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THE ENGLISH DERBY.

Graphic Description By an English Newspaper.

White hats and gauze-curtained hansoms are traditions of the Derby, or else it might have seemed to on-lookers in Piccadilly yesterday that a large number of the population were inappropriately decked as to their heads, and that the hansoms were needlessly adorned. There was a threatening of rain in the air. Innumerable thoughts came down from the heavens, where the clouds were gathering, to the earth, and dwelt upon the probable or possible results of rain, on the going at Epsom, and incidentally on the legs of Queen Adelaide, the first favorite for the 105th Derby, whose victory the civilized world believes—and it is perfectly well known that commissions to back Derby horses come from the four quarters of the globe—depends to a considerable extent on the state of the ground. Those who selected the train as the means of conveyance soon found, however, that the white hats and curtains were not merely ornamental. Looking from the windows of the railway carriages at the throng of carriages which formed an unending procession, it was evident that the Surrey dust had once more asserted and inserted itself, whitening every crease and crevice like unmeltable snow. The destination of the carts and carriages was not to be mistaken. The curious assortment of baskets testified to that. Neat arrangements in wicker-work, with the names of famous firms painted on them, marked the boots of well-appointed wagonettes; and beneath ramshackle turnouts of all sorts tattered hampers swung. Whether the Derby be or be not declining in interest, it is beyond doubt that tens of thousands go to see it run, as the odd congregation of vehicles in unending line and the swarms of visitors that throng the trains unmistakably prove. Evidently it is the Derby day. A rustic vender of dolls, who has drawn over his corduroy trousers a pair of red and white trunks common to the clown of pantomime, can only have so bedizened himself by reason of the Derby, and even he pauses to gaze on an odder sight than himself—a Highlander in full attire, who is seated in a crowded wagonette, solemnly and earnestly playing the bagpipes. Around him surges the odd mixture of men who "go racing," amateurs and professionals, card sharps, "three-shies-a-penny-men," horse-tenders, coat brushers, tipsters, and their victims—all the multifarious elements of the course; but he plays calmly on the melodies of his native land as arranged for his dreadful instrument, his heart being evidently in the Highlands, far away from Epsom downs. The hearer felt constrained to follow him, as the Pied Piper of Hamelin was followed, till aroused from a reverie by the shouts of the showmen in the hill, which drowned the pipes as the piper passed by them. Altogether, the shows are not gay. There is a want of variety about them, and the desperate earnestness of the proprietors as they bellow out the nature of their attractions through speaking trumpets, seems to tell that times are hard. There is the usual fat woman—in fact there are two fat women, and they are balanced, if that term be permitted—by a skeleton queen, the most attenuated of her sex. There is also a gaunt lady who has been severely tattooed; at least the pictures outside the various shows proclaim that these wonders are on exhibition within.

There is also a novelty, a nondescript creature, half man, half gorilla, who has seized a lion by the scruff of the leonine neck, and is carelessly and casually dragging it by his side. The lion has quite given in. He makes no sign of struggle, but placidly submits to be dragged by the nape of the neck whithersoever his captor (who can be seen for 3 pence a head) may please. Roundabouts and rifle galleries are numerous. No Derby day would be genuine without them, and the ready-money book-makers on the hill are in full blast. The ruling odds in Tattersall's ring these gentry despise. The majority of them seem ready to speculate at any rate the speculator pleases, but what happens after the race, if the backer wins his bet, is another question.

From the din and turmoil of the hill there is a pleasant retreat in the paddock, shaded on two of its sides by the fresh, green trees of Lord Rosebery's estate, and the Lord of the domain is standing in the paddock talking to a friend about the great question of the day—what will win the Derby? What is to beat the mare?—the "mare" being, of course, Queen Adelaide—is the thing to be considered, and no one seems able to advance a tenable view. Lord Hartington's bad-tempered Auctioneer is saddled for the first race, his hood marking him out from his companions, but few pay attention to this. The object of the assembly in the paddock is to see the Derby horses, and presently a rush of the crowd shows that some of them have appeared. Three animals in dark, blue clothing are being ridden round, and two of them are recognized as Beauchamp and Borneo. "Mind his heels, please," is the cry of a boy on a white-legged bay, and St. Gatien passes through the crowd, the warning having the effect of making a clear way for him. Familiar faces are to be seen on all sides. There is the owner, trainer and rider of the crack of a bygone Derby who got fourth, and whose number was put up by mistake as the winner—William Day and Promised Land being the pair in question. The veteran trainer is all in favor of Queen Adelaide. Her form was best as a two-year-old, and "The big ones improve more than the little ones" is his experience; but crossing the paddock, attended by three boys, each with a saddle and bridle on his arm, is another hero of the hour, James Jewett, trainer of Queen Adelaide, St. Medard and Harvester. The world has read of the load of anxiety which must have weighed the young trainer down; but he looks cheerful, if anxious withal. "How's the mare?" "She's very well." "Will she win?" "Just about, I expect." To these limits conversation is circumscribed, for the hour approaches, and Jewett is looking round for his charges. One of them, it is presently perceived, is in the highest degree lively. Queen Adelaide, the center of an admiring throng, suddenly scatters her admirers in all directions by rearing up straight, and then seeing if she can send her heels as high as her head has been, a performance which she repeats with remarkable vigor. The duke of Beaufort watches from a safe distance. "That doesn't look like being fit to run for the Derby!" his grace says, as again the mare's heels flash in the air, but she quiets down, and the inquisitive crowd closes round again. The approach of a very bright new yellow cap proclaims the arrival of Tom Cannon, who is crossing the paddock with Mr. Arthur Coventry, the famous amateur horseman. Cannon, fresh

from his unexpected victory on Little Duck in the French Derby, frankly professes himself unable to guess what will win to-day. Talisman carried him very well when he first made acquaintance with the colt; but Queen Adelaide made Busybody gallop in the One Thousand Guineas, and this year there is no line between the mare and Mr. Leopold de Rothschild's colt. Cannon hopes to win, but has no good reason for feeling sanguine. Among the white and black hats of more conventional shape Archer's cap is perceptible, and it is time to hurry back to the stand. Past the food-stalls, the improper stables, and cocoanut proprietors at the back of the stand is the shortest way; and one of the latter, who for the small sum of a penny allows three throws at nuts placed on sticks, with the privilege to the thrower of taking the nut on certain conditions, inquires if the Derby is about to be run. "We'll close a minute or two, Bill. I s'pose they'll want to go and see this," is the remark to his partner when told that the horses are coming out. Engrossing as the competition for cocoanuts may be, he does not pretend to ignore the fact that there are those who are likely to take some interest in a frivolous horse race.

What may be likened to an overture in the ring swells to a crescendo, and the curtain rises, Condor being the first to enter, followed by St. Gatien, Borneo, Beauchamp, Waterford and Brest, with, after an interval, Woodstock, Talisman, Loch Ranza, Bedouin, St. Medard, Hopeful, Ducthman, Harvester and Queen Adelaide last. So they parade and then turn to canter, Sir John Willoughby's long, low, chestnut filly beginning at once to plunge and fight for her head; but Webb, in the white jacket and yellow cap, gently stops her. This jumping about is graceful and picturesque enough, but it is not racing; and he waits, handling her very quietly, till the others have swept past. Then he, too, follows, the long, low, gliding motion of the air taking her over the ground with wonderfully little effort. Pulling up as they near the paddock, they bear off to the left, and go toward the starting-post, followed by a dense black crowd. Richmond has been waiting them there, and in a short time the line is formed, the caps and jackets of the jockeys looking singularly pretty amid the crowd of somberly-attired spectators, with the green trees of the Durdans estate behind. Something like a false start and one or two breaks away take place before the strange cry, "They're off!" uttered in so many different tones, with such different significance, is heard. Two white jackets with red ornaments, Richmond and St. Gatien are first in front; the other horses soon close up, and, except that the yellow cap of Mr. Leopold de Rothschild gradually goes up from last to a good place, there is little important change till they descend the hill and round Tattenham corner, when the shouting begins. "Queen Adelaide wins!" "No, Talisman's coming!" "St. Medard wins!" "No, Archer's riding!" "St. Gatien!" "Harvester!" "Queen Adelaide's coming!" are the cries till the white-legged bay and the brown, St. Gatien and Harvester, single themselves out from the rest—Queen Adelaide failing strangely, possibly from want of condition, at the last moment—and gallop home in advance of the mare, excitement being so keen that cries are hushed. Murmurs of "dead heat" are hardly realized. A dead heat for the Derby is such a novel idea; but the placing of the numbers

1-15 side by side (the first and last number on the card), with 2 below, sets doubts at rest, and the three animals that are to be immortalized as having won the Derby of 1884 are ridden back toward the weighing room. There is no cheering. Legends of Harvester's lameness, the probable inability of his starting, and practical impossibility of his winning, after a suppositious stoppage of work for four days, render the victory of Sir John Willoughby's horse unpopular; and the other dead-heat was scarcely a general favorite. The owners agree to divide, and so, in a doubly unexpected sensation—that of a dead-heat, and a dead heat moreover made by a horse that was supposed to be unable to run—ends the 105th Derby.—*London Standard*.

How to Tell a Horse's Age.

It often comes handy to know how to tell the age of an animal with reasonable certainty. In the horse age may be measured pretty accurately.

The foal is born with twelve grinders. When four front teeth have made their appearance, the colt is twelve days old, and when the next four assert themselves its age will be about twenty-eight days. The corner teeth make their appearance when the foal is eight months, and these latter attain the height of the front teeth at the end of a year. The two-year-old has the kernel—the dark substance in the middle of the tooth's crown—ground out of all the front teeth. In the third year the middle front teeth are being shifted, and when three years old those are substituted by the permanent or horse teeth, which are larger and more yellow than their predecessors. The next four teeth are shifted in the fourth year and the corner teeth in the fifth, giving place to the permanent nipper.

AT FIVE YEARS OF AGE

A horse has forty teeth, of which twenty-four are grinders far back in the jaw, with which we have little to do. The buyer must be particularly on his guard against having palmed off on him as fully 5 years a filly of less age, by calling your attention to the fact that "she has no colt's teeth left," when the truth is they have been cunningly extracted; and we have known the same said of a horse, when it was thought the customer was green enough. But, be it remembered, horses invariably have tushes, which mares very rarely do.

BEFORE THE AGE OF SIX

is arrived at the tush is full grown, and has a slight groove on its internal surface (which generally disappears with age, the tush itself becoming more rounded and blunt); and at 6 the kernel or mark is worn out of the middle front teeth. There will still be a difference of color in the center of the tooth. The cement filling the hole made by the dipping in of the enamel will present a browner hue than the remaining part of the tooth, and it will be evidently surrounded by an edge of enamel, and there will even remain a little depression in the center, also a depression round the case of enamel; but the deep hole in the center of the tooth, with the blackened surface which it presents, and the elevated edge, will have disappeared. Persons not much accustomed to horses have here been sometimes sadly perplexed, expecting to find a plain surface, uniform in color. The mark in the corner nippers no longer appears to dip down to the gum, but

(Concluded on page 4.)

The Stock Interest.

PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.

September 30—Clay Co., Mo., Short-horn Breeders' Association, Liberty, Mo.
October 9—C. S. Eichholtz, Wichita, Kas., Short-horns.
November 6—S. E. Ward & Son, Short-horns, Kansas City, Mo.
November 20—Jos. E. Miller, Holsteins, at St. Louis, Mo.

May 20, 1885—Powells & Bennett, Short-horns, Independence, Mo.

STABLE MANAGEMENT FOR STABLEMEN.

The following remarks on stable management appeared as a prize essay published in the English *Stock-keeper*:

There are many essentials to the successful management of horses which are practically overlooked by stablemen. These cannot be fully discussed in the space to which I am limited, but I shall endeavor to indicate the more important points with which all horsemen ought to be conversant.

At the outset I shall briefly allude to the importance of providing ample stable accommodation, and the advantages derivable therefrom. Modern enlightenment has, within the past ten or fifteen years, done much to increase the comfort of farm horses in the direction of procuring more efficient stabling for them. On mostly all the larger and better class of farms good stables are now to be seen—airy, lofty and well provided with underground or surface drain. On a large proportion of the medium sized farms, however, stable accommodation, even at the present day, is very imperfect.

The only rule by which the length of a stable can be regulated is the number of stalls required, and these should never be less than, from 5 feet 6 inches to 6 feet wide. It is desirable that the width of a stable for farm horses be at least 18 feet, in order that ample space may be available behind them. It has for some time been, and still ought to be, a desideratum in the construction of the stable to have the walls built high—it may be, higher than any other portion of the farm-stead— and the apex of the roof "open." When the building is high and "open" horses thrive much better than in stables which are small and close. Small stables are very objectionable, being generally badly ventilated and injurious to the equine constitution. In nearly every modern stable there are ventilators in the apex of the roof, as well as gratings in the walls, and sometimes under the pavement for admitting fresh air. There is nothing more deleterious to health than a heavy polluted atmosphere, and it is therefore of primary importance that a current of pure air should be constantly passing through the stable, carrying away the ammonia which impregnates the atmosphere in so many badly ventilated buildings. The temperature in the stable should be about 53 deg. in winter, and from 55 deg. to 60 deg. in summer. That purity of atmosphere is essential to the strong, healthy and muscular development of all animals, and especially horses, is a fact which ought to be indissolubly associated with the mind of the stablemen. It is his duty to see that his horses are not suffering from extreme temperature, and if so, to contrive by every possible means to modify the intensity of heat or cold as the case may be. There is also some room for discretion in the internal arrangements of the stable, as well as in its external construction. The partitions between the horses should never be shorter than about 9 feet, 2 of which is required for the manger. When the "travis" is short accidents occasionally happen which an additional foot to its length might obviate.

GENERAL MANAGEMENT OF HORSES.

The treatment of horses as regards

feeding varies with the seasons. There can be no doubt that the mode of feeding has improved during the past twenty years, but it must also be admitted that notwithstanding this, improvement is further needed in many instances.

Feeding has chiefly been regulated by a certain prototype practice in many parts of the country, especially on small holdings. That practice is simply to see that the animals are abundantly supplied with food and water, and groomed at certain hours.

Is this sufficient to maintain the health, strength, and condition of draught horses? I hesitate not to answer in the negative, and my response will be heartily corroborated by the majority of horse owners. There are scarcely two horses alike anatomically, and the only means of ascertaining the best way of feeding them is to study their respective natures and contrive to meet their peculiarities.

It is easily noticed that horsemen who study the likes and dislikes of their horses, and treat them appropriately, keep them in better condition to resist the daily tear and wear to which they are subjected than those who merely follow the custom of the country side. Many good ploughmen are totally ignorant of the fact that horses are differently constituted from cattle. The horse has only one stomach, and therefore requires special attention in respect to the amount, condition and quality of food given him. When horses enter the stable in a hungry state they should be sparingly supplied with fermentative food. Many valuable animals have been lost through fermentation in the stomach.

Beginning at the first of the year, I shall briefly point out the main features in the management of horses during the various seasons. When the winter is so severe as to suspend farming operations for any length of time, the quantities of the richer varieties of food given to farm horses should be lessened; but when working they require full measure. A common daily supply of oats per animal is from 12 pounds to 16 pounds, in addition to a liberal supply of straw or hay. The latter variety of fodder is decidedly the more nutritious, and should be reserved during the winter until the hard work of spring begins. Mixtures consisting of Indian corn, beans, peas, and oats, all crushed and mixed in equal proportions, make a commendable meal for draught horses. In some instances this mixture is given to horses three times a day—at 5 o'clock a. m., at noon, and at 6 o'clock p. m.—but we consider that the evening meal might be cancelled with advantage, substituting for it a feed of warm mash consisting of cooked roots, boiled barley, bran, chopped hay, linseed, and oil-cake. When well cooked and supplied in seasonable condition the latter is found to be a good fattening mixture. Bran and boiled corn is a good feeding for work horses.

Though it is necessary (if possible) for farmers to have a stack of hay for stable use in spring, oat straw is quite enough feeding for horses in the "dead" of winter. During both winter and spring each horse should receive from 8 pounds to 10 pounds of raw Swedish turnips per diem, but it is necessary that the roots should be well cleaned before being supplied. Rock salt should be laid in the manger, or at least within reach of the animal, as it acts as a stimulant on the constitution, increasing the appetite, etc.

When farm horses begin to fall in condition from the effects of hard work, a little condiment may be beneficially used.

The following is considered a liberal weekly allowance per animal for horses

working strong clay land, viz., 60 lbs. oats, 30 lbs. barley, 20 lbs. wheat, and 70 lbs. hay, with oat and wheat straw *ad libitum*. An equally commendable dietary, however, is the following—from 12 lbs. to 16 lbs. of grain, including a small quantity of Indian corn, and from 18 lbs. to 25 lbs. of fodder per animal daily. Full-sized horses, when hard wrought, would be all the better of 16 lbs. of oats per day, providing that it be distributed over three or four meals. As I have already hinted, however, it may be imprudent, if indeed not dangerous, to feed horses proportionately, without a knowledge of their peculiarities. Care should be taken that such varieties of food as oats or beans be only given to horses, when perfectly dry and wholesome. Many horsemen imagine that the more corn they give their horses the fatter these animals will become. This is a decided mistake. Too liberal feeding with corn has often disastrous effects. Besides putting horses from eating fodder, it damages their constitutions. A similarly erroneous notion is held by some in regard to supplying horses with fodder. It is the belief of some stablemen that the horse's manger or rack should always be kept brimful. It is complete waste of fodder to pitch half-a-cwt. of hay into the manger at a time. When this is done the animal eats the best of it and pulls the remainder down amongst its feet. Instead of packing the manger with hay at stated times, the fodder should be supplied in small quantities frequently. It often happens that horses require to be coaxed to eat by frequent handfuls of the choicest hay, or it may be a sheaf of corn, especially before going to the yoke.

For a considerable part of the summer farm horses are lightly wrought, and then the allowance of oats can be reduced to from 6 lbs. to 7 lbs. each per day, these being divided into two feeds. Throughout the summer and autumn they are, as a rule, put to grass immediately after their work, and this goes far in lessening the demand on the corn-box.

A word as to the management of young horses. The indifference with which young horses are sometimes treated is, to say the least of it, reprehensible. It is a vast mistake to think that young horses can be turned to the best account by constant feeding on dry straw without some additional stimulant. They should have a liberal allowance of turnips (Swedish) three times a day—say 18 lbs. at each time. Horses intended for farm work should also get from 3 lbs. to 4 lbs. of corn every day, as well as an occasional feed of boiled mash or pulped food, consisting of linseed or oilcake, swedes, and bran. On the other hand, it is unsafe to feed colts or fillies too freely with corn, but the line can safely be drawn at the foregoing allowance. It is immaterial whether young horses are groomed or not, if they are kept clean and free from parasites of skin disease. Before putting them to grass for the summer, on which they will likely remain for some four or five months, their owners should procure a park of soft, moist or clay soil, as it is much better for young horses than hard gravelly land. For one thing, it is essential for their tender growing hoofs, and conduces to strength of muscle and bone. When closely confined to the stable, or undergoing a sudden change of diet, young horses are subject to dishealth, which checks their growth, weakens their appetite, and impairs their subsequent usefulness.

Many people disapprove of watering horses in a warm state, but there is little danger of anything serious resulting from this. It would be all the better, where practicable, to have a constant

supply of water within reach of horses in the stable, providing that it is not allowed to lie for many hours on hand. The stableman should see that the water troughs are carefully cleaned out at stable hours, and a fresh supply of water obtained. The anatomical structure of the horse is such that water does not lie in the stomach but passes rapidly through it, and hence the cause of frequent watering. When horses get thirsty and need a large supply of water at a time, the water in passing through the stomach in such volume carries particles of indigested food into the intestines before they are ready for transmission. This is all the more inevitable when horses are fed immediately before being watered. They should always be watered before being fed. The result of first feeding and then watering is often serious, the animals sometimes succumbing to colic or what is known in Scotland as "grips." The washing away of indigested food in the manner described accounts for the seeds of grain which pass through the bowels and are observed to vegetate here and there on the fields. Horses that are not provided with water in the stable should be taken to the watering place three or four times every day. Moreover, the system of not watering horses in the morning until they are harnessed to the yoke, which is practiced on some farms, should be abolished, and they should be turned out to seek the watering pond for themselves, which they are sometimes allowed to do; the stableman by accompanying them can not only satisfy himself that they reached the pond, but may be the means of preventing accidents arising from the animals kicking each other.

It is a matter of utmost importance at all times to have horses thoroughly cleaned at regular hours; sometimes, however, circumstances render a thorough dressing impossible, i. e., when the animals are wet or perspiring. When in this state the animals should be well rubbed down with straw or a cloth, and groomed as soon as the hair dries sufficiently to allow the scurf and debris to be extracted from its roots. If the stable is high and "open," horses after being rubbed down should be covered with a rug. Neglecting horses when they are wet or perspiring often causes mortality among them, resulting from affections of the lungs, such as bronchitis or severe colds. In ordinary circumstances, farm or other draught horses should be groomed three times a day at least—in the morning, after being watered; at noon; and in the evening, when they are being suppered. The morning is decidedly the best time for grooming, and every stableman ought to devote longer time in plying the curry-comb and brush than either at mid-day or evening. When the land on which horses are worked is very soft and tenacious, the animals should be driven through a shallow pond of water, when practicable after leaving the field, in order that their feet may be thoroughly washed before the animals enter the stable.

