



ESTABLISHED, 1863.
VOL. XXIII, No. 30.

TOPEKA, KANSAS, JULY 29, 1885.

SIXTEEN PAGES WEEKLY.
PRICE, \$1.50 A YEAR.

Cattle Fevers in General, and Texas Fever in Particular.

Fevers in cattle the next ninety days will be common. It is well, therefore, to consider their causes and means of prevention.

In general it may be said, in all applicable cases, that conditions which will produce fever in humans will have a similar effect on animals. Extreme heat is one of the causes of fever, but it always operates in connection with other causes. If a person or an animal is in perfectly healthy condition, heat alone, as a disturbing element, will not be likely to leave any serious consequences. (It will be understood that we refer to the heat of the sun). Unless there is, also, over-exertion in the heat, or unreasonably long exposure to it, or a hungry, thirsty or unhealthy state of the body, mental anxiety, or some other abnormal condition, there is no danger to be apprehended from the ordinary heat of the sun. Sunstrokes are never heard of among healthy persons who are not in some way unnaturally susceptible to the effects of heat. In crowded cities, where heat is made more intense by reason of the high walls and paved streets, laborers and delicate women suffer, and of these those are most susceptible whose health is affected by other causes, as loss of sleep, dissipation, use of improper food and drink, etc. Out in the open air of the country, where the people's habits are good, and where they eat wholesome food and drink pure water, and where the surroundings are healthful, there is no danger in the sun's heat.

Fevers come from combinations of unhealthy conditions, and these conditions are produced, oftentimes, by causes which are plainly visible. Deadly influences sometimes lurk about us unobserved, unsuspected, and for evil consequences therefrom resulting we are not responsible; but when there is a fever-breeding machine operating in full view every day and every hour, we are responsible for what injuries follow its legitimate effects. Accumulations of filth which give off offensive odors, great masses of decaying vegetable matter, exposed sinks and cesspools, mud-holes and ponds of muddy water, stagnant water in which weeds are rotting, unclean drinking water, unwholesome food; these are some of the visible causes of fever among people, and they operate in the same way on animals, also.

Applying these suggestions to cattle, one can readily see how many cases of fever are produced. Animals that are in good health and have healthy surroundings, including good food and water, rarely have fevers coming from any local cause. But, as a man or woman, long exposed to the sun's rays in warm weather, are very susceptible to disease, so are cattle that go upon the open prairie in the morning and stay there all day, having no relief from shade or clean water. Let a man who has been out in the unobstructed heat six or eight hours take a drink of water out of a mud-hole, or from water in rocks where washes from grass and weeds have come, and he will be all the worse for it. If, on the other hand, he reaches a refreshing shade, and after resting and cooling, he drinks clean, pure water, he is benefitted and restored. So it is with animals. When cattle are turned out on the prairie or in large fields without shade, and have only filthy water to drink, it is not strange that fevers follow. The eating of dry, dusty grass, with water once a day and that not good, is another fever-breeding ar-

rumgement, as is the standing or lying in muddy corrals or pens. Excitement or any kind of over-exertion of cattle in warm weather is dangerous. Long periods of hunger or thirst, also, are not good conditions. Indeed, if one will think a little about the matter and reflect upon his own experience and observation, he will take note of many things to avoid if he would have healthy cattle.

Contagion comes silently and unseen. That is one of the causes which are not recognized always before its deadly effects become visible. Still, there is such a thing as preventing contagion; or, perhaps, it would be better to say, it is possible to prevent the combination of influences from which at least one kind of contagion comes. There is a fever-producing contagion, as the influence of miasma. A malarial atmosphere is the region of fevers. In low latitudes it produces contagious fevers. If these malarial influences can be prevented, as it has been done, at least partially, in the city of Memphis, the contagion does not appear. If a marsh breeds fever, and the marsh is drained, fevers disappear in that locality. If cattle get sick by drinking stagnant water and by standing in it and making it still more filthy by their discharges, give them clean, fresh water in troughs, and at least one cause of disease is removed. If long exposure to the sun's rays produce discomfort and therefore predispose to disease, manage to have shade for the cattle. And apply the same rule to every other disturbing element. Whatever is dangerous avoid, if possible. By avoiding dangers we insure safety. By avoiding or preventing causes of disease, we insure health.

But there is a contagion still more subtle as it relates to cattle here. Although it may in the beginning be developed by influences such as are above referred to, as we find it and dread it, it comes to us on the march. Texas fever is a disease which is well known, but its peculiar nature and the peculiar methods of its contagion—that is, how it is communicated, are not well understood. Its dangers are apparent, while means of prevention, short of permanent separation during all the season between spring and fall frosts, are not plainly recognized. A great many theories have been advanced as to the means by which Texas fever is communicated, but most of them are not satisfactory. Indeed, some persons doubt whether there is a Texas fever such as is commonly so recognized. Cases have occurred in Kansas which no theory yet advanced will explain, unless there is a tweedle-dee and a tweedle-dum difference between Texas fever developed in the wake of herds of Southern cattle and Texas fever developed on grounds where Texas cattle had never been. Dr. H. J. Jetmers, of the Agricultural Department, thinks the "probable vehicle and medium of the pathogenic (disease-producing) principle is the saliva or slaver of the Southern cattle deposited by them, not only wherever they graze and wherever they drink, but also often dropping in strings from their mouths when on the march." Dr. Detmers believes the bacteria or fever germs are produced in the South, and he says that if the Southern cattle, before being shipped or started on their journey toward the North, take up on their native range or at any place between their Southern home and Northern destination, but south of a certain latitude, the pathogenic bacteria of Southern cattle fever, either with their food or with their

water for drinking, the bacteria, of course, will first pass into the paunch where they find all the conditions (a suitable medium, warmth and moisture) necessary to their existence and propagation. Ascending to the cavity of the mouth with the juices of the paunch when the animal is ruminating, they find a new and at the same time excellent medium in the saliva and mucous secretions, and thus it becomes possible not only that the bacteria retain their vitality, and that the same vastly increase in numbers, even if the journey of the cattle as to time and distance is a long one, but also that one herd of Southern cattle is able to infect a large territory (trails, pasture grounds, etc.) at a long distance, a thousand miles or more from their native range."

Whatever may be the cause and means of propagating the disease, it is well to keep cattle away from all Southern stock that has come in since the first day of March last, and this until after the first day of November.

Buy a Thoroughbred.

The *Western Rural*, in a good article, not long since, said "one thing that stands in the way of a rapid improvement of our cattle is the difficulty of owners of very small herds getting a thoroughbred bull. The difficulty is more imaginary than real, but that makes no difference. The result is the same. The small farmer with a few cows cannot always see his way clear to purchase a thoroughbred bull, and so he goes on, year after year, breeding poor stock, to his financial injury. There is only one way to look at this matter, and that is to consider whether cattle that are worth a hundred dollars a head are not much better than those that are worth not more than half that amount; whether a cow that will produce two or three times more milk and butter than the cow we have is not very desirable; and if these questions are answered in the affirmative, and of course they must be, the question arises, whether a thoroughbred bull will not soon pay for himself, and leave a handsome profit, by producing such stock. It often seems to be forgotten that there are low-priced thoroughbreds. It would seem as if many never get it into their heads that there are bulls sold under the thousands, and indeed young bulls under the hundreds. They may not be and are not as desirable as some famous bull whose reputation is sufficiently established to make him a very highly desirable sire. But they are good bulls, and when we cannot get the very best we had better take what we can get. Then there is still another view of the matter: A bull of great reputation might never be able to pay for himself upon a small farm, while a bull of less reputation, though perhaps equally as good, would. The reputation of the animal often makes him exceedingly valuable at the head of a professional breeder's herd, though really he may not be any better than a lower-priced animal. The owner of a few cows may not want, and probably would not want to advertise himself through the possession of a noted bull. He probably would simply desire to improve his stock for his own use. Now such a man will ordinarily find no difficulty in securing a bull within his means, and would find the purchase very profitable. At almost every sale animals are knocked off at prices which even the opponents of high prices would call reasonable. Generally the sales under

a hundred dollars are not reported, but there are many such sales.

"But it is the duty of the farmer, his duty to himself, to improve his cattle by some means. The farmer is conducting his business to make money, and if he does the best he can he does not make more than he can conveniently take care of. But if he neglects the profits of stock-raising, he throws away the most profitable branch of his business. There is money in good stock. People who go into the business intelligently and conduct it intelligently do well. Therefore, the first thing that a farmer whose stock is below standard should do is to breed it up. If he has the means to buy a thoroughbred bull, buy it. It cannot be invested to better advantage. If he cannot buy a thoroughbred, get a grade. That will likely prove to be a great improvement upon common stock. But a very simple and easy way by which a thoroughbred bull can be procured is for the farmers of a neighborhood to club together and get one. A good animal could thus be got at very small individual expense, and the results would be grand. If men can be brought to consider this matter as its importance demands, we shall not be so slow in breeding up our cattle; and as rapidly as we seem to be doing this, taking the entire country together, we are progressing slowly. In some sections of the country nothing is found but scrub stock, though there may be abundance of evidence of general enterprise and thrift in other directions. We remember a few years ago of riding through one of the most beautiful sections of country we ever saw. It was in the East. The houses bordered on the elegant; barns were large; fences good; crops luxurious. Everything indicated good farming, except the cattle. In a ride of miles we did not see a herd of cattle that we would hardly take for a gift. The thought that came to us was—it is astonishing that men who give so much evidence of general enterprise, should utterly neglect this important and profitable branch of the farm. Now, if we should have gone to these farmers and said we can tell you how to double your profits on your corn, they would have listened eagerly, and if what we said was reasonable, they would have adopted it. Yet we could have told them how to double and quadruple their income from the cattle yard. Strange as it may seem, however, though we could have given indisputable evidence that our assurances in that respect were well founded, probably they would not have believed us. And this is one cause why so many do not give attention to the improvement of their stock. They do not realize how much profit there is in good stock, and nothing that can be said seems to fully impress them with the fact.

"But we do earnestly hope that every reader who has not thus far given so much attention to the subject as it should have, will delay to do so no longer. Men are making money from breeding good stock, and we wish every reader of our journal to do likewise. There is all the time an increasing demand for the products of our improved breeds of cattle, and all the time the demand for the products of scrub stock is growing less. Every day the taste for better beef is being educated, and we must keep up to the popular demand if we would reap the highest benefit. Delay in such a matter is expensive, and if the foundation of a better herd of cattle seems to us costly, our word for it that an outlay in this direction will prove exceedingly profitable.

The Stock Interest.

PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.

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

About the Sheep Industry.

The KANSAS FARMER has frequently urged that it is not good policy to go out of the sheep industry when one is prepared to take care of sheep. Times of depression ought to serve as guide-boards, not as scarecrows. Unload what cannot be safely carried so as to make the rest secure. Like sailors, let us unload what we cannot carry through the storm, so that we may be the better able to carry what is left. This is a good time to go down to the foundation of the business and make things secure and then build up again more carefully. Business will be more brisk after a time, but the day of wild speculation in sheep is past. It must settle down to safe business methods.

We have just been reading a suggestive and helpful article which appeared recently in the *Farm and Fireside*. The writer shows some figures and makes reasonable deductions from them. The statistics of the National Agricultural Department show that there was a considerable decrease in the number of sheep in the United States during 1894, instead of the rapid increase which had marked previous years, the number on January 1, 1885, being estimated at 50,360,243, against 50,626,626 for January 1, 1884, 49,237,291 for 1883, 45,016,224 for 1882, and 40,765,900 for 1880. Heavy losses have also been reported from Australia, from drouth and famine.

Meanwhile there is no reason to doubt that the human population of the country is increasing in its normal ratio, nor that woolen clothing is as much in demand as ever. Indeed, all experience shows that the consumption of an article of such prime necessity as wool rapidly increases when the price is lowered, and the only reason for anticipating any different experiences in this case is that the loss of crops and the general stagnation in other lines of business curtail the ability of the people to buy. This stagnation will soon pass away, however, and with better times will come a livelier demand for wool, while the increase of population on the one hand, and the decrease of flocks on the other, will have so adjusted the supply of wool to the demand that we shall see another era of fair prices and good profits for the wool grower.

Meanwhile the low prices at which sheep are selling afford a golden opportunity for that improvement of the flocks of the country which shall place its sheep industry upon a broader and firmer foundation than it has ever before known. Our bitter experience of to-day is showing us that over the settled portions of the country the pursuit of sheep husbandry for the wool alone must be abandoned. However much some of our fine-wool growers may regret to abandon the one-idea system by which they have built up flocks, yielding magnificent fleeces, it is true, but fleeces produced on a carcass worth next to nothing for meat, the inexorable course of events renders it imperative that they either change their methods or remove their flocks to cheaper lands.

There is no occasion, however, for the latter alternative. In the so-called "Black-top Merino" exists the foundation stock for a breed of sheep which shall combine every desirable excellence of a fine-wooled sheep, with such qualities of carcass as shall make it a meat

producer of no mean rank, and the fine-wool grower who will but turn his attention to this sub-breed, and will open his eyes to the double source of intellectual growth for himself and of profit to his purse to be realized by intelligently developing its combined excellences of wool and flesh instead of confining his energies to the mania for growing two hides upon one carcass, and a debilitated one at that, will unquestionably reap a rich reward.

This is but one of the many openings through which a lover of sheep may successfully pursue his chosen industry. In the development and improvement of the mutton breeds, and in the production of a new breed which shall be not inferior to those we now have in meat production, but shall at the same time be more valuable as wool-producers, there is abundant room for work which shall be both profitable and pleasurable.

Our cattle industry, even when conducted only for meat production, needs no tariff protection. In free-trade England sheep husbandry thrives, because the sheep is bred there primarily as a meat producer, and is so carefully bred for this purpose that mutton commands a higher price in the English markets than beef.

The combined area of Great Britain and Ireland is less than that of Ohio, Indiana and Illinois, and yet the statistics of the United Kingdom show 26,068,354 sheep in 1884, against 24,319,768 in 1882—a gain of nearly two millions in two years, and a total sheep population one half as great as that of the entire United States, and more than three and one-half times that on the combined area of the three States named, notwithstanding the 22 to 45 per cent. tariff on foreign wools by which the American wool-grower is protected.

Colic in Horses.

(Concluded from last week.)

Flatulent colic is another form of colic, and the symptoms much resemble the preceding form, but it is more continuous, there not being the marked remissions of pain; the action is not usually quite so violent, and the abdomen is visibly blown out, "inflated like a drum." It may come on of itself as a primary disease, it may accompany the spasmodic form, or may result from it; any obstruction in the intestinal canal may also cause it. An excessively inflated state of the abdomen also often occurs before death from any of the diseases of the digestive organs. Among the causes of this affection may be mentioned food that easily undergoes fermentation, such as roots, green clover, or an excessive feed of boiled grain, especially if the digestive organs have been in rather a weakened state from a long drive or an unusual length of time of enforced abstinence, and the animal may have eaten it too eagerly, fermentation taking place and gas forming in place of the proper digestive process going forward. Any cause that may obstruct the intestinal canal and arrest or prevent the natural onward course of its contents, such as intestinal calculi, infraction, tumors, strangulation, intussusception, or any mechanical cause, will also produce a distention of the abdomen with gas. Should it occur during the progress or toward the termination of another disease, it may be looked on as a very dangerous symptom, as it may prove that the vital powers are becoming exhausted, and that the system is becoming amenable to chemical laws, which would indicate the approach of death. Flatulent colic, equally with spasmodic, and for the same reasons, calls for the administration of a purgative, but more active stimulants than those before mentioned for that form of the disease may be necessary. Sulphuric ether in place of the nitrous ether, or carbonate of ammonia, or ammonia and turpentine, well sheathed with linseed oil. These are agents that may be expected to assist in dissipating the gases formed. We have little confidence in the various compounds of chlorine and other agents that are sometimes advised, with the

object of chemically combining with and condensing the gasses. Warm water injections should be freely administered, and the same treatment given externally to the abdomen as before mentioned.

Great patience is required in treating severe cases of colic. It often happens that some hours will elapse before manifestations of decided relief are obtained, and it is of great importance that the veterinarian, or whoever may be for the time endeavoring to relieve the poor animal in its agony, should exercise a calm judgment, and not be excited or hurried by the impatient remarks of any "knowing" onlookers and wise-acres, into administering any "nostrum" or doing anything but what a prudent thought for the welfare of his patient would substantiate. In reference to aloes, it may be an hour or two, or even up to several hours before decided relief is obtained after their administration. But it is a mistake to suppose that because it requires perhaps twenty to twenty-four hours to purge a horse, that it is not till after that time that relief is obtained. The length and volume of a horse's intestines prevent the speedy action of a purgative being manifested, but the aloes acts by causing an increased flow of fluid into the intestinal canal, which lubricates its lining membrane and softens its contents, and these effects take place in a comparatively short time after their administration, and long before their action as a purgative is apparent. Practitioners of human medicine might object to the administration of aloes, on account of their supposed irritating effects, and advocate oil in preference. But the digestive organs of different species of animals are differently organized, therefore the same class of purgative does not act in a similar manner on all—for instance, as a rule, aloes is the best purgative for the horse. Epsom salts for the ox, tripe, and jalap for the dog. This, of course, is liable to some modifications. In the horse, oil is a very uncertain purgative; when it does act, merely acting mechanically, and not causing the increased flow of fluids into the intestinal canal as before described of aloes, and we believe it is quite as likely to cause griping in its action.

Various veterinarians have at different times strongly recommended the operation of puncturing the colon, and by this means evacuating the confined gas. This has, by others, been called a "last resort," a "desperate remedy," etc. From personal experience we can speak most favorably as to the comparative safety of the operation, when properly performed; and from careful *post-mortem* examinations, made with the express view of investigating the effects of the operation, we have in no case discovered anything that would deter us from again performing it. But it must be remembered that the removal of the gas is not the removal of the causes of its formation. In certain conditions, no doubt, by simply evacuating the gas, the digestive process may again go forward, or if the distention be so great that death from suffocation or from an intestinal rupture is feared, the animal's life may be prolonged by its performance, and this may be favorable by allowing time for the purgative or other measures to act in removing the original cause of the trouble; but if the formation of gas is the result of a fatal disease, the evacuation of it could of course, at the best, only prolong the life of the animal for a very short time. Colic from impaction of the large intestines, the caecum and colon especially, is far from uncommon; it results from over-feeding on harsh, indigestible food, such as pea straw, to which the animal has not been accustomed; over-feeding on corn or wheat, insufficient exercise, or an insufficient supply of water. It is quite common in very cold, stormy weather, when horses have not had much exercise, and from the excessive cold they have not drank as freely as usual. The acuteness of the pain is often not so great as is evinced in the preceding forms, but it is continuous. When standing the animal will show a disposition to stretch himself, with the fore-legs forward and the hind ones backward; also to back up and press the hind-quarters against the wall or partition; and enemas, when given, are apt to be quickly and forcibly expelled. By inserting the hand into the rectum, the impacted mass may often be felt, and there may be some distention or fullness of the abdomen, but not the excessive drum-like expansion denoting flatulence, although, like other diseases of the organs of digestion, that may be

a result if the trouble is not removed. With regard to the treatment, we believe in these cases it is advisable to give a full aloetic purgative at once, and in the form of a ball; the obstruction being so distant from the stomach there is not the danger of that viscus not acting on the ball, as in the preceding forms of colic; and by giving aloes in solution there is a greater liability for the medicine to be passed off by the kidneys.

Objections have been made as to the propriety in this disease of administering purgatives by the mouth, claiming that the contents of the stomach and small intestines may be, by this means, forced onward into the already overburdened large intestines, and rupture with an escape of their contents into the abdominal cavity, and of course death may be the result. Prof. Williams advocates this view, and advises an aloetic solution as an enema, which is to be repeated if immediately expelled. High as is the authority, and highly as we estimate Prof. Williams' writings, we must say that we should be loath to place our whole dependence on the action of the aloetic enema as a purgative, especially as in the majority of cases of this nature, injections, no matter how small or how carefully exhibited, are immediately expelled; but we may endeavor to expedite the action of the ball by the use aloetic enemas. The action of a purgative may often be excited by stimulants, such as carbonate of ammonia, alcohol in some of its forms, or nux vomica, or its alkaloid strychnia. The administration of strychnia either by the mouth or hypodermically, is often very successful in exciting the action of a purgative when the bowels are slow in responding; and we believe this mode of treatment is, as a rule, far better than continually repeating the purgative.

Cases of impaction, or constipation of the nature described, are usually lingering, and relief may not be obtained for ten or twelve hours, and sometimes much longer; but we believe if reliance is placed on the purgative, as mentioned, which may be supplemented by injections, with the external applications to the abdomen, as in the other forms of colic, the percentage of deaths will be small. A little walking exercise in cases of this nature may be sometimes beneficial; also, perhaps a little beer as a stimulant, but the less opiates we administer, the better, as they have a tendency to retard the action of the purgative. In this or in either of the other forms of colic, it is most decidedly wrong and contrary to nature to persist in keeping the poor animal standing or walking, or to prevent him from lying down—by lying down he obtains some relief, and of course selects the position that is easiest to himself.

It should be borne in mind, that a purgative should not be repeated until at least twenty-four hours have expired, and that in all cases after recovery the food should consist of bran mash or boiled food, and nothing of a harsh nature be allowed until the organs have recovered their tone.

These three descriptions of colic are but a small proportion of the number of diseases of the abdominal viscera, in which colicky pains are manifested.

Red Polled Cattle.

Mr. Henry F. Euren, editor of the *Red Polled Hand Book*, is, or ought to be good authority on the history and merits of Red Polls. We give a few extracts from an article prepared by him, as we find them in the *Canadian Breeder*:

The history of Red Polled cattle can be carried back far into the last century. Suffolk had from time immemorial its breed of polled cattle producing butter which, 150 years ago, was asserted to be "justly esteemed the pleasantest and best in England." Arthur Young, in his "Survey" (A. D. 1794) defines the area—"a tract of country twenty miles by twelve * * * the seat of the dairies of Suffolk"—which, he said, must be peculiarly considered the headquarters of the Suffolk Polled stock, though he found the breed spread over the whole country. In this "Survey" we get the best accurate description of the breed. Though Arthur Young makes no note of Norfolk Polled cattle, yet advertisements of sales held in and from the year 1778 prove that dairies of such animals were numerous in the county, and that they extended from the northern boundary of the Suffolk "headquarters" well into the centre of Norfolk.

