therefore be it

Resolved, By the State Board of Agriculture, that our Senators and Representatives in Congress be requested to take the steps necessary to place the agriculturist on an equal footing with other classes, by the creation of the position of Secretary of Agriculture as a government department, and that said position be filled by a practical agriculturist.

Hog Cholera.

Dr. A. A. Holcombe, State Veterinarian, has drafted the following bill upon the subject of hog cholera which will be presented to the Legislature for consideration:

SECTION 1. No person or persons shall bring or cause to be brought into or through any county or part thereof in this State, any swine which are diseased with, or have been exposed to, what is commonly known as hog cholera. Any person violating any provision of this act shall, upon conviction thereof, be adjudged guilty of a misdemeanor, and shall for each offence be fined not less than one hundred and not more than two thousand dollars, or be imprisoned in the county jail not less than thirty days and not more than six months, or by both such fine and imprisonment.

SEC. 2. Whenever the Governor of the State shall have good reason to believe that hog cholera has become epizootic in certain localities in other States, Territories, or counties, or that there are conditions which render swine coming from such infected districts liable to convey such disease, he shall by proclamation, prohibit the importation of all swine into the State unless they are quarantined at the point of introduction and retained there until they shall receive a certificate of health from the State Veterinarian of Kansas.

SEC. 3. Whenever the Governor of the State shall have issued his proclamation as provided in section 2 of this act, it shall be the duty of the Sanitary Commission to establish upon the borders of the State such quarantine stations as may be required, and to prescribe such rules and regulations governing quarantine as may be deemed necessary, and all animals detained in quarantine as required by this act shall be held at the expense of the owner or owners thereof, and upon the appearance of the disease known as hog cholera among the swine of any herd so held in quarantine, it shall be the duty of the Sanitary Commission to at once cause the destruction of all animals found so diseased, or which have been exposed to such disease, and the owner or owners of swine so destroyed shall have no claim upon the State or its authorized officers for the losses sustained thereby.

SEC. 4. On and after the first day of September, 1886, it shall be the duty of any person having in his possession, any swine known or believed to be infected with hog cholera, or after having received notice that such swine are infected, to at once report the same to the Sanitary Commission; and any person who shall keep any swine known, believed or reported to be so infected, or which have been exposed to such infection, where other swine not affected by or previously exposed to such disease, may be exposed to its contagion or infection, or who shall sell, ship or drive, trade or give away any swine which are or have been so diseased or exposed, or who shall move or drive any swine in violation of any direction, rule, regulation, or order establishing and regulating quarantine, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum of not less than one hundred nor more than five hundred dollars for each of such diseased or exposed swine which he shall permit to run at large, or keep, or sell, ship, drive, trade, or give away in violation of the provision of this act.

SEC. 5. On and after the first day of September, 1886, it shall be the duty of the Sanitary Commission to destroy without delay all swine found within the State which are affected with or which have been exposed to what is known as hog cholera, and to effect such measures of disinfection and quarantine as shall effectually prevent the spread of the disease; and no owner

or owners of swine killed under the provisions of this act shall be entitled to compensation therefor.

Inquiries Answered.

Who laid out the city of Hutchinson, Reno county?

—C. C. and W. E. Hutchinson, two brothers, the latter doing the work of surveying.

May grape vines be pruned safely now?

—Yes.

HORSE IN BAD CONDITION.—What ails my horse. Last spring he had the epizootic and apparently got over it except his hair has not laid good since. About a month ago there were hard lumps came on the inside of his hind leg, and seem to keep along the big veins and extend down to the foot. Every once in a while these lumps break and run a bloody matter; then they heal up and keep swelling again and then break. What must I do with him to make a cure of it and to heal those boils?

—The horse needs renovating. He has never fully recovered from his disease of last spring. He needs to be loosened up and his blood put in good condition. Feed wheat bran, oats, rye, clean hay. Be careful about the hay; that it is not dusty, nor that the life is dried out of it. If there is any dust about his rough feed, moisten it. Good, clean corn fodder is as good as hay. Don't feed much millet or Hungarian, because of the oil in the seeds. Sorghum blades mixed with hay is good. A little flaxseed, or oil cake will be very serviceable. The first thing needed is to get the digestive functions in good state, the bowels loose and regular, and the appetite normal. After a week or two of laxative diet, mix a little powdered gentian and ginger in his feed once a day. Give plenty of salt and pure water. Rub and brush well twice a day. Report in a month.

New Advertisements for 1886.

S. L. Allen—Planet, Jr., Goods.
Wm. Henry Maule—Seeds.
James J. H. Gregory—Gregory's Seeds.
Sedgwick Bros.—Steel Wire Fence.
Cole & Brother—Seedsmen.
A. W. Livingston—Tomato Seeds.
Geo. Pinney—Evergreens.
Pall Mall Electric Association.
H. S. Waldo—Make Your Own Incubators.
Bloomington (Phoenix) Nurseries—Trees and Plants.
D. M. Ferry & Co.—Seed Annual.
J. S. Collins—359 Fruits, etc.
Stark Nurseries—Mariana Plum.
R. H. Shumway—Free Seeds.
Robt. Buist, Jr.—Garden Seeds.
W. Atlee Burpee & Co.—Seeds.
S. Stahl & Son—Excelsior Hatchery.
Coe & Converse—Stone's Hardy.
Carpenter & Gage—Choice Fruits.
Geo. S. Josselyn—Fay Currants.
McDermaid & Allen—Churn.
R. Douglass & Son—Forest Trees.
Alineer Bros.—Seeds.
J. B. Root & Co.—Seeds.
Nature's Incubator Co.—Incubator.
Kansas City Times—One Cent.
Francis Brill—Cauliflowers.
Peter Henderson & Co.—Seeds and Plants.
C. E. Shanahan—Maryland Farms.
Maywood Co.—The Pulverizer Cultivator.
Folding Sawing Machine Co.
C. I. Hood & Co.—Hood's Sarsaparilla.
Mrs. C. E. Warren—Bronze Turkeys.
J. W. Hile—Eggs and Poultry.
S. H. Downs, Manager, —Topeka Seed House.
Jas. H. Campbell & Co.—Live Stock Commission Merchants.
M. B. Keagy—English Berkshires.
Blair & Kaufman—Kansas City Nurseries.
Hodges & Knox—"Guaranteed."
Moline Plow Co.—Mill and Power.
H. R. Hilton, Sup't.—Fenced Pastures.
Silas M. Locke—Pure Queen Bees.
F. E. Fross—Ninety-Day Seed Corn.
Axtell Rush & Co.—The National Stockman.
F. Barteldes & Co.—Kansas Seed House.
John Whitworth—Gordon Setter Pups.
Bailey & Hanford—Hardy Catalpas.
W. D. Warren & Co.—Stolen, \$25 Reward.
D. C. Burson—Catalpa Grove Nursery.

Senator Edmund's new house on Massachusetts avenue, Washington, is to be wholly above ground. The first story contains little except the stairway, hall, kitchen, and household offices. The entrance from the street is through a low, round, central arch. There is a magnificent double bay-window in the southwest corner running up through two stories. The Senator paid \$2 a foot for the land, which he bought from Mr. Frelinghuysen, who had paid only \$1.50 for it a few weeks before.

A meeting of ladies, married and single, was held in Richmond, Va., on Saturday night, and resolutions were adopted in favor of punishing wife-beating husbands with the lash. The meeting was occasioned by a case that recently occurred there.

Horticulture.

On Forestry.

Paper read before the Kansas State Horticultural Society at Manhattan, December 3d, 1885, by Hon. Martin Allen.

"Why are there not more trees in central Kansas, and what are the possibilities?" The first paper on this subject was by Hon. Martin Allen, of Hays City.

Truths, like fine fruits, are not made, but found. The finders of truths are in their age usually denominated cranks, especially if they undertake to apply these truths. It is indeed true that the discovered truths often require rearrangement, and this rearrangement is in progress now. This is not true of any one branch of human knowledge alone, but of all. To gather up the facts that have been established and apply them in practice is, I conceive, the great work of this society.

Frequent allusion was made to the treeless plains of Kansas by travellers. Some ten years ago a series of articles appeared in the KANSAS FARMER, entitled "The Treeless Plains." The article assumed that the timber which was then growing here was to be found only along the streams, and this was the general belief at that time, and many no doubt yet believe this to be true. But, notwithstanding the universality of this belief, it was a false view. The facts are that from the Platte to the Arkansas, and from the 97th to the 100th meridian west, the best timber and the most of it are found along the water courses that do not carry water in them more than one or two months in the year. The two streams mentioned as bounding the northern limits of this region, though fed by the snow waters of the mountains, are the most devoid of timber.

The same is true of the next two, the Smoky and Republican, while the Solomon and Saline, two short ones, are heavily timbered.

This brings me to the question you have set me to answer. I answer, first, prairie fires have had much to do with it. Second, the presence of the immense herds of buffaloes were a great agency in destroying and preventing timber growth. The essay concluded by giving statistics of tree growths which had been attained since the settlement of this region, and showed the possibilities of this region, in this great interest, to be of the most encouraging character.

VALUE OF THE RUSSIAN MULBERRY TREE—BY I. HOMER.

Its origin in southern Russia dates back ninety years when the Russians went to occupy the plains of Russia. They planted so successfully that the mulberry became the principal tree of that region, a region similar to the plains of Kansas.

He believes that the mulberry has more to recommend it as a tree for the plains than all others put together.