The bedding of horses is an item of stable management of considerable moment. It is impossible to judge of the comfort of a horse's bed by the quantity of straw spread out in the stable. It is not so much a matter of liberality in the distribution of bedding, as it is of discretion in the handling of the straw, hay, bracken, or whatever is used. A fairly liberal allowance per week of bedding for each animal is 100 lb., but stablemen are perfectly justified in protesting against over-wrought economy or niggardliness in the supply of bedding material. Many animals are addicted to eating their bedding in preference to the food in their racks. In these cir-

cumstances, sawdust, which when carefully spread out forms a good bed, should be used instead of fodder.

WALKING.

No breed of horses should be kept standing long in the stable without an "airing." Exercise is necessary for maintaining the soundness of the animals, which is easily impaired by protracted idleness. They should have a few miles walk every day. While idle and in need of walking they are usually very spirited during their exercise, and should be kept closely under the eye, and firmly in the grasp of the man in charge, lest they should injure each other.

HARNESS KEEPING.

Horsemen who keep their horses' harness clean and in fine pliant condition, and see that the collars, etc., are a proper fit, may at once be recognized as conversant with the details of stable management. The horseman who is contented with the line of life he has chosen, and who takes an interest in his team, will always pride himself in keeping his horses and harness in the best possible condition. Such a man is worth several pounds per annum more wages than the man who thinks how he can best pass muster with least labor, or who goes through his work hurriedly and imperfectly.

Horticulture.

The Apple-Worm--The Oddling-Moth.

From their letters of inquiry, it is evident that some of our correspondents think that the apple worm and the oddling moth are different insects. It will simplify matters if they understand that the "worm" is the grub or larval state of the moth. This pest has been so general, and has so rapidly increased, that a few years ago it seemed to threaten to make orchard culture unprofitable in many localities. Recently, however, remedies have been devised which should encourage the fruit-grower to hope that he may successfully combat this, his most destructive enemy, and if their application can be made general, promise a better future for the orchardist. The life history of the insect may be briefly stated thus: In spring, about the time the fruit has "set," a little gray moth leaves the chrysalis in which it has been dormant all winter. As this moth flies only at night, it is rarely noticed, making its way to the young fruit, where it deposits a single egg in the calyx or blossom end of each.

The egg hatches in a few days, and the little worm eats its way into the young apple, and attains its full growth in about two weeks. It then leaves the apple by a hole it makes in the side and descends the tree. Finding a crevice, or a sheltering scale of bark, the worm conceals itself there, and spins a cocoon. In two or three weeks, the moths emerge from these cocoons, and are ready to go through the same performance again, laying their eggs and stocking the apples with a second supply of worms, which complete their growth, descend the tree, find a hiding place as before, and make their cocoons. Instead of leaving their cocoons in two or three weeks, as did the first brood, the moths do not issue from them until the following spring, in proper time to lay their eggs upon the recently set fruit. Of the fruit containing this second brood, a large share of it falls to the ground; the worms, when full grown, leave the fallen fruit, and if they find no shelter at hand, affording a hiding place, crawl back to the tree, ascend its trunk, and finding a secure place, make their cocoons. The methods of destroying the insect depend upon a knowledge of

the facts here briefly stated. A most important addition recently made to the other modes of warfare, depends upon the fact that the apple, when young, is erect, with its calyx or blossom end upward. As the fruit grows and becomes heavy, it turns downward. Acting upon this fact, and the other, that the young worms enter the apple from the blossom end, some western orchardists have applied Paris Green, which poisons the worm, as it attempts to eat its way to the interior of the fruit. The tree is so abundantly showered with water in which the poison has been stirred, that a little will fall into each upturned blossom end of the young apples. Very little Paris Green is required, a tablespoonful thoroughly distributed through (for it does not dissolve), a barrel of water is sufficient. The barrel is placed upon a wagon of some kind, and its contents showered into the trees by means of a force pump. The least particle of the poison kills the worm. So little is applied that no harm could result from the use of the poison, did not the rains completely remove all traces of it. The season for poisoning is past, but there are other measures that may yet be taken. If the trunks of the trees were not scraped in early spring, let it be done at once; then apply a bandage of some kind around the trunk of each tree. Woollen fabric is best, old carpet answers well, but any rags will answer. The bands may be about six inches wide, long enough to go around the tree and lap slightly and be fastened by a single tack at the lapped portion, being careful to not drive it in so far that it cannot be readily removed. The worms will seek the shelter of these bands, and spin their cocoons. The bands are removed every ten days, and the worms or their cocoons crushed. They may be killed by hand or by passing the cloth through a clothes-wringer. The branches should be shaken, to cause wormy apples to fall, and these, and all those which drop spontaneously, should be picked up and fed to pigs, or the worms they contain otherwise destroyed.—*Exchange.*

Give the fowl house a good cleaning and the birds will rid themselves of vermin with the dust bath.

Carrots boiled and cut into rings make a nice garnish when nothing more satisfactory can be obtained.

Ask your Druggist for a free Trial Bottle of Dr. King's New Discovery for Consumption.

Dust and clean your silk dresses with a piece of old velvet or plush, formed into a convenient shape to handle.

Drunkenness.

Those trying to break up the baneful habit of intemperance, will experience great relief from the use of Leis' Dandelion Tonic. It restores the brain, stomach and liver to healthy action and strengthens the will power. There is nothing that will so quickly cure the ravages of a long course of debauching. It is recommended by leading temperance advocates.

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CATTLE.

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

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

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

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

DR. R. PATTON, Hamlin, Brown Co., Kas., breeder of Bradshaw Herd of Short-horns, representing twelve popular families. Young stock for sale.

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

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

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

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

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

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

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

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

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PURE-BRED Registered Vermont Spanish Merino Sheep and Light Brahms for sale. Satisfaction guaranteed. R. T. McCullay & Bro., Lee's Summit, Mo.

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POLAND-CHINA SWINE AND MERINO SHEEP.

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

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R. B. BALDRIDGE, Parsons, Kas., breeder of Thoroughbred Recorded POLAND CHINA Swine. Stock for sale. Inspection of herd or correspondence inv.

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

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EGGS FOR SALE—Of Light Brahma and Black Spanish Chickens, by Mrs. M. Walmsire, Carbondale, Kas.

ONE DOLLAR per 13 for Plymouth Rock eggs; Pekin Duck eggs the same. Three sittings for \$2.50. Mark S. Salisbury, P. O. box 931, Kansas City, Mo.

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NEORHO VALLEY POULTRY YARDS—Established 1870. Pure-bred Light Brahmas, Partridge Cochins, Plymouth Rocks. Egg in season. Stock in full. Send for circular. Wm. Hammond, box 190, Emporia, Kas.

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RIVERSIDE POULTRY YARDS, Cricket Randolph Prop'r., Emporia, Kas. Plymouth Rock, Partridge Cochins, Light Brahmas, or Brown Leghorn eggs, \$2.00 for 13.

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

MISCELLANEOUS

LIVE STOCK ARTIST. L. N. Rogers, Emporia, Kas., will do all kinds of ske ching from life or picture. Orders solicited.

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

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.

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A well-watered stock ranch of 1,280 acres, three miles west of Stockton, county seat of Rooks county. A creamery and a school house one-half mile from the ranch. 640 acres under fence and 300 acres in cultivation. The ranch has four good springs and abundance of running water in the creek. There is a good stone residence, stone stable frame corn cribs a stone cattle stable 14x12 feet, ice and milk house 1x30 feet and corral 150x40 feet, a good well and 600 growing catalpa trees. Price \$7 per acre; one-third cash, balance on time at 8 per cent. Address R. O. K. BANK, Stockton Kansas.

H. V. PUGSLEY,
PLATTSBURG, MO.



BREEDER of Vermont Registered Merino Sheep. The largest flock in the State. 350 rams and a number of ewes for sale. High-class poultry. Catalogues free.

(Continued from page 1.)

looks more like a hole made in the middle of the tooth.

The edge of the enamel has become regular, and the surface evidently worn. The tushes have now attained their full growth, being nearly or quite an inch in length; convex without, concave within, tending to a point, and the extremity somewhat curved. Now, or perhaps some months before, the horse may be said to have a perfect mouth.

AT SEVEN YEARS

the mark, as described, is very nearly worn out of the four center nippers, and fast wearing away in the corner teeth—especially in mares; but the black mark still remains in the center of the tooth, and is not completely filled up until the animal is 8 years old. As he gets on past 7 the bridle teeth begin to wear away.

AT EIGHT YEARS

the kernel has entirely disappeared from all the lower nippers, and begins to decrease in the middle nippers. It is now said to be "past mark of mouth." There is, however, a "fake" termed "bishoping" from the knave who started it, by which the mark on the lower nipper is prolonged. It is supposed to be done with a "graver," by which a cavity of the pattern of a seven-year old is scraped out of the plain surface of the corner teeth; the hole is then finished with a hot iron, leaving a permanent mark by which an unpracticed eye might well be deceived; but the exact natural appearance is never so nearly imitated as to deceive one who has paid any attention at all to the development of a horse's mouth.

When "more than 7" the "knowing ones" are accustomed to go by appearance of the upper fronts, from which some conclusion may certainly be drawn, as the marks remain in them long after they have been lost from the bottom ones. Much reliance can never be placed on the tushes, for sometimes they may be found quite blunt at 8, and as often remain pointed at 18, and sometimes those in the same mouth will show an apparent difference of a year or more.

AFTER EIGHT YEARS.

There are indications which enable very close observers to guess at a horse's age, but none to enable accurate determination. In the 9th year the mark has entirely disappeared from the upper middle teeth, and the hook on the corner has only increased in proportion as the bridle teeth lose their points. At 8 the upper surfaces of the nippers are all oval, and as the animal gets older they diminish in width, but not in thickness; they become more rounded and appear wider apart.

At 12 years of age the crown of all the lower front teeth has become somewhat triangular, and the bridle teeth much worn down; but anything further must be left to experts, and would serve no useful purpose to enlarge upon here. We must not, however, omit to mention the fact that as horses advance in age their gums shrink away, conveying that long, narrow appearance of the teeth which has long formed the subject of proverb. They likewise lose their upright appearance, and appear to lean forward, more particularly the upper ones, which assume an arched shape.

Beyond the indications of age afforded by the teeth are some others, which very little experience will render familiar. A dark-colored horse—as a brown or a bay—will, in time, turn gray about the face, mane and top of tail. The back becomes hollow, and the pit or cavity about the eyes gets by degrees more and more pronounced. A practice prevails among the more unscrupulous tricksters of the trade by which this appearance is removed. In the slang of the craft it is known as "puffing the glims." The operation consists simply of making a slight puncture in the skin, and then, with the stem of a thin "straw" tobacco pipe, fill it out by blowing air into it. The youthful appearance thus gained is, of course, only temporary, and, where suspected, may be readily detected by pressing the thumb or finger on the part.

England, with a population of 25,000,000 sends 5,000 students to her two universities; Scotland, with a population of 4,000,000, has 6,000 university students; Germany, with 48,000,000 population, has 22,000, and the New England States, with a population of 4,110,000, send 4,000 students to their eighteen colleges and universities.

SHEEP-SHEARING ESTABLISHMENT

Erected at Hugo, Colorado, by the Union Pacific R. R. Co., for the Benefit of Colorado Flock-Masters.

Special correspondence KANSAS FARMER.

Any one passing through the little village of Hugo, Elbert county, Colorado, on the Union Pacific railroad, would hardly suppose that such an unpretentious little place was such an important shipping station for wool, as well as cattle. Hugo lies 100 miles east of Denver, in the heart of a rich, well-watered grazing region. From this point last year was shipped nearly a half million pounds of wool, besides thousands of cattle. The country tributary to Hugo is the largest wool-producing region of Colorado. The shearing season has always been attended by considerable inconvenience, for want of suitable accommodations and competent shearers. The sheep men have depended mainly on Mexicans to do their shearing, and they are a set of slow, slovenly and bloody shearers.

When these difficulties of the sheep industry became known to O. H. Dorrance, the Division Superintendent of the Union Pacific at Wallace, he set about with commendable vigor and enterprise to remedy the existing evils, in which he was heartily encouraged and seconded by that staunch friend of the live-stock interests, S. T. Smith, Kansas City, the General Superintendent of the Kansas division of the Union Pacific, and through their efforts the management of the road was persuaded to erect a suitable establishment at once at Hugo.

The building is 120x52 feet, two stories high in the center, and contains two rows of shearing pens—thirty in all. Each pen will accommodate two shearers. The center of the building is used for sacking the wool. The shearers from each side of the central portion of the building easily places each bound fleece of wool upon the second floor, where it is dropped in the wool sacks, which extend through this floor to the first floor. Eleven sacks can be filled at a time. The corrals adjacent to the building are divided into four departments, and will accommodate 16,000 sheep. From the corral the sheep are driven into a passage on the outside of the shearing pens, and fifteen or twenty are let in the pen, and when shorn are let out of the pen into another passage, which leads out to a department of the corral. From 4,000 to 5,000 sheep can be shorn daily when running at the full capacity of the shearers. These accommodations are free for the use of any flock-master whose sheep are free from the scab.

S. H. Kennedy, Laramie, Wyoming Territory, has a contract to do the shearing for the sheep men at 10 cents per head. He furnishes competent shearers and boards them, furnishes the twine and sacks the wool. About thirty expert shearers were at work at the time of the visit by the KANSAS FARMER's representative. A number of professional shearers from California were at work. These men follow the business almost exclusively for about nine months of the year. They take off a fleece of wool with surprising rapidity, and do the work neatly. One man sheared 158 sheep in one day, the fleeces being from grade Merinos, and averaged over five pounds. These shearers never average less than 100 fleeces each day.

The sheep men have a specified time for having the sheep shorn. The Holt Live Stock Co. were the first on hand and had 12,000 sheep shorn in five days. M. W. Jones, their superintendent, informed your correspondent that they have 20,000 sheep, mainly grade Merinos, that would clip between five and six pounds each. The past winter was unusually severe, and they were compelled to feed a great deal. Ninety-seven per cent. of the lambs were saved. The range is in excellent condition.

Fourteen thousand sheep owned by Merriam & Co. just arrived, and are to be shorn at once. They are in the charge of C. Thurlow. The flock consists of grade Merinos, and will clip over six pounds each. This company owns 20,000 sheep and have been engaged in the business for ten years in Colorado.

The sheep men are delighted with this establishment at Hugo, and are loud in their praises of O. H. Dorrance, the Division Superintendent, for his efforts in their behalf. The Union Pacific deserves credit for

this enterprise, which is so opportune at the present low ebb of the sheep business.

It is estimated that over 150,000 sheep will be shorn at Hugo next season. The freight agent thinks that he will ship full 600,000 pounds of wool from Hugo this season.

Hugo, Colorado, June 25.

HEATH.

Colorado Cullings.

Special correspondence KANSAS FARMER.

The Denver board of trade have decided to hold another great exposition at their famous exhibition building during the month of September. The bulk of the mineral displays will be forwarded to the World's Exposition at New Orleans.

The principal cattle men of Colorado are changing their tactics somewhat. Instead of raising the cattle they go to Texas and buy two-year-old cattle and drive them through and feed and graze them for the market. The losses are much less by this plan.

The KANSAS FARMER was the first paper to call attention to the great sheep-shearing establishment at Hugo, the center of the greatest wool-producing center in the West. A special correspondent visited the establishment and gave the information to the public.

Colorado will make a large show this year in its agricultural products, surpassing anything in its previous history in this respect. The dealers in agricultural machinery report an immense business. The area subject to irrigation will produce a wonderful supply of farm products.

Business matters are quite dull in Denver at the present time, more so than at any other time since 1873. There is very little building being done, and "for rent" or "for sale" may be seen on hundreds of dwellings and on a number of business houses, yet the price of rent or purchase would be considered quite high in any of our eastern cities.

D. S. Grimes, of Denver, one of the leading nurserymen and fruit-raisers of Colorado, will make an exhibit of fruits, grain and grasses of that State at the World's Fair at New Orleans. A creditable exhibit will be made, he thinks, and coming from this mountainous region it will attract considerable attention. Mr. Grimes has formed a company which will establish a large fruit farm in the Arkansas valley in Colorado. He has full faith in the enterprise, which, if successful, will prove a very profitable investment for the company in partly supplying the home demand for fruit, which is now shipped in from Kansas and Missouri.

The Denver Tribune gives a great deal of live-stock information. The following notes are gleaned from its columns:

Twelve hundred horses do the livery work for the city of Denver, and yet on a Sabbath of a pleasant day it is as difficult to obtain one as it would be to borrow a \$10 note.

Three years ago a doubting people began to say "stock cattle are all too high. The prices must tumble." Then yearling steers were going at \$11. Now they are worth \$18, and still up they go.

The famous old race horse Parole, that was the first American-bred animal to go to England and make the haughty Britons lose their money, is reported to be dangerously ill at the farm of his owner, Pierre Lorillard.

The Hall, Barela Company, of Las Animas county, will exhibit some fine imported Polled Angus cattle at the Denver Exposition this season. These gentlemen claim to have the finest animals of the Polled Angus breed in America.

Five thousand head of young Texas cattle will be at Dodge City in the next ten days, and put upon the open market for sale. Buyers flatter themselves that prices will tumble a trifle, but the holders say they will go higher as the season advances.

Farmer Southworth, of the Pleasant View Farm, a few miles below Denver, on the Platte, has a bunch of American Merino ewes that earn him a trifle over \$6 apiece yearly, they all being twin lambs, and clip upwards of 14 pounds of fine wool.

"Scarcely any wool has been sold of the present year's clip as yet," remarked Mr. Watkins, the buyer, to the reporter of the Tribune. "I advise all of my customers to hold their wool for better prices. There is no danger of its being lower. The outlook

is discouraging, I will admit, but it seems as though the bottom had been reached."

Thomas Ennis and William Spencer sold to Henry Mills, of Middle Park, 250 head of beef cattle, 90 head of which were driven into Georgetown for the local butchers. These latter cattle, which were grass-fattened, weighed 1,220 pounds apiece.

The largest horned animal in Colorado is an imported Holstein bull owned by Mr. Henry C. Green, of Rock Ridge, in Douglas county. The animal turns the scale beam at 2,640 pounds. The gentleman purchased him of Messrs. Cornforth & Cooper.

The famed band of Kerry cattle, belonging to the estate of the late John W. Prowers, of West Las Animas, will be on exhibition at the forthcoming Exposition Show in Denver the present season. This will be the only band of Kerrys in America, and will attract much attention.

But few of the 2,000,000 of sheep of Colorado now remain unshorn. Very little of the clip of 1884 is yet sold, yet some few car loads have gone forward to market. Many of the larger producers will wait before shipping to see if the railroads are not going to give them a little better rates.

Mr. John Dillon, ex-member of the British Parliament for county Tipperary, Ireland, is sojourning on a cattle ranch near Castle Rock, in Douglas county, Colorado. The gentleman expects to be returned to Parliament from his district at the next recurring election, which occurs the present year.

Writes a correspondent at Fort Collins: "Stockmen in this section of Colorado cannot fail to be pleased at the appearance of the range. It never looked better at this time of the year than it does now. The calf crop will not be an extraordinarily large one, but stock-raisers will have to put up with this state of affairs until a law is passed and enforced requiring each stock man to furnish six or seven bulls to the hundred head of female stock upward of two years old he owns, and to keep the bulls off the range during certain months of the year."

Boats, Bicycles and Hay Fever.

Nature has resolved that all the people shall not enjoy themselves at once. With the opening of the season of out-door sports comes the time of trouble for the poor victims of Hay Fever. For them flowers have no odor, and the summer little or no beauty. To sniff, sneeze and wipe their weeping eyes for three or four successive months,—this is their pitiable portion. Whether this form of Catarrh is called Hay Fever, Hay Cold, Rose Cold or Rose Fever, makes no difference; they suffer just the same. There is no help in sea voyages, there is no help in high mountain air. These only lighten the pocket and leave the disease unabated. But there is a positive cure in Ely's Cream Balm. We could cram these columns with grateful letters of the rescued. Try it and join them. If you continue to suffer it is because you neglect a remedy as sure as it is cheap and pleasant. 50 cents.

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Other expenses are reasonable, and opportunities to help one's self by labor are afforded to some extent. The work of the farm, orchards vineyards, gardens, grounds and buildings, as well as of shops and offices, is done chiefly by students, with an average pay-roll of \$300 a month.

THE TWENTY-SECOND YEAR OF THE COLLEGE BEGINS SEPT. 10TH, 1884.

with eighteen instructors, 385 students, buildings worth \$90,000, stock and apparatus worth \$40,000, and a productive endowment of \$475,000.

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Whitman Agricultural Co., ST. LOUIS, MO.



On the Range.

Not long since, through the courtesy of that successful and genial flockmaster, Chas. Weeks, Amboy, Rooks county, a representative of the FARMER visited Trego, Rooks, Ellis and Graham counties. The ranch of J. M. Ostrander, near WaKeeney, was first visited. He has about 3,000 sheep on his newly equipped ranch. The sheep are mainly Mexican and Merino grades, which are now bred to thoroughbred Merino bucks. A few miles farther northwest is the ranch of that well known breeder, Chas. H. Gibbs, who has the best flock in Trego county. This ranch is a well watered and timbered ranch—in fact, there is more timber on this ranch than in all the balance of the county. The corrals have the best natural protection of any I have ever visited. My attention was called to a large field of rye which had been pastured from late in the fall until May 1, and now it is tall and thick stand and would yield as much as though it had not been pastured; the same is characteristic of nearly every field of rye in all western counties.