An old Elmham tenant, who survived

until 1872, recollected Red Polled cattle on the estate so long ago as 1780. At Shipdham, they were greatly valued from a date certainly as early. At Necton they were kept from a remote period. The predominant breed in Norfolk at that time (see Marshall's "Rural Economy of Norfolk"—notes written from 1780 to 1782) was, however, "a Herefordshire breed in miniature," and "the favorite color a blood-red, with a white mottled face." Marshall fortunately preserves for this generation a record of the process by which the excellences of this now extinct old Norfolk blood-red stock have been combined with the proverbial merits of the Suffolk Red Polled. He says there were several instances of the Norfolk breed being crossed with Suffolk bulls, and that the result was "increase of size and an improvement of form."

A Holkham tenant, Mr. Reeve, of Wighton—of whom Arthur Young speaks as an agriculturist whose husbandry merited attention—co-operating with his neighbor, Mr. England, of Bingham, would appear to have thought more highly of this cross than did Mr. Marshall. The result of his selection was first shown in public at the Norfolk Agricultural Society's meeting, held at Swaffham, July 16, 1808, at a time when the rage for Devons was nearly at its height on the Holkham estate. The official report of the meeting was advertised. It spoke of the bull shown by Mr. J. Reeve as follows: "This breed is a new kind, partaking of the best qualities of the Suffolk and the Devon and the old Norfolk. It has no horns, is of a true Devon or Norfolk red, and will get stock to raise fat to about fifty or sixty stone, with as little coarse meat as can be expected." Mr. Reeve could have had no part in drafting this report, or the word Devon would not have been found there; for an old letter in my possession, written by one who well knew Mr. Reeve's likes and dislikes, says "he certainly never used a Devon bull," and the writer goes on to speak of Mr. Reeve's "antagonism to that breed. This 'new kind' of cattle was carefully selected and bred by Mr. Reeve until September, 1828, when his dairy numbered twenty-five head, the bull then sold, being 'one of the most perfect animals in the kingdom.' An equally judicious breeder was Mr. G. B. George, of Dunston, and afterwards of Eaton, near Norwich. Some of the animals were within a few years introduced into Suffolk, for crossing with the red cows there. The mixture of the two varieties has continued to this day, so that it would now be difficult to find stock which could be said to be free from its influence. Occasionally the evidence of the old Norfolk variety is made manifest by reversion, though the instances of this are now becoming very rare. Another cross was tried some forty or fifty years ago by Mr. Moseley, of Glenham, Suffolk. He used a Scotch bull for one generation, and then reverted to the original Suffolk breed. The evidence of this experiment is yet occasionally seen in the few tribes which trace back to the cows of this once famous herd. Another experiment was made with a Devon cross; but the result at the end was found to be unsatisfactory. In fact, the animals whose breeding is known to have been true during the last fifty years or more give the best results now.

COLOR.

Color was, in the opinion of the old fanciers of Suffolk Polls, a distinctive characteristic. Mr. M. Biddell, speaking in 1862, could "recollect the time when no other color than red would be looked at in a Suffolk cow," and in this discussion on color it was admitted that "the red cow had established the breed." Previous to that meeting of the Suffolk Agricultural Society there was a tendency being developed to get rid of the color distinction. This may have arisen from the remembrance of the fact that "red and white, brindle, and a yellowish cream color," had also been accepted colors, as representing good milkers. In Norfolk, as I have said, red was the favorite color, but in a few districts sheeted polls were preferred. The fashion has during the last forty years set steadily in one direction. The red, which is now recognized as the mark of excellence, is a deep, rich blood-red, and the spot of white on the udder, which Mr. George held to be a sign of good breeding, has been crossed out. The predominance of the deep red shows plainly the degree in which the old Norfolk breed has affected the polls, and, on the contrary, the freedom from horns and from white on the udder and

face is evidence of the persistence of the Suffolk Polled character. The amalgamation of the two varieties—Norfolk Polled and Suffolk Polled—may with certainty be traced from the year 1846. Both counties henceforth met in an honorable competition in the show yard. Purchase of the handsomest and truest bred red stock became the desire of all the breeders. The result of this zeal was soon made evident, not only at county shows, but also at the Royal meetings. The breed, however, continued to be without a name until the Royal Agricultural Society, at the Battersea meeting in 1862, opened classes for "Norfolk and Suffolk Polled" cattle. This cognomen was thereupon adopted by Norfolk, but it was never accepted by the Suffolk Society, whose practice it has been either to provide classes for "Suffolks," or—and this very recently—for "Suffolk and Norfolk Polled." This breed now having its Herd-Book, and being distributed far beyond the boundaries of the two counties, is henceforth to be known as the "Red Polled," and the Register as "The Red Polled Herd-Book."

The standard description reads as follows:

ESSENTIALS.

Color.—Red. The tip of the tail and the udder may be white. The extension of the white of the udder a few inches along the inside of the flank, or a small white spot or mark on the under part of the belly, by the milk veins, shall not be held to disqualify any animal whose sire and dam form part of an established herd of the breed, or answer all other essentials of the "Standard Description."

Form.—There should be no horns, slugs or abortive horns.

POINTS OF A SUPERIOR ANIMAL.

Color.—A deep red, with udder of the same color, but the tip of the tail may be white. Nose not dark or cloudy.

Form.—A neat head and throat. A full eye. A tuft or crest of hair should hang over the forehead. The frontal bones should begin to contract a little over the eye, and should terminate in a comparatively narrow prominence at the top of the head.

In all other particulars the commonly accepted points of a superior animal are taken as applying to Red Polled cattle.

DIVERSITY OF TYPE.

Many of the old Suffolk Polled cattle were much more massive beasts than the Norfolk and this characteristic is yet in evidence. They could easily be picked out from a collection by the comparative coarseness of the head—a difference which is now but seldom manifest. In other points there were few divergences in character between the two varieties.

WEIGHT.

At the close of the last century the animals when fattened seldom exceeded fifty stone (of 14 pounds.) This is the report both of Marshall and Young. The former says:—"The superior quality of their flesh, and their fattening freely at an early age, do away with every solid objection to their size and form." There has been great improvement in this matter of weight for age, while there has been no deterioration in the quality of the flesh; butchers now, as then, purchase the Red Polled readily, because they die well, and the meat is equal to the best Polled Scot or Highlander.

PREPOTENCY OF THE POLLED TYPE.

Red Polled cattle are found to lay on flesh rapidly on pasture of the poorest character, where other breeds need to have an additional supply of richer food. The dry temperature of Norfolk and the poor pasture seem more particularly to have had their effect on the size of the stock. The first cross-stock sired by a Red Polled bull, no matter of what horned breed is the dam, is usually red in color and polled in character. Such animals, when fat, are eagerly bought by the butcher. I have recently seen a number of such cross-bred, the produce of a Red Polled bull and a pure-bred Jersey cow, and the cross is an excellent one. Some of the animals had a few silver hairs mixed with the red coat; all were polled, and all had black noses.

Use Mica Axle Grease, the best made.

Mann Boudoir Cars.

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

BREEDERS' DIRECTORY.

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

HORSES.

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

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

CATTLE.

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

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

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

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

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

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

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

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

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

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

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

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

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

CATTLE AND SWINE.

COTTONWOOD FARM HERDS,

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

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

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

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

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

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

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

SWINE.

CATALPA GROVE STOCK FARM, J. W. Arnold, Louisville, Kansas, breeds Recorded POLAND-CHINA SWINE AND MERINO SHEEP.

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

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

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

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

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

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

SWINE.

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

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

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

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

POULTRY.

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

ONE DOLLAR per thirteen for eggs from choice Plymouth Rock fowls or Pekin ducks. Plymouth Rock cockerels \$2 each. Mark S. Salisbury, Box 981, Kansas City, Mo.

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

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

EGGS FOR SALE.—From Light Brahmas, Buff Orpingtons and Plymouth Rocks, 18 for \$1.75; 26 for \$3. Also Pekin Duck eggs, 11 for \$1.75; 22 for \$3. Also Emden Geese eggs, 6 for \$2; and Bronze Turkey eggs, 12 for \$3. W. J. McColm, Waveland, Shawnee Co., Kas.

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

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

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

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

MISCELLANEOUS

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

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

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

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

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

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

ABERDEEN-ANGUS CATTLE!

A few tip-top YOUNG BULLS, at low figures and on easy terms. We offer a few CHOICE FEMALES from our show herd, for sale for the first time.

Two well-bred SHORT-HORN COWS at a bargain. Two standard-bred

HAMBLETONIAN STALLIONS,

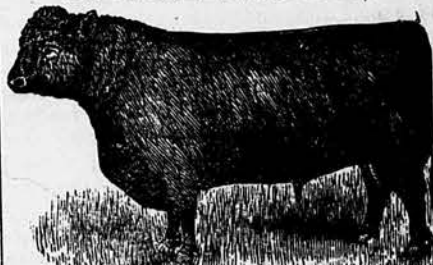
at bed-rock figures. There are few better-bred Trotters in Kansas.

GRADE ANGUS and GALLOWAY cows at farmers' prices.

Send for Catalogue.

J. S. & W. GOODWIN, JR.

F. McHARDY,



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

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

Correspondence.

Southwestern Kansas.

Kansas Farmer:

I have just returned from a trip through the southern part of Edwards county, that portion known as the Indian Reserve. I have frequently heard of the rapid settlement of that section and the thrift and industry of the new settlers, but was not prepared for the surprise. As soon as I crossed the sand-hill range and came in sight of the more level country, it seemed literally spotted with new frame and board houses with here and there a sod house. Cornfields on every hand; oats, millet and sorghum, with a good supply of vegetables; everything looking fine. Corn, especially, is making a magnificent growth. The ground is all new, very little having been broken earlier than last fall. The people are a different class from what you find in any other portion of Kansas. They are a hard-working and seemingly temperate people, rather close-fisted for Western people. They are just such people as get rich minding their own business. The town of Wellsford is a model town and is destined to be the center. Everything has a substantial appearance and the people mean business. Every acre of land is taken and quarter section claims are selling from \$800 to \$1,200, with but little improvements on them. Their worst drawback is depth to water, from 100 to 170 feet, but no lack when they get to it and excellent water in every instance.

As you go west to Brenam (a small town of but few houses,) the land is hardly as good and further on to Greensburg. I saw a great many good fields of corn and oats, but not such as is seen on every hand about Wellsford. Greensburg has not the appearance of thrift that Wellsford has, although it is considerably larger, and I think it will be quite likely to take a back-set. There seems to be too much speculation about the people. I do not say this from any ill-feeling towards any individual in or around the place, for the short stay that I made was very pleasant and the few that I met were very sociable and friendly, and I may be mistaken in my opinions.

On my return from Brenam north, I found a wide strip of sand hills unsettled which will make to some industrious people good homes. There are thousands of acres of good land among those hills, but the sandy ridges are unpleasant to travel over. Then east down the north side of the Rattlesnake hills is another fine section of land settling fast with an industrious class of people.

Occasionally we came to old settled places which can be seen and known from a long distance by the trees growing around them. These always look cozy and inviting, especially in a very warm day. Tree planting is becoming more common and will soon be generally practiced. Trees of all varieties seem to prosper the last two years, either from cultivation or from climatic changes. Small groves are to be seen now in all directions, especially in the sand hills. I saw some walnut trees five or six years old hanging full of nuts. Southwest Kansas is bound to come out and I think will be in time the most desirable portion of the State.

W. J. COLVIN.

Larned, Pawnee county.

Things in McPherson County.

Kansas Farmer:

Having seen nothing in your very welcome and much esteemed paper from this county for some time, and thinking we were left out just because none of our citizens would take the matter in hand and write you, I concluded to give you some items which I trust may be of interest to some of your readers.

We are done harvesting. Wheat was very light and not a very good quality; a great many fields were not cut at all. Oats are only fair, nothing near such a yield as we had last year. Potatoes and garden vegetables are splendid; corn is clean and looking well, the prospect now is nearly as good as at this time last year, and then this county beat its previous record for corn. Fruit will be scarce, excepting the small fruits, and a light sprinkling of apples; peaches having been winter-killed.

I have been very much interested in the articles in the FARMER on tame grasses and been experimenting some with grasses my-

self. In the spring of '84, I sowed a small quantity of orchard grass, tall meadow oat grass, Johnson grass and alfalfa, each in separate plots. The orchard grass looks like it would be fine for pasture, but it did not yield much hay; the oat grass yielded considerable hay, but don't look as though it would amount to much for pasture without being mixed with some other grass; the Johnson grass I thought was the very thing for pasture until our cold winter came on and killed it root and branch. The alfalfa alone we pronounced worthless in this section of country for any use, unless it would be for hog pasture, and it gets too hard and woody for that purpose.

This spring we tried our old Illinois standard grasses—timothy and clover mixed; it seems to be making a good start, but don't know how it will succeed. I hear of large meadows of it doing well in the county. I think the subject of grasses one of prime importance to us Kansas farmers, and we eagerly read and try to digest all we see on that subject by Kansans; and the farther west the experiments the more interesting the reading. We have met with a (to us) new enemy to our apple and plum trees. It is a very large pale green worm. I measured one that was nearly four inches long and three and one-half inches in circumference. Like caterpillars, they devour the leaves, or at least eat out the stems, thereby cutting the leaves off. One of our physicians has one preserved in alcohol and labeled "The What-is-it."

The web worm was here, but did us no harm.

We have seen and heard a great deal about the unjust exactions of the railroads, but we expect to be fleeced the worst by the pooled elevator men to whom we sell our grain right at home. They get the first nip at us and they bite deep, so that between them and the railroads we don't have much left.

I say success to the KANSAS FARMER, and think every wide-awake farmer in the State ought to take it. JAMES C. BETHARD.
Wheatland, McPherson county.

State Fair of Kansas.

As the fair association at Topeka have decided not to hold a fair there this year, the people of Peabody, a prosperous, enterprising town, have decided to hold the State Fair of 1885 at that place, on the beautiful and commodious grounds of the Marion County Agricultural Society. This Society is one of the few organizations of the kind which has always paid its premiums in full, without discounts or pro rating, and they propose to continue to "fight it out on that line."

Peabody lies in a rich agricultural district, and the outlook for exhibits at the State Fair is most excellent. The live stock departments will be particularly well represented.

Thursday, September 3d, has been set apart as Soldiers' Day, on which occasion there will be a grand rally of the soldiers of the southwestern and central portions of the State. A grand parade, drill, camp fire at night, and other interesting features will be participated in by all soldiers present. Peabody Post No. 89 of the Grand Army of the Republic extends a cordial invitation to all soldiers to be there, and will see that ample accommodations may be had. Hundreds of tents will be pitched on the grounds near where the camp fire will be held.

Governor Martin will be present and deliver an address, and other prominent public men will participate.

Reduced rates for passage and freight will be given by the railroads.

For catalogues or other information, address the Secretary, Dr. L. A. Buck.

Topeka Stock Yards Sales.

The representative sales of live stock at the Topeka stock yards for the week ending July 25, was not so large as usual. Several ponies sold from \$38.50 to \$50; horses from \$70 to \$110; 67 hogs, averaging 220 lbs., sold at \$3.60; heifers averaged \$21; 19 sheep weighing 85 to 95 lbs., sold at \$2.80 to \$3.10; milk cows sold from \$30 to \$40; 11 calves of 160 to 210 lbs. weight sold at 4¢ to 5 cents; 8 three-year-old steers sold at \$33, 12 others sold at \$3.75 to \$3.90; 68 fat cows, ranging in weight from 940 to 1130 lbs., sold at from \$2.85 to \$3.60.

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

Gossip About Stock.

The receipts of live stock at the Kansas City stock yards last week were 728 horses and mules, 1,285 sheep, 8,816 cattle and 53,079 hogs.

Forty-six Jersey cattle sold for \$9,060, an average of \$197, at the recent public sale held at Lexington, Ky., by Messrs. Wallace, Sparks & McClintock.

The Aztec Land and Cattle Company own 1,000,000 acres of land in Arizona, and they recently purchased 35,000 head of stock cattle with which to stock their ranges.

The closing-out sale of the entire herd of Holstein-Friesian cattle, owned by Buchanan Bros., of Chicago, resulted in an average of \$133.27 for eighty-seven head. The stock was mostly young.

Charles Roswurm, of Morris county, has made another fine investment. This time he purchases forty high-grade Short-horn heifers and cows at \$100 per head from the Blue Valley Herd of W. P. Higinbotham, Manhattan.

Attention is directed to the advertisement of the "Excelsior Herd" of Poland-China swine and high-class poultry of D. H. Webster, Austin, Cass county, Mo. Mr. Webster's reputation as a successful Western breeder of first-class stock is excellent. Send for his catalogue and circulars.

Miller Bros., Junction City, the noted Poland-China breeders, appreciate the fact that no better pure-bred swine are raised in the United States than the Kansas bred stock. They make the following offer: "We will give \$100 for a sow pig that is better than one we have of our own breeding."

The largest pork producer in Massachusetts is John Cummings, of Woburn. He has now on his place 2,500 hogs and pigs, and generally kills 2,000 each year. He buys all his feed. He purchases the buttermilk of a Boston firm, who churn fresh milk that has not been skimmed. He buys Western corn and grinds it on his premises.

T. L. Miller & Co.'s sale of Hereford cattle at Chicago last week resulted in making an average of \$252.07 for eleven bulls and \$378 average for ten females. The cattle were a good lot. The highest priced bull, Prairie Chief 7277, sold to Shockey & Gibb, Lawrence, Kas., for \$400. They took another bull for \$250, and two fine heifers for the neat sum of \$910.

Neosho County Democrat: Since the first day of last January Messrs. Baxter and O'Bryan have shipped from this place seventy-one loads of stock—553 head of cattle and 3,097 head of hogs, receiving therefor and distributing among our farmers the sum of \$53,986.65. Their profits on the above sales, owing to fluctuations in the markets, were comparatively small.

The proclamation of President Cleveland giving the stockmen of the Cheyenne and Arapahoe reservations in the Indian Territory orders to remove their cattle in forty days, is regarded at this time of the year as entirely too little time, and will, if accomplished, result in great loss of cattle and money. The stockmen are making efforts to have the time extended.

The Breeder's Gazette tells about the private sale of the noted imported Hereford bull, Archibald (6290), for \$6,000, to C. K. Parmlee, of Chicago. The bull was imported last fall by Geo. Leigh & Co., Aurora, Ill., and since that time has been at the head of the herd of J. O. Curry, successor of Geo. Leigh & Co. Archibald now weighs 2,350 pounds, and has had a successful career in England as a show bull.

Ottawa county, Kansas, has the Minneapolis Horsemen's Association. The capital stock of the corporation is \$5,000, divided into 500 shares of \$10 each. The directors are seven in number, and for the first year consist of John Triplett, F. C. Rees, W. A. Roberts, F. M. Sexton, L. A. Henry, A. Gilbert and R. A. Merryfield. The object of the corporation is to advance the interests of the horsemen of Ottawa county and improve the breeding of horses for all purposes.

The latest report says the cattle ranch area embraces about 1,365,000 square miles, hence constitutes nearly 44 per cent. of the total area of the United States. The report indicates that 7,500,000 cattle graze on the green plains east of the Rocky mountains, and that their value reaches upward of \$200,000,000. It is rather a significant fact that

nearly 21,000,000 acres of this grazing land, together with the herds thereon, are owned by English syndicates.

During the soldiers' reunion in Topeka, September 22 to 25, more than ordinary attractions will grace the speed ring. Mr. R. Bean, of this city, is making an effort that bids fair to be successful to secure Jay-eyesee and Phallas. Should this fail, an unusual effort will be made to secure Maud S., the queen of the turf, or Johnson, the most famous pacing horse in America.

The Canadian Breeder very sensibly remarks that it is the farmer's business to raise young colts, and develop them into fully mature and thoroughly broken horses. When he has accomplished this he should put his horse on the market, and start the training of another and younger one to fill its place. In this way he can always have a good horse to sell at good figures.

Manhattan Mercury: Several farmers about Wabunsee went in partnership last spring and bought a very fine Norman stallion from the famous Dunham farm, paying \$2,200 for him. These men have been breeding large farm horses for several years, and they say it pays. There is such a demand for them that the breeders find it difficult to keep enough on hand to do their own work. We have good horses now, but the best are none too good for Kansas farmers.

The Kansas Cowboy very properly says that now is the time for those cattlemen who experienced losses on their ranges last winter and have on hand less cattle than their ranging facilities will accommodate, to replenish their decimated herds. Stock cattle are now cheap. In a short time their value will inevitably appreciate. It is a good time to buy when prices are low down. When the prices of cattle begin to advance then the demand will increase. That is the way of the world.

This State now has within her borders quite a number of fast horses. The following from the Junction City Republican is an example: Dr. Dutcher attended the races in Salina last Friday and Saturday. He says there were some of the best horses at this meeting he ever saw in the West. The following horses were among those present: Don, record 2:23; Harry P, record 2:29½; Ruby, record 2:32. The purse for which these horses contested was only \$100. The following is the position of each: Harry P, 1, 1; Ruby, 2, 2; Don, 3, 3; time 2:32½, 2:30½. Such horses as these are too good to contest for a \$100 purse.

John Carson, Winchester, Kas., is building up quite a breeding establishment in Jefferson county. The Era says: A visit to his stables convinced us that he owns one of the best herds of Clydesdale and Norman horses in Kansas. Many of them were imported direct from Europe by Mr. Carson himself, who made a trip across the ocean only a short time ago for that purpose. He loves good stock, and will keep no other if he can help it. His stallions have been a source of vast income to him the present season, and the colts from his horses always give the best of satisfaction and command admiration and high prices wherever put on the market, and are a source of considerable income from the premiums they command at fairs and general exhibitions of such stock.