One, as a wind break; two, as shade; and three, as a tree from which to grow posts, it is very valuable.

He showed trees, the seed of the mulberry planted in the spring of 1884, which were ten feet high.

He stated that this was a tree for all purposes. It may be used as a hedge very successfully.

But this is not all; the value of this tree lies in the additional fact that in connection with raising trees for the purposes mentioned before, the tree is first in connection with the silk industry which, though now in its infancy, is destined to become a great industry in Kansas.

Obstacles to a more general planting of forest trees, and how to overcome them: One of the obstacles is a failure of the masses to realize the importance

of forestry. Another obstacle to the planting of trees is the belief that the supply will continue equal to the demand. Then the question of profit enters into the question, and is presented as an obstacle. Procrastination is another hindrance, but a more prominent one than any of these is a lack of knowledge upon the general requisites of this region in this respect. These obstacles may, in a great measure, be removed by establishing experimental stations at suitable points throughout this region, when the fact of successful tree culture may be fully demonstrated. Let a manual on tree-planting be compiled and distributed freely among the people, and lastly let the Legislature exempt from taxation for a term of years the lands that are planted to trees. This has been the policy of nearly every nation of Europe, and it should be ours.

The Treasurer's report was read and referred to the auditing committee. Colonel U. B. Pearsell, Fort Scott, and A. C. Griesa, Lawrence, were appointed delegates from this Society to the national convention of nurserymen, to be held in Washington, D. C., next May.

Starting an Orchard.

The following is from notes taken by a student from Prof. Budd's class lectures in the Iowa Agricultural College, and published in the *Iowa Homestead*. As Prof. Budd is now one of the best recognized authorities upon the apple in the Northwest, anything he has to say on orchard matters has an interest and almost always a value:

It is always the best to plant a low-stemmed tree, because if the stems are high the sun is very liable to scald and burn the tree on the south side. On all trees it is best to have one straight stem and the other starting out from this. The best time to take up trees to set out in the orchard is in the fall. After taking up make a trench about two feet deep, with one side straight down, and lay the trees in this with the tops turned towards the South; then cover them with earth, then a layer of trees and another layer of earth, etc., until you get them all in, when they should be entirely covered with dirt and left in that condition during the winter. The process I have just described is called "heeling in." If you cannot take up and heel in, in the fall it should be done in the spring, for you will naturally enough cut the roots when taking up, and during the time they are heeled in they have time to recover in a great measure from the injury. Do not set them out in the open spring until the natural time for growth, or when the buds begin to start. They will not grow before this time anyway, and they do a great deal better in the trench than outside until that time.

Always dig the holes in advance, select a cloudy day for planting, and put your trees in rapidly. Dig the holes four inches deeper than those for the nursery. Spread the roots out and press the earth down around the roots very firmly, leaving the ground dishy around the tree so that it will catch water when it rains. It is always best to lean the tree toward the South at a strong angle. This may not look near so well as to set them upright, but we must pay more attention to profit to ourselves and good health for the tree in this matter. By leaning the tree to the South in this manner sun-scalding is prevented to a great extent, for the top being partly between the sun and the trunk shades and protects it from the heat; as the tops and roots are both strongest on the north side they will gradually pull the tree back into an upright position.

The best soil for an orchard is where,

when in digging a well, you find a porous subsoil for about twenty feet. In a subsoil like this the water will rise during a drouth, and in a rainy season it will sink into the ground. The worst soil for an orchard is a blue stiff clay.

In central Iowa apples should be planted 20x30 feet apart; in the south part 18x24 feet apart. It is best to plant them by what is called the Quincunx plan, that is, so they will row in five different directions. In this way you get just as many trees to the acre as in any other, and each tree has more room to spread. A good way to measure is by a board having a notch in the middle and pin-holes in the ends, thus getting every tree just where you want it. This way of measuring is probably familiar to most of the *Homestead* readers. After the trees are set out it is generally considered best to plow the ground at once. In the fall throw a little mound around the bottom of each tree. This keeps the mice from injuring them as they have never been known to crawl up a mound to get at a tree. In the young trees set out, borers are apt to get and injure them. To prevent these, wash the trees with a strong soft soap and water. To prevent rabbits from barking them wash the trees with sulphur, carbolic acid and salt dissolved in whitewash. Enough sulphur should be used to turn the mixture yellow. This is very good for the trees, even if the rabbits do not trouble them. It is usually done in the fall as late as possible.

The next year plow the ground about 20th of June, and sow buckwheat again. Take care and not plow deep enough to injure any of the roots. Continue this practice for four or five years and then sow the ground in clover. In regard to pruning: It is not best to prune much at any one time. The best time is in June, and this applies to all fruit trees. It is best because the new wood is being deposited at that time, and the wounds will heal perfectly. The bark can all be peeled off a tree in June and it will not die, provided you keep the light and heat of the sun from it.

A friend writes us requesting the publication of a certain address on frauds in the nursery business and means to protect planters against them. We have not a copy of the address, and therefore cannot give it.—ED. K. F.

Pumpkins, squashes, turnips, beets, etc., do not take up much room while growing, but make a big item in the feed and health of farm stock.

Those who have used the BOSS ZINC and LEATHER COLLAR PADS and ANKLE BOOTS say they are the best and cheapest, because most durable. They will last a lifetime. Sold by Harness-makers on sixty days' trial. DEXTER CURTIS, Madison, Wis.

Farmers near large cities can often afford to sell hay and grain when other farmers cannot, because they are able to renew their soil with manure from the city stables, often taking in a load of hay and bringing back one of manure. In this way the hay and grain can be sold to good advantage and yet the fertility of the land be fully maintained.

In receiving visitors the President has peculiar habits in the management of his arms and hands. When he is pleased or contented to listen he holds his hands about six inches apart, with the back of his hand against his coat. The fingers generally are quiet, but if they begin to work or contract he is growing tired. Then he will shift from one foot to the other. If the man bores him the arms gradually come forward. The movement is gradual, but if the infliction continues the hands fall to the sides, thumbs in. If still the visitor persists in staying the arms go out and the thumbs beat against his side. Then it is time to go.

In the Dairy.

The Ayrshire Cow.

Kansas Farmer:

Comparatively little has been done in this country to bring to notice the merits of the Ayrshire as a dairy cow. She has many qualifications which highly commend her to the average farmer and dairyman; but is best known and appreciated in her native Scotland, and there takes the highest rank as a dairy breed. Her early history, like that of other improved breeds, is somewhat obscure, having undoubtedly been built up by careful selection from the native stock of the country, and judicious introduction of bulls from other sections. There are many points which tend to show that she has crosses of the old Holderness breed. This was before the latter had their milking qualities bred out by their change into the improved Short-horn. From whatever source the Ayrshires sprang, a breed was established that has enriched the dairy districts of Scotland, and for over a hundred years has been bred solely for the dairy, which will probably account for the fact that no other breed can be found which will produce so large an amount of dairy product for the food consumed. Their popularity in Scotland is evident from the prices brought at the recent auction sale of the herd belonging to the Duke of Buccleuch: Forty-eight aged cows averaged \$141; thirty two-year-old heifers, \$108; thirty yearling heifers, \$142; thirteen bull calves, \$194; five yearling bulls, \$325.

The Ayrshire has been successfully imported into New England and Canada, and while her progress to fame has been heralded by no trumpet sound, it has been none the less sure, for it has been upheld by actual merit at the pail. Her long line of breeding in Scotland, and the peculiar conditions under which it was done, has given to her a hardiness of constitution which eminently fits her for endurance and change of climate; she seems to feel at home and thrive alike on the rugged pastures of New England, and in the cold of Canada, and the heat of the tropics. This characteristic makes her valuable for keeping in large herds, where no especial care can be bestowed on individuals, for while the Ayrshire cow will do exceedingly well if bountifully supplied, she will not go to pieces if placed on scanty rations, but will work the harder for a supply, and ever give to her owner the fullest return possible from her supply of food.

One important feature of the Ayrshire is the peculiar quality of her milk, being exceedingly rich in what is called solid matter, thus enabling her to hold a high position as a "general-purpose" cow. As a milkman's cow, she is satisfactory both to producer and consumer. She will give, in the course of the year, a large amount of milk. She does not start off with an enormous quantity, and then go dry a long time, but holds out well up to within about three months of calving, thus distributing her milk along through the year, and in the aggregate giving a large amount. The quality of the milk, too, is satisfactory to the consumer, being rich, pleasant tasting, and of good color.

These same qualities enable her to produce cheese that for quality and quantity is second to none; or if it seem desirable to devote the milk to butter-making, he will find a large return of butter for the number of cows. If veal calves are wanted, he will find them quick feeders and heavy weighers. While we do not call the Ayrshire a beef animal in competition with the established beef breeds, yet we do not

hesitate to place her against any of the dairy breeds as an animal that is quick growing, and either as steers or aged cows, taking on flesh rapidly, and on the block she shows her flesh to be finely larded, and the desirable cuts largely in excess, being heavy in the hams and thick on the loin, with little shrinkage of offal.

In the recent experiments made by Prof. Brown at the Ontario Experimental Farm, with twelve breeds of dairy cattle, the Ayrshire won great credit as a cow adapted to competing in any branch of the dairy. Standing first as a cheese cow, second as to quality of milk, and second as a butter cow.

The recent official test of Duchess of Smithfield 4256, shows both milk and butter qualities. In seven days she gave 463½ lbs. milk, from which was made 19 lbs. 6 oz. of unsalted butter.