Chas. Weeks manages three ranches for F. G. Willard, of Denver, each ranch controls from three to five sections of fine buffalo grass. He has about 4,500 grade Merinos that for uniformity are hard to surpass. He has about 200 acres in sorghum cane besides millet and rye, which he uses for feed in the winter. I was surprised to find that he never used any shelter for his sheep. They are kept in a movable corral, which is occasionally shifted, and although the sheep have no winter shelter he does not lose any number as a consequence. As a substitute for shelter he feeds a little heavily during the severe winter weather. The range he divides, using a part for summer and the other for winter grazing.

Perhaps one of the best equipped sheep ranches in this part of Kansas is that of J. B. Hutchinson & Co., twelve miles north of Ellis. The ranch contains five sections. They have nearly 4,000 sheep in all, having saved 90 per cent. of the increase. The flock consists of high grade Merinos, most of which were the purchase of the C. P. Allison flock. They have two well ventilated stone sheds covered with shingle roofs, each 200x27 feet, which they use for sheltering sheep during severe weather. They have 250 acres in cane, rye and millet which furnishes feed for winter. They were shipping their clip of 24,000 pounds of wool to Dewey & Gould, Boston.

After visiting a number of other flocks in Graham and Rooks counties we drove to that justly famous tract of farming country called "Paradise Flats." This belt of country lies between the Saline and Solomon rivers, beginning at the west line of Osborne county and runs westward over sixty miles through the southern portion of Rooks, Graham and Sheridan counties. Paradise Flats are but ten miles in width north and south. It is the finest tract of farming country that I ever beheld, and, lying as it does in the midst of an almost purely grazing country, it is a remarkable stretch of farm land for this altitude. All of the eastern part of Paradise Flats is cut up by small and nicely improved farms ranging from 160 to 320 acres. The wheat crop this season is simply wonderful. Although oats, corn and millet are looking as well as could be desired, the acreage is small. But perhaps nothing is more attractive and excites the admiring attention of the traveller, who has been driving over that unlimited and treeless range which is adjacent to the Flats and covered with thousands of sheep or cattle, than to behold on Paradise Flats the large number of forest and fruit trees and the handsome farm houses and other neat and tasty improvements.

In the vicinity of Stockton, Hays City, Russell and Ellsworth, which were visited on this trip, may be seen the best crops of wheat, corn, oats, etc., which has been grown since the country has been settled. It is gratifying to know that this will be the most prosperous year for western Kansas. The potato crop of this year is worthy of special mention because of its abundance in this high altitude, caused no doubt by the unusual rainfall.

Farmers and cattle raisers are buoyant with hope and success with the prospects of this season. The sheep men do not exhibit quite so much spirit on account of the depressed price of wool; yet in the near future they will reap the benefits of this present

low state of the industry. Those who continue in the business must pay careful attention to all the little details and instead of handling inferior flocks which produce little or nothing of value. The same sized flocks must be made to produce more and a better quality of wool; besides the flockmaster now realizes that the sheep must possess more mutton qualities than most of them have at present, so that when he turns off the usual number of wethers each season he may realize some profit from them besides the wool. This, I think, is one of the lessons taught by the present depression in the wool industry. I have interviewed scores of lifelong sheep men and they all agree that the present time is the bed rock of depression and a year or so more will find the wool business as good as it has been at any time during the past ten years.

I am fully satisfied that from Trego county west that no more profitable business can be engaged in than the sheep business. Farming has not and will not for years to come, if ever, prove remunerative in this section; yet rye and cane can be grown with considerable certainty any season in sufficient quantities to supply either sheep or cattle during very severe weather or when the ground is covered with snow. The country is covered with abundant and nutritious buffalo grass which affords pasturage during summer and winter, and there is no better pasture for sheep than it is. I believe that it is safe to predict that within ten years all of this valuable grazing land between Ellis county and the mountains will be occupied by sheep and cattle, and I fully believe that the former will be as profitable as the latter.

HEATH.

Russian Apples.

Kansas Farmer:

Are they preferable to our home-grown American varieties, either in character of tree or quality of fruit? and even if equal in the requisite traits, are they worth 40 to 60 cents apiece, when such varieties as constitute the approved list for Kansas can be bought at any nursery at 8 to 15 cents each? Let us first go back to the first planting of this class of apples in Kansas and follow their history to the present time, and weigh the results in the scale of experience. Several small lots of these trees were first planted in Douglas county in 1868 and fruited in 1872. Their growth was dwarfish and they never attained to a tree of any size; suffered serious injury in drouths and the hot weather which generally prevails during August; subject to spur and twig blight, when nearly all of our American varieties escaped; at the age of 10 to 12 years from planting not one remained alive, and their epitaph should be, "Died in their youth, in a foreign land, from disease engendered through inability to adapt themselves to the uncongenial conditions of soil and climate of these Western prairies." The fruit borne upon these trees was scarce, yet on some trees was beautiful, having a waxy appearance which was shaded with blushed cheeks, and some were handsomely striped and splashed with crimson. None were above a medium, but most were inferior in size, flavor insipid in some and in others severely tart. None possessed a degree of excellence fitting them for any other purpose than cooking.

Again in 1877 a combination of tree peddlers formed in Pennsylvania came into the State and canvassed the southern portion of Leavenworth and Jefferson counties, the whole of Douglas, Franklin and Johnson, and portions of Anderson and Osage counties. Their stock was largely recently-imported Russian varieties of apple trees which had been propagated and nursery-grown at various points in western New York. Their list of varieties were read to their customers, but seldom appeared in their printed order sheet, and so shy were they towards those with whom they sought trade that it was exceedingly difficult to obtain a copy. Having canvassed the above named counties, they worked the counties of Lyon, Chase and Marion. They estimated their aggregate sales in the State at \$30,000. The successful delivery of the orders in Douglas county was defeated through an exposure of the worthlessness of the class by the writer; in Franklin and Anderson counties by the Hon. H. P. Welsh, of Ottawa, and in Chase and Marion counties by the efforts of that veteran horticulturist, J. W. Byram, of Cedar Point.

However, despite all efforts, several thousand trees of the class were received and planted, and although the Secretary of the State Horticultural Society has repeatedly in his annual circular to the Vice Presidents of the Society in each county of the State, called for reports on newly-introduced varieties of fruit, no mention has ever been made of the planting of Russian varieties of apples.

In view of these facts are we not justified in the conclusion that they have been an absolute failure, for does any one believe that had the trees developed the valuable traits of extreme hardihood and productiveness, and the fruit the high degree of excellence claimed for them, that the proprietors of such plantations could have kept the community in ignorance of their merits through so long a period? Again, if this class of trees are so extremely hardy, and in their constitution so peculiarly adapted to the climate of these Western prairies, the plant of 1874 should still be in existence and developed into sturdy, healthy trees; and if so profuse in bearing, the product would be found in our markets and on the exhibition tables of local and State fairs. Yet such has never occurred.

G. C. BRACKETT.

(To be continued.)

National Railroad Commission.

The Senate Committee on Railroads has determined to report the Cullom inter-State Commerce bill, with the recommendation that it be passed. This determination may have been reached too late to secure the passage of the bill, owing to the backward condition of business in the House, but it may be advanced far enough to give us early legislation at the next session of Congress that will have a tendency to allay the railroad agitation that has been so long a source of annoyance to the public as well as vexatious to a great business interest.

The bill provides for a commission of five members, not more than three of whom shall belong to the same political party, to be appointed by the President by and with the consent of the Senate. Each of these Commissioners is to receive an annual salary of \$7,500, which is deemed sufficient to make them independent of any influence of the railroads, whose affairs they have to investigate.

The chief provision of the bill prohibits any railroad or transportation company from collecting any rebate, or drawback, or from receiving from any person a greater compensation for any service than it receives for a like service. No further effort is made to regulate the rates of transportation or the affairs of the companies.

In case of complaint of the violation of the law by any transportation company the Commission is required to certify the facts to the United States District Attorney of the judicial district in which the violation is said to have occurred, and he is required to begin proceedings in the United States court for that district.

As to growing potatoes from seed balls, an old farmer gives these directions: Gather the seed in the fall, put them in sand or dry ground and put them in the cellar in a box. In the spring make the balls fine. You will see fine seed in them. Plant them in rows, in good, rich, mellow ground, and cover them lightly. If they come up too thick, thin them out. They will grow, some as large as a hen's egg, sometimes, the first year, but you can not tell what variety you will get. You may get ten or more different varieties from one ball, and seldom one like the parent potato. If you keep planting them they will be larger every year. This is the way all our new seedlings are raised.

The Confederate statutes in paper covers sell for \$50 a set. The Guiteau trial for \$25.

HER SECRET TROUBLES.

The Unknown Trials Which a Woman Endured Without Complaint—Why They Vanished.

Near the close of one of the most trying of the few hot days of the present year a pale, care-worn woman might have been seen at the window of her dwelling apparently in a condition of complete exhaustion. Her efforts to meet the accumulated duties of her household had been great but unsuccessful, while the care of a sick child, whose walls could even then be heard, was added to her otherwise overwhelming troubles. Nature had done much for her and in her youthful days she had been not only beautiful but the possessor of health such as is seldom seen. But home and family duties and the depressing cares which too often accompany them had proven greater than her splendid strength, and she felt at that moment not only that life was a burden but that death would be a grand relief. This is no unusual experience. It is, in fact, a most common everyday occurrence, and a great prayer is constantly ascending from thousands of homes for deliverance from the deadly power which is enslaving so many wives, mothers and daughters. And yet these duties of life must be met. No woman can afford to turn aside from the proper care of her home and the ones who are committed to her care, although in doing these duties she may sacrifice her health, and possibly life itself. The experience of one who successfully overcame such trials and yet retained health and all the blessings it brings is thus told by Rev. William Watson, Presiding Elder of the Methodist-Episcopal church, residing at Watertown, N. Y. He said:

"My wife became completely run down through overwork and care of a sick member of our household, and I entertained serious apprehensions as to her future. She was languid, pale, utterly exhausted, without appetite, and in a complete state of physical decline. And yet she did not, could not neglect her duties. I have seen her about the house, trying courageously to care for the ones she loved when I could tell, from the lines upon her face how much she was suffering. At times she would rally for a day or two and then fall back into the state of nervous exhaustion she felt before. Her head pained her frequently, her body was becoming bowed by pain and all hope or enjoyment in life seemed departed. What to do we could not tell. I resolved, however, to bring back her vitality and life if possible and to this end began to treat her myself. To my great relief her system has been toned up, her strength restored, her health completely recovered and wholly by the use of Warner's Tippecanoe, which I regard as the greatest tonic, invigorator and stomach remedy that has ever been discovered. I was led to use it the more readily as I had tested the health-restoring properties of Warner's Safe Cure in my own person and I therefore knew that any remedy Mr. Warner might produce would be a valuable one. I have since recommended both Warner's Tippecanoe and Warner's Safe Cure to many of my friends and I know several Doctors of Divinity as well as numerous laymen who are using both with great benefit."

If all the overworked and duty driven women of America could know of the experience above described, and act upon the same, there can be little doubt that much of the pain, and most of the depressing influences of life might be avoided. Such truths are too valuable to remain unknown.

A modern philosopher thinks it is a mistake to suppose that women have stronger attachments than men. "A man," he says, "is often attached to an old hat, but who ever heard of a woman being attached to an old bonnet?"

Nothing makes a Kentucky man so disgusted with himself as to learn from a scientific work that three-fourths of the human body is composed of water. He regards it as a mean slur on the quality of the whisky he drinks.



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The Home Circle.

Origin of the Moss Rose.

[From the German of Thrummacher.]

The angel of the flowers, one day,
Beneath a rose tree sleeping lay,—
That spirit to whose charge 'tis given
To bathe young buds in dews from heaven;
Awaking from his light repose,
The angel whispered to the Rose,
"For the sweet shade thou'st given to me,
Ask what thou wilt, 'tis granted thee."

The Rose replied with heightening glow,
"On me another grace bestow."
The angel paused in silent thought,
"What grace was there that flower had
not?"

'Twas but a moment, o'er the Rose
A veil of Moss he lightly throws;
And, robed in Nature's simplest weed,
What other flower can this exceed?

Life, we've been long together,
Through pleasant and through cloudy
weather;

'Tis hard to part when friends are dear;
Perhaps 'twill cost a sigh, a tear!
Then steal away, give little warning,
Choose thy own time,
Say not "Good-night," but in some brighter
clime,
Bid me "Good-morning."

—Mrs. Barbauld—

The glance that doth thy neighbor doubt
Turn thou, O man, within,
And see if it will not bring out
Some unexpected sin

To hide from shame the branded brow,
Make broad thy charity,
And judge no man, except as thou
Wouldst have him judge of thee.

Our Newspapers.

There are published in the United States and Territories, at present, 12,671 newspapers and periodicals, of which 1,178 are dailies, 2,492 weeklies and 1,427 monthlies, the remaining 574 being divided between quarterly, bi monthly, semi-monthly, semi-weekly and tri-weekly publications. Of the States, New York has the largest number, 1,523; and Delaware the smallest, 31. New York leads with 146 dailies and 937 weeklies, and Florida and Mississippi have but 3 dailies each. Nevada has the smallest number of weeklies, there being but 18 published in that State, which is unique, in that it possesses nothing but dailies and weeklies, 32 in all.

Pennsylvania stands second in number of dailies, it having 116 of them, and Illinois stands second with 753 weeklies.

There are but two States in the Union in which there are published more than 100 daily papers, and but five which have 50 or more to the State, while eleven States have less than 10 dailies each.

Of the weeklies, there are more than 500 published in each of five States; and 27 States publish more than 100 each per week. Twelve States publish less than 100 weeklies each, and one—Nevada—has less than 20.

Of the whole number—12,671—published, 87 are devoted to agriculture and kindred topics, 674 to religion, 56 to medicine, 306 to education, 86 to secret orders and societies, 87 to science. Of the 420 papers published in Kansas, 10 are devoted to religion, 1 to medicine, 7 to education, 3 to secret orders and societies, and to agriculture and kindred subjects, though most Kansas papers give some space to the discussion of the one great industry of the State—agriculture.—Supt. Graham.

The acute form of suffering known as cramp, whether in the feet, legs, stomach, or, indeed, any part of the human system, may be almost instantly relieved by holding in the hand a stick of brimstone, which will almost immediately crackle and emit an offensive odor. If the cramp is very severe, the brimstone breaks into pieces as soon as it is touched by the patient. Remember that applying the brimstone to the affected part is not efficacious; simply laying it in the palm of the hand is sufficient. The same piece should not be used more than two or three times.

A poet sent to an editor a contribution entitled "Why do I live?" and the editor answered: "Because you send your contributions by mail, instead of bringing them in person."

PRINTING TELEGRAPHY.

A Recent Invention That Promises to Revolutionize the Business.

[From the Philadelphia Times.]

The latest consolidation of the telegraph companies is said to have for its object the ultimate introduction of a new and greatly perfected printing telegraph system between this city and New York. The stock quotations at present furnished the brokers in this city are often delayed to such a degree that the offices having direct private wires to Wall street secure decided advantages in an active market. There are many brokers in this exchange who earn handsome yearly incomes by "scalping" this market for the eighths and quarters of 1 per cent. This would no longer be possible were the quotations furnished by the stock tickers simultaneously in the brokers' offices of New York and Philadelphia. This is the problem to be solved, and to do it several prominent Third street men and inventors have put their heads together.

SPEED SOUGHT FOR.

The Commercial Telegraph Company of New York has opened a branch office here within the past ten days, and has already put its instruments on several offices on Third street. Mr. Maris, of Maris & Smith, is at the head of this enterprise, and its friends are very sanguine of success. The machines are run by clock-work, in a manner somewhat similar to the Phelps instrument, used by the Philadelphia Local Company for transmitting news. A much greater degree of speed is claimed for the Commercial's instrument. Whether it will prove so remains to be seen. A maximum working speed of 120 revolutions per minute was claimed by the operator in charge of the office on Saturday, when he explained the machine to a *Times* reporter, but the actual speed noted did not exceed sixty to eighty revolutions. The conditions may not have been perfect, however. This company's machines are all run by a current from the main office. This instrument will have a fair test and the result will be watched by brokers and electrical experts with much interest. Already there are those who predict that the Morse sounder will more than keep ahead of this printing machine. Among these gentlemen is W. W. Kurtz, a broker, on Third street. He declared emphatically that the printing and stock telegraph machine of the future had been built by a young Philadelphia electrician and that when it was put in operation competition would become interesting.

MANY NEW IDEAS.

A visit was at once paid to 132 Market street, in the upper story of which William J. McCausland was found. He received the *Times* man and led the way to the front part of the room, where a printing telegraph machine of new and original design was at work. Actual test made by the writer showed that the machine was making twenty revolutions every five seconds, or 240 per minute. This speed was obtained with two cells and a very ordinary dynamo apparatus attached to a wheel used for driving a small circular saw. Officers of several of the telegraph companies visited the room while the reporter was there, and all manifested great curiosity and surprise at the speed which the instrument showed. While the machines in common use were printing two inches of tape this instrument printed and delivered ten and a half inches. This machine can be worked with perfect ease, it is claimed, between Philadelphia and New York, because of the light current required.

FASTER THAN MORSE.

"Will your machine simultaneously transmit and print faster than a Morse can receive?" was asked.

"With a good man at the transmitter it will double on a Morse in chronicling stock quotations—not to say anything about simultaneously recording them on a tape, which, of course, a Morse sounder does not do," answered Mr. McCausland. "But don't put that down, for I don't care to have it known, though I have made repeated trials and am positive as to the accuracy of the statement. We shall have these machines in operation just as soon as those new buildings are finished. They will be like this one and their cost will not be more than one-third that of any printing telegraph instrument now in use."

"How were you led to undertake this invention?" was asked.

"By the complications of the present ma-

chines," was the reply. "They did not keep up with a heavy day's business. In New York I frequently found the tapes five to ten minutes behind the actual prices on the floor of the Exchange. This, in an active market, made a difference of thousands of dollars to customers in every broker's office."

READING BY EAR.

"I studied the best printing machines for months. Half a dozen brokers on Third streets will tell you that I can call off the stocks and prices with my back to the machine and without seeing the tape. It is a special acuteness of the ear. I can detect the unison point and count the letters or figures from it. Well, I went to work two years ago to build a machine. I hadn't much money, but I had plenty of ideas. I first got rid of the clock-work. Then I tackled the knotty part of the unison. I tackled the discovery that the peg in the wheel, which is covered by a multitude of patents, is not necessary—indeed, practically not used by the inventors, who base most of their claims upon it. I have at least half a dozen devices for getting the same result, not one of which is an infringement of any existing device. Then I gave my whole attention to simplifying the principles of printing telegraphy and to increasing the speed of the machine. I hit upon a divided printing-lever, which entirely does away with the shifting of the wheels. I put both the alphabet and figure wheels on the same shaft. Look at the speed I get." He touched the finger-board and the machine printed "One Minute," requiring seven revolutions (as any operator will understand), in exactly three and a fourth seconds by a stop-watch.

SIMPLICITY THE MAIN THING.

"Are all the present printing telegraph machines too complicated?" was asked. "Entirely so," answered the electrician. "Simplicity is the main thing to strive for in these days. It is the only way one can invent anything and keep control of it. A man could go to thirty or forty years ago and build a complicated machine with hope of reward; but everybody who does so to-day finds himself assailed by dozens of inventors, who make enough improvements on his machine in a year to bury his original idea out of sight. I mean to say that I have accomplished more than I want in a simple manner. Take the Morse sounder. Its simplicity is its charm. The moment you go to improve it you kill it. Look at the combination printer, as it is called. I believe the Western Union Company has abandoned its use. In that case complications destroyed good results, for there are many admirable features and ideas about that instrument. The printing machine of the future will have speed and accuracy, and it will be a Philadelphia invention."

Smoking Hams.

A correspondent of the *Country Gentleman* objects to the smoke-house used for smoking meats, says it befouls the outside, rendering it unfit for eating. Not unfrequently a string breaks or the stitch in the skin tears out, letting the ham drop into the fire and setting the whole concern ablaze, which, if on wood, is likely to be consumed with its contents; and, further, that the smoke-house is a standing temptation to thieves. Instead he recommends smoking thoroughly the barrel with maple or hickory chips (corn-cobs are good.) Pack the hams and shoulders in it, flesh side up, and pour in the prepared pickle in sufficient quantity to cover the whole. The pickle will extract the smoke from the barrel and carry it evenly through the entire mass of meat, the center of the ham being as perfectly impregnated with it as the outside. It saves trouble, avoids risks of fire or thieves, obviates any necessity of bagging or otherwise protecting from flies, since they can remain in the pickle till wanted for use.

One of the most attractive ornaments of a lawn or flower bed is a small rockery. Arranged with taste and care nothing can be more effective. Pieces of slag or large cinders dipped in a mixture made thus: Four parts yellow rosin and one part vermilion melted together, color the pieces into a fair imitation of coral, which if not overdone, furnish pretty bits of vivid coloring, brightly visible through the trailing vines.