The well-known and successful breeders of Poland-China and Berkshire swine, Randolph & Randolph, Emporia, Kas., give the following good advice to all their customers on how to care for a pig: "In cold weather give him warm dry quarters to sleep in, and room to exercise at all times. Feed corn sparingly, as it is too heating for a young growing or a breeding animal that you do not want to fatten. Give plenty of good slops mixed with mill feed. Milk is the best feed known for young growing hogs. If possible give some milk—the more the better. The hog needs some vegetables and ought to have them in season to vary his diet. Corn and water alone will soon burn up a pig. Never allow your boar to run with sows in heat; if you do he will soon be worthless. The vigor and increase in number of pigs to the litter will repay you for the care of the boar. One service in our opinion is better than more. Don't use a young hog much; it will hurt his growth, and when grown he ought not to serve more than one sow per day and that must not be kept up long. Don't allow your boar to leave your place; if you do he will be

spoiled. Make a pet of your hog by being gentle and kind with him and he will not get cross. You can drive a hog like a horse with a little careful handling; if you beat him he will soon want to fight you, and if he fights you he will whip you. If you have to strike him do it so that he will remember it. There is no animal that responds to gentle treatment more readily than a hog. You ought to have all your breeding animals so tame that you could walk up to them any place; it saves lots of money, trouble and corn. Our breeding hogs are all as quiet and gentle and as easily managed as milch cows are. If a hired man abuses a hog, he is forthwith discharged."

The Kansas Pacific or "Golden Belt" circuit of horse meetings and fairs was arranged yesterday, and embraces the six largest and best towns in central Kansas. \$12,500 is offered in the speed ring, the most liberal string of purses ever offered in the State by any circuit. The circuit is as follows: Concordia, August 25th to 26th; Salina, September 1st to 3d; Minneapolis, 8th to 11th; Clay Center, 15th to 18th; Abilene, 22d to 25th, and McPherson, September 29th to October 1st. Large sums are offered as prizes for the products of the field and farm. Low rates are offered and freights guaranteed on the railroads. The circuit is a national trotting association. The officers of the circuit are J. H. Brady, of Abilene, President; E. D. Randall, of Concordia, Vice President; H. L. Cunningham, of Salina, Secretary. Entrees close August 22d.

Phil Thrifton sends the following items: The London *Live Stock Journal* announces the publication of the Herd Book of the National Pig-Breeders' Association of England. The volume contains 106 pages, and records the pedigrees of 274 pigs, consisting of Berkshires, Blacks, Large Whites, Middle Whites, Small Whites and Tameworths, arranged in the above order. From an American standpoint this seems like a small number of pedigrees with which to close the first volume of a national record intended to embrace all the useful breeds of pigs in England.... The Council of the Polled Cattle Society, Bauff, North Britain, at a late meeting resolved to offer a gold medal valued at £10 to be competed for at the Chicago Fat Stock Show in November next, and to be awarded to the best steer, cow or heifer of the Aberdeen-Angus breed.... Heber Humfrey, Secretary of the British Berkshire Society, writes that the first volume of the British Berkshire Herd Book is nearly half printed. The work will be as near uniform in appearance with the American Berkshire Record as can be, only different in color. Breeders on this side of the Atlantic await its issue with much interest.... While the most of the farmers of central Illinois are rejoicing in the prospect of more than an average corn crop, in some localities more rain seems to be needed to bring the crop forward. And yet along the river in Sangamon county hundreds of acres have been overflowed this month, and the growing corn almost wholly destroyed.... The hay and oats harvests are about over. Both have done well and the product generally saved in good condition. All who can afford to do so are stacking and holding their wheat for better prices.

Our wool market is now in better condition than at any time since the opening of the season. Continued advances in values have caused purchasers to take firm hold, and out of a receipt to date of more than has been received in any two former years, not one sack is on hand unsold. Eastern rates declined to-day from \$1.05 to 60 cents, causing a further advance in values of 1/4 cent per pound, with all grades quick sale. The criticisms of Chicago concerning the bogus sales of wool in St. Louis, are erroneous, and the outcropping of envy, as our records show that St. Louis sold more wool during the month of June than Chicago will sell during the entire season. St. Louis sells for spot cash all round, while Chicago imitates Boston. Our sales to-day of 68,000 pounds, were at the following prices:

Fancy medium light fine.....	19 1/2 a22
Choice.....	18 1/2 a19
Fair.....	17 a18
Common mixed grades.....	15 a16 1/2
Carpet.....	10 a14
Heavy and buck.....	12 1/2 a15

Burry, 3 to 5 cents per pound less.

HAGEY & WILHELM,
St. Louis, Mo.

The Law of Oleomargarine.

The KANSAS FARMER has several times briefly discussed the law concerning the manufacture and sale of oleomargarine. It has been and still is our opinion that there is and can be no law against the making of any useful or healthful thing. Things which are hurtful, as tainted food, may and ought to be prohibited. Oleomargarine, when made according to standard methods, is as pure as the purest butter. It was originally invented and made as a substitute for butter during the siege of Paris, when the people of that city had no butter and could not obtain any without smuggling it through the lines of an invading army. A chemist solved the problem, using clean fats and milk or the best butter. By putting these substances through various changes, he produced oleomargarine, as pure as any animal product can be. It is not only pure, but it is wholesome, and by many persons it is not distinguishable from butter. There can be no law then against the making and selling of such a substance. The only thing that can be done is to require that manufacturers and dealers mark the article so that all persons interested may know what it is. Of course there is spurious oleomargarine as there is spurious butter, and against such there is or ought to be law in every State and Nation.

Some time ago our readers were informed that the Court of Appeals in New York—the highest court in the State, decided a case of this kind. We give below a brief history of the case and some extracts from the opinion of the court showing the reasons upon which the court based the decision.

The indictment charged the defendant with having, on the 31st of October, 1884, at the city of New York, sold one pound of a certain article manufactured out of divers oleaginous substances and compounds thereof, other than those produced from unadulterated milk, to one J. M. as an article of food, the article so sold being designed to take the place of butter produced from pure unadulterated milk or cream. It is not charged that the article so sold was represented to be butter, or was sold as such, or that there was any intent to deceive or defraud, or that the article was in any respect unwholesome or deleterious, but simply that it was an article designed to take the place of butter made from pure milk or cream.

On the trial, the prosecution proved the sale by the defendant of the article known as oleomargarine, or oleomargarine butter; that it was sold at about half the price of ordinary dairy butter. The purchaser testified that the sale was made at a kind of factory, having on the outside a large sign, "Oleomargarine." That he knew he could not get butter there, but knew that oleomargarine was sold there. And the District Attorney stated that it would not be claimed that there was any fraudulent intent on the part of the defendant, but that the whole claim on the part of the prosecution was that the sale of oleomargarine as a substitute for dairy butter was prohibited by the statute.

On the part of the defendant it was proved by distinguished chemists that oleomargarine was composed of the same elements as dairy butter; that the only difference between them was that it contained a smaller proportion of a fatty substance, known as butterine; that this butterine exists in dairy butter only in a small proportion—from 3 to 6 per cent.—that it exists in no other substance than butter made from milk, and is introduced into oleomargarine butter by adding to the oleomargarine stock some milk, cream or butter, and churning, and when this is done it has all the elements of the natural butter; but there must always be a smaller percentage of butterine in the manufactured product than in butter made from milk. The only effect of the butterine is to give flavor to the butter, and it has nothing to do with its wholesomeness; that the oleaginous substances in the oleomargarine are substantially identical with those produced from milk or cream. Prof. Chandler testified that the only difference between the two articles was that dairy butter had more butterine; that oleomargarine contained not over 1 per cent. of that substance, while dairy butter might contain 4 or 5 per cent., and that if 4 or 5 per cent. of butterine were added to the oleomargarine there would be no difference—it would be butter, irrespective of the sources—they would be the same substances. According to the testimony of Prof. Morton, whose statement was not con-

troverted or questioned, oleomargarine, so far from being an article devised for purposes of deception in trade, was devised, in 1872 or 1873, by an eminent French scientist, who had been employed by the French Government to devise a substitute for butter.

Further testimony as to the character of the article being offered, the District Attorney announced that he did not propose to controvert that already given. Testimony having been given to the effect that oleomargarine butter was precisely as wholesome as dairy butter, it was, on motion of the District Attorney, stricken out and the defendant's counsel excepted. The broad ground was taken at the trial, and boldly maintained on the argument of this appeal, that the manufacture or sale of any oleaginous compound, however pure and wholesome, as an article of food, if it is designed to take the place of dairy butter, is by this act made a crime. The result of the argument is that if in the progress of science a process is discovered of preparing beef tallow, lard, or any other oleaginous substance, and communicating to it a palatable flavor so as to render it serviceable as a substitute for dairy butter, and equally nutritious and valuable, and the article can be produced at a comparatively small cost, which will place it within the reach of those who can not afford to buy dairy butter, the ban of this statute is upon it. Whoever engages in the business of manufacturing or selling the prohibited product is guilty of a crime. The industry must be suppressed. Those who could make a livelihood by it are deprived of that privilege. The capital invested in the business must be sacrificed, and such of the people of that State as can not afford to buy dairy butter must eat their bread unbuttered.

The references which have been here made to the testimony on the trial are not with the view of instituting any comparison between the relative merits of oleomargarine and dairy butter, but rather as illustrative of the character and effect of the statute whose validity is in question. The indictment upon which the defendant was convicted does not mention oleomargarine, neither does the section (section 6) of the statutes, although the article is mentioned in other statutes which will be referred to. All the witnesses who have testified as to the qualities of oleomargarine may be in error, still that would not change a particle the nature of the question, or the principle by which the validity of the act is to be tested.

Section 6 is broad enough in its terms to embrace not only oleomargarine, but any other compound, however wholesome, valuable or cheap, which has been or may be discovered or devised for the purpose of being used as a substitute for butter. Every such product is rigidly excluded from manufacture or sale in this State. * * *

The provisions of this last act are covered by one of the acts of 1882, above cited, and the provisions of the repealed acts in relation to dairy products are covered by substituted provisions in the act of 1884, but the statutes bearing upon fraudulent simulations of butter, and the sale of any such simulations of dairy butter are left to stand. Further statutes to the same effect were enacted in 1885. Consequently if the provisions of section 6 should be held invalid, there would still be ample protection in the statutes against fraudulent imitations of dairy butter, or sales of such imitations as genuine.

It appears to us quite clear that the object and effect of the enactment under consideration was not to supplement the existing provisions against fraud and deception by means of imitations of dairy butter, but to take a further and bolder step, and by absolutely prohibiting the manufacture or sale of any article which could be used as a substitute for it, however openly and fairly the character of the substitute might be avowed and published, to drive the substituted article from the market, and protect those engaged in the manufacture of dairy products against the competition of cheaper substances, capable of being applied to the same uses as articles of food.

The learned counsel for the respondent frankly meets this view, and claims in his points, as he did orally upon the argument, that even if it were certain that the sole object of the enactment was to protect the dairy industry in this State against the substitution of a cheaper article, made from cheaper materials, this would not be beyond the power of the Legislature. * * *

Measures of this kind are dangerous, even

to their promoters. If the argument of the respondent in support of the absolute power of the Legislature to prohibit one branch of industry for the purpose of protecting another with which it competes can be sustained, why could not the oleomargarine manufacturers, should they obtain sufficient power to influence or control the legislative councils, prohibit the manufacture or sale of dairy products? Would arguments then be found wanting to demonstrate the invalidity under the constitution of such an act? The principle is the same in both cases. The numbers engaged upon each side of the controversy cannot influence the question here. Equal rights to all are what are intended to be secured by the establishment of constitutional limits to legislative power and impartial tribunals to enforce them.

Illustrations might be indefinitely multiplied of the evils which would result from legislation which would exclude one class of citizens from industries, lawful in other respects, in order to protect another class against competition. We cannot doubt that such legislation is violative of the latter as well as of the spirit of the constitutional provisions before referred to, nor that such is the character of the enactment under which the appellant was convicted.

Imitation Butter.

The extent to which the making of imitations of butter has moved the people may be inferred from the facts set forth in a recent report of investigations made by direction of the British government. The foreign office collected, through its representatives at Paris, Berlin, Vienna, Rome, St. Petersburg, Brussels, The Hague, Copenhagen, Stockholm, Madrid and Lisbon, information respecting the legislation of foreign countries on the subject of oleomargarine and other spurious butters. The papers thus obtained were presented to Parliament, but in reply to inquiries, the President of the Board of Trade intimated that the government would take no further steps. Evidently it is a hard subject to tackle, whether here or abroad, says the *National Live Stock Journal*, of Chicago.

The Austrian government replies, that while rigidly excluding ham, lard, or any pork from America, on the ground of trichina, no questions are asked regarding, or restrictions placed on, the importing of butter.

In Belgium the government pays no attention to the subject, leaving all regulations of that and kindred matters to the Communal Council. In 1875, the market authority there promulgated an ordinance requiring every vender of margarine or other butter compound to surmount his stall with a sign of "artificial butter." The Danish government has no special law on the subject, regarding its regular laws as affecting the sale of any commodities which are liable to be injurious to health as sufficient. Recently, however, a law was passed, to have effect for three years, which forbids the manufacture, sale, or export of artificial butter of any sort, unless packed in distinctive vessels and marked "Margarine." The French law forbids its sale without a printed label, stating the nature or composition of the mixture. This law has not yet been in force a year.

In Germany and Italy no special law exists, and both governments are wondering what they had better do. In Spain and Sweden no special legislation has been taken, although in the latter country they profess to regard existing laws as quite sufficient to stop the sale of any compound injurious to health. Holland's reply reveals the non-existence in that country of any legislation on the subject, and is described as "curt," a fact perhaps due to the fact that during 1884, out of a total import of butterine into Great Britain of 733,342 cwt., Holland sent 658,027, and in the first four months of 1885, 274,000 cwt. out of 370,000. Russia has no occasion for such laws, no artificial butter being imported into the country.

The foregoing facts were gathered by the *Journal* from the *Farmer and Chamber of Agriculture Journal*, and that paper, in reference to Russia, on the same subject, says a "large French company has factories both at St. Petersburg, Moscow and Odessa, 3,000 pounds of raw fat being annually employed at their St. Petersburg establishment alone by this company. The trade is even so far recognized that we read that the concoction of these butters goes on under the supervision of the sanitary police, who are supposed to see that nothing injurious to the public health is manufactured. How much is provided to meet local demands, and how much Russia exports, our Consul could not learn. If he is right in saying that 'considerable quantities' are shipped to western countries, and 'particularly to England,' under the general and singularly misleading appellation of 'dairy butter,' we commend that fact to Mr. Chamberlain's attention, as showing that he need not be too sure that the requirements he spoke of on Monday, as to the true character of butter imports being declared by the importers at our ports is by any means always enforced."

The Home Circle.

How Easy It Is.

How easy it is to spoil a day!
The thoughtless word of a cherished friend,
The unselfish act of a child at play,
The strength of a will that will not bend,
The slight of a comrade, the scorn of a foe,
The smile that is full of bitter things—
They all can tarnish its golden glow,
And take the grace from its airy wings.

How easy it is to spoil a day
By the force of a thought we did not check;
Little by little we mould the clay,
And little flaws may the vessel wreck,
The careless waste of a white-winged hour,
That held the blessings we long had sought,
The sudden failure of wealth or power,
And lo! the day is with ill inwrought.

How easy it is to spoil a life—
And many are spoiled ere well begun—
In home light darkened by sin and strife,
Or downward course of a cherished one;
By toll that robs the form of grace,
And undermines till health gives way;
By the peevish temper, the frowning face,
The hopes that go and the cares that stay.

A day is too long to be spent in vain;
Some good should come as the hours go by;
Some tangled maze may be made more
plain;
Some lowered glance may be raised on
high.

And life is too short to spoil like this;
If only a prelude, it may be sweet;
Let us bind together its threads of bliss,
And nourish the flowers around our feet.
—The Watchman.

Eternal youth is pushing upwards still!
Is the load lighter from the toll of ages?
Does it get near the summit of the hill?
And will ye toll on ever, O ye sages?
When to the top the giant mass is ta'en,
Will it fall back and crush you? nay, to
know

Perchance were worse than this sad work
and pain.
Push on! Push on! O mortals onward
go!

Immortal love is watching o'er each pang—
Though ye are blind—from life's obscur-
ity—

When on the verge the quivering mass doth
hang,
Love will appear and your poor hearts be
free!

What do we know—if 'tis not love is near?
What hope have we—but that love will
awake

The sullen surges of life's ocean drear,
A glorious sunrise! Break, O morning,
break!

Such is the patriot's boast where'er we roam;
His first, best country is ever his own.
—Goldsmith.

Trust in God.

"I will be with thee; I will not fail thee
nor forsake thee. Be strong and of a good
courage."—Joshua 1, 5-6.

Are they not good words? Have they not
comforted many, many people? When
weary, disheartened, and feeling as though
it was not worth while to live, they turned
to the Good Book and beheld these words.
Have they not felt that God was talking to
them, "I will not fail thee nor forsake
thee." Does it not encourage you? Have
you had faith to trust in those words, and
been rewarded by a ray of sunshine crossing
your path? or have you read those words
and not believed in them, but instead, com-
plained and mourned over your hard lot?
Has it brought you any peace, any happiness
to do like that, making yourself and every
one else miserable? Could you not put
faith in those words and be a little more
cheerful? If you could, you don't know
how much better you would feel. You
would, indeed, be strong and have more
courage.

What did God put those words there for
if not to comfort and console you? Did he
not know that there would come a time when
all things earthly would fail you? and it was
for this He meant for you to read those
words.

"I will not forsake you." Indeed He will
not; for away up there in the blue sky He
is watching and caring for you all the time.
If He has to give you sorrow, rest assured it
is for your own good. He has tried to soften
it by giving you those words. Over the busy
city, over the country towns, over the broad
prairies, and over all the world, He looks
down upon them and loves them with a great
and mighty love—such as they can not real-
ize.

Then, love and trust Him, and over you
will come a peace and happiness that noth-
ing in this world will ever make you part
with.
BRAMBLEBUSH.

The pine tree, says an authority, serves as
a refuge for more than 400 species of insects.

Must We Run Our Chances?

"I will have so much a month for cigars
and clothes; a fellow is bound to keep up
his own personal expenses."

It was gathering dusk and I was hurrying
homeward, when the above sentence caught
my ear and two young men passed me. I
looked them well over, for the remark
awakened my interest. The speaker was a
fair-faced, well-dressed boy of, possibly, 18.
He had a characteristic way of setting down
his heels, and that general undersized devel-
opment that the early use of tobacco, and
other evil habits, leaves upon the young.
His companion carried his under eye-lids
well up, as though the nerves were weak-
ened by tobacco smoke; and there was a
bulge on one side of his unwhiskered face
that told its own story. As I recognized in
the boys sons of our best citizens, my
thoughts flashed with painful suddenness to
the two little boys who hold in their tiny
hands so very much of my future sunshine.

"Is that what I am working so unceasingly
to accomplish?" I asked myself at every
step.

No, it is as far from that as virtue is from
vice; this result for which I struggle. Yet,
I know the mothers of these boys, and I
know they have struggled to accomplish the
same results for which I am struggling. I
say struggle, for after work comes rest; but
to us who call ourselves mothers there never
comes any rest. Throughout all eternity
this mysterious creature whom we have
helped develop into action must exist; and
throughout all eternity there will remain a
new beam of brightness or an added line of
darkness through this, our offspring.

I carried the instance, together with all of
my doubts and fears, to my husband. He
said to me: "Well, it is the state of society!
It is next to impossible to bring up a decent
boy in this city."

"Hadn't we better move to Kansas City?"
I asked, searching for a remedy.

"Kansas City!" he echoed, with a circum-
flex of bitterness over each separate letter.

"St. Louis?" I hesitatingly suggested.

"St. Louis!" he repeated with horror.

"Chicago?" I murmured with meekness.

"Chicago!" screamed my better half and
sought what seemed a great relief in a very
unsympathetic laugh.

"Well, what must we do?" I demanded
desperately, being given one of those com-
bative natures that finds relief in fighting an
evil.

"Run our chances," he replied.

"But we don't seem to have any chances,"
I said.

"Well, time enough to worry about it when
the trouble comes," he answered, thus cheer-
fully dismissing the subject.

There is often a depth of strong common
sense in a reply that is made by the inspira-
tion of the moment. And the poor, little
driven-into-a-corner sentence I flung after
him as he disappeared through the gateway,
grows in strength and importance every day
in this household. It was this—"Can't you
do something?"

I have been living something in the spirit
of a hunter whose life depends upon running
down his game ever since those boys crossed
my path. Individuals, especially parents,
in their struggles after patience, get so ac-
customed to enduring circumstances as they
overtake them from day to day, that they
sometimes need a shock to arouse them to
the fact that many of the burdens and an-
noyances of daily occurrences, which it
would be more wise—in fact their duty, to
cast off. How many mothers are so accus-
tomed to hearing the father say, "Why
don't you see that Jimmy stops this, or that
Jennie does that?" that it ceases to sound
strange, and the weak wife struggles along,
bearing her own and her husband's author-
ity, ending, in too many cases, in a misera-
ble failure.

All day an undefined sense of injustice
had been lingering in my mind, and when
the father of the children we are supposed
to be helping each other to bring up came
into the house with the exclamation, "Wife,
why will you allow Johnny to play with
those street gamins?" the veil was rent, and,
instead of meekly going to the door and com-
manding the boy to come in, I boldly made
use of the reply I had flung after him earlier
in the day, "Can't you do something?"
When, a little later, he said, "Wife, why
will you allow that child to come to the table
with such dirty hands?" I reiterated, with
unusual sweetness, "Can't you do some-

thing?" And when, an hour afterwards,
looking up from that man's mantle of do-
mestic irresponsibility, the newspaper, he
called out, somewhat impatiently—"Wife, if
you don't want that boy utterly ruined, you
have got to keep him off the street even-
ings." I again re-dished the sentence,
"Can't you do something?" It seemed, for
the first time, to convey a meaning to his
mind. He walked to the gate and called the
child, who came immediately, expecting
something pleasant—"Johnny, you must not
go through the gate after supper without
permission."

That was the beginning; the end is not
yet. And singularly as it may seem to that
very numerous class of fathers who have
never tried governing their own children,
there has been from that hour the gradual
upbuilding of a feeling of confidence in and
dependence upon each other between that
father and son.

(Concluded next week.)

Waste in the Kitchen.