The following butter tests are from correspondence with the owners of the cows:

Mysie 2d, 1634, in twenty-one days in July, gave 51 lbs. of butter.

Juniper 4th, 4378, for seven days in June gave 17 lbs. 11 oz. of unsalted butter.

Mary, 4410, made 18 lbs. of butter in seven days.

Temple, 3263, made 15 lbs. 6 oz. of unsalted butter in seven days in June.

Bessie Belle 3d, 4323, made 15 lbs. 4 oz. of unsalted butter in seven days in June.

Quess 2d, 3120, for seven days in June made 14 lbs. 6 oz. unsalted butter.

Rosie 4th, 3965, for seven days in February, made 11 lbs. of unsalted butter.

Most of the above tests were reported to have been made with little or no extra feed from pasture.

One reports a herd of nineteen cows, for a term of six years, giving an average of 203 lbs. in a year after fattening their calves.

As a milk producer we have a larger number of reported yearly yields, of which the following are a part:

The official report of the year's test of Myra, 2955, gives a yield of 11,908 lbs. of milk.

That of Ruth, 4816, was 10,061 lbs., with no extra feed in consequence of being tested.

The official report of one herd of six cows was an average of 7,420 lbs. for one year, with no extra feed for the test. This same herd, taking the six best cows each year in their annual yield from January to January, yielded as follows: In 1880, 6,400 lbs.; in 1881, 6,855 lbs.; in 1882, 6,906 lbs.; in 1883, 7,235 lbs.; in 1884, 7,820 lbs., making an average for six years in common dairy service of 7,106 lbs.

The following are a few of the annual yields of milk as gathered from correspondence with the owners of the cows:

	Pounds.
Mysie 2d 1634.....	13,463
Queen of Ayr 5th 4406.....	14,331
Queen of Ayr 4th 3465.....	10,426
Ethel Douglas 2d 2341.....	10,066
Belle Temple 3353.....	9,624
Island Belle 1292.....	9,982
Princess Buttercup 3101.....	9,585
Roxie 4498.....	9,191
Ruth 4816.....	9,166
Cherry 4460.....	9,180
Queen of Ayr 1766.....	9,775
Queen of Ayr 3d 4464.....	9,290
Queen of Ayr 6th 4881.....	10,864
Queen of Ayr 7th 6186.....	9,840
Duchess of Smithfield 4256.....	9,216
Queen of Ayr 2d 3963.....	9,105

We have reported as the live weight of cows in milk—fourteen cows and heifers in one herd whose average weight is 1,095 lbs.; 1,000 lbs. being the standard weight as laid down both in American and Scotch scale of points.

Judging from the above facts collected in regard to the Ayrshire cow, and judging from the experience of those who have owned Ayrshire cows, we feel warranted in saying that for a general purpose cow, one that the owner may use in any branch of the dairy with

profit, and fatten without loss when old, the Ayrshire cow stands second to none, and that when the days of speculative booms in cattle are past, and each breed stands on actual merit as a working dairy cow in the production of the largest margin of profit from food consumed, the Ayrshire cow will openly hold that position of superiority which she now quietly holds among her friends.

C. M. WINSLOW.



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FROM
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ECZEMA, or Salt Rheum, with its agonizing itching and burning, instantly relieved by a warm bath with CUTICURA SOAP and a single application of CUTICURA, the great Skin Cure. This repeated daily, with two or three doses of CUTICURA RESOLVENT, the New Blood Purifier, to keep the blood cool, the perspiration pure and unobstructed, the bowels open, the liver and kidneys active, will speedily cure Eczema, Tetter, Ringworm, Psoriasis, Lichen, Pruritus, Scall Head, Dandruff, and every species of Itching, Scaly and Pimply Humors of the Skin and Scalp, with Loss of Hair, when the best physicians and all known remedies fail. Sold everywhere. Price, CUTICURA 50c; SOAP, 25c; RESOLVENT, \$1. Prepared by POTTER DRUG AND CHEMICAL CO., BOSTON, MASS.

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James J. H. Gregory, Marblehead, Mass.

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The Busy Bee.

Italianizing Bees.

Kansas Farmer:

To Italianize bees they must be in a frame hive. If you do not know a queen, get some one who does, if you can, to help you. Look the frames over till you find her (as she must be destroyed). If not, and you cannot distinguish her, you can put a part of the frames covered with bees in another hive; (see that there are eggs in both hives.) Send to some dealer and get an Italian queen. In a few days one of the hives, which ever one has not the queen, will have queen cells. Tear these out, and lay the queen cage, which you will get by mail, wire side down, upon the frames, first taking off side of cage which covers wire screen. There must be spaces between frames to let bees come to cage. Spread quilt over, and leave them twenty-four hours. Then drop honey—(scrape some out of combs in hive if you have no other)—through the screen till the queen is smeared so she cannot fly; take off screen and let her crawl down among the bees, and by the time they get the honey cleaned off her, they will think she belongs there. I think I have introduced more than a hundred queens in this way, and never lost one.

If your bees are in a box with stick through the middle—(have some one prepared with hat and gloves to help you)—take off side of box, cut loose comb enough to fill a frame, brush the bees off, lay on a board, and bind comb in frame—(taking care to have same side up which was before, as the cells slant up a little)—by putting splints on each side of comb and frame, and tie at ends with cord. Put this frame in your new hive, cut some more comb out and brush the bees in new hive; continue till you have all the combs in hive, then lay the box at entrance of hive and what bees are left will crawl in where their combs are. In a few days the bees will have the pieces all fastened together, and to the frame; you can then carefully cut the splints loose and take them off. I have helped people take bees out of trees in the same manner. First saw in far enough to split a piece out. In transferring bees, it is better to find the queen if you can, to be sure you have her safe in hive. It is often difficult to find a black queen, as the bees will run and pile up. (Italian bees and queen will remain quiet while being handled.) But it can be done, if in no other way, by taking frames all out and shake one by one, in front of hive, on a sheet. As the bees crawl in you can see the queen. Drones are longer and larger than workers. Queens are longer than drones, with slender, pointed bodies. Queen cells look like medium-sized peanuts fastened perpendicularly against the comb. Drone cells are horizontal like worker cells, but enough larger to be easily distinguished. Eggs can be readily seen in bottom of cells; they are about the size of the eggs of the green fly. In next letter I will give directions for dividing. MRS. J. N. MARTIN.

Topeka, January 4th, 1886.

[N. B.—The foregoing was on file in time for our last issue, but was overlooked in some way.—ED. K. F.]

Dividing Bees.

Kansas Farmer:

It is less trouble to divide bees than to hive them when they swarm naturally, to say nothing of staying at home from church to watch the bees, and then, perhaps, have them go off in spite of you. In dividing, it is best to

find the queen; but if you cannot, or do not wish to take the trouble, you can divide by putting a part of the frames covered with bees in another hive a rod or two away, taking care to have combs which contain eggs in both hives, so that the one which is left without a queen can raise one from the eggs, which they will do in from eleven to sixteen days. The young queen will commence to lay when she is ten days old, so in four weeks it would be necessary to examine and see if there are eggs in both hives, because young queens, when they leave the hive for fertilization, sometimes fail to get back, get lost or destroyed in some way. In that case, you would have to give them a frame with eggs from the other hive, and let them try it again, or buy a queen. I do not recommend this plan for dividing, and only give it because, in helping people take care of their bees, I have found many persons so timid they would not try to divide, if they had to find the queen with no one to help them. A better way is this: Find the queen; if she is on a frame of eggs, let her crawl on to one which is capped, then place it, bees and queen, in your new hive with three more frames, taking those that are nearest ready to hatch. The old stand will then make queen cells, perhaps a dozen or more. In about a week they will be capped over; they put the frames which have queen cells in the new hive, first caging the queen and return her to the old hive, for this reason: The old stand will make more queen cells, and stronger queens, but you nearly lose the use of the queen for two weeks if you leave her in the new hive, because a large portion of the workers will go back to old stand, and the queen will not lay much till the young bees get old enough (fourteen days the bee book says) to fly out. The queen cells are quite likely to hatch the twelfth or thirteenth day; but as the first one that hatches would kill all the rest, it is safer to arrange for what you wish to save the eleventh day. If there are cells on several frames, put them in hives where you wish to make swarms; if cells are all on one frame, cut out a piece of comb, an inch or less, containing cell; cut similar piece from another frame, and insert cells. If your swarm is strong, full of bees, by the 1st to 15th of June, if there are eight frames, you can make three new swarms, with two frames each, and they will build up to good swarms with plenty of honey for winter. Much more than this can be done with one swarm by buying comb foundation, which enables them to keep raising brood without waiting to build comb, and some experience would, of course, come handy. Will give some ideas about hives, etc., next week.

MRS. J. N. MARTIN.

Topeka, January 12th, 1886.

Words of Encouragement.

Kansas Farmer:

We are glad that Kansas bee-keepers are beginning to give their experience in the FARMER. Keep it up and not force the editor to copy from Eastern journals to keep up this department. Give us your experience, success or failures; tell us what you are doing and how you do it. We want no cranky theories, but actual experience in the apiary, and we will not only make this department interesting but profitable. On December the 10th we weighed thirty-eight colonies, and put them in the cellar. We will weigh them again when we take them out in the spring; this will give us almost an exact idea how much honey they will consume while in the cellar. Will report same to the FARMER. M. F. TATMAN.

THE MARKETS.

By Telegraph, January 18, 1886.

LIVE STOCK MARKETS.