"I suppose that it just means that he hired 'em out," was the reply of a small Sunday school child when asked what was meant by the expression, "And the king rent his clothes."

Roses and Rose Lovers.

June is the paradise of roses. In this month they break into unparalleled splendor. All roseland is out in holiday apparel; and roses white and black, green and pink, scarlet, crimson and yellow, striped and mottled, double and single, in clusters and solitary; moss roses, damask roses, noisette, perpetual, Bourbon, China, tea, musk, and all other tribes and names hang in exuberant beauty. The air is full of their fragrance. The eye can turn nowhere that it is not attracted to a glowing bush of roses. At first one is exhilarated. He wanders from bush to bush and cuts the finest specimens until there is no room or dish for more. So many roses, and so few to see them! What would not people shut up in cities give to see such luxuriance of beauty? How strange that those who have ground do not gather about them these favorites of every sense. The air and soil that nourish nettles and thistles, plantain and dock, would bring forth roses with equal kindness. There is enough ground wasted around country houses to furnish root room for a hundred kinds of roses without detriment either to fruit trees or ornamental trees. Men admire them when they see them in a friend's house; they are always pleased to receive a lapful as a present to their wife, mother or daughter; but it does not enter into the head that they, too, might have roses to give away. Roses are easy of culture, easy of propagation, requiring almost as little care as dandelions or daisies. The wonder is that every other man is not an enthusiast, and in the month of June a fanatic. Floral insanity is one of the most charming afflictions to which man is heir. One never wishes to be cured, nor should any one wish to cure him. The garden is infectious. Flowers are "catching," or the love of them is. Men begin with one or two. In a few years they are struck through with floral zeal. No bees are more sedulous in their researches into flowers than many a man is, and one finds, after the strife and heat and toil of his ambitious life, that there is more pure satisfaction in his garden than in all the other pursuits that promise so much of pleasure and yield so little. It is pleasant to find in men whose hard and loveless side you see in society, so much that is gentle and beauty-loving in private. Hard capitalists, sharp politicians, grinding business men, will often be found, at home, in full sympathy with the sweetest aspects of nature. One is surprised to find how gentle these monsters often turn out to be! Here is the man whom you have for years heard described, in all the newspapers, as a spectacle of wickedness or a monument of folly. You are, by some convulsion of nature, thrown into his company and travel for days with him. To your surprise, his manners are gentle, his conversation pleasing, his attention to all about him considerate. This must be artifice. It is a veil to hide that hideous heart of which you have heard so much. You watch and wait. But watching and waiting only satisfy you that this supposed monster is a kind man, with a world of sympathy for beautiful things. And when, in after years, you have been at his summer-house, and know him in his vineyard and his garden, you smile at yourself that you were ever subject to that illusion which is so often raised about public men. A man is not always to be trusted because he loves fine horses, or because he follows the stream or hunts in the field. But if a man that loves flowers, and loves them enough to labor for them, is not to be trusted, where in this wicked world shall we go for trust? A man that carries a garden in his heart has got back again a part of the Eden from which our great forefather was expelled.—H. W. Beecher.

An elegant new screen has on the bough of its painted tree a real stuffed owl perched and calmly contemplating a golden moon in the right corner.

Scrim, which comes in brilliant colors fifty inches wide, and only nine cents a yard, is in great demand for window, door and bed drapery for summer use.

Lovers of brown bread should have a tin made on purpose for it, round and tall with a closely-fitting cover. In this genuine brown bread should be baked slowly for four hours.

If you take Leis' Dan-dellon Tonic when you perceive the first symptoms of "chills," you will almost invariably escape them. It fortifies the system against the attacks of other diseases as well. It improves the digestion, purifies the blood and regulates the liver.

The Young Folks.

A Child's Night-Thoughts.

BY LUCY LARCOM.

They put her to bed in the darkness,
And bade her be quiet and good;
But she sobbed in the silence and trembled,
Though she tried to be brave as she could.

For the Night was so real, so awful!
A mystery closing around,
Like the walls of a deep, deep dungeon,
That hid her from sight and sound.

So stifling, so empty, so dreary,
That horror of loneliness black!
She fell asleep, moaning and fearing
That morning would never come back.

A baby must bear its own sorrow,
Since none understands it aright;
But at last, from her bosom was lifted
That terrible fear of the night.

One evening, the hands that undressed her
Led her out of the door close by,
And bade her look up for a moment,
Up into the wonderful sky.

Where the planets and constellations,
Deep-rooted in darkness, grew
Like blossoms from black earth blooming,
All sparkling with silvery dew.

It seemed to bend down to meet her—
That luminous purple dome;
She was caught up into a glory,
Where her baby-heart was at home—
Like a child in its father's garden,
As glad as a child could be,
In the feeling of perfect protection
And limitless liberty.

And this had been all around her,
While she shuddered alone in bed!
The beautiful, grand revelation,
With ecstasy sweet, she read.

And she sank into a sound child-slumber,
All folded in splendors high,
All happy and soothed with blessings
Breathed out of the heart of the sky.

And in dreams, her light, swift footsteps
Those infinite spaces trod—
A fearless little explorer
Of the paths that lead up to God.

The darkness was now no dungeon,
But a key unto wide release;
And the Night was a vision of freedom—
A Presence of Heavenly peace.

And I doubt not that in like manner
Might vanish, as with a breath,
The gloom and the lonely terror
Of the Mystery we call Death.

A Word to Boys.

As a general thing boys like to busy themselves with animals. I would not discourage this natural disposition in any one of them, but only try to guide it in the right direction. For such natural activity unguided by proper information is apt to cause mischief, though unintentional. When a boy finds a young animal, such as a bird, or any other, he is not apt to pass it by, but he will either kill it or capture it and try to make a pet of it. Now boys, whichever of the two you do, you should be able to give a good reason for doing it. If you cannot give a good reason better do neither without asking advice of one who knows. This is a good general rule. Do nothing that you cannot give a good reason, at least satisfactory to your own mind, for doing it. It will save you many regrets.

For the benefit of the reading boys I will relate a little incident. One of my boys is very fond of pet animals. He has pet chickens, ducks, pigeons, guineas, pigs, squirrels, etc. Last summer he caught two young Kansas mocking birds and tamed them. For a while he set them in a cage in an upstairs window. There the old mockers—the parent birds—brought loads of worms. The whole bottom of the cage was full of worms—mostly cut-worms, and nothing but worms were brought. After a while the parent birds suspected that their nestlings would never be fledged and so quit feeding them. The children fed them crumbs and flies, but one soon died; the surviving one became a great pet, and would eat flies out of our hands when we called it and held the flies up. When cold weather came and flies failed this one died too to the great sorrow of all the family.

This we have learned now and would tell

all the boys: That what we call the Kansas mocker is one of the farmers' best friends among birds. It has greatly increased in this part of the country since we have hedges where it can shield itself and brood from the hawk. Though not young now I was so once, and still take pleasure in spending much time with the young aiding them in intellectual and moral development. This is an excuse for appearing in this column.

H. F. M.

The Inundation of the Nile.

I wish that my readers might enjoy, what I have often enjoyed, the glorious view, which at the time of the inundation is peculiarly fascinating, from the summit of the mountains which bound the valley of the Nile on the eastern side. Let me try to lead you there, in fancy at least. It is an excursion which amply repays any one who undertakes it.

At other times of the year the valley of the Nile, seen from this height, resembles a green and blooming garden. Waving corn fields, deeply green clover meadows, high-grown Indian corn and beans, sugar cane and cotton plantations, cover every inch of cultivated ground, interspersed with groups of palm trees and groves of acacias, in the midst of which the villages nestle. Far away to westward the hills of the Libyan desert frame the picture, and the pyramids of Ghizeh stand out in bold profile against the sky. If so be that the sun is setting behind them at the time that your eye is resting on this picture, you will enjoy a symphony of color such as once seen is never forgotten. The blue-green tints of the valley meet and blend with the warm browns and ochres of the desert, and through almost purple tints these again are united with and attuned to the deep blue of the sky.

The grand simplicity of subject, combined with the—I might say classic—harmony of lines and the marvellous blending of colors which go to make up the Egyptian landscape, cannot but fascinate every artist; and all who have once seen and studied it are drawn irresistibly again and again to the deeper study of these problems of art. At the moment that I have selected for introducing this picture to my readers, the waters of the Nile, which at other times, hemmed in by the high shores, only resemble a silver ribbon winding in and out among the green fields, and glancing here and there as the sunlight falls upon it—these waters cover all, and the vast plain resembles an extensive lake. The villages, built on more elevated ground, and protected by high dikes, peep out of the vast expanse of water like islands in the sea. The palms, whose bluish-green feathery crowns are already burdened with heavy tassels of dates, red or brown or yellow, are more than half way up their graceful stems in water. Numberless boats and small craft, with their picturesque lateen-sails, looking like sea-gulls on the wing, skim the water, speeding before the north wind, which at this season blows steadily and strongly, and sends them southward heavily laden with produce of the north, whence they return with cargoes of ivory, ostrich feathers, gum arabic, and, alas! only too often, with slaves.

This is the time at which, in Cairo, a most curious and interesting fete is celebrated, one which has its origin in a heathen custom, namely, the so-called "breaking through of the Nile," and takes place when the Nile has reached a certain height.

A canal traverses Cairo from east to west. The canal is closed, when the inundation begins, at the junction with the Nile, by a solid and well-made dike, and remains thus closed until the water-mark shall have reached a desired point. The rupture of this dike, which admits the water into the city, is accompanied by festivities in which all classes of the population share.

Already in the afternoon, and still more in the evening, of the day preceding the feast, numbers of dahabeeyahs—a kind of vessel found only on the Nile, and best described as a floating dwelling combining great comfort with ship-like compactness and regard for space—are seen on the Nile approaching the spot where the canal and river meet, and there drop their anchors, while others continue tacking about. Some of these dahabeeyahs are the private property of residents of Cairo, who with their families spend this night on board; others

are chartered for the occasion by a party who disperse, as best suits their taste, for the night—some retiring to the divans in the airy saloons, others preferring the deck, with its bright spectacle of illumination on all sides, for in the rigging of all these boats the colored lamps are twinkling and reflecting their light in the water.

One large boat among the many catches the eye in particular; it is that called "Akabeh" by the Arabs—painted in all the colors of the rainbow, its masts and rigging decked with countless lamps and flags. This boat leaves the harbor of Boolak, near Cairo, in the afternoon (and by paying a small sum one can obtain a passage), and sails on till it reaches the isle of Rhodda, quite near to which is the spot at which the festivities of that night are to take place. Here it is made fast by heavy cables, and prepares to remain till the morrow.

On the deck is an awning under which the passengers can while away, with friendly cigarette and cooling sherbet, the intervening hours. In the imagination of the Egyptians of to-day this boat represents the splendid vessel on which, in ancient times, the "Bride of the Nile" ("Aruseh"), a maiden, beautiful and of noble birth, was brought annually as a sacrifice to the god, and who, clothed in bridal array, was doomed to a watery grave. * * *

All Orientals, and the Egyptian is no exception to the rule, like to have their merry-makings at night. And they are right. The intense heat of the day is over; the sun, with its rays and its glare, no longer wearies eyes and nerves; the glorious starlit sky—such a sky as only the far East can show—spreads its canopy over all; a soft, balmy breeze comes gently through the valley, and blows up-stream, bringing the cool but never cold atmosphere of the Mediterranean, whose moisture and briny odors have been modified by the long journey it had to make before reaching the inland capital. This is the time, above all others, at which the river and its shores become the scene of animated life. At regular intervals the cannon boom, for without smell of powder, much shouting and screaming, and oft-repeated fire-works, the proper holiday mood is wanting. Legions of small boats, like midges glancing over the water, move about in all directions as connecting links between the large, firmly-anchored vessels.

From some one point the sound of the "tarabooka" is heard, and to its monotonous rhythmic accompaniment female singers warble their slow and melancholy ditties, ending generally in a chromatic scale. From another side the sound of castanets meets our ears—a sure sign that here the oft-mentioned and far-famed, though certainly not admirable, dancing-girls are in full performance. Along the shore hundreds of tents are erected, lighted, according to their rank and degree in the social scale, either by most primitive little oil lamps, or, progressing upward, most luxurious colored lanterns. In these booths refreshments of all kinds, but mostly coffee and sherbet, are to be had; and here one finds the sedate and well-to-do paterfamilias and the youthful though independent donkey-driver side by side, smoking. The entertainment consists in listening to ballad singers, comic actors, reciters of Koran verses and romances; and all these artists manage to collect an ample public around them, and one which is very simple in tastes and most grateful and appreciative for whatever is offered it. Add to all this constant, endless screaming and shouting, a maze of human forms ever rolling and unrolling itself, and my readers will be able to form some idea of what are the elements that go to compose every Arab festivity, and so also this "feast of the Nile."

Shortly after midnight the Arabs begin their work at the dike. To the accompaniment of a monotonous strain they dig away valiantly, so that at daybreak only a thin wall of earth remains as partition between them and the mighty flood beyond. At rise of sun the Khedive (viceroy), surrounded by the grandees of his realm, all in uniforms and gold-lace, arrives; he takes his stand in a tent prepared for him, and which commands the best possible view of all that goes on. A secretary takes a place at his side, and is prepared to take notes on this most important act, testifying that the Nile has reached the necessary height for bursting

the dike, and for the land-tax on all the fellah to begin its work. This document is sent to Constantinople the moment the festivities are at an end.—Dr. A. Trautletter, in *Harper's Magazine* for July.

Making a Lead Pencil.

"What does it cost to make a lead pencil?" said the manufacturer. "First let me show you how we make a pencil. See this fine black powder? That's graphite. It costs twenty-five cents a pound. This white substance is German clay. It comes across the ocean as ballast in sailing vessels, and all it costs us is freight. We mix this clay and this powder together and grind them in a mill, allowing moisture to be added during the process until the two are thoroughly assimilated and are reduced to a paste about the consistency of putty.

"This paste we press into these dies, each one of which is the size of a pencil lead, except in length. There are four leads in one of these. After they are pressed we cut them into the proper length and bake them in an oven kept at very high heat. There we have the lead made. Its hardness is regulated by the greater or less amount of clay we mix with the graphite; the more clay we put in the harder the lead.

"The cedar we use comes principally from the swamps of Florida, and is obtained entirely from the fallen trees that lie there. The wood is delivered to us in blocks sawed to pencil lengths, some thick to receive the lead and others thin for the piece that is glued over the lead. The blocks are sawed for four pencils each. They are grooved by a saw, the groove being the place where the lead is to lie.

"The leads are kept in hot glue, and are placed in the grooves as the blocks are ready. When that is done the thin block is glued fast to the thick one. When dry the blocks are run through a machine that cuts the pencils apart. Then they are run through a machine that shapes and burnishes them, and they are ready to be tied in bunches, boxed and put out.

The different grades in value are made by finer manipulation of the graphite. Here is a pencil that is about the average quality used in everyday business. It costs a little more than one-quarter of a cent to get it ready for market. We sell it to dealers at 100 per cent. profit, and the dealer makes much more than that. Of this grade an operator and the machinery will easily make 2,500 a day.

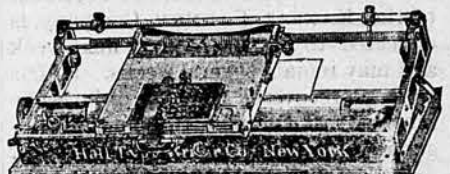
"There is a pencil in that case. It's a cheap-looking thing, isn't it? Don't look worth more than a cent, does it? Well, it would take a ten-dollar bill to buy that. The cedar that surrounds the lead in that pencil was centuries old, I guess, before any cedar that is standing to-day began to grow. It was taken from a marl bed in Orange county, N. Y., at a depth of sixty feet, and near it was found a mastodon's remains. That bone knob on the end of the pencil was a piece of that mastodon's tooth. No, I don't think \$10 would buy that pencil.—*New York Sun*.

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TO SUBSCRIBERS:

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

Harvest is now in progress all over the southern one-half of the State, with encouraging prospects.

Capital Grange, Topeka, subscribed \$50 last Saturday to the State Fair Association, provided a fair is held this season.

Apples in Missouri were badly injured last winter. Fruit is dropping from the trees; still a large crop in the aggregate is expected.

Shawnee county, in which Topeka is located, increased in the taxable value of her property the last year over two million dollars.

Recent heavy rains have rusted wheat in some places, but we have not learned of any serious falling off in condition on account of it.

A writer in *Texas Wool Grower* is authority for the statement that the word "Merino" means the superintendent of sheep walks.

The Nebraska State Fair is to be held at Omaha September 5 to 12 inclusive. The editor acknowledges receipt of an invitation to attend.

Subscription Agents, Publishers and Postmasters, please preserve the cards we send you, and encourage the FARMER by sending us a large number of subscribers each for one year.

It is estimated from the good condition of the wheat harvest and the increased acreage this season, that Kansas will produce forty million bushels of wheat this year. The largest wheat crop ever produced.

Professor H. C. DeMotte, President of the KANSAS FARMER Company, is expected to pay us a visit next week and may remain several weeks. He has so much recovered from the injuries he received last summer that he is able to get about without artificial assistance.

Hon. E. H. Funston was nominated for re-election to Congress in the Second district. Mr. Funston, as our readers remember is the farmer that was elected last March to fill the vacancy caused by Mr. Haskell's death. He is making a good record, and we believe he will be elected next fall by as large a majority as he received in March.

One Year Older.

The government of the United States is not perfect, even though we admit all that is claimed for it by enthusiasts. The principles upon which it is founded are good, but they are not the government. A very great improvement it is, indeed, upon all that preceded it, and it may be that with enlargement upon beginnings and better application of admitted powers, we have enough to carry us through.

We are one year older now. Within a day or two people will gather in large and small assemblies to commemorate the anniversary of our Independence, and orators will declaim upon the priceless blessings of liberty. This is well. Freedom is the normal condition of men. Without freedom there is little room for improvement. With the progress of this people as a nation has come the most remarkable era of progress ever known in human history. And this grand development has extended to all civilized people. The world is better because the people of the United States are free.

Our government retains two elements of older systems—monarchy and aristocracy. Our President represents the kingly power, and the Senate is an outgrowth of aristocracy. The House of Representatives, fresh from the people every two years represents more largely the people, and all three are made to work harmoniously together for the common good. The President has no kingly power, and the Senate is not hereditary. The Presidency is within the reach of any citizen whom a majority of the people desire to elect, and no qualifications except age and residence are prescribed for members of either branch of the national legislature. It is a government of the people, by the people for the people.

And yet we say it is not perfect. If the people are at the end of progress, if they in their political knowledge and methods have arrived at a point where nothing more is needed or desired, then we might rest at ease and say all is well. But that is not our condition. We are on the march continually. We are under pressure of a momentum now greater than ever before. We are moving ahead faster than in any former period. And this applies to all that concerns us for which government is necessary. Indeed, among the many things which we are learning is the art of government itself. We are beginning to better understand the real object of government. This department of study is made more active and fruitful by reasons of the great civil war and matters relating to it. Are we a nation of people, or are we a confederation of States with reserved sovereignty? If we are really one people with local governments for local purposes, then what is the extent of power in the nation. What subjects are national, what local, and where is the dividing line? These things were studied and debated by the fathers of the Republic, but we are a hundred years farther along than they were and we have seen tests that they could not foresee. Since their day steam and electricity have come in to help us; we have the sewing machine and harvester; one-fifth of our people are engaged in manufacturing things for the comfort and convenience of the other four-fifths; one-fifth of the people are carriers and their assistants, transporting persons and property from place to place. These changes and a thousand others have taken place since the fathers died. In their time it was worth a bushel of wheat to carry it fifty miles, but now 25 cents will pay for hauling an equal quantity a thousand miles.

The people of this day begin to appre-

ciate the truth that our government is a means of serving the public in matters directly concerning the general welfare. Formerly, and even now in some parts of the world, the people in general had little to do with government. It did not occur to them that the government was for them, and in truth it was not. But we have learned more and we see farther. With us government is a practical thing.

We are being moved up to this plane by a practical process. Political economy with us is practical work, not theory. This comes of our marvelous development. Take two examples to illustrate the thought—transportation and invention. Experience has taught us that a common carrier is dangerous as he is useful if he uses his advantages for personal gain instead of for public good as well. The same teacher has demonstrated that the inventor, who is a public benefactor, may at the same time be a public robber. Money that has been paid by the people of this country—that is, money over and above a fair and reasonable compensation, for sewing machines, would pay off all of our national debt and leave enough to pension every soldier of the late war.

These two examples show what is at least one legitimate power and duty of government. There is debate and doubt about the propriety of retiring General Grant and paying him a few thousand dollars because of his unequalled service to the country, while the inventor of a door hinge or a currycomb is entitled to draw at liberty upon the money and credulity of the people.

Look at the long list—nearly ten thousand bills, now pending in Congress, and imagine, if you can, the object of them. Beyond necessary appropriations for the government, not a hundred of them will become laws. Instead of matters directly concerning the people's interests, our lawmakers are called upon to consider a mass of useless and pernicious stuff that concern private persons and interests.

It would be well if, on the people's holiday—July 4, they would consider defects in our system as well as the numberless advantages. No people under heaven are as free as we are, and for that reason no people have as much need of a good government—one that comes near to them and takes care of their necessary concerns.