A writer, Evangeline, in the *Household*,
writes of the practical subject above named
in a very practical way. She says that there
is a law that has come down to us from the
ages, that "Those who would have must
save, and those who would save must prac-
tice self-denial;" but a great many of the
American people form an exception to the
general rule. It is a deplorable fact that
we are the most wasteful people in the whole
world, in the matter of buying and cooking
our daily food. There is a sinful waste in
the majority of American kitchens; between
injudicious buying and bad cooking, we may
safely venture to say that in any one hun-
dred homes there is enough wasted to furnish
the tables of another hundred households.
What particular profit is it to the laboring
man, that he receive the highest wages?
His wife, with extravagant tastes and waste-
ful ways in the management of the house-
hold, will keep him poor all his days. Girls
marry young, and go into homes of their
own, with no idea whatever of what man-
agement and saving mean. Mother always
looked to those things, you know, and quite
often mother's ideas about those matters
were rather vague. The wisest legislation
cannot wholly prevent the evil of hard times,
which the country occasionally experiences.
But economy in our personal and household
expenditures will help wonderfully. We
have just passed through an unusually hard,
close winter; there has been much suffering,
men have not had employment, and as a ne-
cessity their families have suffered because
there had been no money laid by for that
rainy day which is liable to come to every
one. A man might just as well work for
small wages as large, if it must be squan-
dered at the beer garden or wasted in the
kitchen. The French will take barely noth-
ing and serve a delicious soup. There is not
a shadow of an excuse for bad cooking; look
at the diabolical stuff set upon the table in
nine-tenths of the homes, and dignified by
the name of "bread." There is no bread
about it; it is not fit to eat; it would give a
Poland-China convulsions. There should be
less guess-work and more certainty; when
the sponge is set at night, you want to know
for a fact that the bread will come out of the
oven next day in good shape. I mean by
this it is to be eatable; so nice and white and
sweet and light that your husband and
everybody else at the table will remark "how
beautiful the bread is," and there will be
such a satisfied feeling that you will deter-
mine every baking shall be just as nice. I
think it needs a well-balanced head to run
the home machinery; you need to look a
number of ways to keep everything going;
you have got to calculate. There are seven
days in the week, four weeks in a month and
twelve months in a year, with three meals a
day; there must be considerable calculation
used to have variety, plenty at the table each
time, and see that nothing is wasted. There
are numberless delicious little dishes that
can be prepared out of the fragments. Cold
ham can be chopped fine and made into om-
elet, meat pies out of cold beef or veal, hash
will utilize the salt beef and cold potatoes;
there need never be waste. The wife is
vested with full authority to manage the
household; see how many drains there are
if she be inclined to waste. The husband
will wonder where all the profits go. One
will say, "Well, I shall not save; he has a
new blinder and all the improvements in
farming implements, keeps lots of help; I

shall spend all I can; what little I would
save would not count." Ah! but it does.
There is nothing better than a well-managed
household; it will not dwarf or stunt the
mind; it will help to develop it. Economy
is not stinginess. The pantry need not be
filled with numberless butter plates, mouldy
meat, dry bread and cake. Calculate how
much you want for each meal, cook it just
as good as you can, improve every time if
possible; there is progression in the kitchen
as well as elsewhere. A true wife should
feel that a great share of her husband's suc-
cess depends upon herself. She must be in-
terested in the management of the house, or
failure is the result.

Washing Suggestions.

In cases where it is feared that soap may
change the color of an article, as, for in-
stance, scarlet hosiery or lilac print, if the
garment be not badly soiled it may be
cleansed by washing, without soap, in water
in which pared potatoes have been boiled.
This method will also prevent colors from
"running" in washing prints.

To prevent blue from running into a white
ground, dissolve a teaspoonful of coppers
in a pailful of soft water, add a piece of lime
the size of an acorn, and soak the garments
in this water two hours before washing.

To keep colors from running in washing
black prints, put a teaspoonful of black pep-
per in the first water.

To make linen beautifully white, prepare
the water for washing by putting into every
ten gallons of water a large handful of pow-
dered borax. Or, boil with the clothes one
teaspoonful of spirits of turpentine.

To remove tea stains from a white cloth,
soak it in javelle water, which is made as
follows: Put a pound of sal soda and five
cents worth of chloride of lime into an
earthen vessel, pour over it two quarts of
soft water, stir well until the sal soda is dis-
solved, and use the bath warm. This is also
effectual in case of grass, tannin or fruit
stains.

A simpler way to remove grass stains is to
spread butter on them, and lay the article in
hot sunshine.

Fruit stains upon cloth or upon the hands
may be removed by rubbing with the juice
of ripe tomatoes. If applied immediately,
powdered starch will also take fruit stains
out of table linen. Left on the spot for a
few hours, it absorbs every trace of the stain.

For mildew stains, mix together soft soap,
laundry starch and half as much salt, and
the juice of a lemon. Apply to the mil-
dewed spots, and spread the garment on the
grass. Or, wet the linen, rub into it white
soap, then finely-powdered chalk; lay upon
the grass and keep damp. Mildew stains
that have been long in linen may be removed
by rubbing yellow soap on both sides, after-
ward laying on, very thick, starch wetted
with cold water. Rub in well and expose to
light and air.

There are several effectual methods of re-
moving grease from cloth. First, wet with
a linen cloth dipped in chloroform. Second,
mix four tablespoonfuls of alcohol with one
tablespoonful of salt; shake together until
the salt is dissolved, then apply with a
sponge. Third, wet with weak ammonia
water; then lay white blotting or tissue
paper over it, and iron lightly with an iron
not too hot. Fourth, apply a mixture of
equal parts of alcohol, gin and aqua ammo-
nia.

How Oatmeal is Made.

The first operation in the manufacture of
the meal is the removing from the oats all
cockle, small oats and foreign seeds of what-
ever kind, for if any of these remain the
quality of the meal is much injured. Black
oats, if even of good quality, give a bad ap-
pearance to the manufactured meal, as it re-
appears in the form of black particles, which
to the tidy housewife appears to be a some-
thing much more uncleanly. After the oats
have been properly cleaned by sifting, they
are subjected to the operation of drying.
This operation requires some care to prevent
the oats from burning. As soon as suffi-
ciently dry, they are removed from the kiln
while still very hot and stored in such a way
as to have them retain their heat; after thus
remaining three or four days, and harden-
ing, they are ready for the shelling opera-
tion. This shelling is accomplished by
passing the oats through millstones of a
special pattern. The product that comes
from the stones is groats, or the whole ker-
nels, dust, seeds, etc., and they must be sep-
arated. By means of a combination of
seives and fans the groats are separated from
the other material, and are then ready for
grinding. For extra quality meal, the groats
may be shelled and also passed through a
brushing machine. The grinding of them
must not be long delayed, as a few weeks'
exposure renders them unfit for milling.
In grinding the groat, the great aim is to avoid
pulverization, and to have the granules cut
square and of uniform size. Oatmeal is gen-
erally denominated by the cut—as pin-head
cut, rough cut, medium and fine cut—though
these terms have different meanings in dif-
ferent districts. After the grinding, the
meal is passed through sieves, and the sift-
ings graded according to size.

Women are numerous in the British civil
service. In a competition for 165 places in
the postoffices 2,534 women entered.

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

The Young Folks.

A Beautiful Picture.

Among the beautiful pictures
That hang on memory's wall,
Is one of a dim, old forest
That seemeth the best of all.
Not for its gnarled oaks olden,
Dark with the mistletoe;
Not for the violets golden,
That sprinkled the vale below;
Not for the milk-white lilies
That lean from the fragrant hedge;
Not for the vine on the upland,
Where the bright red berries rest,
Nor the pink, nor the pale, sweet cowslips,
It seemed to be the best.

I once had a little brother,
With eyes that were dark and deep;
In the lap of that olden forest
He lieth in peace asleep.
Light as the down of the thistle,
Free as the winds that blow,
We roved there the beautiful summers,
The summers of long ago.
But his feet on the hill grew weary,
And one of the autumn days
I made for my little brother
A bed of the yellow leaves.

Sweetly his pale arms folded
My neck in sweet embrace,
As light of immortal beauty
Silently covered his face;
And when the arrows of sunset
Lodged in the tree-tops bright,
He fell, in his saint-like beauty,
Asleep by the gates of light.
Therefore, of all the beautiful pictures
That hang on memory's wall,
The one of the dim, old forest
Seemeth the best of all.

—Alice Carey.

Afloat With a Florida Sponger.

(Continued.)

Nearly a dozen different kinds of sponges are named by the Gulf fishermen. The valuable ones are the "sheep's wool," "boat," "yellow," "grass," and "glove" sponges, but the last two are not of much account. "Loggerhead," "bastard," "finger" sponges, and the like, are useless. Expert fishermen can tell all these apart as far under the water as they can see them at all, though in six or seven fathoms the very largest—perhaps as big as a peck measure, become mere purple spots on the bottom. Unless the water is clear, however, even the aid of the water-glass will not enable a man to see the large deep-growing sponges; and a locality is often "played out" because it is so muddy that nobody can tell what is there. This is not a common obstacle, however. In fact, sponges would not grow where the water is often soiled.

Perceiving a sponge on the bottom—you or I would probably pass it over as a stone or bit of coral, or not notice it at all—the hooker signs to his mate, who, by dexterous manipulation, holds the boat stationary while the hooker lets his long pole slide quickly to the bottom. Guiding it with one hand and shoulder only, and looking through the water-glass, he places the hook underneath the sponge, taking care not to injure the body, and gives it a violent jerk. If it breaks, it floats up at once and is picked up; but sometimes several twisting jerks are required to detach the tough polypore, and now and then one will hold on so unexpectedly that the gunwale of the boat will be dragged under, and the two "Conchs" find themselves pitched head first into the water. We can imagine not only the laughter of the crews of the other boats, but that sponges, corals, and ascidians gurgled with pulpy glee over such a retributive accident. The hardest of all species to detach is the "sheep's wool," while the "yellow" is the easiest.

When a sponge comes up bearing a "bud" of good size, this is broken off and thrown back. It sinks and survives, but is said not to become affixed to a rock, but to drift about on the bottom with the motion of any storm or current that may stir it. It increases in size, but easily eludes the grasp of the clumsy hooks that try to pick it up. These outcasts, the wandering Jews of their race, are called "rolling Johns" by the fishermen.

In the regular routine of the summer sponging, breakfast on shipboard is over in time for the boats to start out at early daylight. At 12 o'clock (noon)—if, in the excitement of good fishing, it is not forgotten—the men come in to get a luncheon and empty their catch on deck. Should a fog settle upon the sea, it is the cook's business to work the vessel as near to the boats as possible, and to keep sounding his fog-horn. Nevertheless, boats frequently get astray, and are sometimes drifting for many hours in the fog before they can get aboard their own or any other vessel. Separations occur in this way which last through a whole season, now and then; but I am not aware that any boat's crew was ever totally lost, though they are not accustomed to carry either a compass or any provision other than a keg of fresh water in the yawls.

Sometimes, in the spring, the roughness of the sea will prevent the handling both of hooks and glasses. Then the sponger throws a spoonful of oil into the waves, producing a calm about his boat, lasting as long as he cares to drift about with it. The oil obtained by trying out the liver of the "nurse" shark, is considered by the spongers as far more effective than any other for this use, and

they will pay a dollar a gallon for it. As these fish abound in the vicinity of the Florida Reefs, and are more easily caught than any other species, their capture is one of the many curious items that enter into the Conch's means of livelihood at Key West.

The noon luncheon is hurriedly eaten, and after it the men return to work as long as they can see. A hearty dinner awaits them at sundown, and, later, an evening of conversation and rest. They are great storytellers, these muscular, brine-faced spongers; and some of their yarns, derived from the most ancient plots and motifs, exhibit a quaint and salty originality which deserve a place in sea literature.

At the end of a week or fortnight a schooner collects her boats and carries her spoils to the shore, where has previously been set up an arrangement for preparing the raw sponges for market. This consists of a circular palisade of poles bound together by withes into a pretty close pen, about twenty feet in diameter, and standing in some protected shoal where at high tide the water may be ten or a dozen feet deep. Such a pen is called a "crawl," a word corrupted from the Spanish *corral*. Into it is thrown the first week's catch and left to macerate—a process rapidly effected in the poorly-organized tissues of the sponge animals. When the vessel reaches it on the next Saturday, these first sponges have been swashing about and rubbing against the poles until they are well rotted and partially cleaned of the sarcodae. They are now taken to the shore, placed upon planks, and thoroughly beaten with a short paddle called a "bruiser," which treatment drives out of the interior of each, as well as presses from its surface the dirty water and decayed animal matter with which it is saturated. It is a very noisy and nasty piece of work, and ends with slashing away with a knife any black and limy particles that may still adhere. This done, the new stock is transferred from the vessel's heaped and slimy deck to the *corral*, and left to be washed out by the waves.

After the "bruising," the skeleton sponges are strung on a rope-yarn, in lengths of two-fathom "strings," and are laid out to bleach and dry on the hot sand beach until the end of the voyage. All this work will be done by a ship's crew, even if they have as many as 2,000 sponges, in half a day. The other half is devoted to repairing and tidying the vessel, mending the *corral*, or idleness. Sunday is almost universally kept as a complete holiday, most of the spongers being very religious men so far as regards certain observances.

The open and unprotected way in which the season's catch is left as it accumulates in the *corrals* and on the beach, tempts to occasional thieveries; but these are of rare occurrence, for captured culprits are roughly dealt with by the fishermen, whose property has no serviceable protection under the protection of law, and who, therefore, do not feel called upon to consult judge or jury in inflicting punishment.

At the end of the cruise the captain calls the cargo, transacts all the business, and gives the men their equal shares. There is not much market except at Key West and Nassau, though merchants in Cedar Keys and some other Florida ports occasionally buy. The annual catch in the Gulf of Mexico probably brings the fishermen about \$200,000, and amounts to about 135,000 pounds, ready for market.

The buyers classify the sponges according to market grades, put them, in many cases, through a second process of shearing, cleaning and bleaching by the aid of lime, etc., then pack them in pressed bales, reducing their bulk, and thus cheapening their freight, before sending them to their customers in New York and London.

No sponges growing in American waters are as fine as those of the Eastern Hemisphere, and especially of the Mediterranean. Those seen in apothecaries' windows in the United States are usually foreign, and are far more expensive than the native product. Three species of each are ordinarily to be bought, but these are separated by dealers into several extra varieties. The superior elasticity and density of the Mediterranean sponge can be easily shown by pressing one of them and one of the American sponges together under a weight, and watching the less rapid and complete recovery of its original form by the latter. "This is due, not only to the comparative absence of impurities in the fiber of the Mediterranean form, but to the greater purity of the horny matter (Keratode) in the form of fibers, shown largely by its lighter color, and also by the smaller size of the internal cavities, and perhaps greater density of the mesh. These qualities all increase the water-holding power of the Mediterranean sponges, and make them much softer and more agreeable to the skin, as well as more elastic and durable." This difference is supposed to be due to the fact that the waters of the Mediterranean are cooler in the winter, and never so hot in the summer, as the waters of the American tropics.

Other factors, "such as the greater abundance of proper food, and the absence of vast quantities of chalky sediment beaten out from the shores and reefs by the winter storms of the Caribbean sea," are considered by Professor Alpheus Hyatt as also contributing towards the inferiority of the American sponges. Those of the Red Sea are poorer than those of the Mediterranean, while on the American side, Bermuda yields sponges far inferior to the product of the Gulf of Mexico.

American sponges are used for the bath and other domestic purposes to some extent, but a large part of the product is torn to

pieces for stuffing cushions, mattresses, etc., as a substitute for hair, and in the manufacture of certain kinds of cloth in place of wool or hemp.—E. I., in *London Field*.

Something About Liberia.

The following interesting interview is taken from the Topeka Daily Capital. It is well worth reading:

Mr. John Norman, a colored man, who was a resident of this city about sixteen years and was engaged in the grocery business in Topeka for a period of eleven years, and who left Topeka in the spring of 1881 for Liberia, a country on the west coast of Africa, returned yesterday for a visit with old friends. Mr. Norman was a slave in Mississippi, and soon after the war came to Topeka, and lived here until his departure for Liberia. Liberia, it is well known, is peopled wholly by negroes, and was established as a colony in the year 1821 by the American Colonization Society. In that year the first negroes were sent over from America, and the country gradually grew until in 1847 they declared their independence. Since that time this country has been very prosperous, and now has about 900,000 inhabitants. Probably about one-fourth of this number are uncivilized natives, who are easily managed and are willing to work. The others are either natives of America or of English colonies. The country has a President, a Senate and a House of Representatives, 'Supreme courts, etc., just as in America, in fact everything is fashioned after America.

Mr. Norman and wife and son left Monrovia, the capital of Liberia, on the 23d of May, coming by way of Sierra Leone, Liverpool, Queenstown and New York. The journey from Monrovia to Sierra Leone, was by a sailing vessel, and the remainder by steamer, the journey being made in about five week's time. Mr. Norman, in giving an account of his stay in Liberia to a *Capital* reporter, said he had always had a desire to see the country inhabited by his people, and having a number of friends over there, he decided in 1881 to make the trip. The expense of the trip for him and his wife was about \$700. When he arrived in the country, he looked over the different settlements which extend about fifty miles back in the interior, and finally bought 265 acres of land for which he paid \$1 per acre. The soil is gravelly and a sandy loam. There was nothing on this land but some coffee, and it was at some expense that it was cleaned. Mr. Norman has employed each year four or five natives to tend the crops, paying them for their work in farm products at about the rate of 25 cents per day. Mr. Norman raised on his farm such products as coffee, sugar cane, ginger, cassava, rice, etc., coconuts and arrow root. The most profitable crops are coffee and ginger. He had about 5,000 coffee trees which produce ten or twelve pounds each per year; this they market for about 12 cents per pound. Ginger grows in the ground and is worth 10 cents per pound; they never have a failure in crops. The most important commercial point is Monrovia, the capital city.

The natives traffic in palm oil, palm kernels, rice, rubber, monkeys, parrots and other productions characteristic of this country. There are a great many varieties of monkeys and they abound in all parts of the country, sometimes doing considerable damage for the farmers by infesting rice fields. They are captured by the natives and sold at the seaports to outgoing vessels. Parrots are very plentiful, often as many as sixty or one hundred being found in a flock. They are called the African gray parrot, and are the most valuable kind in the market.

Mr. Norman says the greater part of the African coffee is shipped by way of Hamburg to New York.

It is the general opinion among Americans that the climate of Liberia is intensely hot, but Mr. Norman says he has never suffered more with the heat than since he came to Kansas. The average temperature there, he says, is about 80 deg., but never over 95 deg. They never have frosts, so it will be seen that it is a very moderate temperature. There is a wet and dry season. The rainy season begins in May, and continues about six months, sometimes overflowing farms.

The houses which the American, or civilized citizens, live in are brick, while the natives live together in huts. There are many towns up and down the coast, but few in the interior. The religion of the civilized citizens is the Christian. They have Methodist, Presbyterian, Baptist, Lutheran and other churches, which are all very generally attended. A Catholic church has been established within the past year. The religion of the natives is Mohammedan. There are many missionaries from America and other places who are working with the natives and their labors are very successful. Mr. Norman belongs to a Baptist church, which has sixty-nine members, of which sixty are converted natives.

Mr. Norman was much surprised when he went there to find such a prosperous country. In some things they were not far behind America, and they are rapidly bettering themselves. There are many improvements and conveniences which one would hardly expect to find in that country. Many of the citizens are in fair circumstances, while others who are not as industrious have, of course, not fared as well. Mr. Norman is well satisfied with his new home, and will probably return about December 1. He brought with him several specimens of the productions of Liberia, among them coffee in the shuck, a pair of blue monkeys, two parrots, three African gray parrots, a bo-constrictor's skin sixteen feet in length, five

or six varieties of deer skins, specimens of the native homespun cloth, and a number of coffee canes.

Mr. Norman said the people of that country were very much interested in the last election in America, and very much regretted that there was a Democratic victory. He says they have two parties—the Republican and Whig, and great interest is taken at their elections. He thinks Liberia is a most interesting country, and that some day it will have a name in the world.

A Hint to the Boys.

I stood in the store the other day when a boy came in and applied for a situation.

"Can you write a good hand?" was asked.

"Yaas."

"Good at figures?"

"Yaas."

"That will do—I don't want you," said the merchant.

"But," I said, when the boy had gone, "I know that lad to be an honest, industrious boy. Why don't you give him a chance?"

"Because he hasn't learned to say 'Yes, sir,' and 'No, sir.' If he answers me as he did when applying for a situation, how will he answer customers after being here a month?"

What could I say to that? He had fallen into a habit, young as he was, which turned him away from the first situation he ever applied for.—*New London Day*.

The Story of Appomattox.

From the "Personal Memoirs of U. S. Grant." I found General Lee had been brought into our lines and conducted to a house belonging to a Mr. McLean, and was there with one of his staff officers waiting my arrival. The head of his column was occupying a hill, a portion of which was an apple orchard across the little valley from the court-house. Sheridan's forces were drawn up in line of battle on the crest of the hill on the south side of the same valley. Before stating what took place between General Lee and myself, I will give all there is of the narrative of General Lee and the famous apple tree. Wars produce many stories of fiction, some of which are told until they are believed. The war of the rebellion was fruitful in the same way. The story of the apple tree is one of those fictions with a slight foundation of fact. As I have said, there was an apple orchard on the hill occupied by the Confederate forces. Running diagonally up the hill was a wagon road which, at one point, ran very near one of the trees, so that the wheels on that side had cut the roots of the tree, which made a little embankment. Gen. Babcock reported to me that when he first met Gen. Lee he was sitting upon this embankment with his feet in the road and leaning against the tree. It was then that Lee was conducted into the house where I first met him.

Chinese Passion for Flags.

The military desire for flags in China has developed into a passion. Every fortress, entrenched position, camp, city gate or officer's headquarters has from one to 100, some of them of one bright, solid color, but most of them are arranged in stripes, the colors red, white and blue being preferred. Were but three stripes used the resemblance to the French tricolor would be almost exact, but as they ordinarily use five or six the similarity of color becomes a mere suggestion. When it is not obtainable, black, and rarely yellow, takes its place. At the camp of the Tsotsung regiment, on a pleasant knoll just outside the walls of King-chung-foo, more than 100 small flags were displayed, ranged with the precision of the rows in a cornfield, there being one for nearly every white canvas tent, in which the soldiers were comfortably installed. The material used is Manchester cotton, bought white and colored by the Chinese. As each is about the size of a common bed-blanket, and several thousand must be required for the 10,000 troops stationed in and about Hoihow and King-chung-foo, the quantity needed is immense, and the merchants who deal in the goods were prepared accordingly. There is no doubt that their number is often unreasonably increased by the mandarins commanding the troops, that they may have the squeeze or difference in price, since they purchase at a fair rate and charge the Government double.