New York.

BEEVES—Receipts 3,100, making 13,100 for the week. Good and prime stock had a fair demand at about former figures while inferior and ordinary cattle ruled dull at a decline of about 15c per 100 pounds, and 20 carloads were carried over. Extreme sales for steers were 4 25a 25, dry cows at 3 40a 40.

SHEEP—Receipts 14,200, making 53,000 for the week. Sheep fell off 15c, lambs fully 50c lower, and market closed dull and weak. Extremes were 3 1/2a 5 1/2c per pound for sheep and 5a 6 1/2c for lambs, with one carload of fancy lambs sold at 7 12 1/2.

HOGS—Receipts 17,300, making 55,150 for the week. Market nominally steady for live hogs at 4 00a 4 30.

St. Louis.

CATTLE—Receipts 1,260, shipments 220. Good to choice shipping steers firm at 4 75a 5 10; common to medium quiet at 3 85a 4 50, butchers steers strong at 3 25a 4 25, cows and heifers 3 50a 3 70, stockers and feeders firm and active at 2 75a 4 00.

HOGS—Receipts 8,400, shipments 800. Market active and 5c higher. Butchers and choice heavy 4 00a 4 15, mixed packing 3 70a 3 95, light 3 50a 3 70.

SHEEP—Receipts 1,200, shipments 400. Market fairly active and a shade easier at 2 50a 4 25.

Chicago.

The Drovers' Journal reports:

CATTLE—Receipts 6,700, shipments 2,000. Market steady. Shipping steers 3 60a 5 35, stockers and feeders 2 90a 4 30; cows, bulls and mixed 1 90a 4 00, bulk at 3 40.

HOGS—Receipts 27,000, shipments 4,500. Market stronger for heavy and weak for light grades. Rough and mixed 3 90a 3 95, packing and shipping 3 95a 4 25, light 3 40a 3 90, skips 2 60a 3 50.

SHEEP—Receipts 6,000, shipments 1,000. Market stronger. Natives 2 25a 5 00, Westerns 2 50a 4 00, Texans 2 20a 4 50, lambs 4 00a 4 75.

The Drovers' Journal special Liverpool cable quotes the cattle market stronger than last week, prices being 1/2c higher. Best American steers 13 1/2c per pound dressed.

Kansas City.

CATTLE—Receipts since Saturday 852. The market to-day was steady and fairly active at Saturday's prices. Sales ranged 3 85 for feeders to 4 60 for shipping steers.

HOGS—Receipts since Saturday 6,496. The market to day was strong and active with values 5a 10c higher than Saturday. Extreme range of sales 3 50a 4 00, bulk at 3 60a 3 75.

SHEEP—Receipts since Saturday 775. Market active for good. Sales: 107 natives av. 79 lbs. at 3 20, 333 natives av. 85 lbs. at 3 25, 328 natives av. 89 lbs. at 3 25.

PRODUCE MARKETS.

New York.

WHEAT—Spot lower and moderately active; options lower, closed heavy. Receipts 7,150 bus., exports 23,282 bus. spot. No. 2 spring, 89c; ungraded red, 84 1/2a 90c; No. 2 red, 88 1/2c in store, 90 1/2c afloat, 91 1/2c rail delivered.

CORN—Spot dull. Options opened firm, later declined and closed heavy. Receipts 758,000 bus., exports 2,692 bus. Sales: 816,000 bus. futures, 76,000 bus. spot. Ungraded, 44a 49c; No. 3, 47 1/2a 47 1/2c.

St. Louis.

WHEAT—Active but weak and very heavy. No. 2 red, cash, 88 1/2c; February, 88 1/2c; March, 90 1/2c bid; May, 93 1/2a 95c.

CORN—Very dull and irregular within very small limits, prices being materially unchanged. No. 2 mixed, cash, 33a 33 1/2c.

OATS—Very dull and easy. No. 2 mixed cash, 27 1/2c; May, 31 1/2c.

RYE—Dull and unchanged.

BARLEY—Quiet at 60a 80c.

Chicago.

WHEAT—Sales ranged: January, 78a 79 1/2c; February, 78 1/2a 79 1/2c; March, 78 1/2a 79 1/2c; May, 83 1/2a 85 1/2c; No. 2 spring, 78c.

CORN—Dull and featureless. Receipts were a little larger. Cash, 38 1/2c; January, 36 1/2c.

OATS—Quiet but firm. Cash, 28 1/2c.

RYE—Dull. No. 2 at 58c.

BARLEY—Quiet. No. 2, 63a 65c.

FLAXSEED—Weak. No. 1, 11 1/2c.

Kansas City.

WHEAT—The market to-day was weaker, and values lower. No. 2 red cash, January and February were nominal; March sold at 68c, 1 1/2c lower; April was nominal; May sold before the call at 72 1/2a 72 3/4c, and on the call at 72 1/2c.

CORN—There was a steady but merely nominal market on 'change to-day. No. 2 cash, 26 1/2c bid, 28c asked; January, 27 1/2c bid, 28c asked.

OATS—No. 2 cash, 26 1/2c, bid, no offerings.

RYE—No. 2 cash, no bids, 48 1/2c asked.

BUTTER—Creamery scarce and wanted; roll in fair demand from packers. We quote: Creamery, fancy, 30c; good, 25c; fine dairy in single package lots, 20c; storepacked, in single package lots, 10a 12c; common, 4a 5c; roll, 8a 12c, according to quality.

EGGS—Receipts large and market dull at 15c per doz. fresh re-candled. A large portion of the receipts consists of limed and held stock, which will not bring more than 11a 12c per dozen.

CHEESE—Full cream 12c, part skim flats 9c, Young America 12c.

HAY—Receipts, ... cars. Best weak; low grades very dull. We quote: Fancy small baled, 7 00; large baled, 6 00; medium 4 50a 5 50; common, 2 50 a 3 50.

OIL-CAKE—100 lbs., sacked, 1 25; 1 ton, 23 00, free on board cars. Car lots, 22 00 per ton.

CASTOR BEANS—Quoted at 1 50a 1 55 per bus.

FLAXSEED—We quote at 1 00a per bus upon the basis of pure.

BROOM CORN—We quote: Hurl, 8c; self-working, 6a 7c; common red-tipped, 5c; crooked, 3a 3 1/2c.

WOOL—Missouri unwashed, heavy fine, 15a 17; light fine, 19a 21c; medium, 23a 24 1/2c; medium comb, 23a 24 1/2c; coarse combing, 19a 21; low and carpet, 15a 17c. Kansas and Nebraska, heavy fine, 15a 17c; light fine, 19a 21c; medium, 19a 21c. Tub-washed, choice, 32a 34c; medium, 28a 30c; dingy and low, 23a 26c.

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THE STRAY LIST.

HOW TO POST A STRAY.

THE FEES, FINES AND PENALTIES FOR NOT POSTING.

BY AN ACT of the Legislature, approved February 27, 1886, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisal, to forward by mail, notice containing 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.

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 person, except citizens and householders, can take up a stray.

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

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

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

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

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

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

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

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

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

Strays for week ending Jan. 6, 1886.

Lyon county—Roland Lakin, clerk.

COW—Taken up by Simon Gentner, in Jackson tp., December 2, 1885, one red cow, 7 or 8 years old, left horn broken off, no other marks or brands; valued at \$22.

STEER—Taken up by Chas. Evans, in Emporia tp., November 4, 1885, one black and white yearling steer, branded O on right hip; valued at \$18.

STEER—Taken up by W. W. Caldwell, in Americus tp., December 28, 1885, one red and white spotted steer, 1 year old past, one-third of left ear off and bush of tail off; no marks or brands; valued at \$16.

HEIFER—Taken up by Henry Jacob, in Jackson tp., December 14, 1885, one dark red yearling heifer, white under belly, end of tail white, crop off right ear, slit in left ear, no other marks or brands; valued at \$13.

STEER—Taken up by James N. Tucker, in Waterloo tp., December 4, 1885, one 2-year-old white steer, both horns broken off, nick on under side of left ear and on upper side of right ear; valued at \$25.

Chautauqua county—A. C. Hilligoss, clerk.

COW—Taken up by J. S. Gorly, in Belleville tp., one Texas cow, 9 or 10 years old, tip of both horns sawed off, branded on left side with letter S and on left hip G D, brand on right hip not discernible; valued at \$15.

HEIFER—Taken up by B. C. Henson, in Sedan tp., December 8, 1885, one roan heifer, 1 year old, no marks or brands; valued at \$10.

STEER—By same, one red steer, 1 year old, no marks or brands; valued at \$10.

MARE—Taken up by Henry Colyer, in Sedan tp., December 5, 1885, one bay mare, 4 years old, slit in end of each ear, bluish on left hock, black mane and tail; valued at \$30.

COW—Taken up by E. H. Stoneback, in Center tp., December 16, 1885, one spotted roan cow, 6 years old, scar on right hip; valued at \$20.

HEIFER—By same, one pale red heifer with white spots, 2 years old; valued at \$15.

HEIFER—By same, one red heifer with white spots under belly; valued at \$15.

Woodson county—J. M. Jewett, clerk.

STEER—Taken up by Owen Doney, in Owl Creek tp., November 24, 1885, one dun and white spotted 2-year-old steer, small size; valued at \$14.

STEER—Taken up by Geo. W. Allen, in Liberty tp., November 18, 1885, one red yearling steer with some white spots, no marks or brands; valued at \$12.