By reason of the long continued low temperature, and of excessive cold rains, our harvest is ten days to two weeks later than usual. It is not often that there is any wheat standing in Kansas on the Fourth of July. But there will be thousands of acres of such this year.

A subscriber sends in the following question: "Will the editor or any one that knows please answer the following query: Is there any such a variety of peach trees as the Hopkinsville? and if so what are the merits of this variety?" [We are not quite certain about it, but think there is a peach of that name that originated in Kentucky. Do any of our readers know?—Ed. K. F.]

A dispatch from Chetopa, last Monday says there is great consternation among stockmen having ranches in Indian Territory. The sheriff of the Cherokee Nation and a squad of Indians have been taking down all wire fencing that encloses larger tracts than fifty acres, that being the limit allowed by an act of the Cherokee council. The sheriff confiscates all wires he has taken down. The Sheriff began the work south of Coffeyville and is taking it down clean as he comes east. Thousands of miles of fencing have been removed. The Indians, it seems, mean business and evidently propose to eject all intruders.

Kansas Wheat in 1884.

It is too early to count our bushels, but there is no harm in guessing upon facts already known. The acreage in wheat this year is estimated at two million. At the rate of 15 bushels per acre, the aggregate yield would be thirty million bushels, about the same as we had last year. If the average yield should reach the figures of 1882, or a little over 23 bushels per acre, the total yield would reach upwards of forty-six million bushels. Putting it at 20 bushels the average, we will have forty million, that would be enough to supply all the people in Kansas and of seven other States of the same population, allowing five bushels, the usual allowance, to every person old and young.

This is a grand showing for so young a State. Let us see about the movement of so large a crop. Four hundred bushels is a large load for one freight car. At that rate, it would require one hundred thousand cars to haul our wheat crop. Allowing twenty cars to the train, we should have five thousand trains, and giving to each train one-half mile on the track, the procession would be twenty-five hundred miles long. Putting the cars together in solid train, and move them by an overshot water wheel driven by Niagara, we would have—(30 feet space to the car—) five hundred and sixty-eight miles of solid train, or nearly half way from Topeka to New York City.

Forty million bushels of wheat at 75 cents per bushel would amount to thirty million dollars. That, at \$25,000 per mile would build 1200 miles of railroad; at \$25 per acre, it would pay for 12,000 one hundred-acre farms. It would be equal to thirty dollars apiece for one million persons—a little less than the population of Kansas. It would pay for ten school houses at \$1,000 apiece, one court house at \$10,000, five churches at \$2,000 each, and twenty bridges at \$500 apiece in every one of the 81 organized counties of the State; and there would be money enough left to buy for each of the two hundred thousand families in the State, one sewing machine at \$25, one Jersey cow at \$50, and one parlor organ at \$60. Kansas can grow wheat.

Dr. R. R. Brown, Business Manager and Treasurer of the KANSAS FARMER Company has a much needed rest in contemplation. The Doctor is one of the hardest working and painstaking of men. He is always on duty and at his post. Two years of continuous labor has made him a good subject for a vacation which he has been hoping for some months to enjoy. It is his intention to visit some friends in California, and if he does not wrestle with the mountains and swim in the ocean until he grows stronger and able to lift a ton more or less, we will send him back till he does. In the meantime, those of us who remain will be in the spirit with him every day hoping him to enjoy the good things and pleasant things which we expect him to see and have while he is gone. We will miss him in the office, but the KANSAS FARMER will come out on time every Wednesday all the same.

The article on Western Kansas which was mentioned last week as running through the mind of our rustling man Heath, appears this week under the head—On the Range. The writer was out among the Colorado stock men last week, and the net result is shown in several communications from him in this issue of the paper. Heath beats them all gathering information.

We received printed reports of proceedings of the horticultural societies of Republic and Washington counties, but they came in after our Horticultural matter for this week was in type. So, they will lie over till next week.

Condition of Wheat and Corn.

The Atchison, Topeka & Santa Fe railway company, through its land department has been collecting information concerning the condition of crops in some of the counties along the line of their road. From their reports, as published in the Topeka papers last Saturday morning, we make some extracts.

BARTON COUNTY.

Great Bend.—Wheat and rye are in full head and ripening fast under the influence of the warm weather. Heads seem to be filling well, and promises are bright for a good yield. Generally a good stand. Some rye mixed with the wheat. There are some fears of too much wet weather, rains having been very plentiful this season. Reports from some localities speak of smut and some of rust in late sown, but not to any serious extent. Assessors returns not yet tabulated, but the acreage is estimated at from 30 to 40 per cent. more than in '82 or '83. Considerable grain will be harvested this week. Much is ripe enough for binders, and some binders are already in the field. Corn clean and growing fast. Oats headed out and generally good. Heavy growth of barley in excellent condition. While wheat is our principal and most profitable grain crop nearly all our farmers are getting small herds of stock together and buying adjoining lands so as to combine stock raising with grain growing.

STAFFORD COUNTY.

St. John.—Our wheat crop shows a good growth of straw and seems to be well filled. Much is ripe enough now to harvest, but rains have kept straw too green to head. Have heard of nothing serious affecting the crop, which promises to be heavy, but some say rains have been too frequent. Rye is a good crop. One-third more wheat than last year. Corn clean and growing fast; not large as usual at this time year.

RENO COUNTY.

Hutchinson.—The assessors estimate a one-fourth larger acreage of wheat than in 1883. The quality is as good as in the very favorable years that have preceded the present. Grain is ripening slowly; heads filled out to the extreme top. No rust whatever, except a little red rust on the leaves which does not affect the crop. Harvesting begun under favorable conditions, more favorable perhaps than last year on account of the dry, warm weather. Every year finds more people going into stock. Cattle and hogs are in great demand, and farmers everywhere are fencing their pasture. Corn where properly cultivated is waist-high.

EDWARDS COUNTY.

Kinsley.—Winter wheat is ready to cut, full of grain; straw clean and heavy. Harvesting will commence this week. Not a great deal of wheat out in 1882, but in 1883 there was a considerable breadth of land sown to this crop, which is exceeded this year by 33½ per cent. Barley, oats and corn are in good condition, and the same may be said of broom corn, millet, and sorghum.

PAWNEE COUNTY.

Garfield.—There is a good stand of wheat on the ground. Both straw and heads are good length. Not winter-killed. There are a few fields struck with rust, very lightly estimated acreage 15 per cent. in excess of last year. Indications are favorable to a yield of from 20 to 30 bushels on an average. Harvest will begin this week unless rain should interfere. More rye sown than heretofore. Corn has all been plowed once, most of it twice, and has a good stand and color. All our farmers are going to sheep or cattle, the profits in stock being very satisfactory in this county.

Larned.—Wheat is almost ready to

harvest, and next week will find every available hand in the harvest field. It has been so wet this spring that some fears are expressed of a wet harvest, but the prospects of a large crop were never better, and the fine outlook is general over the counties of Pawnee, Rush, Edwards and Hodgeman. Corn is backward, but has a rich green color, and all other spring crops are doing well. No plants injured. Oats and barley headed out, and very heavy all through the country.

HARVEY COUNTY.

Newton.—Harvest has commenced in this county and the yield promises better than for several years past. Do not think the acreage varies much from last year when there were 42,000 acres sown to wheat, quality is better. Rye and oats are a splendid prospect. Corn is promising.

RICE COUNTY.

Sterling.—Wheat is mostly in good condition, some little is down on account of heavy rains. Farmers are now cutting. Acreage is one-fourth more than that of 1883.

Raymond.—Harvest is about commencing. Extra good crop. Little River.—About 1st of July harvesting will be fully under way. The wheat was never better in our part of the State. Do not think the rains have injured the crop.

RUSH COUNTY.

Rush Centre.—Our wheat is equal to the crop of 1878. A small per cent. has been injured by rust or smut, but the injury is not general. Acreage about the same as last year. All other small grain crops are heavy, harvest will commence in about a week. In this county, in spite of the good harvests, the tide is turning in favor of larger stock interests as the surest husbandry for south-west Kansas.

FINNEY COUNTY.

Lakin.—This is the first season any attempt has been made as far west as Lakin to grow winter wheat, but what we have is good and promises well. During the winter the jack-rabbits ate the plant close to the ground. There are more farmers getting ready to put wheat in this fall. Oats and barley look well at Garden City; where all other crops raised by irrigation show large promise. But sheep and cattle raising are the chief resources of this county, and return the largest profits, exceeding as a general those made by our stockmen in the eastern and middle States from which most of them have emigrated.

A New Paper.

M. O. Frost & Son, publishers of the *Saturday Evening Lance*, Topeka, have begun the publication of another journal, monthly, entitled *The Knight and Soldier*. From the first number now before us, we extract the following from the salutatory:

"*The Knight and Soldier* aspires to be the organ and representative of the orders of the Knights of Honor and the Grand Army of the Republic, and their several and respective auxiliary societies, for and within the State of Kansas.

It is the purpose of the publishers to make a paper that will be of interest to every member of the orders in the State, and they hope and expect that every member of the orders will be interested in the paper and its welfare. It is a necessary adjunct to them and their work, and the paper is as much theirs—their prosperity as much of interest to them—as it is to the publishers. It represents the orders, and through this representation it hopes to create renewed interest in them, and to cause them to flourish and prosper anew."

Lizzie Bradley, White Cloud, Kansas, it is reported, quarreled with her father

about a niece whom she had raised, and undertook to destroy herself by use of chloral. That failing, she refused to eat and speak. After fasting fifty-three days she died of starvation.

Gossip About Stock.

Breeders of Berkshire swine report large sales of that breed at satisfactory prices, and that it is almost impossible to fill all the orders.

The Riley county breeders of Short-horns intend exhibiting a show herd of cattle at the leading fairs this fall. They can show as good blood as there is in America.

Lord, Finch & Nelson, Burlingame, have just purchased of Hutton & Sotham, Abilene, seven Hereford bulls, three calves and four cows at an average price of about \$400.

A. F. Wilmarth has a Merino sheep-breeding establishment at Ellsworth, Kas. He was formerly associated with Mr. Walbridge, of Russell. He will have 130 fine rams for sale this season.

To those parties who have been inquiring after Chester White swine, we would refer them to the breeders' card of W. W. Walbridge, Carbondale Kas., who makes a specialty of recorded Chester Whites.

All kinds of stock is doing well upon the range this season and taking on flesh very fast. The grass is abundant and nutritious and will not only furnish a large amount of pasturage but an unusual amount of hay.

The Central Kansas Wool Growers' Association held their annual meeting at the Russell House, Russell, Kas., on the 26th ult., and elected for President E. O. Church; Secretary, W. B. Page, Russell; Treasurer, A. F. Wilmarth, Ellsworth. The old Vice Presidents were reelected, and the new ones are Jas. Hutchinson, of Ellis county; F. A. Bates, Ellsworth county; and W. W. Morr, of Osborne county. The next meeting will be held at Ellsworth on the third Thursday of January next, when a number of papers will be read on various subjects relating to the wool industry.

It may be of interest to our readers to state that the late remarkable Short-horn sale of the Hamiltons took place at Lexington, Ky., which is situated on that famous "Blue Grass Route," the Kentucky Central railway. This road and its branches reaches all parts of this famous blue grass region, starting from Covington, Ky. The writer of this will ever remember with pleasure the delightful and interesting trip made over the Kentucky Central railway. Any information concerning this country and its resources may be obtained by addressing the G. P. Ag't K. C. R'y, Covington, Ky.

W. G. McCandless, Chase county, writes us: Our shearing was so satisfactory I subjoin a little account of it. Our Cotswolds (45) averaged 15½ lbs., running from 11 lbs. up to 23½. Capt. Snell, a 3 year old, clipped 23½ lbs., a 14 month's clip; Chess Wilson, 3 years, 21½ lbs., 14 month's clip; Young Chess, 2 years, 18½ lbs., 12 month's clip; Young Snell, 1 year, 18 lbs., 14 month's clip; Lady Kepple, 5 years, 18½ lbs., 12 month's clip; Snowflake, 4 years, 18 lbs., 12 month's clip; Young Queen, 1 year 2 months, 18 lbs., 14 month's clip. These sheep were shorn June 13th, 1884, and, except the two three-year-old rams were shorn between the 12th and 18th of June last year.

Carey R. Smith's sale of Holstein cattle at Iowa City, Ia., last week, was conducted by Col. John Scott, of Nevada, Ia. The sale was well attended by buyers from several States. The cow Mink with her famous milk and butter record, was bought by Thos. Wales, of Iowa City, for \$1,275. Mink was 8 years old and on June 7 gave ninety-six pounds of milk. J. P. Hall, of Emporia, bought the bull Norman 1531, 2 years old, and imported in his dam, price \$450. He also secured Mink 3d 1324 for \$610. The total amount of the sale was \$17,425. Five young grade Holsteins sold at an average of \$76, fifteen thoroughbred Holstein bulls averaged \$251, and thirty-eight females, only two with calves at foot, averaged \$350. Wm. Brown, Lawrence, Kas., took most of the grade heifers. He also purchased a number of thoroughbreds of Wm. Hauke, Iowa City.

As a rule subscribers to the KANSAS FARMER are prosperous and happy. A word to the wise is sufficient.

THE MARKETS.

By Telegraph, June 30, 1884.

STOCK MARKETS.

Kansas City.

The Live Stock Indicator Reports:

The Stock Yards will be closed on Friday, July 4, except for the receiving and feeding of stock. CATTLE Receipts since Saturday 936 head. The offerings to-day were moderate and the market steady for shipping grades, while medium and common butchers' stuff was weak and 5a10c lower. Sales ranged 3 75 for native stockers to 5 63½ for shipping steers.

HOGS Receipts since Saturday 6,291 head. There was a firmer feeling to the market to-day and values of light 5c higher than Saturday. Sales ranged at 4 72½a5 00, bulk at 4 80a4 85.

Chicago.

The Drovers' Journal reports:

HOGS Receipts 1,800, shipments 2,500. Market firm. Rough packing 4 90a5 15, packing and shipping 5 15a5 40, light 5 15a5 30, skips 3 50a4 75.

CATTLE Receipts 6,500, shipments 8,900. Solid, fat, dry fed cattle firm. Exports 6 40a6 65, good to choice shipping steers 6 90a6 40, common to medium 5 00a6 00, grass Texans 3 25a5 25.

SHEEP Receipts 1,000, shipments 200. Market steady. Inferior to fair 2 50a4 00, medium to good 4 00a4 25, choice to extra 4 50a5 20.

The Journal's Liverpool cable says: Cattle ½ per cent. higher, good to choice American steers 15a16c for cuts; dressed sheep weaker at 16 cents.

St. Louis.

CATTLE Receipts 1,200, shipments 600. Market active and strong. Exports 6 50a6 75, good to choice shipping 6 00a6 50, common to medium 5 40a5 90, native grassers 4 50a5 50, grass Texans 3 50a5 00, mainly 4 30a4 50.

SHEEP Receipts 900, shipments none. Market steady. Good to choice 3 75a4 50, common 2 50a3 00, Texans 2 25a4 25, good to best lambs 4 50a5 25.

New York.

CATTLE Receipts 4,600. Market firm and higher for extreme steers. 5 75a7 50, mainly 6 44a7 14. All sold early.

SHEEP Receipts 15,000. Market good and prime, steady with full prices. Sheep 3 75a5 75, lambs 5 50a7 50.

HOGS Receipts 10,500. Market nominally 5 80a5 70.

PRODUCE MARKETS.

Kansas City.

The Daily Indicator reports:

WHEAT There was a weak market to-day with values lower than Saturday. Cash No. 2 red sold at 72c against 73½c asked Saturday. June was nominal, and July sold at 72½a72¾c against 73c bid Saturday.

CORN The market was again weak to-day on change with cash No. 2 mixed nominal, while June sold at 41½a42c against 42c bid Saturday.

OATS No. 2 cash, no bids, 27c asked, June no bids, 26¾c asked, July no bids, 24c asked. Rejected cash no bids nor offerings.

RYE No. 2 cash, no bids, 51c asked; June, no bids, 50¾c asked; July 40c bid, 45c asked. Rejected cash, no bids nor offerings.

CASTOR BEANS Quoted at 1 55a1 60 per bushel on a basis of pure.

FLAX SEED We quote: 1 25 per bu.

BUTTER Receipts are light and the quality not, as a general thing, good. Demand good for a good article. No accumulation in store. We quote: Choice creamery 16a18c, fine dairy in single package lots 15c, store packed, good in round lots, 8c.

EGGS Receipts lighter and market steady at 11c per dozen. All receipts have to be candied.

CHEESE We quote: Full cream 12½c, flats partly skimmed 10c, Young America 13c.

POTATOES New home grown 50c per bushel, green peas 50c per bu.

WOOL Missouri and Kansas—fine 12a18c, medium 12a16c, coarse 14a16c, tub washed 28a30c, Colorado and New Mexico 12a14, black burry or cotted 10c less.

Chicago.

WHEAT Good demand. Market weaker and lower. June 83½a85c. July 84½a85½c.

CORN Unsettled and lower. Cash 51a51½c, June 51a52c, July 51½a52½c.

OATS Weak and lower. Cash 30¾c, June 30¾a30¾c.

RYE Dull and easy at 62a62½c.

BARLEY Dull at 62a64c.

FLAX SEED Firm at 1 54a1 55.

St. Louis.

WHEAT Market fairly active but lower. No. 2 red 1 01½c, cash and June.

CORN Market fairly active and lower except for cash and June which were better, 55c. Cash and June 49¾a49¾c.

OATS Lower and slow. 28¾a28¾c cash.

RYE Slow at 57a58c.

BARLEY No market.

New York.

WHEAT 96c to 1 00.

CORN 58 to 62c.

The Busy Bee.

The Fertilization of Flowers.

Mr. James Reid, a nephew of Mr. Robt. Reid, Collector of Customs at London, Ont., who is now a prominent resident of Paisley, Scotland, has devoted much attention to botanical subjects, and lately delivered a very interesting lecture on "The Fertilization of Flowers," before the Botanical Section of the Philosophical Society, from which we make a few extracts:

We all know, said Mr. Reid, that most flowers have their stamens and pistil situated together in the same flower; but we likewise know that many species bear those organs on separate flowers, although both kinds of flowers are found growing together on the same plant, whilst still other plants bear their stamens and pistil not merely in separate flowers, but in flowers on perfectly distinct plants.

It is evident that, when these organs are each situated on separate flowers, fertilization can ensue only when pollen from the stamens of one flower is carried by some means or other to the stigma of another flower of the same species. In the most of cases this is effected by insects, in a few instances by birds, and in others by the wind. The Scotch fir affords a well known example of wind-fertilization. Doubtless the enormous quantity of pollen shed by this species is meant to make up for the great waste incidental to its method of transmission. Meanwhile we will confine our attention to plants bearing hermaphrodite flowers.

It was long supposed—indeed, until quite recently, and, I may almost say, within the lifetime of the youngest members of our society, it was the almost universal belief amongst botanists—that all flowers of this kind were self-fertilizing; but it is now quite well known that very many flowers, although hermaphrodite in structure, are unisexual in function. Some of our most eminent botanists are of the opinion that cross-fertilization is the rule with many flowers which yet have the power of self-fertilization; and experiment has shown that when one flower is fertilized by pollen from another flower, the resulting seeds give rise to healthier and more vigorous plants than usually spring from seeds of self-fertilized flowers. However, we shall see as we proceed, that, with some hermaphrodite flowers, self-fertilization is physically impossible, and that in such cases the most beautiful arrangements exist for ensuring cross-fertilization.

In the remarks which I have to make, I will draw my illustrations from a few wild flowers which grow freely around Paisley, and I will, for two reasons, take up no more than three or four species—first, because it is impossible, within proper limits, to deal satisfactorily with many flowers; and next, because the nature of the principle which we are considering, can be as well illustrated by three or four as by a larger number. I will also restrict myself to plants which I have for a number of years grown in my own garden, and thus have had opportunities of seeing confirmation of certain phenomena which have engaged the attention of botanists of acknowledged reputation. In many hermaphrodite flowers, the stamens come to maturity at one time and the pistil at another; and, of course, in such cases self-fertilization cannot take place.

Dichogamy is a technical term to indicate that the two sets of organs on the same flower are not developed simultaneously, but it does not tell us which of them ripens first. However, in flowers of this kind, the stamens generally arrive at maturity first; and, when this

is the case, the flowers are said to be protandrous or protandrous. But in many cases where both sets of organs are developed at the same time, insect agency is still essential to successful fertilization. We have a familiar instance of this in the common red clover (*Trifolium pratense*). Some naturalists affirm that the common red clover can be fertilized only through the agency of one of the common humble-bees; others are disposed to question the soundness of this opinion, although all appear to agree that insect agency is quite essential to its successful fertilization.

In the course of the late Darwin's numerous and valuable experiments, he found that 100 heads of red clover, when grown in the open air in the usual way, produced 2,700 seeds, but the same number of heads, when protected from bees, did not produce so much as a single seed. I remember reading in the newspapers, some 12 or 14 years ago, an account of the efforts of the Acclimatization Society, of New Zealand, to introduce red clover into that colony; but, although the seeds sent from this country yielded a fair crop of good plants, yet the plants thus grown totally failed to reproduce others "after their kind," and the failure was described to the absence of wild bees.