Men and Deeds.

Men that can dare and do;
Not longings for the new,
Not pratings of the old;
Good life and action bold—
These the occasion needs,
Men and deeds.

—T. Duncan McGregor.

Free Tuition. Expenses Light.

KANSAS STATE AGRICULTURAL COLLEGE.

Endowment \$500,000. Buildings \$100,000.

Apparatus \$50,000.

17 INSTRUCTORS. 400 STUDENTS.

Farmers' sons and daughters received from Common Schools to full or partial course in Science and Industrial Arts.

Send for Catalogue to Manhattan, Kansas.

REWARD! Of \$10—\$50 to every person sending us valuable information of school vacancies and needs. No trouble or expense. Send stamp for circulars to CHICAGO SCHOOL AGENCY, 185 South Clark street, Chicago, Ill. N. B.—We want all kinds of Teachers for Schools and Families.

WANTED LADIES AND GENTLEMEN who own homes. Wish to make \$5 to \$4 a day easily at their own homes. Work sent by mail. No canvassing. Address with stamp Crown Mfg. Co., 204 Vine St., Cin. O.

THE KANSAS FARMER

Published Every Wednesday, by the
KANSAS FARMER CO.

H. C. DEMOTTE, President
E. B. BROWN, Treasurer and Business Manager
H. A. HEATH, General Business Agent
W. A. PEPPER, Editor

TERMS: CASH IN ADVANCE.

Single Subscriptions:
One copy, one year, \$1.50
One copy, six months, 1.00

Club Rates:
Five copies, one year, \$5.00
Eleven copies, one year, 10.00

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

ADVERTISING RATES

Made known on application. Orders from abroad for advertising must be accompanied by the Cash.

KANSAS FARMER CO.,
Office, 273 Kansas Avenue, Topeka.

GENERAL GRANT IS DEAD.

At every mention of the old hero's name, at every sight of his grim features, one's hand almost instinctively moves to his hat. It is no dishonor, it is no evidence of weakness to uncover one's head in the presence of such a man. All men are created equal, and in respect to natural rights, there is no difference among men. But when the child opens its eyes upon the sunlit land he becomes at once an integral factor of the great public around him; and as he grows older, he and his fellow citizens, as a nation, become factors in the world's history. Nations rise and grow and they decay and die in accord with the qualities and characters of the people there; and there come times in the history of every people when the best and strongest men or the worst and weakest men are publicly recognized, one class as benefactors, the other as destroyers. There are supreme moments in most men's lives when all of their future is determined by a movement in one or another direction. In many cases men walk or run past great opportunities, or sit still while the opportunities pass; and when one recognizes the time and place to strike, he starts ahead in a new and better direction, ever afterward appreciating the circumstance of the new departure. Those are heroic moments when lives are moulded and permanent impressions are made not only on the individual himself, but upon all who are near to him. So it is in larger degree when men grasp great occasions and beckon to the people to come; so it is when men strike at some great wrong and cut their way to fame; so it is in vastly greater degree when in perilous times the people call one of their number to perform great deeds and he does it. This last is Grant's case. A simple, modest, silent citizen, without honor or fame as the world knows them; without distinguished lineage, without fortune, without friends outside the little circle about his humble home; when reckless hands struck at his country's flag and threatened disruption of the Republic, he organized a company of soldiers, not as lieutenant or captain specially commissioned, but as a citizen and patriot, and then asked to be assigned to duty. In less than four years after that he mustered out the grandest army that ever moved upon a battlefield and turned over to a rejoicing people a restored Union. He commanded more and better soldiers than any military leader of modern times, he conquered the most formidable rebellion in history, he never asked for promotion, he never disobeyed an order, he never complained against a superior, he never oppressed a subordinate, he never misused a private soldier; he was neither profane nor vulgar, he was not a boaster nor a babbler,

he was uniformly kind, quiet, unobtrusive, prudent, firm and brave; he was never driven from a field of battle, he never failed in what he undertook; and this mild mannered man, this retired, industrious, patriotic citizen, without show, without noise, without complaint or boast, never disheartened beyond effort, never elated beyond prudence, this faithful and true soldier is General Grant. There is no dishonor in raising one's hat to such a man.

Was he great? What other word, to-day will fit his case. There is none like him in history. Lift the veil and look back to the dawn of time. Among all the names that illuminate history, most of them are sometimes below the horizon, but Grant's will always be above. Not a single dark spot upon the career for which his countrymen honor him. Always on duty, always faithful, always successful, always just, always merciful, always magnanimous, never disheartened, never defeated, always manly, brave and generous, equal to every emergency, always modest, not forgetting in presence of royalty that he was a citizen, not forgetting when princes, potentates, kings and emperors paid him homage, that his countrymen at home shared with him all his honor and fame. Is not such a man great?

"On the 12th day of April, 1865, the Army of Northern Virginia was formed by divisions for the last time. Lee had already given his personal parole, and was not present. But commissioners had been appointed on each side, under whose direction the troops marched to a spot in the neighborhood of Appomattox Court House. The national column halted on a distant hill, where a white flag was waving. No guns were in position, no bands played; no cheers taunted the unfortunate. In profound silence the Southerners dressed their lines, fixed bayonets, stacked arms and deposited their accoutrements, then slowly furling their flags, they laid them down; and many a veteran stooped to kiss the stained and tattered colors under which he might fight no more. All day the sad ceremony went on, the disarmed men streaming to the Provost Marshal's tent for their paroles. Then they started for their homes." But Grant was not there. He had fought to crush the rebellion, not to make fame for himself. After fixing the terms of surrender, he made no parade of show. He was clad in his fatigue uniform when he met Lee who was superbly dressed in new and well fitting clothes. He cared not to honor himself, but to serve his country. He gave no pang to his enemies after they laid down their arms. He tarried not to receive the formal surrender; he left that for others to do while he hastened to Washington to prepare for the disbandment of his own weary soldiers. In all his orders, in all his correspondence, in all his little speeches, not one order, letter, or speech can be found that extols himself or asks for praise, nor one that detracts from the valor of his soldiers, or refers ungenerously to his superiors. He left to his vanquished enemies their horses, and gave them food to eat on their way home. Robert E. Lee, himself, received a "destitute ration" when he reached Richmond, and he was brave enough to express his thanks and to say that "unless this assistance had been extended, he did not know where he should have found a meal. And when the order went forth to arrest General Lee and others and try them for treason, this quiet man, this silent chieftain, said it must not be done, and it was not. He had paroled General Lee and his army, and that parole must be respected. On every proper occasion, this

modest soldier has spoken kindly of his old enemies and said good things for them. His last recorded utterance is of this character. Is not such a man great?

It was he that first suggested a practical way to correct abuses in the civil service; it was he that set on foot investigation looking to governmental control of Inter-state Transportation; it was that insisted upon arbitration instead of war to adjust differences among nations; it was he that led contending nations of Asia to peace; it was he that began that friendly commercial intercourse between the United States and Mexico that will ultimately make the two Republics friends indeed.

Within the range of his public duties, measured by any reasonable standard, General Grant was great. His modesty and reticence, while they are among his best traits, obscure the real man. He was so simple in his habits, so mild, attentive, respectful and retired, that people wonder how such a man can be great. Sherman had a glowing intellect, he could originate great schemes and put them on paper, and he could lead armies and fight battles; Sheridan had passion and energy and courage equal to overturning volcanoes, and he could express his thoughts in piercing tones; Hancock had courage and precision and skill; Grant had all there is of good in all these traits. Sherman said—"Your judgment is best;" Sheridan said—"I wish you were here yourself;" Hancock—"Command and I will obey." No man was jealous of Grant; no man wished to deny him the full enjoyment of his justly earned renown. All his countrymen honor him as the first among their million soldiers, and all the world recognizes in him at least one of the most distinguished military heroes of whom history gives any account. Such a man must have been great.

Now that he is dead his virtues will begin to show themselves more prominently. Those who were his enemies will be ready to do him justice. The writer of this is not a hero worshipper, nor is he given to measuring out unmerited praise. He regards General Grant as a man whom the American people ought to remember always as the only man found competent to lead our armies to victory in the most trying time of our history; as one who, when clothed with power used it for his country and not for himself; one who never spoke unkindly of his enemies and persecutors; as one who in time of trouble and danger asked for opportunity to help; as one who, while honored beyond all men, always received it in the name of his country.

THE FUNERAL.

The body of General Grant is embalmed. It will remain at the cottage where the General died until Tuesday, August 4, when it will be removed to the place of interment in Central Park, New York city, stopping at Albany one day and lying in state at the City Hall in New York. The interment will take place Saturday, August 8.

The attendance will be larger than any similar gathering mentioned in history. The people will be numbered only by hundreds of thousands. The President of the United States will be present, and with him a hundred thousand of the soldiers of the great war on both sides, as many citizens, and Governors, and Senators, and Judges, and people of foreign nations.

General Hancock has been assigned by the President to the duty of directing the ceremonies.

THE DEAD.

Ulysses Simpson Grant was born at Point Pleasant, Clermont county, Ohio, April 27, A. D. 1822, and he died at Mt. McGregor, N. Y., July 23, 1885, at the age of 63 years, 2 months and 26 days. His father was a tanner, but Ulysses did not like to work at that business; he preferred farming, trading on the river, or to "get an education." He was sent to West Point and graduated there as number twenty-one in a class of thirty-nine. He was promoted twice for gallantry in the Mexican war, and returned as Captain. In 1854, he resigned his commission and cultivated his farm near St. Louis. In 1859, he joined his father in the tanning and leather business at Galena, Ill. When President Lincoln called for soldiers, Captain Grant organized a company of volunteers and took them to Springfield, and asked for something to do. He refused to accept the captaincy of his company and the colonelcy of several regiments. He was appointed Colonel of the 21st Regiment Illinois Infantry. In August he was appointed Brigadier General, and the next February he was made a Major General and received the thanks of Congress for his conduct at Fort Donelson. He was afterwards appointed Lieutenant General, appointed under a special act of Congress, and placed in command of all the armies. He received the surrender of the commander of the Confederate armies, April 9, 1865. He was made Secretary of War *ad interim* (during, or for interval) under President Johnson, during the period of suspension of Mr. Stanton. He was elected President of the United States at the general election in 1868, and again in 1872. In 1878 he, with his wife, began a journey around the earth. He received special honors at every place he visited, and was received on his return at San Francisco, with public demonstrations never before equalled anywhere. It may be said truly that he received more attention, more respect, more applause than any other man named in history. His last recorded thoughts were, (1) that his wife's body should be buried with his when it comes her time to die; (2) thankfulness that sectional feeling among the people has passed away; (3) thanks for the good will of his fellow citizens; and (4) praise of his country.

It is said that web worms first get to work on corn a little below the surface of the ground, where they may be caught and destroyed by hand.

The first annual Poultry and Pet Stock Show of the Missouri Valley Poultry Association will be held at Kansas City from December 29, 1885, to January 1, 1886, inclusive. Edward Haren, Corresponding Secretary, Kansas City, Mo.

An exchange calls attention to the fact the first apple orchard in Kansas was set out near Osage Mission (on what is known as the Lakeview farm and owned by James O'Brien), by a Presbyterian missionary society in 1845. The Osage Indians a few years afterwards burned the buildings and cut down the orchard. The Catholic fathers at the mission planted a peach and apple orchard in 1847, and some of the apple trees are yet standing and bearing.

SPECIAL NOTICE!

The KANSAS FARMER on Trial Until January 1, 1886, for ONLY 50 CENTS, or a Club of Twelve Copies for \$5.00.

Tell your neighbors, and let everybody know, that for the small sum named above they can have this representative, 64-column weekly farmer's journal for the time above mentioned. No farmer, fruit-grower or stock-raiser in Kansas should be without the KANSAS FARMER. It deserves a permanent place in the home of every family.

Please favor us by sending us the names and addresses of persons who do not read the FARMER, and we will be glad to mail them sample copies free.

Any one reading this notice may consider it a direct invitation from the publishers to send us one or more trial subscriptions at 50 cents each, or twelve at one time for \$5.00. Remit by draft or P. O. money order.

Address all communications to
KANSAS FARMER CO.,
TOPEKA, KANSAS.

Horticulture in Sumner.

The Sumner County Horticultural Society had a very interesting meeting—the 17th. Pear culture received more attention than any other one subject. Mr. Williams, who has given the subject much attention, gave this list as good in the order of their naming: Bartlett, Duchess, Clapp's Favorite, Flemish Beauty, Louise bon de Jersey, Vicar of Wakefield and Howell—add for family use Osbond's Summer and Seckel.

The President, Mr. Seavey, gave his experience with blackberries. He stated that he set his patch in rows five feet apart and the plants five feet apart in the row and cultivated thoroughly. Did not until the second season allow more than three stalks or canes to the hill—pinched laterals at 6 or 8 inches. In the spring mulched heavily and pulled up all sprouts outside of the rows. Keeping the bushes low and stocky prevents injury by the wind or by rabbits. Has gathered about 200 quarts from his patch of about one-sixth of an acre and expects to get from 200 to 300 more. Any one can easily raise all the more. Any one can easily raise all the blackberries they want. Prefers the Kitatinny to the Snyder or any other variety. It is good enough. In reply to an inquiry of the Secretary, he said he had been successful with berries. Had picked 350 quarts of strawberries this season from about one-eighth of an acre; 150 quarts of raspberries from a little less ground and from two rows of blackberries ninety feet long would get 100 quarts or more. Mrs. Jessup inquired what varieties of raspberries he cultivated, and he replied: Thornless, McCormick and Gregg. The last two named are very productive. They all need pinching in as Mr. Seavey does his raspberries. In answer to an inquiry as to red raspberries, he said he was not yet prepared to recommend any variety—had hopes of some now on trial.

Mr. John Henderson inquired how late in the season a young orchard should be cultivated. President Seavey replied as long as the woods grow. The Secretary said it depended on the season. As wet a one as this until late in July, but the late tending should be shallow plowing or cultivating.

Vice President Camp agreed to this, but said keep the weeds out if there is danger of drought.

Mr. Andreas inquired as to the best grape for this section, and the response

by several was the Concord. The Secretary said several members of the society had lately procured three or four earlier and as many later varieties, and in two years could, perhaps, give an interesting answer.

Assessment and Taxation.

A certain amount of taxation is to be raised every year, and it must come off the people in proportion to the amount of the property they own. The theory in Kansas is, and the practice ought to be, that property, for purposes of taxation, should be assessed at its actual value. But it is not so assessed, as we all know very well. The aggregate wealth of the State, as appears from the report of the State Board of Equalization, last week, is \$247,271,645.40. As compared with other years, that is a great showing, over \$11,000,000 increase the last year, yet that amount does not show more than 25 or 30 per cent. of the real value of the property in the State.

Property for taxation is assessed much below its real value. We have been looking at the figures published in some of our exchanges. They are taken direct from the assessor's returns, showing the values put on different classes and different items of property. In one instance, 4 horses, 7 head of cattle and 3 hogs are put down at \$35 for the lot; another case, 4 horses, 7 cattle, 35 hogs are valued at \$65, the lot; another case, 4 horses, 8 cattle, 5 hogs, are put at \$25, the lot; wagons are valued at \$2 to \$10 each; pleasure carriages rate at \$2, \$5, and \$10; gold watches \$10 a piece; silver watches \$5 a piece, organs \$15; mules \$5 and less per head; horses \$10 to \$25; cattle \$7 to \$12, and so on. And besides this undervaluation, a great deal of property escapes taxation altogether, not including that which is exempt under the constitution. If all the property in the State were taxed, and if the assessment were made according to real, and not according to fictitious values, the State's showing would be much better, and the people would in no way be injured. If a man has to pay ten dollars in taxes, that will be all, whether his property be assessed high or low, provided, of course, that all the people's property is assessed at the same rate of valuation.

Every head of a family in Kansas is entitled to an exemption from taxation of \$200 worth of personal property. In practice that \$200 often covers value equal to five times as much. But say the general average of assessed values is 40 per cent. of the real value of the property; that would justify covering \$500 worth of actual value with the \$200 exemption; then suppose that of the two hundred thousand families in the State one-half of them are in possession of that much to exempt, the aggregate thus exempt, and that therefore does not appear in the reported figures, amounts to \$50,000,000. Then, take the \$247,000,000 regarding it as 40 per cent. of the real value of the property assessed, it is seen that the proper figures would be \$617,500,000, to which add \$50,000,000 exempt, and we have in round numbers \$667,000,000, which would look a good deal on paper, to say the least.

We agree with one of our city contemporaries, the *Capital*, that besides these and a great many other irregularities, assessment costs too much. In an average county of a dozen townships the cost of assessing the people's property is from \$1,500 to \$2,000 a year. By reference to other methods in vogue in some other States it will be seen that we are paying too much; and if we compare the charges of individual assessors in the townships of the State with the charges of enumerators that took

the census for the United States in 1880, we will see that the work can be well done for about one-half of what is now being paid, and still good wages be earned. There is no necessity for a man running about over the township or waiting in towns for country people to come in; assessments can be done in a cheaper way; but people generally, we suppose, would rather have the assessor come to them and not that they should go to the assessor, in which case, as stated above, they are paying about twice as much as they ought to do.

Distribution of Seeds.

We are in receipt of a printed circular purporting to give extracts from minutes of a meeting of the American Seed Trade Association held recently at Rochester, N. Y. The particular subject referred to in the extracts is the distribution of seeds by the Department of Agriculture, and the object of the discussion was to evolve some plan, as the president said, whereby the Government could be stopped from sending out free seeds. The complaint is based on the fact of competition on the part of the Government.

We are not in sympathy with that idea at all. It is true, we believe, that the department is often imposed upon by unscrupulous dealers, and in that way, inferior seeds are distributed; but the general object of the Government in the seed business is a good one. Agriculture is the first and greatest interest; it needs the support and attention of the Government by way of aiding farmers in getting possession of new and rare seeds. If left to seedsmen alone the process of distribution would be very slow, for nine of every ten persons that receive seeds from the department would never order the same kinds from a person who makes a business of raising and selling seeds.

The best way to handle this subject is to call the attention of congressmen and of officers in charge of the Department of Agriculture to the subject and discuss with them the duties of government agencies in promoting the interests of agriculture.

Niagara Park.

After several years effort, the legislature of New York succeeded in purchasing all the land and water about Niagara Falls on the American side, from the middle of the river above and below the cataract, and a hundred feet beyond the bank line, including all the islands and other points from which a good view of the great wonder can be had. The ceremonies of dedication of the place as a park a few days ago were imposing. Many people were present; addresses were delivered appropriate to the occasion; prayers were offered and national airs sung and played. At last, then Niagara is to be kept for the people's inheritance. And it is a timely move, something that ought to have been done long ago. When one thinks of the great cataract at Niagara, its grandeur, its fame, and its history, the *Capital* says, it seems strange that it was not taken long ago by the Governments interested and set apart for a world's park forever. It is one of the things that ought to be saved for men, and women, and children to look at and study; it should belong to the world, kept and cared for by local governments as trustees. If, within a circle of five miles radius from the falls, all had been left as it was two hundred years ago, the place would have a still grander look than it has now. Nature, in her own wierd dress is more enchanting than combinations of art can be; and could we now look upon that wonderful leap of waters surmounted by the old forests and rocks as they were when

white men first saw it, there would be greater naturalness about the place. It is well that even at this late day steps are taken to preserve what is left.

Mr. W. J. Colvin, writes: "The corn crop of Pawnee county is as good as we have ever seen in any State. We had a fine rain last night which will insure a good yield on all early corn. Cattle, hogs and sheep are healthy and doing well. Everybody busy and happy."

THE MARKETS.

By Telegraph, July 27, 1885.

STOCK MARKETS.

St. Louis.

The Midland Journal reports:

CATTLE—Receipts 2,900, shipments 1,100. Good corn-fed native shipping steers firm and wanted at 4 80a 00, native grassers 4 25a 00, good native butchering steers 4 50a 00, mixed butchering stock 2 75a 00.

HOGS—Receipts 2,600, shipments 2,800. Market firm and active. Yorkers 4 65a 70, packing 4 25a 40, butchers' 4 65a 70.

Chicago.

The Drovers' Journal reports:

CATTLE—Receipts 8,500, shipments 2,000. Market dull and 10a 20c lower. Shipping steers 4 50a 50, stockers and feeders 4 50a 25, through Texas steers 10a 15c lower at 2 75a 00.

HOGS—Receipts 18,000, shipments 4,000. Market firm and 5c higher. Rough and mixed 4 00a 45, packing and shipping 4 30a 50, light weights 4 30a 45, skips 3 00a 25.

SHEEP—Receipts 1,600, shipments 200. Market steady and firm. Natives 2 00a 25, Texas 1 75a 37 1/2.

Kansas City.

CATTLE—Receipts 2,205, shipments 890. Exporters 5 25a 45, good to choice shipping 4 90a 50, common to medium 4 50a 80, stockers and feeders 3 90a 40, cows 2 00a 80.

HOGS—Receipts 8,963, shipments 3,798. Assorted to light 4 35a 87 1/2, heavy and mixed 4 20a 80.

SHEEP—Receipts 1,256. There was only a poor quality on sale; demand good for fat. Fair to good muttons 2 25a 85, common to medium 1 50a 2 10.

PRODUCE MARKETS.

St. Louis.

WHEAT—Lower and moderately active. The market opened lower, but recovered under good demand, later became irregular, and finally closed 1/4c below Saturday for August and September and 1/2c higher for October. No. 2 red, cash 96a 90c, August 97a 97c, No. 3 red, cash 87 1/2a 89c.

CORN—Lower, under a pressure to sell, closing 1 1/2c lower than Saturday for July. No. 2 mixed, cash 41 1/2a 42c, July 42c, August and September 42 1/2a 43c.

OATS—No. 2 mixed, cash 24 1/2a 25 1/2c.

RYE—Firm at 54c.

Chicago.

The wheat market to-day was heavy and lower under discouraging advices from abroad and better crop reports at home last week.