STEER—Taken up by J. P. Kelly, in Eminence tp., November 26, 1885, one 2-year-old steer, white and red, red neck, star in forehead, no marks or brands visible; valued at \$25.

STEER—Taken up by Wm. Cox, in Perry tp., December 1, 1885, one yearling steer, red with white spots in flank and on left shoulder and in forehead, no marks or brands visible; valued at \$14.

STEER—Taken up by J. H. Morgan, in Liberty tp., December 10, 1885, one white steer, 1 year old, left ear off, dim brand on left hip.

COW—Taken up by Philip Eble, in Toronto tp., November 10, 1885, one red cow, 2 years old, (red calf by her side), marked in left ear with cross-cut; valued at \$12.

STEER—Taken up by Robt. Winter, in Toronto tp., one light roan steer, 1 year old, no marks or brands; valued at \$15.

Miami county—J. C. Taylor, clerk.

COW—Taken up by O. M. Rhody, in Stanton tp., December 16, 1885, one red and white spotted cow, supposed to be 12 years old, no marks or brands visible; valued at \$15.

STEER—Taken up by J. C. Meng, in Richland tp., December 19, 1885, one red steer calf, about 1 year old, white bushy tail, no marks or brands; valued at \$13.

HORSE—Taken up by George Scott, in Wea tp., December 16, 1885, one bay horse, black mane and tail, 13 years old, star in forehead, white stripes on nose, gray on right eye; valued at \$60.

Montgomery county—H. W. Conrad, clerk.

PONY—Taken up by Martin Chase, in Louisburg tp., November 6, 1885, one dun horse pony, 11 years old, no marks or brands; valued at \$25.

Brown county—G. I. Prewitt, clerk.

STEER—Taken up by W. S. Herman, in Powhatan tp., October 20, 1885, one 1-year-old red steer, white face, both ears cropped, slit in right ear; valued at \$20.

HEIFER—Taken up by ——— in Powhatan tp., December 5, 1885, one pale red heifer, 1 year old past, marked with an under-bit in each ear, no brands visible; valued at \$12.

Jefferson County—J. R. Best, clerk.

HEIFER—Taken up by John O. Wilburn, in Osawatie tp., on or about December 8, 1885, one 2-year-old red heifer, white on belly, no marks or brands; valued at \$20.

Linn county—J. H. Madden, clerk.

COW—Taken up by Hezekiah McCoy, in Mound City tp., November 16, 1885, one black cow, 4 years old, no marks or brands visible; valued at \$15.

STEER—Taken up by E. T. Barnes, in Mound City tp., December 18, 1885, one white yearling steer, neck and head red, white strip in face, bob-tailed, some kind of brand on left hip; valued at \$15.

Wabunsee county—H. G. Licht, clerk.

HEIFER—Taken up by J. M. Brook, in Maple Hill tp., (Maple Hill P. O.), December 14, 1885, one 2-year-old red heifer, branded S on left side and M on right hip; valued at \$18.

HEIFER—By same, one 2-year-old red heifer, S on left side and M on right hip; valued at \$18.

HEIFER—By same one yearling red heifer, S on left side and M on right hip; valued at \$12.

Butler county—James Fisher, clerk.

SOW AND PIGS—Taken up by Horace H. Wilcox, in Clifford tp., November 7, 1885, one black sow and five shoats, the latter being black with more or less white spots; two of the shoats are sows and three are males; valued at \$17.50.

Strays for week ending Jan. 13, 1886.

Labette county—F. W. Felt, clerk.

COW AND CALF—Taken up by W. A. Maxson, in Elm Grove tp., December 7, 1885, one white cow, red spots on neck, branded on left hip with letter D, about 9 years old; white calf, about 1 year old; valued at \$23.

BULL—Taken up by Robt. Laughlin, in Elm Grove tp., December 8, 1885, one bull, about 3 years old, light red with white spots, small size, branded on right hip and back with letters J. E.; valued at \$15.

PONY—Taken up by L. A. Wood, near Parsons, one dark brown mare pony, white strip in face, shod in front, hind feet white, supposed to be about 4 years old, had rope halter on when taken up; valued at \$25.

Nemaha county—R. S. Robbins, clerk.

HEIFER—Taken up by A. Henly, in Marion tp., (P. O. Baileyville), December 1, 1885, one red heifer, white spot on top of hips, no marks or brands visible; valued at \$15.

STEER—Taken up by E. Shepherdson, in Marion tp., (P. O. Baileyville), December 17, 1885, one steer, part white body, bluish neck, head and flanks, white spot in forehead, no marks or brands; valued at \$12.

Strays for week ending Jan. 20, 1886.

Nemaha county—R. S. Robbins, clerk.

HEIFER—Taken up by Louis Lohmuller, in Mitchell tp., (P. O. Centralia), December 11, 1885, one roan heifer, with white tail, back and head; valued at \$15.

HEIFER—Taken up by Nickolas Yenson, in Wetmore tp., (P. O. Wetmore), December 9, 1885, one red and white heifer, bob tail; valued at \$15.

HEIFER—Taken up by R. N. Gillaspie, in Illinois tp., (P. O. Corns), December 6, 1885, one 1-year-old red heifer, small white spot in forehead, bush of tail off; valued at \$14.

HORSE—Taken up by J. W. Firkins, in Adams tp., December 27, 1885, one sorrel gelding, 12 years old, face and left hind foot white; valued at \$12.

Stafford county—T. A. Hays, clerk.

CALF—Taken up by E. D. Cunningham, in York tp., November 15, 1885, one red and white steer calf, 7 months old; valued at \$3.

CALF—By same, one red steer calf, 7 months old; valued at \$8.

CALF—By same, one red heifer calf, 7 months old; valued at \$7.

Douglas county—Joel S. White, clerk.

PONY—Taken up by Isaac Durham, in Eudora tp., (P. O. Eudora), December 28, 1885, one black mare pony, 12 hands high, no marks or brands; valued at \$20.

Doniphan county—Joseph Schletzbaum, clerk.

STEER—Taken up by Carl Deuber, in Wolf River tp., (P. O. Leona), December 29, 1885, one 1-year-old red steer, no marks or brands, a little white on sides and face; valued at \$12.

Wabunsee county—G. W. French, clerk.

HEIFER—Taken up by Franklin Loveland, in Alma tp., (P. O. Alma), January 5, 1886, one deep red heifer with white belly, about 18 months old, no marks or brands; valued at \$10.

HEIFER—By same, one red and white heifer, about 18 months old, no marks or brands; valued at \$10.

Osage county—R. H. McClair, clerk.

PONY—Taken up by John A. Moberg, in Superior tp., January 8, 1886, (P. O. Osage City), one bay mare pony, small saddle mark; value: at \$15.

Stolen -- \$25 Reward!

On the night of December 23d, 1885, from the farm of Wm. D. Warren & Co., Maple Hill, Wabunsee county, Kansas, one bay mare, 8 years old; weighs about 850 pounds; black points; left ear split; left front foot larger than right, also hoof slightly crooked. A reward of \$25 will be given.

BUTLER COUNTY!

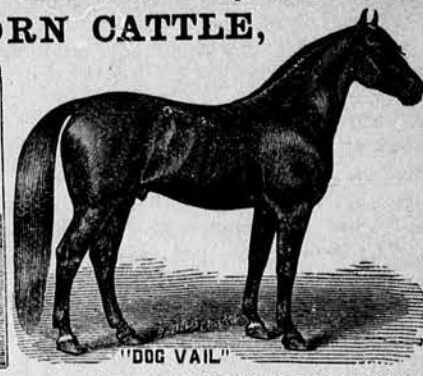
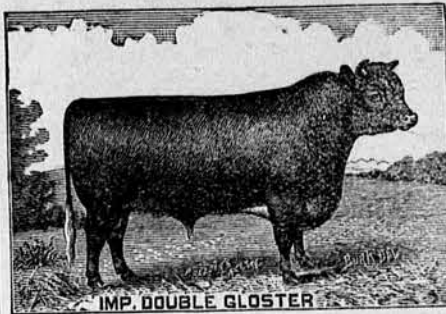
Land for Sale, in Large or Small Tracts, Improved or Unimproved.

No snow winter; tame grasses are successful all kinds of fruit do well; fine limestone for building; gravelly-bottom streams; splendid location for stock and agricultural products; thirty miles of railroad—more than any other county, and out of debt. Address for Circular A. J. PALMER, El Dorado, Butler Co., Kas.

Oil-Cake

Whole or ground, manufactured by the old process. For sale to feeders at export values. Prices quoted by mail on application. Address KANSAS CITY LINSSEED OIL CO., Eighth and Mill streets, Kansas City, Mo.

BLUE VALLEY HERD AND STUD OF SHORT-HORN CATTLE,



The Blue Valley Herd and Stud offers for sale FIFTEEN RECORDED SHORT-HORN BULLS of choice breeding, good colors and splendid individual merit; thirty head of equally good COWS AND HEIFERS; also thirty head of first-class ROADSTER, DRAFT AND GENERAL-PURPOSE HORSES, many of which are well-broken single and double drivers. My stock is all in fine condition and will be sold at reasonable prices. Correspondence and a call at the Blue Valley Bank respectfully solicited. Write for Catalogue. MANHATTAN, KAS., January 1st, 1886. WM. P. HIGINBOTHAM.

HOLSTEIN-FRIESIANS

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

Cows and Heifers Bred to Best Netherland and Aaggie Bulls.