Like the red clover, the fertilization of the pansy is likewise due to the agency of insects, chiefly to the visits of one or more of the wild bees. As the pansy is believed to be one of the most highly specialized flowers not only in the British flora, but in the whole list of phanerogamous plants, it is very well worth the while of any one at all interested in the subject to take some pains to understand its structure and the contrivances which it exhibits to insure its reproduction from seed. The peduncle of the pansy, just below the flower, suddenly curves round to a position at right angles to its ascending axis, thus throwing the flower forward and downward. Look into the "eye" of the flower, and you will notice the round knob-like stigma, of a yellowish green color, situated almost right in the throat, so to speak, of the tube. This globular organ you will likewise observe, is pressed closely down upon the front petal. Now, look beyond the stigma and in towards the very heart of the flower, and you will there see something having a more or less orange tint. This orange color proceeds from the broad and membranous prolongations of the connectives. I may remind some of you that the connective is what might be called the mid-rib of the anther. It usually terminates at the tip of the anther, but it is sometimes produced beyond it, as it is in this case, and very strikingly so in *Paris quadrifolia*. An anther with prolonged connective is analogous to a leaf whose mid-rib is produced beyond the blade. The stamens of the pansy have very short filaments—much shorter than their anthers. The ovary is conical in form, and the anthers are arranged completely round it, their dehiscing sides inwards, facing the pistil. The prolongations of the connectives thus take up a position near the upper part of the ovary, their tips meeting at the apex of the cone, but in such a way as to inclose a hollow space, with the ovary in the centre. Each of the two lower or front stamens throws out from the base of the connective a long spur. These staminal spurs project into the spur of the lower petal, and penetrates its whole length. The honey-glands are situated in the somewhat thickened ends of the staminal spurs, whence it drops to the bottom of the spur of the corolla, where it remains until sought for by some insect whose trunk is long enough to reach it.

I will not weary you with these struc-

tural details further than to mention that the stigma, which seems to guard the entrance to the honey-chamber, is quite hollow, and has a remarkable round opening in front. Below this opening, and close in contact with the petal, is a recurved lip or valve. There is a bend at what appears to be a weak part of the style. Having examined the flower thus carefully, we are now in a position to watch the effect of a bee visiting the pansy in search of honey. The insect alights on the broad front petal, thrusts its trunk under the stigma and downwards to the bottom of the spur of the corolla, where it can either sip what has trickled into the tube or take the honey directly from the secreting glands of the staminal spurs. Now, observe what happens. If the anthers are mature, or have been so for a short time, the pollen will, partly at least, have dropped through the slits between the anthers into the spur of the corolla, where it will be caught by the thick brush of hairs which seem to be placed there for this special purpose. The proboscis of the bee, on its way to the honey, must pass completely through this brush of hairs, and is sure to get dusted over with pollen; but, in withdrawing itself from the tube, the insect comes against the recurved lip of the stigma, which is consequently drawn forward and pressed across the orifice, thus effectively preventing any of the pollen from entering the cavity. Should the bee visit the flower just at the time when the anthers have ripened, but before the pollen has been shed, then when it touches the stigma, the style bends at the weak part, causing a movement of the ovary. This movement disturbs the encircling anthers; the hollow box opens, and the pollen, set free by the agitation, drops upon the bee, and is carried off by it to the next flower it alights upon. In following the bee to this other flower we will see that in thrusting its proboscis beneath the stigma, it has to pass the open orifice, against which it must press with some degree of force. The pollen which it has brought from the first flower gets cleaned off its trunk, some of which is almost certain to enter the hollow chamber, thus securing cross-fertilization.

There are occasional hours between breaks in regular work that may be improved by cutting weeds, or in some other way getting rid of them, or in draining water from places where it is doing harm, or in repairing fences or walks, or cleaning up about the house or barn. Indeed, there is always something to do about a well regulated farm that will pay for the work done in improved appearance if nothing else.

Unless sheep are kept in a uniformly thrifty condition "jointed wool is the result."



"I owe my Restoration to Health and Beauty to the CUTICURA REMEDIES."

Testimonial of a Boston lady.

DISFIGURING HUMORS Humiliating Eruptions, Itching Tortures, Scrofula, all Rheum and Infantine Humors cured by CUTICURA REMEDIES. CUTICURA RESOLVENT, the new blood purifier, cleanses the blood and perspiration of impurities and poisonous elements, and thus removes the cause. CUTICURA the great Skin Cure, instantly allays itching and inflammation, clears the Skin and Scalp, heals Ulcers and Sores, and restores the Hair. CUTICURA SOAP an exquisite Skin Beautifier and Toilet Requisite, prepared from CUTICURA, is indispensable in treating Skin Diseases. Baby Humors, Skin Blemishes, Chapped and Oily Skin CUTICURA REMEDIES are absolutely pure, and the only infallible Blood Purifiers and Skin Beautifiers. Sold everywhere. Price, Cuticura, 50 cents; Soap, 25 cents; Resolvent, \$1. POTTER DRUG AND CHEMICAL CO., BOSTON, MASS.

CATARRH Hay Fever



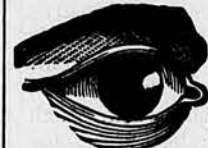
Is a type of catarrh having peculiar symptoms. It is attended by an inflamed condition of the lining membrane of the nostrils, tear ducts and throat, affecting the lungs. An acrid mucus is secreted, the discharge is accompanied with a painful burning sensation. There are severe spasms of sneezing, frequent attacks of blinding headache, a watery and inflamed state of the eyes.

CREAM BALM HAY-FEVER is a remedy founded on a correct diagnosis of this disease and can be depended upon. It has gained an enviable reputation wherever known, displacing all other preparations.

Not a Liquid or Snuff.

Apply by the finger into the nostrils. It will be absorbed, effectually cleansing the nasal passages of catarrhal virus, causing healthy secretions. It allays inflammation, protects the membranous linings of the head from additional colds, completely heals the sores and restores the senses of taste and smell. 50 cts. at druggists; 60 cts. by mail. Sample bottle by mail 10 cts.

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This institution is incorporated under the State laws of Kansas. Has had a flourishing existence for ten years, during which time thousands of Chronic and Surgical diseases have been treated successfully.

Drs. Mulvane, Munk & Mulvane, the physicians in charge, besides doing an acute city practice, devote themselves to the treatment of all kinds of chronic and surgical diseases, in which direction lies their several specialties in Surgery, Gynecology and Eye and Ear affections.

They are prepared to treat successfully by the latest and most approved methods, Rheumatism, Paralysis, Neuralgia, Epilepsy, Chorea, Chlorosis, Dropsy, Scrofula, Dyspepsia, Constipation, Nasal Catarrh, Bronchitis, Gout, Polypus, Tumors, Epithelial Cancer, Old Ulcers, Skin Diseases, Deformities, Granulated Lids, Strabismus, Uterine troubles, Seminal Weakness, Spermatorrhea, disorders of the Kidneys, Liver, Bladder, Rectum, and all private diseases; Tape Worms removed in from one to four hours without fasting; Hemorrhoids or Piles cured without the use of the knife or ligature; artificial eyes inserted.

MULVANE, MUNK & MULVANE.

Also Medical Attendants to the celebrated Mineral Wells of Topeka. Correspondence solicited. References:—Hon. John Francis, Hon. P. I. Bonebrake, J. B. Hallowell, U. S. Attorney.

A HOME DRUGGIST TESTIFIES.

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

Ayer's Sarsaparilla.

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

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

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

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Will purify the BLOOD, regulate the LIVER and KIDNEYS, and RESTORE THE HEALTH and VIGOR of YOUTH. Dyspepsia, Want of Appetite, Indigestion, Lack of Strength, and Tired Feeling absolutely cured. Bones, muscles and nerves receive new force. It invigorates the mind and supplies Brain Power. Suffering from complaints peculiar to their sex will find in DR. HARTER'S IRON TONIC a safe and speedy cure. Gives a clear, healthy complexion. Frequent attempts at counterfeiting only add to the popularity of the original. Do not experiment—get the ORIGINAL AND BEST! (Send your address to The Dr. Harter Med. Co., St. Louis, Mo., for our "DREAM BOOK.") Full of strange and useful information, free.

The Veterinarian.

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

SPRUNG KNEES IN HORSES.—The condition known as "sprung knees," is indicative of over-exertion, and of an undue amount of work which has been thrown upon the ligaments of the forelimbs. It is usually impossible to fix upon any one portion as being at fault more than another, where the entire limb participates in this abnormal state. Undoubtedly there is an hereditary tendency in some horses to take on this peculiar condition. No treatment can be of any avail, and beyond the unsightly appearance caused by the trouble, the animal is not, as a rule, materially injured for moderate work.

UMBILICAL HERNIA.—The bunch formed on the belly or navel is undoubtedly a rupture, a condition not uncommon in this region of the body in young animals. A correct diagnosis may be obtained by gently kneading the contents, and at the same time endeavoring to push them up into the abdomen. If they return with a gurgling sound, it is a rupture. To keep the intestines in place, make a soft pad of folded cloth or any similar material, and attach it with sufficient pressure to a band passing round the body and fastened to a similar one running round the neck. Blistering the parts repeatedly is sometimes effectual, when the rupture is not large and not of long standing. The bunch should by no means be punctured.

BLIND STAGGERS IN COWS.—The *National Stockman* avers that the disease known as "blind staggers" or the "trembles," is caused by disorder of the brain, produced by indigestion and disordered stomach or liver, or both. It is the same in cows as in horses. Probably the cow has stopped chewing the cud, which is a certain indication of indigestion. Give her a pint of linseed oil: repeat the second day, and also give her a bran mash with a tablespoonful of carbonate of soda in it every day for a week. Feed lightly for a week or two, and gradually get up to full feeding. This is caused by over-feeding—giving too much grain food or feeding on frozen grass, moldy corn-fodder or other indigestible food. If the oil does not affect the bowels freely, give 24 ounces of epsom salts dissolved in warm water, followed by drinks of thin, warm bran slop or linseed gruel; this will relieve the stomach if impaction of the undigested food in it has occurred. This disorder affects the whole nervous system, and one of its first effects is to stop the flow of milk.

FOUNDERED HORSE.—The term founder is used very indefinitely, and conveys ideas that are apt to be very confused. The disease to which the word should be restricted consists of inflammation of the sensitive portions of the feet—which inflammation may be either recent or long-standing. In the early stages of the affection, every effort possible must be made to subdue the inflammation, and to restore the parts to their healthy condition. For this purpose large poultices are to be applied to the feet, and the animal encouraged to lie down. In order to prevent congestion, it is advisable in this early stage to walk the horse without shoes, on soft plowed ground. Where excessive tenderness and inflammation have set in, exercise is out of question. A mild laxative (not purging), should be administered—one-half an ounce of aloes is most appropriate, followed by injections of water into the rectum if necessary. In very severe

cases, bleeding from the coronet may be advisable. If the inflammation persists after two or three weeks, a condition known as chronic laminitis follows, accompanied by various changes in the internal structure of the hoof. For this long rest at pasture, blistering, and the application of a thin-heeled bar-shoe are the appropriate remedies. In the worse cases complete restoration of the foot to its healthy condition cannot be expected. The convexity of the sole must be counteracted by the use of a thick, broad, webbed bar-shoe, and the animal placed in the wettest pasture possible. Shorten the toes and lower the heels if necessary. The animal may be used for slow farm work on soft ground a long time before he is fit for use at a quick pace upon hard roads.

PROSPECT FARM.



The two imported Clydesdale Stallions, *Carron Prince* and *Knight of Harris* will stand at the stable of the undersigned this season—the one at \$20.00, the other at \$25.00, to insure. Both horses imported from Scotland in 1882 and recorded in A. C. S. Book, pages 364 and 370.
The two high-grade Stallions, *Donald Dean* and *King William*, will stand at same place at \$10.00 each to insure. These two horses were sired and grand-sired by noted imported Clydesdale Stallions. Farmers, come and examine these horses for yourselves. **STALLIONS AND MARES FOR SALE.**
H. W. McAFEE.
Three miles West of Topeka, 6th St. road.

MARQUIS 2D,

A Pedigree English Shire Horse,

Stands for the season at Fowler's Ranch Maple Hill, Kas., on Tuesdays, Wednesdays and Thursdays; at the West Ranch on Mondays, and at St. Marys, on Saturdays, in each week.

TERMS OF SERVICE:

To insure, \$25, payable when mare proves in foal or if owner disposes of her. Single services \$15.—payable to man in charge, at time of service.

HEREFORD CATTLE.

THOROUGHbred BULLS and HIGH-GRADE BULLS and HEIFERS for sale. Inquiries promptly answered.

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Irving, Marshall Co., Kansas.

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

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

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Breeders of Short-horn Cattle and furnishers of high-grade Red and Roan Bulls and Heifers. Specialty of Grade Polled-Angus and Galloway Cattle for Western trade.

200 choice High-grade Cows and Heifers for sale.

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BREEDERS of and Dealers in Short-horn, Hereford, Polled Aberdeen and Galloway Cattle, Jacks and Jennets. Have on hand one thousand and three hundred the cattle in calf by Hereford and Polled Bulls. Are prepared to make contracts for future delivery for any number.

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SHORT-HORN CATTLE

of the most noted beef strains, and all superior individuals.

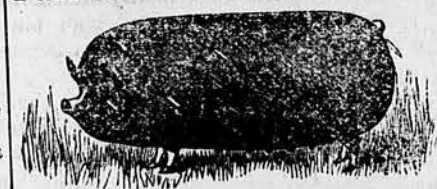
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Correspondence or inspection of herd cordially invited.



Chester White, Berkshire and Poland-China Pigs, Fine Setters, Scotch Collies, Fox Hounds and Beagles, bred and for sale by F. G. Gentry & Co., West Chester, Chester Co., Pa. Send stamps for circular and price list.

PLEASANT VALLEY HERD —OR— 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 skin, or for matured animals. Prices reasonable, satisfaction guaranteed. Send for catalogue and price list, free.

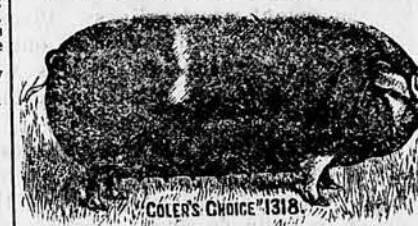
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The Wellington Herd of well-bred and imported Berkshires is headed by HOPKINS JOE 4889. The herd consists of 30 matured brood sows of the best families. This herd has no superior for size and quality, and the very best strains of Berkshire blood. Stock all recorded in A. B. R. Correspondence and inspection invited. Address **M. B. KEAGY,** Wellington, Kas.

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Herds of pure-bred and high grade Short-horn Cattle, Poland-China Swine, Shepherd Dogs and Plymouth Rock Fowls. The best herd of Poland-Chinas west of the Mississippi river, headed by Black-foot 2261, Young U. S. 4691, Landable, vol. 6 (own brother to Look-No-Farther 405) and Seek-No-Farther (a son of Look-No-Farther). All stock sold eligible to the Ohio Record. Send for new catalogue.

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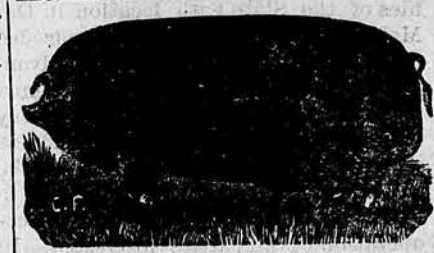
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My stock was selected from the best herds in Illinois, Indiana and Ohio. Young stock for sale; also high-class Poultry. Send for catalogue and prices.

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

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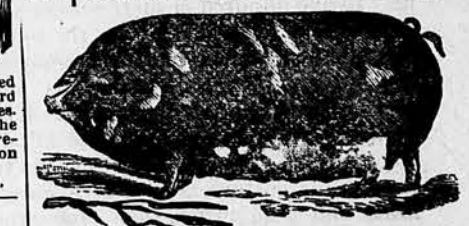
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We are raising over 800 pigs for this season's trade. Progeny of hogs that have taken more and larger sweepstakes and pork-packer's premiums than can be shown by any other man on any other breed. Stock all healthy and doing well. Have made a specialty of this breed of hogs for 37 years. Those desiring the thoroughbred Poland-Chinas should send to hear of our breeders will be registered in the American Poland-China Record. Photograph of 34 breeders, free. *Swine Journal* 25 cents. Three-cent stamps taken.



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Improved Poland-China Hogs



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

Hogs of Quick Growth.

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

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

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

Residence, 7 miles west of Wellington, near Mayfield.

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

BEEES FOR SALE. I have a few colonies of Italian and Hybrid bees for sale—all in good condition. Also, will have choice Italian Queens for sale at \$1.00 each during the season.

J. B. KLINE, 314 Kansas Ave., Topeka, Kas.

In the Dairy.

Iowa Butter and Cheese Exchange.

By way of showing progress in methods of disposing of dairy products, we publish the following circular given out to the public by the Iowa Butter and Cheese Exchange of Des Moines. It shows that the drift of dairy opinion is in the right direction. Kansas will soon need to consider the same subject. Here is the circular:

As the Iowa Butter and Cheese Exchange has been organized and is now one of the permanent corporate companies of the State with location in Des Moines, and in as much as it is conceded by all to be of great benefit and advantage to the creamery men, the dairymen and the farmer, also to the city in many respects and especially to the business men, the officers and members of the Exchange have deemed it advisable to solicit by circular and otherwise the co-operation of all parties interested. In doing this they do not ask for help in the shape of a donation of a dollar, but on the contrary propose to give value received for the small amount of the membership fee, which is five dollars. One share of stock is issued for every five dollars paid, which constitutes the purchaser a member and entitles him to all the benefits and privileges of the Exchange. The stock is now worth its par value, and there is no question but that in a reasonably short time it will command from fifty to one hundred per cent. premium.

The benefits the Exchange offers to the manufacturers are apparent, and understood by most of them, so that it is hardly necessary to enumerate here. Instead of shipping to the dealer and paying freight and commission, standing the shrinkage and loss, they deliver at their own station, receive the money and then and there their responsibility ceases. The products are sold regularly once a week while fresh and sweet, consequently commands the highest market price. They get the benefit of competition from a large number of dealers on call sales, and all that is necessary up to their part to secure the very highest prices is to bring their products up to the proper grade, which they can easily do.

To business men of the city of Des Moines, it will certainly be of great advantage. The annual business of the Exchange will, in a very short time, amount to millions of dollars. Sales on the Elgin, Ill., Dairy Board for 1883 reached the enormous sum of \$3,282,527.19. The Iowa Exchange can do as well. The sales, which are conducted on Tuesday of each week, brings from fifty to one hundred or more sellers and buyers together from all over the country, each one leaving in the city more or less money for accommodations and merchandise of different kinds. The retail groceryman can purchase all his stock of the Exchange, enabling him to furnish his customers with nice, clean, sweet and fresh butter, thus saving the great annoyance now so common. The retail dealer who purchases his butter and cheese of the Exchange will certainly strike a bonanza.

The Exchange would be greatly strengthened and encouraged by the addition of five hundred new members during this year. This number can be secured if only a portion of those who ought to, will send or bring in the five dollars and take in lieu a membership certificate. Nice and convenient rooms have been secured and fitted up for a permanent home for the Exchange at 123 Fourth street, close to hotels, depots, express and telegraph offices. In helping the Exchange you help yourself. The sales so far (three) have been

very encouraging. Nearly fifteen hundred tubs—over eighty thousand pounds—have been sold at fair prices, amounting to over fourteen thousand dollars. Buyers have been in attendance at every sale in sufficient numbers to take all and more than was offered.

The Art of Making Butter.

In the last annual report of the Wisconsin Dairyman's Association are given some excellent directions about making butter. From these practical workers we may learn many things useful here in Kansas.

T. D. Curtis is credited with saying: Have the milk of a healthy and properly-fed butter-cow drawn in the most cleanly manner. Carefully strain it, and however set, run the temperature below sixty degrees but not below forty. Skim just as the milk is the least acid, expose the cream to a pure atmosphere and moderately churn as soon as the cream turns slightly sour, so as to produce even concussion in all parts of the cream. Wash down the cream when the cream assumes a granular appearance, and stop churning when the butter has collected in granules the size of wheat kernels. Draw off the buttermilk and rinse in pure water below sixty degrees. Then float the butter in weak brine, to coagulate the caseine and albumen into a soluble form in about half an hour. Then thoroughly rinse in pure water. Stir in enough purified salt to suit your market, and work just enough to thoroughly incorporate the salt and consolidate the butter. Pack directly (or give a second working after standing a few hours), in style to suit your patrons, or in fifty-pound tubs, thoroughly saturated with brine. Rub purified salt on the inside of the tub, leaving a sprinkling on the bottom. Cover with a muslin cloth and a layer of salt, and make the package as nearly air-tight as possible. Store in a sweet, cool place. The good quality of the butter is guaranteed.