WHEAT—Ruled weaker. Foreign advices were not encouraging, while the weather was reported excellent for growing crops. The market receded steadily 1/4c and closed 1 1/2c under Saturday. Sales ranged: July 86 1/2a 87 1/2c, August 87 1/2a 88 1/2c, September 88 1/2a 89 1/2c, October 91 1/2a 92 1/2c, No. 2 spring 86 1/2c, No. 3 spring 79 1/2c, No. 2 red 90a 92c, No. 3 red 86 1/2c.

CORN—There was a fair speculative trade with a somewhat settled feeling. Cash 46c, July 46a 46 1/2c.

OATS—No. 2 cash, 32 1/2c.

RYE—Market firm. No. 2 at 58 1/2c.

BARLEY—Nominal.

FLAXSEED—Steady; No. 1, 1 24.

Kansas City.

WHEAT—Receipts 2,354 bus, shipments 2,506 bus, in store 702,149 bus. Market is lower. No. 2 red cash 76 1/2c asked, August 76 1/2a 77 1/2c, September 79 1/2a 79 3/4c, No. 2 soft cash 88c bid.

CORN—Receipts 12,858 bus, shipments 2,745 bus, in store 177,697 bus. Market quiet. No. 2 cash 85 1/2c asked.

OATS—No. 2 cash, 24c asked.

RYE—No bids nor offerings.

BUTTER—Receipts generally continue in poor condition on account of the heat. The same butter if solid would bring 2a 30c per lb. more. Store-packed is nearly all spoiled. Creameries and dairies, owing to the better care taken in marketing arrive in relatively better condition than store-packed. All table goods firm and in some cases reported as selling above quotations.

We quote packed:
Creamery, choice..... 17 a 18
Creamery, fair to good..... 13 a 14
Creamery, held stock..... a 9
Choice farm dairy..... a 16
Fair to good dairy..... 9 a 11
Store-packed, grocers' selections..... 8 a 9 1/2
EGGS—Market stronger, owing to reduced supplies. We quote strictly fresh receipts, well candled 8c.

CHEESE—We quote Kansas and Missouri consignments part skims at 4a 50c per lb; Michigan full cream flats, oversalted 6a 7c.

POTATOES—Home grown from wagons 35a 40c per bus.

SWEET POTATOES—We quote home grown at 3 50c per bus.

APPLES—We quote Southern yellow at 1 50a 2 00 per bbl, red 2 25a 2 50; Missouri and Kansas yellow 2 00a 2 50, choice red 2 50a 3 00; fancy large stand fruit 3 00 do; home grown from wagons 1 00 a 1 50 per bus.

PEACHES—Arrivals larger and market weak. Much green stock arriving (too green to ripen) that dealers can hardly put a price on. Choice Crawford selling at 90a 00 1/2 busbox; common varieties 35a 50c do; fancy Chinese clings 1 00a 1 10 do; California 2 00a 2 50 1/2 20 lb. box.

SORGHUM—We quote consignments in car lots: old dark 10 to 20c per gal; new good 20 to 25c; do, fancy syrups 25 to 30c.

Horticulture.

Pear and Apple Tree Blight.

In the last report of the Illinois State Board of Agriculture, Prof. T. H. Burrill has a good article on the subject named above. He says:

This disease shows itself to common observers most conspicuously during the latter half of June, and the early part of July. Though similar appearances are presented at other times during the summer, and though in occasional instances it seems worse at some other than the time mentioned, the fact is usually as stated. We shall undoubtedly hear a good deal of pear blight this season. Trees suffered severely from the vicissitudes of the last winter, and blight or no blight, many of them have perished, or will perish on this account. To many everything that happens to a pear or apple tree is blight. The name thus does service for numerous injuries and diseases. But the other day an entomologist of good standing in the Eastern States, thinks he discovered the cause of pear blight in an insect that bores into the twig! Now no one doubts but that tree twigs may be killed by such a depredator, but that the thing which horticulturists call fire-blight is so produced, is like attributing potato rot to the evil influences of the moon, or rheumatism to witchery.

What we need first is to clearly distinguish this so-called fire-blight or *anthrac*, as it has been called, from other diseases. When one has familiarized himself with its appearance, its special characteristics, the diagnosis is easily made, but it is not so easy to describe in words the peculiarities of the disease. Still it ought not to be difficult to so portray the difference in the appearance of apple and pear trees which have been injured solely by freezing, and those affected with what we specially call blight. Let us try.

1st. Winter injuries usually show the effects upon the whole tree, or throughout large parts of the top. Blight is much more likely to appear here and there leaving the other parts typically healthy.

2nd. The trees severely hurt by frost, often put forth leaves in the spring so that a very superficial observer might pass them for a time as healthy, but if he looks closer he will easily enough see that the foliage is very light upon the tree, and then by further looking, he will find this latter comes both from there being to few leaves, and many of those produced are not full size. Very commonly these half-grown leaves soon wither away, and the others assume a yellowish tint. When, however, the injury is confined to the trunk the leaves come out full and may be for some time to all appearances quite healthy, then perhaps not until July turn yellow and sickly. On examination the bark of the trunk will be found separated from the wood in areas of greater or less extent the twigs are shrunken and hard.

On the other hand the leaves of blighting trees are full size, and until finally affected are green and luxuriant. Then they more or less suddenly turn brownish black, at first watery, then dry and hard. Upon close examination of the leaf surfaces, a peculiar shiny coating, like varnish, may be often found, and this is a most excellent mark. On blighted trees the leaves never become a pale, sickly yellow; at least this is not the case when the disease does not date back to the previous season. The bark never separates readily from the wood, the twigs do not seem dry and shrunken so long as the leaves on them retain any appearance of life.

3rd. In appearances, so far as the leaves are concerned, the frost injuries are indicated by slow and gradual changes; the blight-killed leaves rapidly pass from what seems perfect health to death.

It must be understood that this sudden change in the leaves does not necessarily indicate a very rapid march of the disease through the tissues of the tree, only that when the leaves are themselves directly invaded by the destroying agents, each leaf quickly dies. There are other characteristic differences in these tree maladies, but the foregoing are probably sufficient.

Now, in the case of blight, what is to be done? Surely there is no time to spend over hypothetical remedies, such as burying old horseshoes in the ground, root pruning, external application of sulphur and lime, etc. Surgery, not

medecine, must be appealed to. As early as possible, remove the affected parts. Examine carefully the bark, and cut below any indications in this, of the disease. Sometimes one can only tell how far down the disease has gone by shaving off the outer bark. If, in this way the living, or what ought to be the living bark, shows brownish patches or streaks, cut lower until healthy tissue is reached, and sever the whole part. See that the knife, saw, or other tool, carries nothing from the diseased part to the cut finally made. It is best to carry an extra set of tools, which are to be used only in the healthy wood and bark. It is easy to induce the disease in healthy trees by inoculation from diseased parts, and this must be kept in mind when pruning off the blighted parts. Cover the fresh wounds with common lead and oil paint.

Horticultural Notes.

Trees whose roots seek water should never be allowed near tile drains. The roots entering the pipes choke them. The willow has been known to travel 100 feet to enter a well.

A remedy for the maggot which infests cabbage is to make a hole with a dibble close to the stalk, insert ten drops of bisulphide of carbon and quickly close the hole again, says a contemporary.

A liberal dressing of wood-ashes will renovate an unthrifty orchard most wonderfully, says the *Rural World*. Bone dust and crushed oyster shells can also be applied and beneficial results will soon become apparent.

To dig up a fruit tree, by cutting a circle with a spade half a foot in diameter, says an exchange, cuts off more than nine-tenths of the roots; and to spade a little circle about a young tree not one-quarter as far as the roots extend and call it cultivation, is like *Falstaff's* men claiming spurs and shirt-collars for a complete suit.

A Pennsylvania farmer last year sold over \$6,000 worth of potatoes from twelve acres. He fertilized with a compost of hard-wood ashes and oyster shell lime, plowed deep, planted medium sized, well formed, uncut potatoes, three feet apart, gave level cultivation and cultivated often. From one hill he took thirty-one fine large tubers.

Whenever practical ship fruit at night and give it the benefit of the cool atmosphere while in transit, says the *Philadelphia Record*. Saturday is always the poorest day in the week to sell to advantage. Friday is the best day in the week. Avoid as far as possible getting goods into market on Sunday morning. Monday morning the market is usually bare, and Sunday night shipments as a rule strike a good market. When shipping by freight always notify the consignee by sending receipt or otherwise.

A Natural Curiosity.

The Council Grove *Republican* says:

N. M. Ellis, of Elm Creek Township, brought us the most singular bunch of apples. Three appear in a cluster like grapes on a single twig.

One a red streaked apple, medium size, dead ripe. The other two, a pale green, smaller in size, winter apples, which he found last season ripened late in the fall.

He has five trees which bear apples thus grouped together. Usually two green and one red apple, sometimes three green and two red apples, and in one case only he found two red and one green apple. The red apples are now all dead ripe, while the green will not mature before fall. He has no name for the apples. The trees were purchased at the old Meacham nursery years ago. We shall send the branch and apples left with us to Prof. Shelton of the Stage Agricultural College, and see if he can throw any light upon the subject or tell us the kinds of apples growing on the same twig.

Read This.

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

IRON CLAD STORE CO.,
Wamego, Kansas.

In the Dairy.

Butter and Cheese Making.

In a paper on "Butter and Cheese Making," read before the Illinois State Dairymen's Association, Mr. J. H. Broomell, of Aurora, a successful factory man, gave the following

GENERAL RULES FOR DAIRYING.

- 1st. Decide on your line of dairying—butter or cheese, or both.
- 2d. Select your cows according to the line of dairying chosen.
- 3d. Test each separately, and reject all not suited to your line of dairying or that fail in quality or quantity of milk.
- 4th. Feed liberally; have pure water always accessible, and keep a mixture of equal parts of salt, ashes, and sulphur, within reach of the cows.
- 5th. Be sure your stables are well ventilated; remove all droppings promptly; freely use absorbents and deodorizers, such as sawdust, dry earth, or cut straw, not omitting the liberal use of plaster.
- 6th. Be scrupulously clean in every particular, both in keeping the cows and in milking and handling the milk.
7. By all means avoid exposure of the milk to the hot sun and to foul air.
8. Air and cool your milk as fast as possible down to at least 70 deg., if you carry it any distance to a factory or creamery. Do the same if you make it into cheese at home, though you need not go below 80 degrees if made up immediately.
9. When milk is kept over night to be carried to a factory, the temperature should be reduced below 60 deg.

BUTTER-MAKING.

- 10th. If milk is set at home for cream, the sooner it can be set after milking, and the higher the temperature the better, as cream rises best and almost wholly while the temperature is falling.
- 11th. Never reduce the temperature below 40 deg., as a lower temperature has a tendency to chill the product and injure its keeping quality; and it also expands the water, rendering its relatively greater density less instead of increasing it. To go 5 deg. below 40 deg. would have practically the same effect as raising the temperature 5 deg. and to that extent retards the raising of the cream.
- 12th. Skim as soon as the cream is all up, or so much of it as you wish from the milk.
- 13th. Keep your cream, if not churned immediately, at a temperature of 64 deg. or below, but not below 40 deg.
- 14th. Churn at such temperature between 55 deg. and 64 deg., as experience shows you is best. Conditions vary the temperature for churning.
- 15th. Stop churning when the butter is in granules about the size of wheat kernels.
- 16th. Draw off the buttermilk and wash in clean water before gathering the butter, until the water runs clear. If one washing is in brine, it is all the better, as brine coagulates the cheesy matter, which dissolves and is then washed out.
- 17th. Salt to suit customers, using none but refined salt made for dairy purposes. The best American salt is as good as any.
18. Put up in such packages as are demanded by your market.

CHEESE-MAKING.

- 19th. Milk for cheese-making—whether whole, skimmed, or partly skimmed—should be perfectly sweet.
- 20th. Set your milk at a temperature of 84 deg. or above. Rennet is most active at 98 deg., or blood-heat, above which the temperature should not be much raised. A temperature of 140 deg. will kill the rennet.
- 21st. Add rennet enough to make a firm curd in thirty minutes.
- 22nd. Cut the curd as soon as it can be done without waste, and cut fine and finish at once.
- 23rd. Keep the temperature as evenly at 98 deg. as possible, until the curd is fit to dip and salt. Cheddar or cook in the whey as preferred.
- 24th. Practice alone can teach when to dip, something depending on whether a soft or firm cheese is desired.
- 25th. The cheesing process depends a good deal on the relative percentage of water to caseine. If there is too little water the cheese will cure slowly and be dry, crumbly, and have little flavour. If there is too much water, destructive fermentation will set in, and the cheese

rapidly decay, if it does not sour and break.

26th. An even temperature is indispensable for curing—as low as 65 to 70 deg. for whole-milk cheese, and as high as 75 to 80 deg. for skimmed—according to the degree of richness.

CLEANLINESS.

27th. It is not possible to be too particular about cleanliness. But cleanliness, Gov. Seymour says, is a comparative term, and what is clean to one may be dirty to another.

28th. Carefully brush the cow's udder—if it is lefouled wash it—before milking.

29th. Keep all hairs and loose dirt out of the milk that no milk may be dissolved in it. No strainer can take out what is dissolved.

30th. Use a fine soft-cloth strainer besides a wire strainer.

31. Keep your milk away from all foul or disagreeable odours, as the fats rapidly absorb all odours and impart them to the products.

32nd. Wash in tepid water every dish, implement, or utensil that comes in contact with milk or its products, then scald in boiling water or steam; after which rinse in cold water and expose them to the pure air (and sunshine if possible) until needed for use.

English Creamery.

Management of creameries in England differs in some respects from ours. The following description is taken from *Bell's Messenger*:

The creamery is located in the centre of a district where a great number of cows are kept, within a few hundred yards of Dunragit station, on the Portpatrick Railway. The premises occupied were built for a farina mill, but have lain unoccupied for more than twenty years, and were consequently useless. We believe the property has been bought from Mr. Cunningham, of Dunragit, on whose estate the houses are built. The construction of the buildings has been found very suitable for the purpose to which they have now been put, there being four or five different levels; these allow the milk to pass from one process to another without being once lifted, thus reducing the labor very much.

The upper flat is used as a receiving room for the milk; at the outside of the door of this room a porch has been erected, supported on wooden pillars, underneath which the carts which bring the milk stand while being unloaded. In this porch above the cart, on rails, is a patent hoist for lifting the cans, which, when drawn up, are run along and emptied into one of two cans, which sit on a weighing machine at the door of the room, the milk being taken by weight of 10½ pounds to each gallon. One of those cans is used for new or warm milk, and the other for cold; a pipe runs from each of the cans into large square vats on a lower level. The cans used for conveying the milk to the creamery are capable of containing from thirty to forty gallons each; they are made of block tin, of the same width from top to bottom, the lids being made to fit inside and press down close to the milk, so that the solidity of the milk is thus ensured. The lids are ventilated so that any gaseous matter may escape.

The vats used for conveying the milk are made of tin plate and "jacketed," steam or cold water being available for turning on to raise or reduce the temperature as required; the four vats in this department are capable of containing 2,560 gallons. The milk, though bound to be searched before reaching the creamery, all passes through a searcher attached to each vat, so that all solid particles may be thoroughly removed. Before reaching the separators the cold milk is raised to 70 degrees, the new or warm milk being about 80 degrees. The milk is run by means of tin pipes from those vats to the separators, of which there are three at work, each being capable of separating eighty gallons per hour. The separators in use are by Burmeister and Wain, and are driven at 1,800 revolutions per minute; the De Laval separator, we believe, will only separate fifty gallons per hour, and requires to be driven at 6,000 revolutions per minute, besides taking less butter; at least, a greater percentage of butter is made here than by Mr. Carrick at Low Row, Carlisle, and he says that Wightownshire milk is poor. These separators are of a circular shape, about eighteen inches high, and about two feet in diameter, with a second side within the

outside, and a centre piece, of a cone shape downwards, within it; the rapid centrifugal motion imparted to the machine causes the milk, which enters at the bottom, to separate at once, the skim milk flying to the outer side, the cream coming up the inner side, owing to their different specific gravities. When so separated, the skim milk and cream are caught in two separate tubes, and conducted on to two refrigerators, these reducing the temperature to about fifty degrees.

The refrigerator is a combination of galvanized pipes connected together and running horizontally, so that when at work the surface has a fluted appearance. Through those pipes a supply of cold spring water is continually flowing, entering at the lower corner, and carried by gravitation backwards and forwards through them, finding its way out at the upper corner. In this way the hot milk, which is flowing on at the top, spreads over the cooled surface, meeting the colder water in its progress downwards, and is collected in a trough at the bottom, connected by a pipe to some of the numerous vats. Two of the separators are set on a raised platform, so that the milk when issuing from them is deposited on the top of the refrigerators; the other is on the floor of the room, the cream and skim milk requiring to be raised in a tube to the requisite level. Mr. M'Cracken informed us that he did not consider this such a good plan as the others, as the cream had to be set into the trough, and the tap turned on, thus reducing the labor in this department to a minimum. The manure from the pigs is sold to Mr. Broadfoot, Drockduil, on whose farm the piggeries are built.

The company during the spring months were using the milk from 2,500 cows, and were making during the time 10½ tons of cheese per week, besides a corresponding large quantity of butter. During summer the milk of about 1,500 cows was used, about seven tons of cheese besides butter being then made per week. From April 1st to October 1st, 576,000 gallons of milk were manufactured. During the twelve months the large sum of £25,000 has been paid for milk; the average price paid per gallon would be about 6½d.

Are You Going South?

If so, it is of great importance to you to be fully informed as to the cheapest, most direct and most pleasant route. You will wish to purchase your ticket via the route that will subject you to no delays and by which through trains are run. Before you start you should provide yourself with a map and time table of the Kansas City, Fort Scott & Gulf Railroad (Memphis Short Route South). The only direct route from and via Kansas City to all points in Eastern and Southern Kansas, Southwest Missouri and Texas. Practically the only route from the West to all Southern cities. Entire trains with Pullman Palace Sleeping Cars and free Reclining Chair Cars, Kansas City to Memphis; through Sleeping Car Kansas City to New Orleans. This is the direct route, and many miles the shortest line to Little Rock, Hot Springs, Eureka Springs, Fort Smith, Van Buren, Fayetteville and all points in Arkansas. Send for a large map. Send for a copy of the "Missouri and Kansas Farmer," an eight-page paper, containing full and reliable information in relation to the great States of Missouri and Kansas. Issued monthly and mailed free.

J. E. LOCKWOOD,
Address, G. P. & T. A., Kansas City.

A man 68 years old was sentenced to four years imprisonment in the penitentiary, at Philadelphia, last week, for forging certificates of stock in a transportation company. He pleaded guilty, and his attorney, in asking for mercy, said that a large portion of the stock was issued by the defendant twelve or thirteen years ago, and it was a fact well known that a large amount of the money which the defendant had received for the over-issue was paid in dividends at 12 per cent. per annum, to the very persons who got the stock, so that he profited very little himself in the transaction. The trouble was that he began in a small way and kept it up in order to prevent his first fraud from being discovered.

After apple trees begin to bear, the ground ought to be seeded in grass to keep down the weeds. The grass furnishes good sheep and hog pasture. Every second year at least the orchard will bear a dressing of good, well-rotted manure.

Early lambs are the most profitable. A cross of the Cotswold and Southdown lately produced a lamb that dressed twenty-four pounds at two months old, which sold for twenty-two cents a pound, a total sum of \$5.28.

The Poultry Yard.

About a Hen-House.

A Massachusetts farmer recently described a poultry house as follows, in the New England Homestead:

I am a farmer and have some tact at building farm buildings, with reference mainly to comfort, convenience, economy and durability. I offer a cheap and simple plan of a building suited to the care of fowls, which is considered as nearly perfect as any plan that has come to the notice of the poultry-breeders of this vicinity, several of whom have built poultry houses during the past year.

For fifty to one hundred hens, a building 30 feet long and 13 feet wide, is the size I would recommend. Timber 4x6 inches, halved and nailed at the joints, should be laid on a foundation wall of stone. The wall may be six inches high, or more if necessary to overcome the unevenness of the ground and to afford drainage. Spaces should be filled with small stones and the foundation banked with earth to exclude the cold.

Upon these sills, set studs 2x4 inches and 6½ feet long, mortised in at the bottom and cut off square at the top, standing two feet apart, or a little more if the windows are of a large size. Board on one side and the ends and roof closely with common coarse lumber. To make the frame stiff and strong, nail strips six inches wide crosswise of the building, and even with the top of the studs, provided a light flooring is desired to keep the room very warm; if no floor is wanted, nail only two strips across, and these to the sides of the rafters above the plate and ten feet from each end of the building. These strips will be convenient and sufficient to nail upon for partitions. The one side, ends and roof, except a doorway, should be covered with thick paper (except two or three feet of the ridge), then clapboarded or shingled.

The other side, which should be the south if possible, should have three large or six narrow windows, and these will light and warm the whole building.

The inside arrangement should be: An alley on one side three feet wide, the entire length of the building, for convenience of watching, feeding and managing the fowls. The other part may be divided up so that there will be three rooms each 10 feet square. The partitions should be strips of lathing 1x1½ inches, except the one between the alley and living or business rooms; this partition should be tight and boarded horizontally as high up as the bottom of the perches. At the bottom of this partition, a trough 8 feet long should be placed, 4 or 5 inches deep, and 8 or 10 inches wide on the top, with a hinged cover opening on the alley side of the partition. On the other side of the trough, short slats nailed to the trough and standing upright, with sufficient space for the hens to feed and prevent them getting into the same, is regarded an improvement in the matter of feeding.

About 15 or 18 inches from the ground, and over the feeding trough, a platform 2 feet wide and 8 feet long, covering the space between the partition and doorway of each room, may be permanently placed. One-half the width and next to the alley should be partitioned into nests. A door, like the one over the feeding trough, may be opened into the alley, for convenience in collecting eggs and feeding the hens while setting.

Above the nests are the roosting places or perches with a dropping-board three feet wide. The perches can be arranged to suit the owner. I think a frame hinged on the side next the alley and inclined the other way, one perch a few inches above the front one, the best arrangement. It can be raised in front for convenience in cleaning out.