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

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

MILK RECORDS:

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

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

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

BUTTER RECORDS:

Five Cows have averaged 50 lbs. 7 ozs. in a week. Nine Cows have averaged 19 lbs. 1/2 oz. in a week. Fifteen Cows have averaged 17 lbs. 6 ozs. in a week. Six three-year-olds have averaged 14 lbs. 3 ozs. in a week. Eleven three-year-olds (the entire number tested) have averaged 13 lbs. 2 ozs. in a week. Six two-year-olds have averaged 12 lbs. 1 1/2 ozs. in a week. Fifteen two-year-olds (entire number tested) have averaged 10 lbs. 8 3/10 ozs. in a week. The entire original imported Netherland Family of six cows (two being but three years old) have averaged 17 1/2 lbs. in a week. This is the Herd from which to get foundation stock. Prices low for quality of stock. SMITHS, POWELL & LAMB, Lakeside Stock Farm, Syracuse, N. Y.

TIMBER LINE HERD OF HOLSTEIN CATTLE and POLAND-CHINA HOGS.

HOLSTEINS.

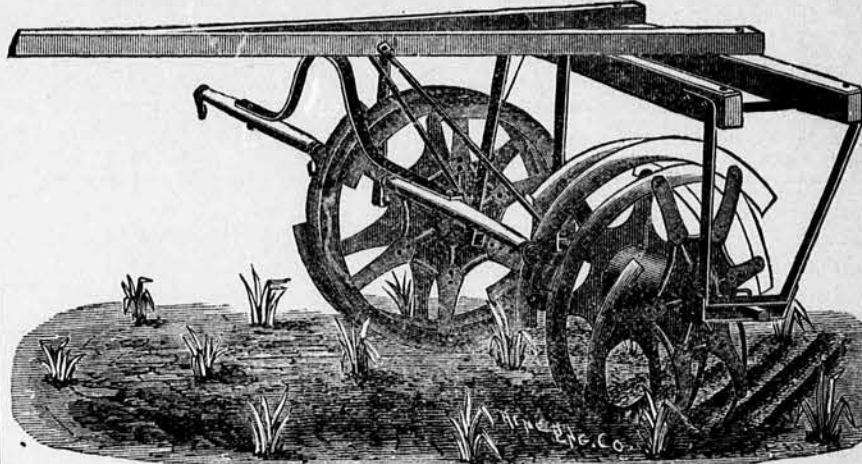
We are now ready to supply the Western trade with Holstein Cattle—Bulls, Cows and Calves. Also Grade Cows (bred or unbred) and Calves. By carload or single animal. We claim that we have the best herd west of Missouri, both in points and record. Our prices are reasonable. We are glad to have persons call and see for themselves. We invite correspondence.

POLAND-CHINAS.

We also have an extra lot of Poland-China Hogs, from a sucking Pig to a four-year-old Sow. Our Hogs are made up of the best blood that money can buy, and to prove our claims we will sell by measure, giving points; and we guarantee all stock to breed, or to be replaced by animals that will breed. Please ask for what you want.

W. J. ESTES & SONS, ANDOVER, KANSAS.

THE PULVERIZER CULTIVATOR.



For working Corn and Cotton, this Cultivator, as improved for 1886, is the best in the market. Full information FREE on application to MAYWOOD COMPANY,

In writing ment'n KAS. FARMER.] Room 64, Metropolitan Block, Chicago, or, Maywood, Ill.

ONE CENT WILL BUY POSTAL CARD

which you can send to the KANSAS CITY TIMES CO. and get in return, post paid, a free copy of their splendid weekly—an 8-page family newspaper, established 16 years ago, handsomely printed, and containing the latest news of the day, besides the choicest home miscellany, stories and matter for the farmer and business man. Also full particulars of their 14th premium list, in which

\$32,000 WORTH OF PRESENTS

are offered to new subscribers. SEND NOW, as the offers will be shortly withdrawn. THE TIMES, Kansas City, Mo.

HARDY CATALPA!! COTTONWOOD!!

Immense stock for planting Timber Claims. All kinds Timber Trees, Red Cedars, Black Walnuts, Fruit Trees; Strawberry, Dewberry and Raspberry Plants. Catalogues free. Send us your name and address. BAILEY & HANFORD, Makanda, Jackson Co., Ill.

FLORIDA. FULL PARTICULARS and a

Map of the "Great Lake Region" mailed free on application to W. N. JACKSON,

Lane Park, Sumter Co., Fla.

VIRGINIA FARMS Mild Climate, Cheap homes, Northern Colony. Send for circular. A. O. BLISS, Centralia, Va.

The Veterinarian.

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

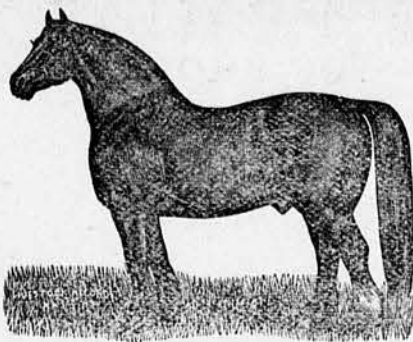
ABORTION.—One of my friends has a mare that has aborted her colts for two years and is in foal now. So he wants to know what to do for her to prevent abortion. The first time she aborted six months before her time, and the second time two months. He did not work her hard. [We should not care to breed from such a mare. She might be helped to let her run over two seasons.]

OPHTHALMIA.—I have a three-year-old colt that has been troubled with his eyes a great deal. There will come a white film over them. It will commence on the lower side of the eye and works up till it covers the whole eye, then he seems pretty nearly blind. It will stay two or three days and then it will work off the same way that it came on. [Blow powdered burned alum in the eye. Feed lightly on mashes.]

BLIND STAGGERS.—Remove the affected animal to a cool, dry, shady spot, shave the poll and neck for a space about three by eight inches, and apply to the exposed surface a coating of the green oil of flies, or cathartical collodion. If neither of these be procurable, use blistering cerate—seratum cantharides of the United States Pharmacopœia—warm slightly and rub into the skin, then spread thickly to the desired extent on a stout cloth, large enough to cover the place, and fasten in position by means of tapes and strings. When a good blister has raised, which will be in from twelve to eighteen hours, it should be opened at its lowest point, the serum evacuated and then dressed with olive or castor oil. Unless the bowels move freely, administer at once four drachms of aloes dissolved in warm water. If not convenient, one-half of a pound doses of Epsom or Glauber's salts may be employed. Saltpeter in tablespoonful doses, freely diluted in water, should be given as a drink.

POISONING BY PLANTS.—What ails all the calves? Pure-bred Short-horn, the first one taken sick fifty-one days ago; age about three months. Sucking the dam night and morning; to blue grass during the day; had access to some poultices that had been used on a horse afflicted severely with distemper; might have probably eat some of it. Symptoms: Refusing to suck; seemed to be blind or have lost instinct; would run against anything or wander off; not blind, apparently. This one was treated with a powerful physic, and the head and throat bathed profusely with spirits of turpentine; its throat seemed to be sore; could not swallow well but drank water; nose sweat regular and all right; it seems better and prospects are good. Another taken yesterday; first symptoms about 2 o'clock; wandered into the road and the man went after it, and it seemed lost; he worried it with the dog considerable; it seemed to have a fit in about one hour and died about 5 o'clock. Other circumstances similar to the other. It seems a disease of the brain. [We would be inclined to attribute this disease to poisoning by some noxious weeds or plants which have a toxic effect upon the brain. Treatment should consist in keeping the calves in-doors and giving purgatives of oil till the bowels have freely operated. We do not think the fact of the calves having access to the poultices has had anything to do with the condition.]

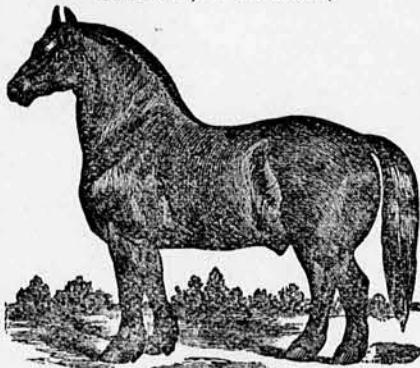
For cuts from barbed wire fence, sore shoulders, ticks and open sores on animals, use Stewart's Healing Powder, 15 and 50 cts. a box.



JOHN CARSON,
Winchester, - - - Kansas,

Importer and breeder of CLYDESDALE and PERCHERON-NORMAN HORSES. Choice stock for sale, including some fine Grates. Also Jacks for sale. Correspondence solicited. Satisfaction guaranteed.

E. BENNETT & SON
TOPEKA, : KANSAS,



Importers and breeders of PERCHERON-NORMAN and CLYDESDALE HORSES. Sixty best just received from Europe. Write for illustrated Catalogue.



We are having now a large selection of Imported Horses and Mares of fifty head, our importation this year; have been selected with the greatest care from the best draft horse breeding districts of France. Having taken the \$100 premium offered at the Fat Stock Show in Chicago for the five best imported horses imported in 1888, we will be pleased to show our horses to visitors. Correspondence invited and promptly answered. **DEGEN BROS., Ottawa, Ill.**

Clydesdale and English Shire Horses.



BEAU NASH (2978)

The only stud in America containing the very best specimens of both breeds. Prize winners at Chicago Fair, the World's Fair at New Orleans, the Royal Society of England, etc. Large importation arrived August 12, and more to follow. Our buying facilities being unequalled, there is no such opportunity offered elsewhere, to procure first class animals of choicest breeding at very lowest prices. Every animal duly recorded and guaranteed. Terms to suit all customers. Catalogues on application.