Mrs. Morley said our first care should be for the cow. She must have plenty of good milk-producing food and pure water. Her stables must be warm, clean and well ventilated, as the milk with the blood, passes through the lungs for purification. She should be handled gently, milked quickly and neatly. The sooner the milk is separated from the milk soured, not very sour, but a little more than slightly, aired and churned at a temperature of 58 degrees in summer and 62 degrees in winter, in a churn that revolves without inside machinery to agitate the cream, the better. Should be churned with an even motion, not too fast. When the butter has come in grains as large as shot draw off the buttermilk and wash two or three times in cold water in which a little salt has been dissolved. After draining, salt with good, clean dairy salt, one ounce of salt to one pound of butter. After standing an hour or two work it carefully so as not to break the grain, until it becomes firm, tenacious and waxy. Pack carefully and cover to exclude the air. Of course everything about it must be kept in the height of cleanliness. Place it upon the market as often as once a week. Butter produced in this way will not only be gilt-edged, but golden throughout.

Miss Martindale advised great care about details. Experience will determine the exact temperature to have the cream to begin churning: the rule is 58 degrees to 62 degrees Far. It must be thoroughly ripened and in its first acid. Do not use a churn warranted to "bring the butter in five minutes;" one hour is soon enough for churning fifty pounds of butter. When the butter is sufficiently separated from the buttermilk, draw out the latter; gently wash

the butter while in the granular form, first with pure water and afterward with brine. Add salt at the rate of one ounce to the pound of butter; work in evenly and let stand four to six hours. When working over butter as soon as the moisture that works out looks watery and free from buttermilk, stop, if the color of the butter is even. This is the only part of the work connected with butter making that can be slighted, but in this there is more danger of working too much than too little. For retail trade mould the butter into rolls or prints; if for shipping, put in packages best suited to your market.

This, That and the Other.

Smoking does not agree with some people; but it always seems to soot the chimney.

Josh Billings says: "Next to a clear conscience for solid comfort cums an old shu."

The members of the local board of government at Dewsbury, England, recently sat thirty hours in the attempt to elect a chairman.

The Sioux believe that the sun is now in the sky because he quarreled with the moon while on earth, until they resolved to separate and to go to the upper world.

The men employed in cleaning and sorting manilla suffer from a peculiar skin disease, which has lately been found to be caused by a minute white insect which lives in the bean.

"Were you ever caught in a sudden squall?" asked an old yachtman of a worthy citizen. "Well, I guess so," responded the good man. "I have helped to bring up eight babies!"

A snow-white hen in Georgia hatched out five black chickens and killed every one as they left the shell. She didn't want the other hens to eye her suspiciously and talk about her.

"Milkman, why does your milk always look so blue?" inquired the housewife. "My crows came from Boston, mum," proudly replied the milkman, "and they're blue-bloods."

Some ingenious observer has discovered that there is a remarkable resemblance between a baby and wheat, since it is first cradled, then threshed, and finally becomes the flour of the family.

A colored man went into a Galveston newspaper office and wanted to subscribe to the paper. "How long do you want it?" asked the clerk. "Jes as long as it is, boss; if it don't fit de shelves, I kin t'ar a piece off myself."

The lumber for 48,000 clothes-pins costs \$8 and the clothes-pins are worth \$36.50. Four kinds of saws, a revolving polishing cylinder of iron and a kiln are requisite for their manufacture, and the poor creature who makes them only has fifty per cent. profit when he sells twelve of them for a cent.

The Bishareen members of one of the Sudan tribes have a rather amazing method of arranging their hair. They part it just above the ears, and above the line they dress it so that it stands erect. Below the line it is plaited and frizzed and drawn out almost straight, so as to shelter the neck from the sun.

Best Way to Apply Poultry Manure.

If every farmer, and every keeper of fowls, even on a city lot, only knew how valuable poultry droppings really are, not a handful of them would ever be allowed to go to waste. A single tablespoonful where needed will make a thrifty hill of corn, where, without it, there might be only a sickly growth of puny stalks. Prof. Voelcker, of the Royal Agricultural Society of England, advises as the least expensive and best way of using poultry manure to mix it with dry earth, ashes, and the like into a compost. Mixed with about twice the quantity of dry, earthy matters of this kind, it will soon be reduced into a fairly dry and powdery state, in which it may be readily sown broadcast or with the drill, and found useful in growing any kind of garden vegetables. For root crops, such as turnips, carrots, and

mangels, it is advised that poultry manure be mixed, after reducing to a powdery state, with an equal weight of superphosphate, and the mixture drilled in at the rate of 500 pounds to the acre. In making poultry manure into compost with earth, Prof. Voelcker warns against mixing quicklime with it, as the effect would be to liberate the ammonia, the most of which would escape and be lost. On the other hand, he recommends as a positive advantage mixing soot with this compost. In the absence of soot, the next best thing, in his opinion, is to mix in burnt plaster, to which a small quantity of superphosphate is added, the free acid of which will effectually prevent the escape of the ammonia. A mixture of two parts burnt plaster and one part superphosphate may be kept in readiness to mix with the fresh chicken droppings for the purpose of absorbing the excess of moisture and thus facilitate its being reduced to a dry and friable nature. Three parts of fresh chicken manure and one part of the proceeding mixture of burnt plaster and superphosphate if kept under cover for a few days and turned once or twice during the time, and then passed through a screen or sieve, will be found to be most efficacious when applied at the rate of from 600 to 800 pounds to the acre.

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

Consumption Cured.

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

\$11,950

IN CASH
GIVEN AWAY

To SMOKERS of Blackwell's
Genuine Bull Durham
Smoking Tobacco.

This Special Deposit is to guarantee the payment of the 25 premiums fully described in our former announcements.

The premiums will be paid, no matter how small the number of bags returned may be.

Office Blackwell's Durham Tobacco Co.,
Durham, N. C., May 10, 1884.

F. A. WILEY, Esq.,
Cashier Bank of Durham, Durham, N. C.

DEAR SIR:—We inclose you \$11,950.00, which please place on Special Deposit to pay premiums for our empty tobacco bags to be returned Dec. 15th.

Yours truly, J. S. CARR, President.
Office of the Bank of Durham,
Durham, N. C., May 10, 1884.

J. S. CARR, Esq.,
Pres. Blackwell's Durham Tobacco Co.

DEAR SIR:—I have to acknowledge receipt of \$11,950.00 from you, which we have placed upon Special Deposit for the object you state.

Yours truly, F. A. WILEY, Cashier.

None genuine without picture of BULL on the package.

See our other announcements.

The Boss Combination

Zinc and Leather
COLLAR PAD.

The Strongest, Most Durable and Safest pad ever made. The tips being pressed into the leather and firmly clenched, act as rivets, and make a pad of zinc and leather firmly riveted together. The zinc plate being heavy enough to prevent the pad closing together at the top of the withers and pinching the neck. It also keeps the pad open, giving a chance for the air to circulate and dry and cool off the neck. The zinc being pressed into the leather on the under side brings a smooth zinc surface to the flesh of the horse; the leather, meanwhile, preventing the zinc from becoming heated by the rays of the sun. It is always cool, and adheres no moisture is easily kept clean, and will positively cure sore withers caused by the use of leather or other soft pads. There is more suffering from sore withers than from any other cause. THE BOSS PAD is guaranteed to wear longer and give better satisfaction than any other pad now in use, or the money refunded. Manufactured by
DEXTER CURTIS, Madison, Wis.

THE STRAY LIST.

HOW TO POST A STRAY.

BY AN ACT of the Legislature, approved Feb 27, 1883, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisal, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice. And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper free of cost, to every county clerk in the state to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5.00 to \$50.00 is affixed to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the FARMER for a violation of this law.

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

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

No persons, except citizens and householders, can take up a stray. If an animal liable to be taken, shall come upon the premises of any person, and he fails for ten days, after being notified in writing of the fact, any other citizen and householder may take up the same.

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

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

The Justice of the Peace 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 rest in the taker up.

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

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

In all cases where the title vests in the taker-up, he shall pay into the County Treasury, deducting all costs of taking up, posting and taking care of the stray, one-half of the remainder of the value of such stray. Any person who shall sell or dispose of a stray, or take the same out of the state before the title shall have vested in him shall be guilty of a misdemeanor and shall forfeit double the value of such stray and be subject to a fine of twenty dollars.

Strays for week ending June 18, '84

Morris county—A. Moser, Jr., clerk.

MARE—Taken up by H. C. Phelps, of Ohio tp, May 29, 1884, one bay mare 2 years old, black mane and tail 2 white hind feet, branded H. N. on left shoulder, has had a brand there before; valued at \$68.

Jefferson County—J. R. Best, Clerk.

HORSE—Taken up by J. L. Speer, in Kentucky tp, May 26, 1884, one bay horse or pony, about 14 hands high, about 14 years old, supposed Mexican brand on each shoulder, right hind foot white nearly half way to knee, has saddle and harness marks; valued at \$45. HORSE—By same, one bay horse, about 7 years old, about 14 hands high, heavy mane, has saddle and harness marks; valued at \$55.

Crawford county—Geo. E. Cole, clerk.

COLT—Taken up by T. E. Lamb, of Baker tp, May 28, 1884, one sorrel colt, 2 years old, about 14 hands high; valued at \$60. MARE—Taken up by N. W. Slifer, in Crawford tp, June 2, 1884, one roan mare pony, about 14 hands high, branded M. on left shoulder and hip, also with cross on right shoulder, scar on withers, supposed to be 15 years old; valued at \$45.

Douglas county—Joel S. White, Clerk.

HORSE—Taken up by T. C. Blankenship, Clinton, Clinton tp, May 19, 1884, one black mare, about 16 hands high, small white spot on right hind foot; valued at \$75. MARE—Taken up by R. C. Price, in Marion tp, April 28, 1884, one bay mare, pony-built, branded J. P. on left shoulder, white feet and face; valued at \$50. COLT—By same, one medium-size iron-gray horse colt, white face; valued at \$40.

Strays for week ending June 25, '84.

Montgomery county—H. W. Conrad, clerk.

COLT—Taken up by Jake Moore, of Sycamore tp, April 27, 1884, one light bay horse colt, 2 years old, a few white hairs in face; valued at \$30. FILLEY—Taken up by Dan Ringle, of Sycamore tp, April 27, 1884, one 2-year-old filley, light brown, with white spot in face; valued at \$30.

PONY—Taken up by J. N. Graham, of Syracuse tp, April 7, 1884, one dark bay mare pony, 3 white feet, some white in face; no brands visible, about 9 years old; valued at \$25.

MULE COLT—By same, one black horse mule colt, 1 year old; valued at \$25.

PONY—Taken up by Daniel Cline, in Independence tp, April 28, 1884, one dark bay Texas mare pony, about 15 hands high, 7 or 8 years old, branded on left hip with letters O. M., with some other brand on left shoulder, a small white streak in forehead; valued at \$20.

Franklin county—L. Altman, clerk.

MARE—Taken up by John H. Shepperd, of Hayes tp, May 28, 1884, one dark bay mare, 15½ hands high, about 6 years old, no marks or brands except collar marks on shoulders; valued at \$80.

Osage County—C. A. Cottrell, clerk.

PONY—Taken up by Jonathan Shirley, in Olivet tp, May 8, 1884, one dark brown mare pony, split in left ear, harness marks.

MARE—Taken up by L. Barden, in Melvern, May 9, 1884, one bay mare, 8 years old, branded with W on left shoulder and 8 on left thigh; valued at \$40.

PONY—Taken up by Abel Craig, in Fairfax tp, June 9, 1884, one bay mare pony, 8 years old, white hind feet, star in forehead, stripe on end of nose, blind in right eye; valued at \$40.

Jefferson county—J. R. Best, clerk.

PONY—Taken up by Charles Petty, in Sarcoxie tp, June 30, 1884, one bay mare pony, about 12 years old, scar on left hip, blaze face, collar marks, about 15 hands high; valued at \$40.

Atchison County—Chas. H. Krebs, clerk.

HORSE—Taken up by Joseph Speer, of Grasshopper tp, (Muscotah P. O.), June 2, 1884, one dark brown horse, heavy built, both front feet clubbed, 15½ hands high, about 9 years old; valued at \$50.

HORSE—By same, one bay horse, left hind leg crooked and large lump on inside, 15 hands high, 6 years old; valued at \$25.

Davis county—P. V. Trovinger, clerk.

FILLEY—Taken up by H. B. Johnston, Jackson tp, June 5, 1884, one dark iron-gray filley, 2 years old, 14½ hands high, no marks or brands; valued at \$45.

Mitchell county—G. W. Clark, clerk.

HORSE—Taken up by Henry Bennett, of Cawker tp, May 23, 1884, one medium sized chestnut-sorrel horse, silver mane and tail, small white spot on forehead and a little white on both hind feet, branded S. O. on right shoulder; valued at \$60.

Leavenworth County—J. W. Niehaus, Clerk. COW—Taken up by John M. Starns, of Delaware tp, May 24, 1884, one white cow with red spots on neck, head and legs, about 18 years old, in fair condition and a good milker, no marks or brands visible, weighs 1,000 pounds; valued at \$30.

Neosho county—A. Gibson, clerk.

COW—Taken up by J. F. Ogden, in Toga tp, one red and white spotted cow, about 6 years old, no marks or brands.

Strays for week ending July 2, '84

Butler county—James Fisher, clerk.

PONY—Taken up by E. Lincoln, in Clifford tp, one sorrel mare pony, right hip down, saddle marks, 11 or 12 years old; valued at \$25.

COLT—By same, one bay mare colt, 1 year old, no marks or brands visible; valued at \$15.

FILLEY—Taken up by William Sharrock, in Bloomington tp, one brown filley, 2 years old, no marks or brands visible; valued at \$50.

Leavenworth county—J. W. Niehaus, clerk.

COW—Taken up by C. P. Clark, of Delaware tp, April 24, 1884, one spotted cow, branded on the left hip, 9 years old, giving milk; valued at \$25.

Rawlins county—Cyrus Anderson, clerk.

COW—Taken up by John Banham, of Herndon tp, June 10, 1884, one black and white cow, branded Lazy W & H L Bar; valued at \$35.

Shawnee county—Chas. F. Spencer, clerk.

MARE—Taken up by Thomas Right, in Mission tp, June 26, 1884, one bay mare, 10 years old, scar on left hip, white spot on left shoulder; supposed value \$30.

Crawford County—Geo. E. Cole, county clerk.

HEIFER—Taken up by C. C. Hudson, in Sheridan tp, June 13, 1884, one red heifer with white face and belly, age not given; valued at \$25. TWO HEIFERS—By same, two red and white spotted yearling heifers; valued at \$12.00 each.

Anderson county—A. D. McFadden, clerk.

PONY—Taken up by Thos. Bunt, of Walker tp, May 29, 1884, one bay gelding pony, branded L. A. on left shoulder; valued at \$40.

The Cold Water Dip!

A HIGHLY-CONCENTRATED CHEMICAL FLUID! Non-poisonous and non-corrosive Sheep Dip and Wash for all Domestic Animals. A safe and sure Remedy against all kinds of Parasites in Flocks or Animals. A powerful disinfectant. Send for papers giving full instructions to

DONALD McKAY, Special Agt.,
Rose Bank, Dickinson Co., Kas.

J. P. DAVIS, Pres't., E. N. MORRILL, Treas., JNO. E. MOON, Sec'y.

The KANSAS Mutual Life Association.

OF HIAWATHA, KAS.

The only Co-operative Life Association offering Absolute Protection in Old Age.

Agents wanted. Send for Journal and Leaflet, giving full information, to J. E. MOON, Sec'y.

BLAINE Agents wanted for authentic edition of his life. Published at Augusta, his home. Largest, handsomest, cheapest, best. By the renowned historian and biographer Col. Conwell, whose life of Garfield, published by us, out-sold the twenty others by 61,000. Out-sells every book ever published in this world; many agents are selling fifty daily. Agents are making fortunes. All new beginners successful; grand chance for them: \$13.50 made by a lady agent the first day. Terms most liberal. Particulars free. Better send 25 cents for postage, etc., on free outfit, now ready, including large prospectus book, and save valuable time.

ALLEN & CO., Augusta, Maine.

Fun, Facts and Fiction.

SATURDAY EVENING PLEASURE

A PAPER FOR THE PEOPLE.

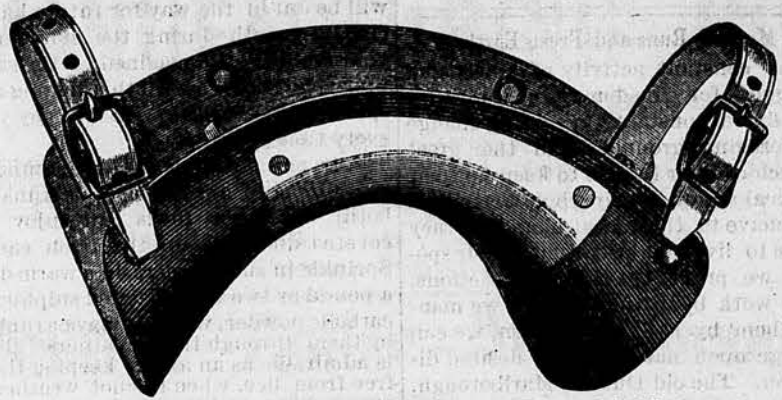
Devoted to Society, Lodge, Amusement and Dramatic News, good Literature, etc. Will be published especially for the State of Kansas. Terms, \$2 a year; \$1 for six months. Specimen copy free.

Address M. O. FROST & SON, Pubs., Topeka, Kansas.

Clubbed with the KANSAS FARMER for \$2.75.

10,000 FARMERS and FARMERS' SONS Particulars free. HOW TO MAKE MONEY. Address O. S. JUDD, Spencerville, Ohio.

CUNS. For information FREE, send to PHOENIX FIREARMS CO., 41 Barclay St., N.Y.



THE "BOSS COLLAR PAD."

This week we give our readers a larger representation of a collar pad recently improved in its construction. It is unquestionably the best pad ever used. The zinc is pressed into the leather on the under side, and firmly fastened, making it the strongest pad in use. It cannot be crippled or bent when backing a heavy load; the zinc being on the under side prevents the pad bending in the center and causing a pinching of the horse's neck, and keeps the pad open, giving the air a chance to circulate cool and dry off the neck.

The zinc being covered it is protected from the sun; it is always cool, easily kept clean, and will positively prevent the mane from becoming matted and worn off. It prevents chafing and will cure sore withers. No man that has any pride or humanity about him will work his horses without this pad after he has given it a trial. Reason teaches that anything soft that will gather moisture will scald the neck. If you had a boil on your neck you would not put a woolen cloth or sheep skin on it to heat and inflame it.

Many a horse is spoiled by having sore withers. Humanity demands that no horse should work while in that condition when a remedy is found in the use of the Boss Collar Pad. They are the cheapest because the most durable, and comparatively inexpensive considering their great value.

COLLEGE OF THE SISTERS OF BETHANY.
TOPEKA, KANSAS.

UNDER CARE OF
PROTESTANT EPISCOPAL CHURCH.

For girls and young ladies exclusively. Boarding and day pupils.

Saveteen Officers and Teachers.

Faithful maternal oversight for all entrusted to our care.

11 branches taught—Kindergarten, Primary, Intermediate Grammar and Collegiate; French, German, the Classics, Instrumental and Vocal Music, Elocution, Drawing, Painting, etc.

The largest Music Department west of Chicago and St. Louis. FALL SESSION will open September 18. Send for catalogue, to T. C. VAIL, Bursar, or BISHOP VAIL, Pres't. Topeka, Kansas.

RED RIVER VALLEY LANDS A FARM

SPECIAL OFFER To Actual Settlers

open only between the 1st day of March and the 31st day of Dec., 1884.

The lands included in this offer are the most productive and considered the best locality, the cheapest of any unoccupied lands in the United States now open for sale.

First applicants will have first chance.

Home seekers "catch on."

For Maps, Illustrated Papers

and other information regarding these lands.

Write to J. B. POWER, Land and Immigration Commissioner, St. Paul, Minneapolis & Manitoba R'y, ST. PAUL, MINN.

SALES WILL BE MADE IN LOTS OF NOT LESS THAN 160 ACRES NOR MORE THAN 320 ACRES. THE TERMS ARE BETTER THAN CAN BE OBTAINED FROM THE GOVERNMENT.

FOR \$3 PER ACRE

and other information regarding these lands.

Write to J. B. POWER, Land and Immigration Commissioner, St. Paul, Minneapolis & Manitoba R'y, ST. PAUL, MINN.

SALES WILL BE MADE IN LOTS OF NOT LESS THAN 160 ACRES NOR MORE THAN 320 ACRES. THE TERMS ARE BETTER THAN CAN BE OBTAINED FROM THE GOVERNMENT.

FOR \$3 PER ACRE

and other information regarding these lands.

WOOL Commission.

A. J. CHILD, 209 Market St., St. Louis gives personal and special attention to consignments of Wool. Commission, 2½ per cent. Sacks furnished free. Write for circular and mention this paper.

E. A. TAFT & CO.,

(Formerly Taft, Emery & Co.),

129 Kansas Ave., Topeka,

Are now open with an entire New Stock, all of which is offered at extremely low prices.

[Say you saw this in the FARMER.]

"ACME" HAY RICKER



LOADER AND RAKES.

Protected by the only Original Patents.

This machine is guaranteed to put up more hay in less time, and at less than half the cost by any other known method. One Ricker and two Rakes operated by five employees, will in one day take from 20 to 30 acres of hay perfectly clean from the swath as left by the mower, and with the same on the stack or wagon, in better condition than twice the force can windrow and cock the same. It seldom gets out of repair, but if it should any farmer can repair it. No Farmer can afford to do without it. Write for price lists, terms and circular giving full information.