Doors for the ingress and egress of the fowls should be under the windows. The partitions of the yards outside should correspond with those inside, if parties of fowls are assigned to be kept separate and unmixed. Closets and coops can be arranged in any of the main rooms as suits the fancy of the keeper, for the convenience of setting hens or fighting roosters. I think soft food should be fed in troughs inside the rooms, so made that no hen can put her "foot in it." The trough under the partition is for dry feed, or soft, also, if preferable. The doors opening from the alley into each division should be light and made of the same material as the partitions.

I think this building will cost about



BETHANY COLLEGE

Under care of the Protestant Episcopal Church. For Girls and Young Ladies exclusively. Boarding and Day Pupils.

Twenty-six Officers and Teachers.

Faithful Maternal oversight for all intrusted to our care. All branches taught—Kindergarten, Primary, Intermediate Grammar, and Collegiate: French, German, the Classics, Instrumental and Vocal Music, Elocution, Drawing, Painting.

The Music Department employs eight teachers, and twenty pianos and three organs. In the Art Department the Studio is fully equipped with casts, models and copies.

Send for Catalogue to T. C. VAIL, Bursar, or Bishop P. VAIL, President, Topeka, Kansas.

FALL TERM—Begins September 9th, 1885.

\$75. Here is the estimate of a structure of this kind built here in 1884: 1,500 feet of lumber, \$15; 3,000 shingles, \$9; windows, \$10; 50 pounds nails, \$2; paper, \$2; making the building \$20; extra work paving the ground, \$5; clapboards, \$10; incidentals, \$1; total, \$74. This estimate is made with the understanding that every part of the work is to be thoroughly done.

It is said that a larger crop of apples may be grown when a hive of bees is stationed in the orchard. The pollen is rubbed from their bodies against the pistils of thousands of flowers, which thus become fertilized. Many of the strange freaks of hybridizing are due to the agency of bees.

If cats are kept for mousing only, they ought not to be pampered in the house. Their regular home should be mostly with other animals, about the barn.



HUMILIATING ERUPTIONS ITCHING AND BURNING TORTURES

AND EVERY SPECIES OF ITCHING, Scaly, Pimply, Inherited, Scrofulous, and Contagious Diseases of the Blood, Skin and Scalp, with Loss of Hair, from infancy to old age, are positively cured by the 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.

Sold everywhere. Price: CUTICURA, 50c; RESOLVENT, \$1; SOAP, 25c. Prepared by the POTTER DRUG AND CHEMICAL CO., BOSTON, MASS.

Send for "How to Cure Skin Diseases."



TOPEKA MEDICAL —AND— SURGICAL INSTITUTE.

PERMANENT AND RELIABLE.

DRS. MULVANE, MUNK & MULVANE,
Physicians and Surgeons in charge.

Treat successfully all curable diseases of the eye and ear. Also catarrh of the nose, throat and lungs, by new and sure methods.

All Manner of Chronic, Private and Surgical Diseases Successfully and Scientifically Treated.

Patients Treated at Home,
BY CORRESPONDENCE.

Send for circular and printed list of questions. Correspondence and consultation strictly confidential.

DRS. MULVANE, MUNK & MULVANE,
86 east Sixth street, Topeka, Kansas.

Self Cure Free
Nervous Debility, Lost Manhood, Weakness and Decay.
A favorite prescription of a noted specialist (now retired.) Druggists can fill it. Address
DR. WARD & CO., LOUISIANA, MO.

WASHBURN COLLEGE

TOPEKA, : : : KANSAS.



FALL TERM BEGINS SEPTEMBER 16, 1885.

OPEN TO BOTH SEXES.

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 McVICAR, President.

ILLINOIS FEMALE COLLEGE, Jacksonville, Ill.

Best Literary, Musical and Fine Art Facilities. Musical Faculty from Conservatory, Boston, with same methods. Pupils receive all new and valuable ideas and methods in solid and ornamental culture. Address
REV. W. F. SHORT D. D. Pres.

IVERS & POND PIANOS

UNEXCELLED IN

Beauty of Tone, Elegance of Finish,

THOROUGHNESS OF CONSTRUCTION.

The IVERS & POND PIANOS are the result of the most extended experience, greatest skill and ample capital. Eighty of these pianos have been purchased and are in daily use by the New England Conservatory of Music, the most important musical college in the world.

Sold by responsible Dealers everywhere throughout the United States.

Fully Warranted for Five Years.

Illustrated catalogue furnished free on application.

GENERAL WARE-ROOMS,
597 Washington St., Boston, Mass.

Fun Facts and Fiction.

SATURDAY EVENING
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.

A PRIZE Send six cents for postage, and receive free, a costly box of goods which will help you to more money right away than anything else in this world. All of either sex, succeed from first hour. The broad road to fortune opens before the workers, absolutely sure. At once address TRUE & CO., Augusta, Maine.

Cattle Leases Declared Unlawful.

The President of the United States, a few days ago, issued the following proclamation:

WHEREAS, Certain portions of the Cheyenne and Arapahoe reservation in the Indian Territory, occupied by persons other than Indians, who claim the right to keep and graze cattle thereon, by agreement made with the Indians for whose special possession and occupancy the said lands have been reserved by the Government of the United States, or under other pretexts and licenses; and, whereas all such agreements and licenses are deemed void and of no effect, and persons so occupying said lands with cattle are considered unlawfully upon the domain of the United States so reserved as aforesaid; and, whereas, the claims of such persons under the said leases and licenses and their unauthorized presence upon such reservation caused complaint and discontent on the part of the Indians located thereon and likely to cause outbreaks and disturbances, now, therefore, I, Grover Cleveland, President of the United States, do hereby order and direct that all persons other than Indians, who are now upon any part of the reservation, do within forty days from date of this proclamation depart and entirely remove therefrom with their cattle, horses and other property.

These leases were made, not by authority of the Government, but with the knowledge of the interior department. The Indians were first consulted and their consent obtained, and the Secretary of the Interior was asked to approve the leases. This was refused. The only color of sanction given was to the effect, that so long as the Indians did not object, the department would simply not interfere, and, as against mere trespassers, would protect the men who are paying Indians for the use of lands. Powderface, chief of the Arapahoes, thinks the leases are good things; for, he says, the Indians receive pay promptly from the leases, and he thinks the Indians will make more money in that way than they would to let the lands lie idle. He charges the dissatisfaction upon a few restless Cheyennes, and he is probably correct.

Be this as it may, the President has determined to set aside the leases and remove the cattlemen. There is nothing to do but submit, and so far as our information extends, there is no disposition to resist. But the time allowed is unreasonably short, as it seems to us. Fifty thousand cattle cannot be handled like a flock of a hundred sheep. It is now the warmest part of the year, just when cattle ought to be quiet as possible, and not driven faster than they would move in ordinary grazing—a few miles a day only. It is dangerous such weather as this to drive cattle faster than they would go of their accord. They need to be kept free from excitement and extra exertion. And this will be true during all of the forty days and for thirty days longer in the Cheyenne and Arapahoe reservations. The cattle ought to remain there until the first of October at the earliest, and then they should be driven slowly. It would be better to put the time November rather than at any time before that.

Besides the danger to the cattle in an early and forced movement, there would necessarily be a good deal of difficulty in finding unobstructed range anywhere else for so many cattle. All lands near Indian Territory are occupied by owners or lessees of lands, and it will probably require a long drive to reach pasture that is unclaimed or that can be leased at rates that will be remunerative to the owners of the cattle. Under the law passed at the last session of Congress no person is permitted to occupy the public lands except as a settler on a tract not exceeding one hundred and sixty acres. These particular cattle must therefore be taken to unsettled public lands and permitted to roam

until they can be sold, or they must be sold at once, or they must be put on other leased lands. In any case there will be great inconvenience and loss if the time for the removal is not extended. The cattlemen themselves ask a year; that is unnecessarily long, because if the cattle are removed it will be done before the warm weather of next year comes. A reasonable time, as it appears to us, would be on or before the first day of April, 1886.

It will be said by some, perhaps, that these men are trespassers, and therefore are not entitled to notice. But that is not true. They are not trespassers. They are not there in pursuance of law, but those lands were set apart for the use and occupation of Indians, and the Indians freely consented to the use of the lands for grazing cattle if they were paid for it. They have been paid, and a majority of them are satisfied now. The Government had notice, and did not object, simply suffering the act to be done, the Indians consenting. It is clear then that, as a lawyer puts it, the cattlemen are there under color of law; that is to say they asked permission openly and honorably, and offered pay for what they should receive; the Indians willingly consented and took the money, and the Government said in effect—"While we have no authority to grant you permission to occupy Indian lands or to confirm your leases from the Indians, so long as the Indians do not object, we will not interfere." Now it appears the Indians or some of them, are objecting, and it becomes necessary that the cattle be removed. Having gone there under such circumstances, it is unreasonable to hurry them off at the risk of great loss.

An effort is being made to induce the President to extend the time, and we wish it will succeed. Every reasonable construction of the law of the case warrants—yes, requires—that the cattle be allowed to remain at any rate until cooler weather comes.

Sorghum for Fodder and Feed.

An old correspondent of the KANSAS FARMER, W. J. Colvin, recently wrote a good letter to the *Rural World*. It is a Kansas letter, by a Kansas man, and it will be interesting to Kansas readers. Here it is:

By request of our friend Dr. Wilson I will try to give my experience in the mode of raising and curing sorghum for feed for the different kinds of stock fed by me the last four or five years.

In the first place I am convinced that it should not be sown or planted until June, and from the 15th to the last, and as late as the middle of July answers very well, if the fall should prove to be a late one with some showers. I raised a fine crop of feed last season, sown on fresh plowed ground, sown about the 10th of August. I sowed sorghum and millet, one-half bushel of each. The millet did not come up very well, but the sorghum made a fine growth. I cut it too early, however, in order to save the millet, which was getting ripe when the sorghum was in bloom. I cut with a mower and raked and piled in large piles after it had dried thoroughly. All my stock ate it well, but being cut before maturing there seemed to be no substance in it, and the stock fell off fast while eating it, and picked up rapidly when I quit it and went back to the coarser and riper kind that had full ripe seed and sweet sap.

I always try to get my sorghum in on fresh plowed ground and sow with my wheat drill, all the holes open, and put about half a bushel of good seed to the acre. If the seed is good I think that is enough. More seed makes a finer growth and more easily handled, but it is not as nutritious. The leaves have but little nutriment in them, and I value the seed as highly as the stalk.

I prefer to cut it before heavy frosts and leave it in the gavel until well wilted and dried, which takes at least a week or ten days. Then pile in large piles so as to cover the seed. I prefer laying the bunches crosswise on the

ground, and continue filling round until a large pile is made, with the tops upwards. It cures sufficient and remains bright and green, and prevents the loss of seed. This takes a good deal of hard work, but it pays better than to leave it lying in the gavel until wanted for feed. I cut all of mine last season before heavy frosts, and the most of it remained in the gavel until fed, and retained its sweetness until April, and I could not tell how much longer it would have kept had it not been burned by a prairie fire. What I hauled and stacked in January and February was as sweet as molasses the last time I examined it.

My hogs seem to enjoy the work of pulling it out of the stacks yet, and have pulled out and eaten and wasted a great deal the last month. I am satisfied it should be cut before frost, or rolled down with a heavy roller that it may retain its sweetness during the winter—late sowing makes a rapid growth, and, I should say, more sappy and tender, and it comes on after crops are out of the way, and the weather being cooler it can be piled without danger of heating. I have summered some over two summers, and my stock seemed to eat it as well the second winter as the first. If it is stacked so as to shed rain, it will not heat and sour. Sorghum is my favorite feed for cattle and horses as well as hogs and sheep. I think there is more stock killed for want of a plenty of it than because they had too much. I think other feed should be fed in connection with it, and especially in cold weather, and plenty of good well water is very essential while the stock is fed upon it. Most people do not give their stock water enough at any time, and they require more when eating sorghum than with any other feed.

New Wood Preservatives.

Immersing the lower ends of fence posts in hot coal tar will preserve the outside for years, but it very frequently happens that in using small trees from four to eight inches in diameter the heart wood is the first to decay. This often occurs with chestnut posts that are set before they are thoroughly seasoned. To prevent this decay at the center, as well as of all that part of the post placed below ground, by the use of wood preserving solutions, my friend and neighbor, J. J. Suckert, Ph. D., suggests a system which strikes me as being not only novel, but exceedingly valuable as well. It is to have a hole in the center of the post, from the bottom upward, to a point that shall be above the ground when the post is in position. Then bore another hole in the side of the post with a slight inclination downward, making an opening in the center hole, which will allow free passage. A wooden plug, two or three inches long, should be driven snugly into the hole at the bottom of the post. In order to prevent the escape of any liquid that may be used in the operation. Now when the posts are set in an upright position, a preservative solution may be introduced into the hole in the side and the center one filled with it, after which a cork or plug of some kind should be inserted in the side hole to prevent evaporation as well as to keep out dust and insects. The solution thus introduced will gradually be absorbed by the surrounding wood, until all parts along the entire length of the central cavity must become completely saturated. When the solutions used have been taken up by the surrounding wood, it will only be necessary to withdraw the cork, or plug, and apply more, if it is thought desirable. A common watering pot with a slender spout will be a handy vessel to use in distributing the solutions.

Petroleum, creosote, corrosive sublimate, or any other of the well known wood preservatives may be used in this way. Telegraph posts might be prepared in the same way, and if the central reservoir were kept filled with petroleum, they would last a hundred years or more. Where a large number of posts or poles are to be prepared, it would be cheaper to have the holes bored by steam or horse power than by hand. With very open and porous wood it is quite probable that a hole bored in the side of the post and above the ground, and deep enough to hold a half pint or more of creosote or some similar solution, would answer, but I think a central cavity reaching to the bottom would be best. Will the readers of the *American Agriculturist* who give the plan a trial report the result? —A. S. Fuller in *American Agriculturist*

Characteristics of Grasses.

In the report of 1884, issued by Prof. W. R. Lazenby, of the Ohio Experiment Station, occurs the following interesting classification of grasses, together with a brief and clear statement of the characteristics by which grasses may be clearly distinguished from other families of plants which are valueless: In point of economic value there is no family of plants that can for a moment compare with the grasses. Its members constitute the basis of all agricultural wealth. This being the case, every farmer should be thoroughly acquainted with the structural characteristics, habits of growth and properties of the valuable species belonging to this important family. Agricultural grasses may be classified as follows: 1. Cereal grasses, such as wheat, corn, oats, barley, rye and rice. 2. Pasture, meadow and lawn grasses, such as June grass, red top, timothy, orchard grass, rye grass, sweet scented vernal grass, etc. 3. Cane grass, sorghum, broom corn, sugar cane, etc. 4. Weedy grasses, couch or quack grass, chess, summer grass, wild rye, pigeon grass, etc. 5. Ornamental grasses, such as pampas grass, variegated maize, feather grass, etc. In ordinary language, the word grass is applied to the second division alone, but the other divisions are members of the same family, and have the same characteristics. Clover, alfalfa and the like are not members of the grass family, and should never be classed with them. There are only two orders of families of plants which can be mistaken for grasses. These are the sedges and rushes. True grasses can always be distinguished by the following characteristics. Every plant that has them is a grass, and no plants except true grasses possess them: 1. A hollow or pithy stem, which is circular and usually unbranched. 2. The stem is separated into sections or joints by horizontal partitions called nodes. 3. The leaves are linear, alternate, and two-ranked. 4. The sheath of the leaf surrounds the stem from the node to the blade. Usually the sheath of the grass is split its entire length on one side. Whether split or not it can be readily removed from the stem without tearing it. Every plant that has the above characteristics belongs to the grass family. The following points will enable anyone to distinguish grasses from sedges: Grasses—Hollow, round stem; split sheath, easily removed; leaves two-ranked. Sedges—Solid, triangular stem; sheath entire, not easily removed; leaves three-ranked. There are in the State of Ohio 140 species of sedges, all of which are practically worthless. There are 125 species of grasses, nearly all of which possess some value. To be able to distinguish the members of one family from another is therefore a matter of considerable importance.

Book Notices.

The August number of *Dorcas* contains more than the usual amount of technical matter. The magazine is growing in favor with the ladies every month. There is a great variety of general information which is invaluable to the worker. No one interested in fancy-work will fail to find in this number something especially useful. Embroidery, knitting, netting and crochet are all introduced, giving directions and suggestions for summer work. The patterns are selected with taste and judgment, and are described in the plainest and most concise manner possible. No well-regulated household should be without *Dorcas*. Send ten cents for sample copy. Address *Dorcas*, 872 Broadway, New York City.

The American nation has a double birthright—liberty and land. Its liberty it has guarded jealously, but until very recent years it seems to have been indifferent to the loss of its landed estate and ignorant of the methods by which it has been diminished. A veteran legislator, the Hon. George W. Julian, who has given special attention to the acts disposing of our public lands, tells the story in brief in a contribution to the *North American Review* for August. In the same number five medical authorities discuss the question, "Can Cholera be Averted?" Felix L. Oswald contributes a suggestive article on "The Animal Soul;" and the Rev. M. J. Savage, in "A Profane View of the Sanctum," brings an indictment against the daily press. The other articles are one on "The Price of Gas," by Charles H. Botsford, one on "Temperance Reform Statistics," by Prof. W. J. Beecher, and the chapter of "Comments," by various writers, on articles in previous numbers.

The Busy Bee.

Prevention of After-Swarms.

F. L. Dougherty, in *Indiana Farmer* says:

Preparatory to casting the first swarm, a colony will build from five to twenty queen-cells. With two or three of these finished and capped over, they are ready to go, and if the weather be favorable, out they come. Almost every bee at home, when they start, leaves with the swarm, even to the very youngest not quite able to fly; hive in a few moments. Bees returning from the fields soon discover the loss of bees and queen, but make no attempt to follow. At this time the combs are very full of young hatching bees, and it sometimes is surprising to notice how many will come out in the space of a few hours.

Queen-cells started and left unfinished at the leaving of the swarm, are continued and finished, and others also may be started after the leaving of the swarm. Under ordinary circumstances, the first young queen that hatches out, if left to "her own sweet will," would visit all other queen-cells in the hive, tear open each cell and sting its occupant; but should the weather continue favorable, the colony having grown quite strong again, they are not satisfied, so they protect these cells, from her royal highness. Being a "her," one may easily judge her humor at a disputed authority in her own home; she leaves with many followers, and her sisters may do likewise, from the same cause, until five or six after-swarms may be cast by the one colony.

Now we may take advantage of this instinct and prevent all after-swarms by removing these queen-cells on the same day, or the day before this first young queen makes her appearance. If queen-cells be removed on the same or a few days after the first swarm leaves, there being plenty of eggs and young larvae, the bees will build more cells at once, thereby defeating the object for which we remove the cells. The coming of after-swarms can always be foretold by the "piping" of the young queen, which once heard will never be forgotten. It is rather an angry, discordant "squawk," and is easily heard by placing the ear close to the side of the brood-chamber of a hive.

If at the time of swarming the swarm's hive be placed on the old stand, and the old hive moved to a new location, all of the working bees will be drawn to the new colony, thus depleting the old hive to such an extent that it is hardly likely to cast a second swarm. Where honey is the main object, and increase not desirable, the old hive may be moved only a few inches, and a little to the rear, then after eight or nine days, removed to a new location. The bees which have hatched out and taken location from the old hive, will enter the new hive when the old one is taken away, and being of the same colony, with honey coming in, they will take up their new quarters without molestation. The latter plan is a good one where bees are in boxes, or in such condition that they cannot readily be examined. After-swarms in general are of little account as honey-gatherers, they being so few in numbers. When they exist it is better to put two or three into one hive; the bees will soon settle the question, or the queens themselves, as to which is to be which.

Late Patents to Kansas People.

List of patents granted to citizens of Kansas for the week ending Tuesday, July 21, 1885, compiled from the official records of the United States Patent office, expressly for the KANSAS FARMER, by Herring & Redmond, solicitors of patents, No. 637 F street N. W., Washington, D. C., of whom information may be had:

No. 322,411—G. F. Bright, Greenwich, running gear for cultivators.

No. 322,443—O. R. and G. B. Hanchett, Wichita, plow attachment.

No. 322,840—A. J. Mercer, Burdenville, assignor to J. M. Mercer and L. E. White, Burdenville, washing machine.

No. 322,506—S. G. Travis, Leavenworth, end gate for wagons.

Kansas Fairs.

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

The Western National Fair (Bismarck), Lawrence, September 7-12; Secretary, R. W. Cunningham.

Anderson County Fair Association, Garnett, August 25-28; Secretary, M. L. White.

Bourbon County Fair Association, Fort Scott, October 6-9; Secretary, E. W. Hulbert.

Brown County Exposition Association, Hiawatha, September 8-11; Secretary, C. H. Lawrence.

Butler County Exposition Association, El Dorado, September 29 to October 2; Secretary, H. W. Beck.

Chase County Agricultural Society, Cottonwood Falls, September 22-25; Secretary, E. A. Kinne.

Cherokee County Agricultural and Stock Association, Columbus, September 8-11; Secretary, S. O. McDowell.

Clay County Agricultural Society, Clay Center, September 15-18; Secretary, Wirt W. Walton.

Coffey County Fair Association, Burlington, September 15-18; Secretary, J. E. Woodford.

Cowley County Fair and Driving Park Association, Winfield, September 21-25; Secretary, D. L. Kretzinger.

Dickinson County Agricultural and Industrial Association, Abilene, September 22-26; Secretary, H. H. Floyd.

Doniphan County Agricultural, Horticultural and Mechanical Association, Troy, September 15-18; Secretary, Thos. Henshall.

Elk County Agricultural Society, Howard, September 15-18; Secretary, J. V. Bear.

Western Kansas Agricultural Fair Association, Hays City, September 22-25; Secretary, P. W. Smith.

Franklin County Agricultural Society, Ottawa, September 23 to October 2; Secretary, John B. Shaffer.

Harper County Agricultural and Mechanical Association, Anthony, September 1-5; Secretary, J. W. Clendenen.

Harvey County Agricultural Society, Newton, September 22-25; Secretary, A. B. Lemon.

Jefferson County Agricultural and Mechanical Association, Oskaloosa, September 30 to October 2; Secretary, A. J. Buck.

Valley Falls District Fair Association, Valley Falls, September 1-4; Secretary, M. M. Maxwell.

Jewell County Agricultural and Industrial Association, Mankato, September 29 to October 2; Secretary, Geo. A. Bishop.

Johnson County Co-operative Fair Association, September 23-30; Secretary, C. M. T. Hulet.