GALBRAITH BROS., Janesville, Wis.

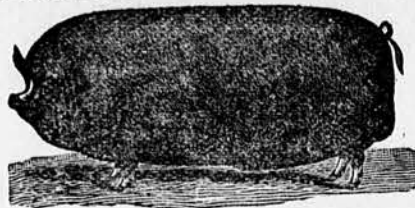


STEWART'S HEALING POWDER.
CURES ALL OPEN SORES, CUTS FROM BARBED WIRE FENCE, SCRATCHES, KICKS, CUTS, &c.
Sold Everywhere. 15 & 50 cts. a box. Try it.
STEWART'S HEALING POWDER CO., ST. LOUIS.

Send stamp for Circular and Price List.

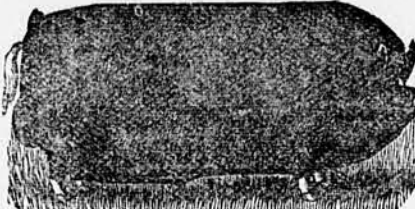
OHIO HERD BERKSHIRES
Won sweepstakes prize for best herd of 1 boar and 4 sows at Illinois and Indiana State Fairs of 1884; also at the Indiana State and St. Louis Fairs of 1885, in competition with leading herds of the United States and Canada. Breeders all recorded and pigs eligible to record. Also Plymouth Rock, Light Brahma and Partridge Cochins Fowls. Send for Catalogue. **D. W. TODD & SONS, Urbana, Ohio.**

ENGLISH BERKSHIRES.



THE WELLINGTON HERD of well-bred and imported BERKSHIRES is headed by Hopeful Joe 1889. The herd consists of twenty matured brood sows of the best families. This herd has no superior for size and quality, and the very best strains of Berkshire blood. Stock all recorded in A. B. R. Correspondence and inspection invited. Address **M. B. KEAGY, Wellington, Kas.**

SHADY GLEN STOCK FARM



H. E. GOODILL, Tecumseh, Shawnee Co., Kas., Breeder of Thoroughbred BERKSHIRE SWINE. Choice young stock for sale. A visit or correspondence invited.

PLEASANT VALLEY HERD —OF— Pure-bred Berkshire Swine.



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

J. N. THOMPSON
MORAN, ALLEN CO., KANSAS,
Breeder, Dealer in and Shipper of
IMPROVED POLAND-CHINA SWINE.
Choice Pigs for Sale.

Pedigree stock—C. P. C. Record. Correspondence invited. [Mention this paper.]

S. V. WALTON & SON,
Box 207, Wellington, Kansas,
—Breeder of—
IMPROVED POLAND-CHINA HOGS
Of the Highest Type.

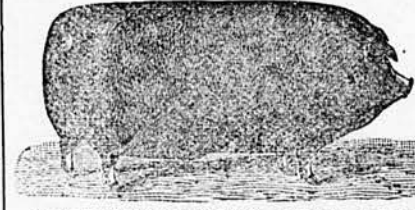
All well pedigreed. Correspondence solicited.

**EXCELSIOR HERD OF
POLAND-CHINAS and ENGLISH BERKSHIRES.**
D. H. WEBSTER, Austin, Cass Co., Mo.

My herd is made up of individuals from noted and popular families. Are all recorded. Single rates by express. Choice Pigs for sale. Prices low. I also breed from premium stock, Plymouth Rocks, Langshans, Mammoth Bronze Turkeys, Toulouse Geese, and Imperial Pekin Ducks. Fowls for sale. Eggs in season. Send for Circular, and mention KANSAS FARMER.

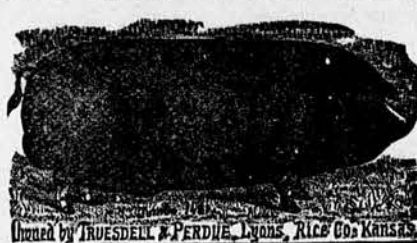
MILLER BROS.,
Junction City, Kansas,
Can tell you
POLAND-CHINA SWINE
At reduced rates. The stock is the best that can be bred, but prices have been reduced to suit the times.
We have no Cholera and never had!
Spring Pigs, \$15 each; \$25 per pair; Summer Pigs, \$25 each; \$50 per pair; Old Sows bred, \$30 to \$50. All eligible to record in the Ohio Poland-China Record.

J. A. DAVIDSON,
Richmond, : Kansas,



Breeder of POLAND-CHINA SWINE. Stock recorded in O. P. C. R. 100 choice Pigs for sale. Inspection invited. Correspondence solicited.

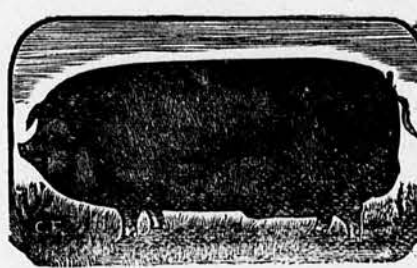
THE GOLDEN BELT HERD OF THOROUGHbred POLAND-CHINAS.



Owned by TRUESDELL & PERDUE, Lyons, Rice Co., Kansas.

Comprises fifty sows and four choice males; every one a show animal, carrying the blood of Black Bess, U. S., and Tom Corwin strains. Sows safe in pig, young boars and sows for sale. All stock recorded in A. P. C. Record. Pedigree with every sale. Describe exactly what you want. Orders looked for spring pigs. Correspondence promptly answered. **F. W. TRUESDELL, Successor to Truesdell & Perdue, Lyons, Kas.**

IMPROVED POLAND-CHINAS

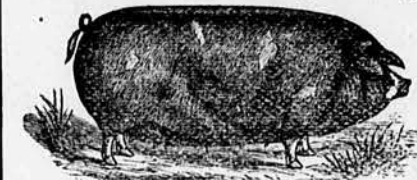


OHIO INDEX, VOL. 7, C. P. R.

GRANGER HERD consists of 22 Registered Sows and 5 Boars, premium stock, and their offspring. Pigs representing from twelve to twenty-eight premium winners on pedigrees furnished. Black Rosal Corwin 3217 was furnished boars for some of the best herds in the West. Ohio Index and Kansas Record 3609 represent the highest Ohio premium stock: Levi 6599, Dorsey's Sweepstakes 3611 and Hanna's Best are now in service.

We have shipped as many fine pigs, from West Virginia to California, as any breeder in the West. We sell only the best, and have no cheap ten-dollar pigs for anybody. Describe exactly what you want, naming nearest express office. **W. S. HANNA, Ottawa, Kansas.**

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



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

I have for sale a fine lot of young pigs sired by Jayhawker 2639, Ottawa King 2885 (the champion hogs of Franklin county), and Buckeye Boy 2d 2219, Ben Butler 2977, Leek's Gilt-Edge 2897, which are very fine breeders of fashionable strains. My sows are all first-class and of popular strains. I also have an extra fine lot of Duroc Jersey Red pigs for sale from sires and dams that have never been beaten in the show ring in our counties in Kansas. I have hogs of all ages in pairs or trio, of no kin, for sale. Herd has taken over twenty prizes this last year. My herd has never had any disease. Stock all eligible or recorded in Central Record. Please call and see stock, or write and give description of what you want. Inquiries promptly answered. Farm, three miles southeast of Ottawa, Kas.

THOROUGHbred POLAND-CHINAS



KING STEVENS, VOL. 6.

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.

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for Dr. Scott's Electric Corsets, Belts, Brushes, etc. Large advertising, sales & profits guaranteed, no risk in outfit. Only respectable persons wanted. Apply immediately. **Pall Mall Electric Ass'n, 842 Broadway, New York.**

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Sent FREE: sealed. Private adviser, 24 illustrations; all languages. Contains copies of our Diplomas, Certificates and Testimonials of Cure. Correspondence sacredly private. Dr. Lucas Private Dispensary, 132 Clark St., Chicago.

ON 30 DAYS' TRIAL.



EGGLESTON'S ELASTIC TRUSS
Has a pad different from all others, is cup shape, with Self-adjusting Ball in center, adapts itself to all positions of the cup while the ball in the cup presses back the intestines just as a person does with the finger. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free. **EGGLESTON TRUSS CO., Chicago, Ill.**

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Forty-eight miles the shortest route to Chicago, Hannibal, St. Louis, and all eastern points. All trains run daily. No stop-over. This is the popular route via Ft. Scott to

Cincinnati, Louisville, Indianapolis, Nashville, Cleveland, Memphis, Buffalo, Atlanta, New York, New Orleans, Boston, Jacksonville, Philadelphia, Chattanooga, Portland, San Francisco,

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Attached to Passenger Trains.
Leave ANTHONY, 7:10 a. m.; WICHITA, 9:43 a. m.; IOLA, 3:15 p. m., arriving at ST. LOUIS Union Depot, 6:50 a. m., daily, making direct connection in Union depot at St. Louis for all points East.
Maps and further information will be furnished on application to the undersigned.
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Vice Pres't and Gen'l Manager,
Fort Scott, Kansas.

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S. B. HYNES,
Gen'l Passenger Agt., LAWRENCE, KANSAS.

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CHEAPER THAN EVER.
Side lever Breech Loader,
\$18. The Famous \$15
Shot Gun NOW \$12.
Every Gun warranted.
Rifles, \$3, \$4, \$5, \$6.
Roller Skates, Watches,
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Best Incubator on earth; will hatch out every fertile egg; the only perfect self-regulating Hatcher in the world; reliable and self-regulating. The price is placed so low that anybody can afford to have one. Illustrated Catalogues sent free upon application.