ACME HAY HARVESTER CO., Mfg., Peoria, Ill.

STEWART'S HEALING POWDER

Cures all Open Sores on Animals from any cause.

At Harness or Drug Stores.

50 Cents a Box.

The Poultry Yard.

Movable Runs and Fresh Earth.

The constant activity of fowls, and struggles for freedom, are that they may find a constantly recurring change of foraging ground; and the great scratch of their lives is to keep up their physical vigor. Their whole activity is conducive to their health, and as they strive to live and perpetuate their species, we profit by their productions. They work by instinct, and if we manage them by skill and reason, we can enlarge upon nature in any desired direction. The old Duke of Marlborough, who is said to have never lost a battle, won by keeping his army so active that he never let his soldiers encamp upon the same ground two nights in succession; and the continual victory of perpetual success is waiting for the poultry keeper who shall hit upon the plan which shall carry out this old hero's method of so moving that new ground shall be reached every day.

Movable runs will accomplish this, and can be constructed cheaply in two ways: 1st, a frame covered with wire netting or twine netting; 2d, a similar frame covered with cheap unbleached cotton, which will last for years for this purpose. The frame for the netting can be made of slats, one inch thick, three inches wide and twelve feet long. Provide two slats for each side, two for each end, and four 2x2 posts for the corners and you are ready to begin the structure. Fasten the slats securely upon the corner posts, one for the top, one for the bottom and cover the sides, ends and top with the netting. Or if you choose, you can cover the top with yard-wide cotton cloth, if you have calculated the width of your cage rightly, and this will protect your fowls from too much sunshine. The second plan is much cheaper and in some points better. It is simply to cover the entire cage with cotton fabric, which can be done by a slight change in the structure of the frame, for the circulation of air. In order to accomplish this effectually, three slats upon a side will be necessary. The third slat may be put three inches below the top one, to leave a free space three inches wide, the whole length of the cage, for air to circulate over the heads of the fowls; or the third slat may be placed only three inches above the bottom one, to leave the space at the bottom of the cage for circulation. Draw the cotton fabric around and tack it on so as to leave your space between the slats which are near together, uncovered, and you have a comfortable cage for a dozen fowls which you can easily move every day, by raising one end a very little and drawing it endwise its length, or by raising the side in the same way, it can be just as easily drawn its width, which will place it on fresh ground. For convenience in feeding and watering, leave two feet in length of the top cover loose at one end, and button it down over screw-eyes to secure it when you do not need it open.

After the tainted ground has been exposed to sun and rain, and especially after it has been spaded or plowed, it will be in a condition to have the run shifted onto it again. There is nothing better whether the yards or runs are movable or stationary than turning the ground over thoroughly by spading—or light plowing—where the yards are more extensive in dimensions.

The advantages of this are twofold: myriads of angle-worms, grubs, beetles, etc., are thus turned up to the light, and your poultry will quickly put them where they will do the most good. Secondly—this spading freshens the ground and affords them a new footing for two

or three weeks. The top soil, tainted from long use, is turned under, where it will be out of the way for future harm. Once a month during the summer, if your stock is still confined to the same limits, go through with this digging and spading process again. It will pay you, every time you do it.

Rake and pulverize the dry ground in the corners of your houses or runs (or both), where the fowls can enjoy the coveted dust-bath in the fresh earth. Sprinkle in such corners, in a warm day, a pound or two of powdered sulphur or carbolic powder, where it may be rubbed by them through their feathers. This is admirable as an aid in keeping them free from lice, when the hot weather is approaching, and they will enjoy such a luxury immensely.—*Poultry World*.

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

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HOPS & MALT

TRADE MARK

BITTERS

THE GREAT BLOOD PURIFIER

Liver and Kidney Remedy,

Compounded from the well known Curatives Hops, Malt, Buchu, Mandrake, Dandelion, Sarsaparilla, Cassia Sagrada, etc., combined with an agreeable Aromatic Elixir.

THEY CURE DYSPEPSIA & INDIGESTION, Act upon the Liver and Kidneys, AND REGULATE THE BOWELS. They cure Rheumatism, and all Urinary troubles. They invigorate, nourish, strengthen and quiet the Nervous System.

As a Tonic they have no Equal. Take none but Hops and Malt Bitters.

FOR SALE BY ALL DEALERS.

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LIFE GIVING PRINCIPLE

THE GREAT BLOOD & LIVER PURIFIER

A SURE CURE FOR

Sick Headache, Dyspepsia, Langour, Nervous Exhaustion arising from overwork or excess of any kind, —AND FOR—

Female Weaknesses.

—IT PREVENTS—

Malarial Poisoning and Fever and Ague, And is a Specific for Obstinate

CONSTIPATION.

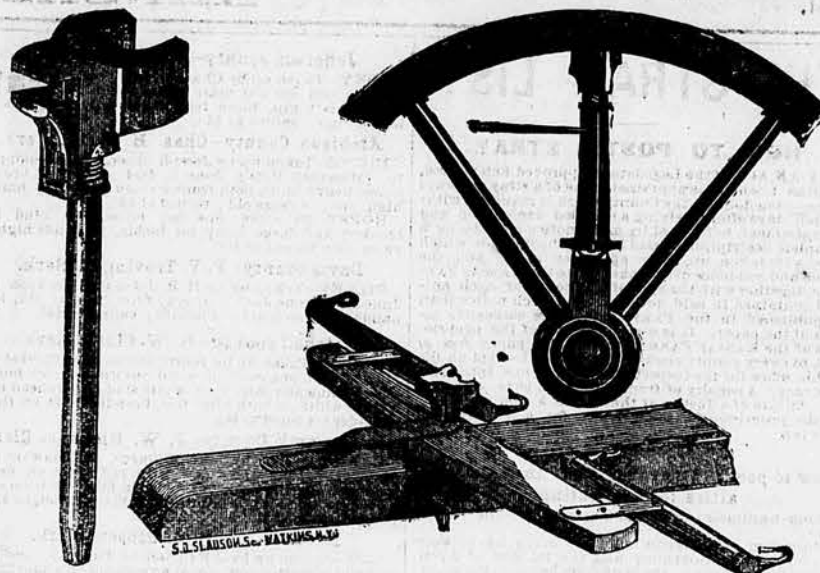
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SOLD BY DRUGGISTS EVERYWHERE.

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Seldom does a popular remedy win such a strong hold upon the public confidence as has HALL'S HAIR RENEWER. The cases in which it has accomplished a complete restoration of color to the hair, and vigorous health to the scalp, are innumerable.

Old people like it for its wonderful power to restore to their whitening locks their original color and beauty. Middle-aged people like it because it prevents them from getting bald, keeps dandruff away, and makes the hair grow thick and strong. Young ladies like it as a dressing because it gives the hair a beautiful glossy lustre, and enables them to dress it in whatever form they wish. Thus it is the favorite of all, and it has become so simply because it disappoints no one.

BUCKINGHAM'S DYE FOR THE WHISKERS

Has become one of the most important popular toilet articles for gentlemen's use. When the beard is gray or naturally of an undesirable shade, BUCKINGHAM'S DYE is the remedy.

PREPARED BY

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Sold by all Druggists.

30 DAYS TRIAL

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ONE, TWO, FOUR OR EIGHT HORSE HORSE POWERS.

BELT OR GEARED FEED GRINDERS.

Pumping or Power WIND MILLS.

ALL SIZES AND STYLES OF Iron Pumps, Iron Pipe,

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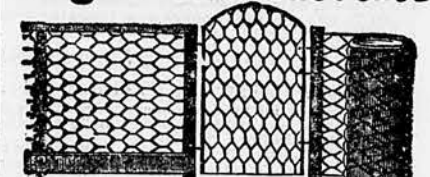
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Is the only general purpose Wire Fence in use, being a Strong Net-Work Without Barbs. It will turn dogs, pigs, sheep, and poultry, as well as the most vicious stock, without injury to either fence or stock. It is just the fence for farms, gardens, stock ranges and railroads, and very best for lawns, parks, school lots and cemeteries. Covered with rust-proof paint or galvanized it will last a life-time. It is superior to Boards or Barbed Wire in every respect. We ask for it a fair trial, knowing it will wear itself into favor. The Sedgwick Gates, made of wrought-iron pipe and steel wire, defy all competition in neatness, strength and durability. We also make the best and cheapest All Iron Automatic or Self-Opening Gate, also Cheapest and Neatest All Iron Fence. Best Wire Stretcher and Post Auger. Also manufacture Russell's excellent Wind Engines for pumping water, or geared engines for grinding and other light work. For prices and particulars ask hardware dealers, or address, mentioning paper

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SOLDIERS or heirs, send stamp or circular showing who is entitled to pension. J. C. WOOD, Box 31 Washington, D. C.

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"THE BEST IS CHEAPEST."
ENGINES, THRESHERS SAW-MILLS,
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 (Suited to all sections.) Write for FREE Illus. Pamphlet
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Has the Largest Track Wheels. DOUBLE GEARED.
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BARREL CHURN - The
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CLAIMS THE BROOM
 Any BETTER
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 Bales 10 tons a day. Loads full weight in cars.
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Is perfectly Self-Regulat-
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 See that your stock is
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PUMPS and TANKS of
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 Agents Wanted. Send for
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REBOUND PLUNGER PERPETUAL.
GUARANTEED SUPERIOR TO ANY LEVER PRESS
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 Received First Premium at N. Y. State Fair, 1880, 1881 and
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 A bale every 3 minutes. Satisfaction guaranteed.
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Wonderfully simple and perfect in its threshing
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 MACHINE now **BEST** MADE. It will
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 It has no **THRESHER** equal in
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 Our **CLOVER HULLING ATTACHMENT**
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The PITTS and WOODBURY Horse-
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 For WOOD or
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Ties the best bundles and uses least twine.
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Choking impossible with **PACKER TRIP.**
 Handles bad and good grain alike.
 Only Binder using **DOUBLE PACKER TRIP.**
 Is strongly built and practical in working.
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 Call on local agent, or send for Descriptive and Tes-
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BINDER TRADE MARK TWINE.

After a test of Four years has the unqualified
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THROUGHOUT THE GRAIN-GROWING
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It will bind more grain to the pound, with
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DOUBLE THE PRICE OF OTHER TWINES.
 Ask your Agent for "**DIAMOND E BINDER**
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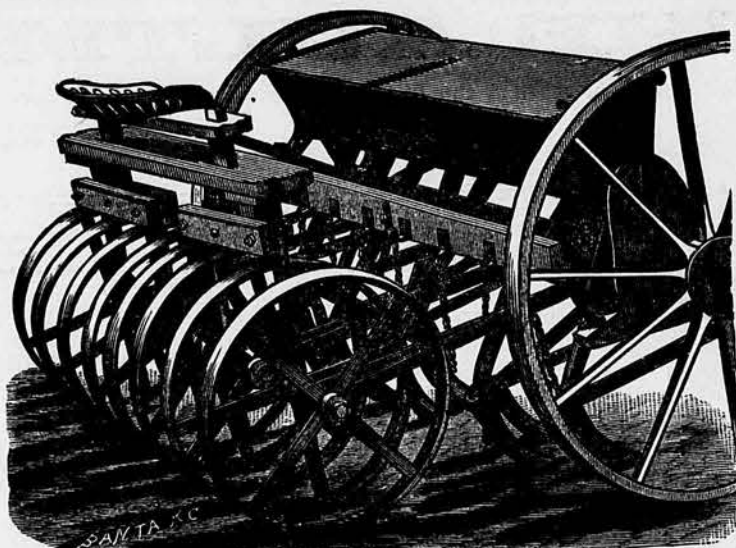
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TOPEKA, : : : KANSAS,

Manufacturers of
Smith's Roller-Attachment for Grain Drills,
The Meadow King Hay-Stacker and Hay-
Rake, and The Topeka Swivel
Tower Wind Mill.

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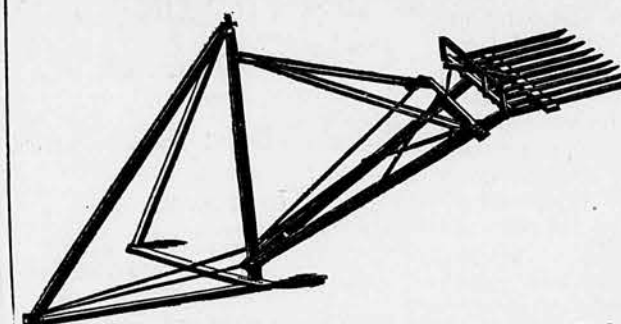


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Made a Certainty by the use of Smith's Roller-Attachment for Seed Drills.
 The soil is firmly pressed on the seed, causing the soil to adhere to the seed, which greatly
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 Requiring less than one-half the seed usually sown, from the fact that none is wasted, either by a
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 most destructive weather that wheat has to pass through. The Roller-Attachment has been per-
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THE ATTACHMENT CAN BE COUPLED TO ANY GRAIN DRILL.

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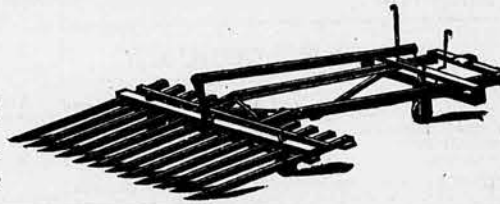


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Hay & Straw Stacker.
 Simplicity of Construc-
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 No Engineer Required!
 Any Farm Hand Can
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 Light Draft and Per-
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CAPACITY OF STACK-
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The MEADOW KING STACKER saves time and labor. It dumps the hay evenly over the
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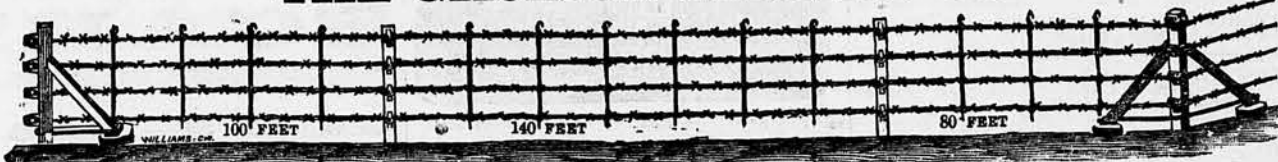
Will do more and better work than any
 other Rake sold, Takes the Hay from
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 It is the cheapest and best Rake made
 One man can rake from 20 to 30 acres
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We also manufacture **THE TOPEKA SWIVEL TOWER WIND MILL**, conceded to be
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 For full particulars and information concerning our Machinery, address

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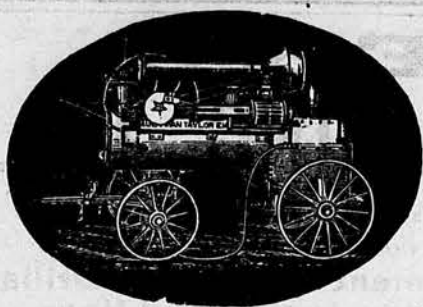
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WIRE for strength, like everything else, must have its true application. The above is the way which shows posts 80, 100, and 140 feet apart.
 The steel stays between the
 wires passing through the brackets and resting upon the rollers, which are fastened to the post with a 3-inch bolt.
 The steel stays between the
 posts combining the wires into one strength. The wires fastened, only at the ends, to the block-binder, by which the tension can be increased at
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 greatest power of resistance to storms, floods and animals. This fence is sold by special agents; and they are wanted everywhere. For terms
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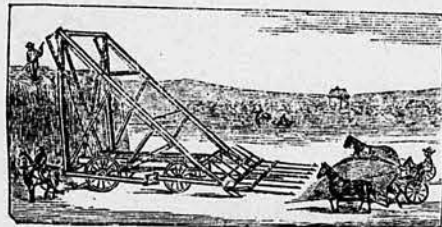
THE FARMER finds that no other Thresher saves and threshes his grain so well with so little detention and litterings, so little help. If a Steam Thresher, he feels safer with an Aultman & Taylor Engine on his place than any other, because they are built strong, with great boiler capacity, great power; are simple; less liable to get out of order than any other. Out of hundreds of Aultman & Taylor **STANDARD and TRACTION ENGINES** we have sold in our territory, we have never had an accident! **THE THRESHERMAN** finds that he can make more money with the Aultman & Taylor Machinery than any other, because it is the choice of the Farmers, and he has no trouble in getting plenty of work. It is made Strong, Simple and Durable, gives him the least expense, and will Out-last anything else he can buy. Aultman & Taylor Machinery sold by us when we first started in business here, twelve years ago, is still running and doing good work.

No other Threshing Machinery can Show such a Record! None other is as Safe and Profitable for the Farmer and Thresherman to Tie to as

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INTRODUCED ON THE FARM. HAY is put up at a Saving of 50 to 75 cents per Ton over the old way. It does the work better than it can be done by hand, so that Hay keeps better and is worth more. Takes the Hay direct from the Swath to the Stack. Saves Win rowing and Cocking. Hay is not touched with a Fork from the time it leaves the Mower until it is on the Stack. Many times its price is often saved in putting up Hay quickly, out of the way of Storms. One Man, Three Boys and Five Horses, with this Machinery, will do the work of Ten Men and Six Horses the old way, and do it better. The Dain Improved Automatic Stacker is the Cheapest to buy, as it is the Strongest, Simplest and Most Durable.

It is the only Stacker that will Handle Hay Successfully in Windy Weather! It is the only Stacker that will Throw the Hay always on the Stack and not Scatter it! It is the only Stacker a Farmer will Always Buy after Examining it Thoroughly in Comparison with Others!

If no Agent in your vicinity, write us direct.

TRUMBULL, REYNOLDS & ALLEN, Manufacturers,
Kansas City, Missouri.

The Mark Lane Express, (London,) in its last weekly review, says: The weather continues most favorably for improving the strong and helping the weak crops. The wheat market is generally weaker although a scarcity of English wheat causes occasional local advances. Sales English wheat last week 39,395 quarters at 37s 4d against 41,425 quarters at 42s 3d the corresponding week last year. Foreign wheat was greatly depressed, heavy receipts causing unusually low rates in off coast trade. A large portion of the overdue supply has been received. Twenty-three cargoes arrived, ten sold, eight withdrawn, eight remained, and twenty-nine cargoes are now due. Flour is exceedingly dull. Maize is weak and barley firmer.

TWO-CENT COLUMN.

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

FOR SALE—Or exchange for Sheep or Cattle, one half Clyde Stallion, 5 years old, bay with white points, a sure breeder, and a three-fourths Clyde mare, 5 years old, bay, bred to an imported horse. Both are good workers. W. Guy McCandless, Cottonwood Falls, Kas.

FOR SALE—Cheap, eighteen pure-bred Buff Cochins, one Cock, twenty Spring Chickens—small, Enquire of Chas. F. Emery, firm of Kendall & Emery, Kansas City, Mo.

H. A. THOMAS, Scranton, Kas., breeder of Fancy H. Pigeons, carries Antwerps, Owls, Jacobines, Trumpeters and Barbs. Birds for sale.

HARVEST HANDS WANTED—At once. Apply to Lawson & Moses, Russell, Kas.

FOR SALE—Seventy very high-grade Short-horn Females and 40 Calves, at a low price. Address Miller Bros., Junction City, Kas.

FOR SALE—One hundred head of Thoroughbred and Grade Short-horn Cows and Heifers, 50 of them with calves by registered bulls at their sides. Also Jersey Cows and Bulls. Will sell all together or in lots to suit purchasers. Prices low. Time given if desired on bankable paper with interest. Call on or address Dr. Eldson, Reading, Kas.

SEND \$2 to the Norton Green-House and get 20 extra choice Flowering Plants. Address H. D. Brand, Emporia, Kas.

KANSAS FARMERS Mutual Fire Insurance Company, —OF— ABILENE, : KANSAS.

OFFICERS:
J. E. BONEBRAKE, President.
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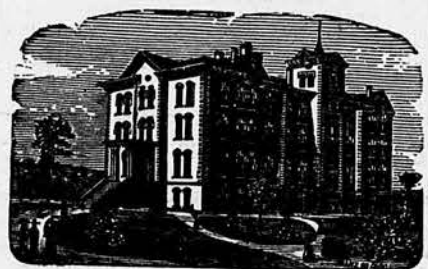
INSURES

Farm Property and Live Stock Against
Fire, Lightning, Tornadoes and
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AGENTS WANTED in Every County in Kansas.

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

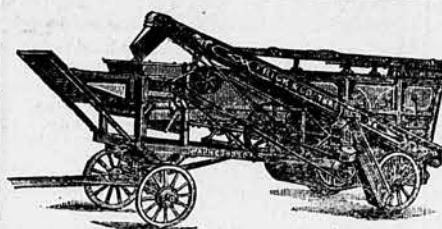
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Four Courses of Study—Classical, Scientific, Academic, Business. Personal supervision exercised. Separate Christian Homes provided for young women. Ten Instructors employed. Excellent appliances of Library, Apparatus and Cabinet. Expenses reasonable. PETER MOVICAR, President.



The Most Perfect
THRESHING OUT-FIT Built!

FRICK & CO.,
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FIRST PREMIUMS
Wherever Exhibited!

"ECLIPSE" TRACTION ENGINE and
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BRANCH HOUSE, KANSAS CITY,
32 to 38 Ewing Street.



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