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The Bonanza Incubator.

Perfectly Reliable. Self-Regulating. All Eggs turned at once. Requires no watching at night. Best Cheap Incubator made. Send for Price List and Circular showing cuts of the finest brooder in the world. Also breeder of high class Wyandottes, Plymouth Rocks and Langshans.—20 Pens. O. P. SCOTT, Quincy, Ill.

Kansas Economy Incubator!

Manufactured by the Inventor, JACOB YOST, Richland, "hawnee county, Kas." The Incubators will be sold at the following low prices, with full instructions for operating:

No. 1, 100-Egg capacity, \$12; No. 2, 150, \$15; No. 3, 250, \$20.

Send 50 cents for my new Book, which contains directions—How to make and use this incubator; also, how to make a good Brooder to mother the chicks; what and how to feed them to make them ready for market in eight to ten weeks; also, how to manage Hens to keep them laying all winter. The Book contains Remedies which cure Roup and Cholera.

This incubator is a success. I have hatched 75 per cent. of the eggs without testing, and raised 90 per cent. of the chicks with my Brooder.

JACOB YOST,
Address P. O. Box 30, Richland, Kas.

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With the TRIUMPH STEAM GENERATOR. It will save 1/2 to 3/4 of your feed, and your stock will thrive better and fatten quicker. Send for illustrated circular. Address
RICE, WHITACRE & CO.,
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Is simple, perfect and cheap; the BEST FEED COOKER; the only dumping boiler; empties its kettle in a minute. Over 8,500 in use. Cook your corn and potatoes, and save one-half the cost of pork. Send for circular.
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The best churn in the World. A child can work it. Makes ten per cent more butter. No churn cleaned so easy. No dashers no paddles. No inside fixtures. One churn sold at wholesale prices where we have no agent. If you want the best and cheapest churn in the market, address manufacturers,
McDERMAID & ALLEN,
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TIMKEN SPRING VEHICLES.

OVER 400,000 IN USE.



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

THE \$200 Saw Mill

Original
1500 to 4000 FEET
of lumber can be cut in a day. Built in a first-class manner. The Best Mill made. Many hundreds of these in use, giving universal satisfaction. We have the best Mills of larger sizes, Portable and stationary. Send for circular I.

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MONARCH LIGHTNING SAWING MACHINE
SENT ON
30 DAYS'
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MONARCH MFG CO., (A) 206 State St., Chicago, Ill.

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Is the best general purpose wire fence in use. It is a strong net-work without barbs. Don't injure stock. It will turn dogs, pigs, sheep and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock Ranges and Railroads. Very neat, pretty styles for Lawns, Parks, School-lots and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is better than boards or barbed wire in every respect. The Sedgwick Gates made of wrought-iron pipe and steel wire, defy all competition in lightness, neatness, strength and durability. We make the best, cheapest and easiest working all-iron automatic or self-opening gate, and the nearest cheap iron fences now made. The best Wire Stretchers, Cutting Pliers and Post Augers. For prices and particulars ask Hardware Dealers, or address, mentioning paper,
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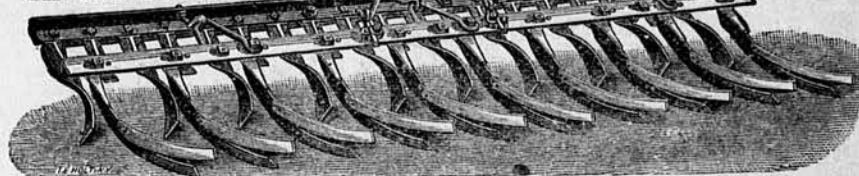
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A Quick, Permanent Cure for Lost Manhood, Debility, Nervousness, Weakness. No quackery. Indisputable Proofs. Book sent sealed, free. ERLE MED. CO., BUFFALO, N. Y.

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Jad that the

"ACME" PULVERIZING HARROW

CRUSHER AND LEVELER
AGENTS WANTED
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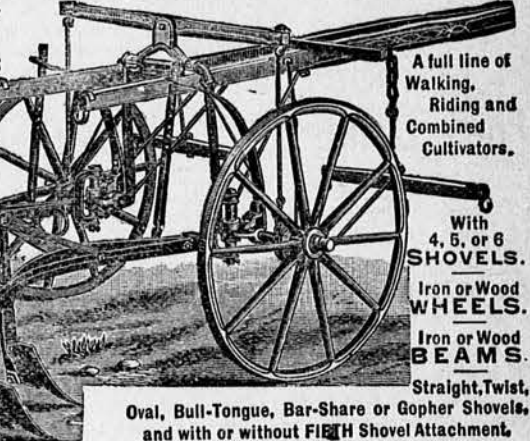
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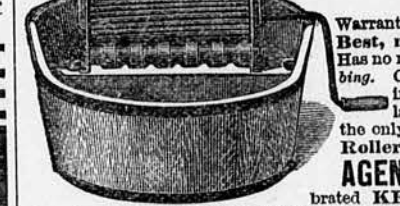
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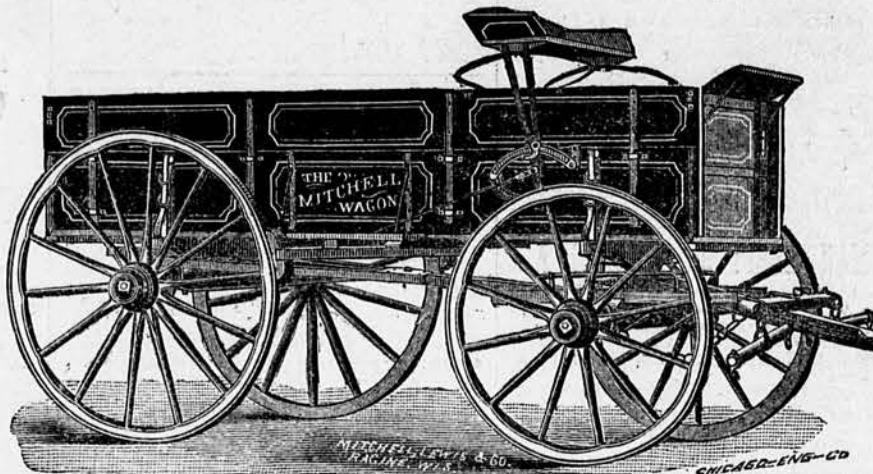
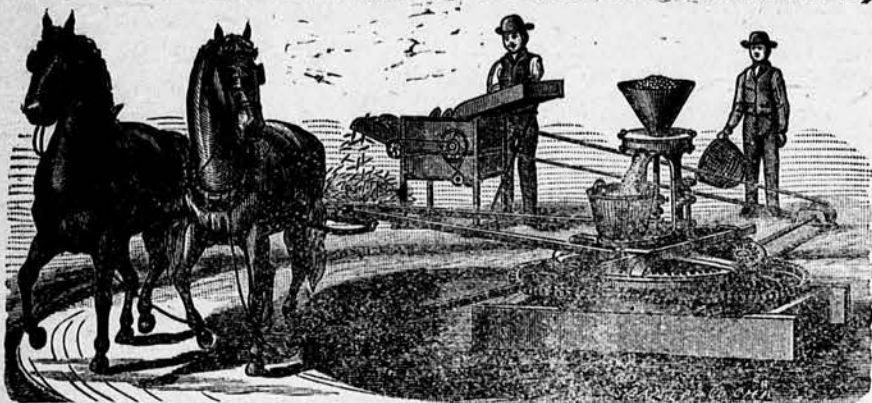
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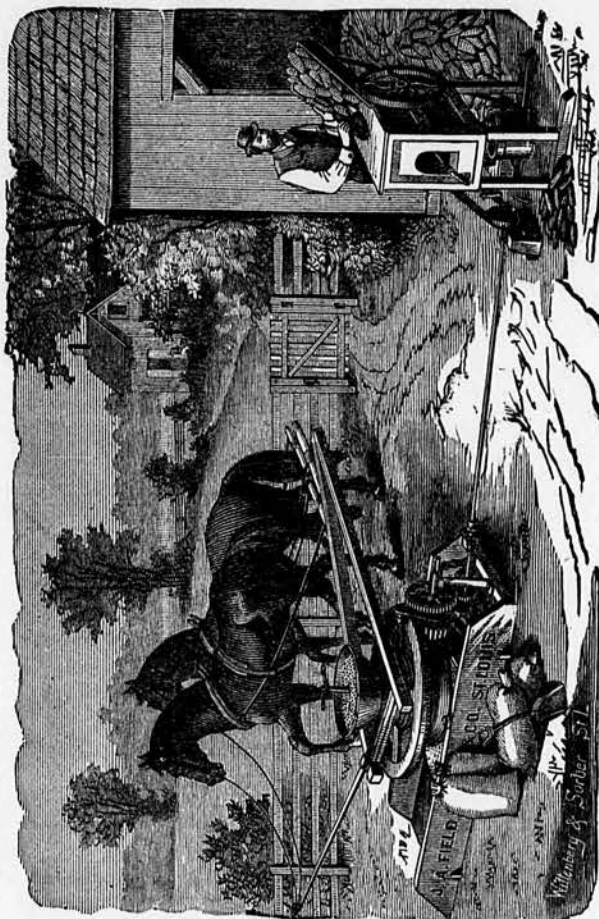
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