LaCygne District Fair Association, LaCygne, September 29 to October 2; Secretary, O. D. Harmon.

Marion County Agricultural Society, Peabody, September 1-4; Secretary, L. A. Buck.

Marshall County Fair Association, Marysville, September 22-25; Secretary, C. B. Wilson.

McPherson County Fair Association, McPherson, September 29 to October 2; Secretary, J. B. Darrah.

Miami County Agricultural and Mechanical Association, Paola, October 7-10; Secretary, H. M. McLachlin.

Montgomery County Agricultural Society, Independence, September 16-19; Secretary, B. F. Devore.

Morris County Exposition Company, Council Grove, September 29 to October 2; Secretary, F. A. Moriarty.

Nemaha Fair Association, Seneca, September 15-18; Secretary, W. E. Wilkinson.

Phillips County Agricultural and Mechanical Association, Phillipsburg, September 16-18; Secretary, J. W. Lowe.

Rice County Agricultural Society, Lyons, October 13-16; Secretary, C. W. Rawlins.

The Blue and Kansas Valley Agricultural Society, Manhattan, August 25-28; Secretary, S. H. Sawyer.

Salline County Agricultural, Horticultural and Mechanical Association, September 29 to October 2; Secretary, C. S. Martin.

Arkansas Valley Agricultural Society, Wichita, October 5-9; Secretary, D. A. Mitchell.

Sumner County Agricultural and Mechanical Association, Wellington, September 8-11; Secretary, D. A. Esby.

Neosho Valley District Fair Association, Neosho Falls, September 21-26; Secretary, O. S. Woodard.

Decatur County Exposition Society, Oberlin, September 23-26; Secretary, T. D. Bebb, Vallonia.

Smith County Agricultural Society, Smith Center, September 23-25; Secretary, F. J. Pattee.

Kaw Valley Fair Association, St. Marys, September 22-25; Secretary, A. J. Beakey.

Oaage County Fair Association, Burlingame, September 15-18; Secretary, A. M. Miner.

The Kansas Central Agricultural Society, Junction City, September 30 to October 2; Secretary, Chas. S. Davis.

Rice County Fair, Lyons, October 6-9; Secretary, C. M. Rawlins.

Washington County Fair, Washington, September 29 to October 2; Secretary, C. W. Aldrich.

Kansas Association of Trotting Horse Breeders, Topeka, September 22-25; Secretary, Rufus Bean.

Parson's Fair and Driving Park Association, Parsons, September 15-17.

Caldwell Driving Park and Agricultural Association, Caldwell, August 27-29; Secretary, John W. Nice.

Pawnee County Fair and Stock Association, Larned, September 23-26; Secretary, Geo. A. Bella.

Reno County Fair, Hutchinson, October 13-16.

Ottawa County Fair, Minneapolis, September 8-11; Secretary, W. H. Chappel.

Centralia Fair Association, Centralia, October 6-7.

Frankfort Fair Association, Frankfort, September 29 to October 2.

Linn County Agricultural and Mechanical Association, Mound City, September 21-25; Secretary, E. F. Campbell.

The Kansas City Fat Stock Show, Riverview Park, Kansas City, October 29 to November 5; Secretary, Edward Haren.

First Annual Poultry and Pet Stock Show, Kansas City, December 29, 1885, to January 1, 1886, inclusive; Secretary, Edward Haren.

THE STRAY LIST.

HOW TO POST A STRAY.

BY AN ACT of the Legislature, approved Feb 27, 1885, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, with in ten days after receiving a certified description and appraisement, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker-up, to the KANSAS FARMER, together with 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 an stray, must immediately advertise the same by posting three written notices in as many places in the township, giving a correct description of such stray.

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

The Justice of the Peace shall within twenty days from the time such stray was taken up, (ten days after posting) make out and return to the County Clerk, a certified copy of the description and value of such stray.

If such stray shall be valued at more than ten dollars, it shall be advertised in the KANSAS FARMER in three successive numbers.

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

If the owner of a stray fails to prove ownership within twelve months after the time of taking, a complete title shall vest in the taker-up.

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

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

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

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

Strays for week ending July 15, '85.

Smith county—J. N. Beacorn, clerk.

GELDING—Taken up by F. F. Cole, of Harvey tp., June 8, 1885, one light iron-gray gelding, 6 years old, weighs 950 pounds, branded O L on left hip, 15½ hands high, scar on right side and top of head; valued at \$75.

Atchison County—Chas. H. Krebs, clerk.

MARE—Taken up by Taylor P. Aikens, of Kapioma tp., (Arrington P. O.), June 22, 1885, one sorrel mare, white stripe in face, spavined in right hind leg, harness marks in various places, about 15 hands high, 12 years old; valued at \$50.

Clark county—J. S. Myers, clerk.

COW—Taken up by G. W. Wilson, of Center tp., (P. O. Ashland), June 19, 1885, one dark red cow, 4 years old, branded H. B. on right hip and three bars on left side, left ear cropped; valued at \$25.

MARE—Taken up by E. G. Lee, of Center tp., (P. O. Ashland), June 10, 1885, one iron-gray mare, 16 hands high, 8 years old, collar mark on shoulder and scar on left forearm; valued at \$35.

Strays for week ending July 22, '85.

Leavenworth county—J. W. Niehaus, clerk.

HORSE—Taken up by J. D. Hines, of Easton tp., one dark brown horse, 11 or 12 years old, saddle marks, slightly knee-sprung, stiff in shoulders; valued at \$50.

PONY—Taken up by Valentine Krapp, of Sherman tp., June 12, 1885, one bay horse pony, white star on forehead, left hind foot white, some saddle and harness marks, 14½ hands high, supposed to be 11 or 12 years old; valued at \$25.

Reno county—W. R. Marshall, clerk.

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

Butler county—James Fisher, clerk.

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

Elk county—J. S. Johnson, clerk.

MARE—Taken up by C. H. Branch, of Pawpaw tp., June 8, 1885, one dark bay mare, about 15 hands high, about 10 years old, saddle and collar marks; valued at \$75.

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

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

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

Montgomery county—H. W. Conrad, clerk.

MARE—Taken up by Wm. Persinger, of Sycamore tp., June 15, 1885, one sorrel mare, 7 years old, blaze in face, both left feet white; valued at \$70.

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

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

Linn county—J. H. Madden, clerk.

HORSE—Taken up by B. M. Thompson, of Pototsi tp., June 29, 1885, one bright bay horse, star in forehead, about 15 hands high, has collar marks, is lame in right fore leg; valued at \$60.

Strays for week ending July 29, '85.

Jefferson county—J. R. Best, clerk.

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

MARE—By same, about July 1, 1885, one bay mare, about 15½ hands high, white spot in the face, barb wire cut on shoulder, collar marks on both shoulders, supposed to be about 10 years old; valued at \$75.

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

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

Miami County—J. C. Taylor, Clerk.

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

CURES ALL OPEN SORES,
CUTS FROM BARBED
WIRE FENCE,
SCRATCHES,
KICKS,
CUTS,
&c.



Sold
Every-
where.
15 & 50 cts
a box. Try it

STEWART HEALING POWDER CO., ST. LOUIS.

RIVER VIEW Stock Farm.

50 HEAD OF IMPORTED NORMAN STALLIONS

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

JAMES A. PERRY
Importer and Breeder of Norman
Horses.

River View Stock Farm, Wilmington, Ill.
Fifty miles south of Chicago, on the Chicago & Alton
railroad.

PERCHERON NORMAN, CLYDESDALE and ENGLISH DRAFT HORSES.



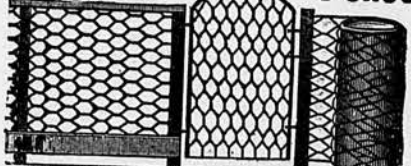
H. BENNETT & SON

Importers and Breeders,

Topeka, Kansas.

All stock registered. Catalogues free.

Sedgwick STEEL WIRE Fence



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

SEDGWICK BROS., Richmond, Ind.

The Veterinarian.

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

SWEENEY.—Wasting of the muscles of the shoulder from hard work in an ill-fitting collar, in a young horse, may be remedied by applying once daily, or every second day, a portion of tincture of cantharides, over the surface of wasting. Give liberty from work on pasture for some time, and thereafter, in moderate work, use a broad, lined breast harness.

SCOURS IN COW.—My cow did not winter well; had a poor appetite. She calved March 19th, and in about two weeks refused her grain altogether, and began to scour badly. I gave her about two tablespoonfuls of powdered bone black, which checked the looseness, and she began to eat better, though not as heartily as she ought. Since turning out to grass, the looseness has returned, and her appetite is exceedingly poor, and her milk has dried up. She has no cough. [Grass is not proper food for her. Take her up. Feed ground oats, bran and whole flaxseed steeped. Also good hay or corn fodder; no corn, cottonseed, or the like.]

STIFLE SLIP.—My mare, three years old, has something the matter with her hip joint. Her right hind leg will slip out of joint, apparently, and she will drag her leg out behind. It will go back again and be all right. She is not lame, and does not lower the leg in the least when walking. She is running in an orchard pasture, and the ground is hilled up about the trees. She is in good flesh, and has had the best of care all winter. [Stifle lameness is peculiar to young and growing colts, and gradually disappears as they get older and stronger. Keep her on level ground. The stifle joints may be frequently bathed with strong oak bark decoction, to give tone to the relaxed ligaments.]

WEAK LEGS IN COLT.—A colt three weeks old when first foaled had very crooked legs; could not stand for the first day without being held up, but got so it could walk some afterward, then one of its hind legs was hurt on the gambrel; it was very much swollen and inflamed. I reduced the swelling with wormwood and salt, but he has no use of the leg. Would it be best to wean it from the mare and feed it cow's milk, keep it quiet and see if it would gain strength, or sling it up and try to have it use its legs? [Rub its legs three times a day with some of the following liniment: Tincture of aconite root, 4 oz.; tincture of iodine, 3 oz.; spirits of camphor, 2 oz.; alcohol, 1 pint; mix. Get the colt up often and thus strengthen its legs. Its natural food is better than cow's milk.]

CONTRACTED FEET.—I have a valuable mare that is stiff and sore on her feet. I do not know from what cause, as I bought the mare from some parties traveling through the country. They represented that her lameness was the result of keeping her constantly shod, causing a somewhat contracted hoof. If the lameness arises from contraction of the hoof, what would be the treatment, and what if it comes from founder? [The probability is that the feet by neglected shoeing have become contracted, and are affected with corns. Remove the shoes all around, pare the feet down properly, leaving the frogs intact, and give the animal liberty during the balance of the season on a good pasture; one with soft ground, or woodland preferred.]

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

Plants watered with water a few degrees warmer than the temperature of the atmosphere will make a far more vigorous growth, all other conditions being equal, than those to which cold water is applied.

The earlier the tomato vines the sooner they begin to bear, as age seems to be a very important matter with the bearing of the vines. The early ones also bear the most fruit and endure drouth better than those that are late.

Beets should be planted in drills thirty inches apart, and carrots two feet apart. This admits of horse-cultivation, and after the plants have attained some growth no hand-work need be done. About six pounds to the acre is a fair average for sowing beets, and for carrots and parsnips about four pounds.

Spreading the manure or fertilizer over the ground broadcast is much better than placing it in hills or rows, as the roots of plants spread out in every direction, and thereby utilize the manure to greater advantage.

The cheese process depends largely upon the relative percentage of water to casein. If there is too little water, the cheese will cure slowly, and be dry, crumbly and have little flavor. If there be too much water, destructive fermentation will set in, and the cheese rapidly decay, if it does not sour and break.

Nervous Debilitated Men

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

BERKSHIRE HOGS.

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

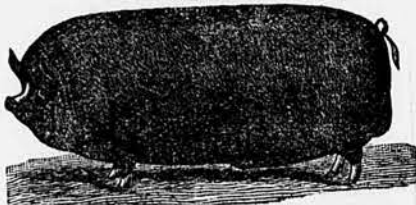
I am also breeding High-grade Short-horn Cattle and Merino Sheep. Have now about 100 good young rams for sale.

I have reduced rates for shipping.

All parties visiting from a distance will be met at the train, if notice is given in time.

For prices or any further information, address
N. H. GENTRY,
Sedalia, Mo.

PURE-BRED Berkshire and Small Yorkshire SWINE.



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

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

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



Send stamp for Circular and Price List.

EMPIRE BREEDING FARM.

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



EARL OF CARLISLE 10459,

A son of Imp. Royal Carlisle 3433 and Imp. Fashion, and Duke of Wellington 12392, winner of second prize at St. Louis Fair in 1884, under one year old. My pigs this spring are very fine, from five different boars. I never have had a case of disease in my herd of any kind. Have some choice Boars now ready for service, also one young SHORT HORN BULL—fine individual and fashionably bred. I would always prefer parties to

Come and see My Stock Before Purchasing,

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

ABILENE HERD

BERKSHIRES FOR 1885.

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



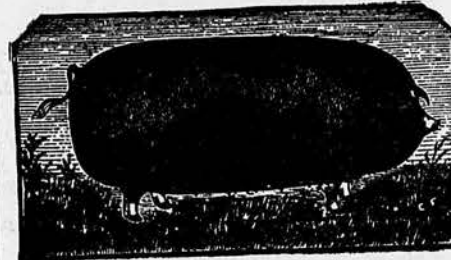
JAYHAWKER 3895
Owned by J.V. RANDOLPH, Emporia, Kas.

Established in 1868.

RIVERSIDE HERDS POLAND and BERKSHIRE SWINE.

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

J. V. RANDOLPH, Emporia, Kansas.



TIMBER LINE HERD

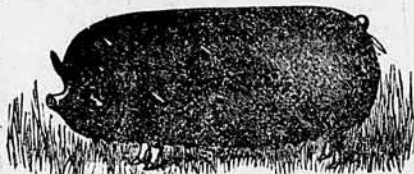
HOLSTEIN CATTLE and POLAND-CHINA PIGS.

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

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

PLEASANT VALLEY HERD

Pure-bred Berkshire Swine.



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

S. McCULLUGH,
Ottawa, Kansas.

S. V. WALTON & SON,

Box 207, Wellington, Kansas.

—Breeder of—

IMPROVED POLAND-CHINA HOGS

Of the Highest Type.

All well-pedigreed. Correspondence solicited

If you want
A YOUNG SOW,
Bred to our crack
Boars;

If you want
A YOUNG BOAR
Pig;

If you want
A YOUNG SOW
Pig;

If you want
to place an order for
A SPRING PIG;

If you want
A SETTING OF
Plymouth Rock
Eggs, at \$1.50;

If you want
a Thoroughbred
SHORT-HORN
BULL,

From \$100 to \$125.

Write to
MILLER BROS.,
Junction City,
Box 298. - Kas.

THOROUGHbred POLAND-CHINAS



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

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



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

I have for sale a fine lot of young pigs sired by Jayhawker 2639, Ottawa King 2886 (the champion hog of Franklin county), and Buckeye Boy 2d 2219, Ben Butler 2977, Leek's Gilt-Edge 2887, which are very fine breeders of fashionable strains. My sows are all first-class and of popular strains. I also have an extra fine lot of Duroc Jersey Red pigs for sale from sires and dams that have never been beaten in the show ring in four counties in Kansas. I have hogs of all ages in pairs or trio, of no kin, for sale. Herd has taken over twenty prizes this last year. My herd has never had any disease. Stock all eligible or recorded in Central Record. Please call and see stock, or write and give description of what you want. Inquiries promptly answered. Farm, three miles southeast of Ottawa, Kas.

MEADOW BROOK HERD



OF POLAND-CHINA SWINE.

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

JELLEY & FILLEY, Proprietors,
KINGMAN, KANSAS.



RANKIN BALDRIDGE,

Parsons, Kansas,

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

THIS PAPER may be found on file at Geo. P. Rowell & Co.'s Newspaper Advertising Bureau (10 Spruce street), where advertising contracts may be made for it IN NEW YORK.

This, That and the Other.

A bullet travels a mile in three and two-tenths seconds.

The walls of several of the British war ships are constructed of paper.

During all seasons of the year, it is said, the earth at Yakutsk, Siberia, is frozen from the depth of fifty feet to that of about 1,000 feet.

The birthdays of Gen. Grant, Louis Kosuth, the Hungarian patriot, and Herbert Spencer, the English author, occur on the same day of the year.

The annual income of Vanderbilt is about ten tons of solid gold. That of the average laboring man is about two pounds, out of which he has to live and support his family.

Afghanistan's population is about equal to that of the State of New York, while the extent of its territory, 225,000 square miles, is considerably less than that of Texas, which contains 237,504 square miles.

A tailor named White, living near Nuneaton, in England, recently placed a scarecrow in his garden to frighten the birds. A robin has, however, built her nest in one of the pockets, while a tomcat has utilized one of the sleeves for the same purpose. Both birds have reared their young there.

The birds of Louisiana, papers of that State say, will soon be exterminated. The colored people there not only make birds an article of food, but have begun to use their eggs for the same purpose. The eggs of partridges, robins, wrens, mocking birds, and all others that they can get their hands on, are eaten.

The seeds of the Kola tree, the highly-prized stimulant of the natives of Africa, appears to possess qualities which should give them a commercial value in civilized countries. Mr. T. Christie, an English writer on new commercial plants and drugs, asserts that chocolate made with Kola paste is ten times as nutritious as that made with cocoa, and that a laborer can work all day without fatigue on a single cup of that at breakfast time.

In many towns in Scotland where street railroads are in operation, instead of charging a stated fare from which there is no deviation on account of the distance the passenger travels, the car routes are laid off into districts. When a man gets on a car he pays one penny, which takes him to the end of that district; then the conductor collects another penny, and continues at each new district until the terminus of the line is reached. By this means a passenger only pays for the distance he rides, and is thus encouraged to enter the cars when he has but a short distance to go.

The Apaches have smoke signals by day and fire beacons at night, and systems of telegraphy understood only by themselves. The displacement and overturning of a few stones on a trail, or a bent or broken twig, is a note of warning like a bugle call to disciplined troops. The many crosses dotting the roadsides of Arizona and New Mexico mark the graves of murdered men. "The country seems one vast graveyard," writes Susan E. Wallace, "if we may judge by the frequency of these rude memorials." Trained by their mothers to theft and murder from childhood, they are inured to all extremes of heat and cold, hunger and thirst. They are cunning as the red fox, insatiable as tigers, and so ingenious in preparing for surprises that they will envelop themselves in a gray blanket and sprinkle it carefully with earth, so as to resemble a granite boulder, to be passed within a few feet without suspicion. Again, they will cover themselves with fresh grass, and, lying motionless, appear as a natural portion of the field.

MISSOURI PACIFIC.

Elegant Equipment Between Kansas City and Omaha.

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

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

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

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

TILE & BRICK MACHINERY.
STONE-SEPARATING
CLAY-CRUSHERS
Illustrated Catalogue free.
H. BREWER & CO.,
No. 146 Mill St.,
TECUMSEH, MICH.

Water Wheels, Millstones and PORTABLE MILLS
Manufactured by
A. A. DeLoach & Bro., Atlanta, Ga.
Prices wonderfully low. Send for large catalogue. Mention this paper.

\$50. REWARD
will be paid for any **GRAIN FAN** of same size that can clean and bag as much Grain or Seed in one day as our Patent **MONARCH** Grain and Seed Separator and Bagger, or our Improved Warehouse Mill with Equalizer which we offer cheap. Circulars and Price List mailed free.
NEWARK MACHINE CO., COLUMBUS, O.

Morton's Lightning Arrestor
FOR WIRE FENCES
Preserves fences from damage and live stock and persons from being killed by lightning.
Agents wanted.
Address W. T. DAVIDSON, Abilene, Kas.

Established 1840. Incorporated 1884.
THE CELEBRATED
"BRADFORD"
PORTABLE MILL.
CORN, WHEAT & FEED.
FLOUR MILL MACHINERY.
Send for descriptive Circular. Address plainly
The Theo. Bradford Co.
174, 176, 178 W. Second St.,
CINCINNATI, O.

ARTESIAN WELLS

Rock Drilling, Well Digging, Pipe Driving, Prospecting Machines and Outfits.
GENERAL WELL SUPPLIES
MANUFACTURED BY
NEEDHAM & RUPP,
27 West Lake St., - CHICAGO, ILL.
ILLUSTRATED CATALOGUE MAILED FREE.

DERICK'S HAY PRESSES.
are sent anywhere on trial to operate against all other presses, the customer keeping the one that suits best.

Order on trial, address for circular and location of Western and Southern Storehouses and Agents
P. K. DERICK & CO., Albany, N. Y.

ZIMMERMAN
FRUIT & VEGETABLE
EVAPORATOR

Made of Galvanized Iron, 5 SIZES.
16,000 SOLD. Economical, Durable and Fire Proof. Will pay for itself in 80 days use, out of sale of its own products.

FREE! Our Illustrated Catalogue and Treatise.
Address ZIMMERMAN MFG CO.,
BURLINGTON, IOWA.
AGENTS WANTED.

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

FENCES FOR FARMERS AND LAND-OWNERS.

PRETTIEST, STRONGEST, CHEAPEST, AND MOST DURABLE OF ALL.
Can be made any size on our Standard Fence-Making Machine, which we furnish at a price within the reach of all. We give exclusive territory free. Owners of our machine are making \$15.00 to \$25.00 a day at home selling fence. Agents who travel and sell our machines are making \$50.00 to \$100.00 per week in their own county. We can furnish any one with a profitable manufacturing business at home, or employment as traveling salesmen. We are also dealers in wire and pickets. Illustrated catalogue, terms, etc., free.
STANDARD MFG. CO., Cincinnati, Ohio.

PATENTS obtained by Louis Bagger & Co., Attorneys, Washington, D. C. Established 1864. Advice free.

TOLL YOUR OWN CRIST!!



"MANVEL" WIND ENGINE

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

HARNESS THE WIND

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

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



ADAMS WIND MILLS

— ARE BACKED BY A —
SPLENDID TWELVE YEARS RECORD
TIME-TRIED. — STORM-TESTED. — (ALSO)

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

Pamphlets, Circulars and Testimonial Sheets, Mailed Free.

MARSEILLES MFG CO., Marseilles, La Salle Co., Ill., U.S.A.



TOWER'S FISH BRAND POMMEL SLICKER
THE BEST WATERPROOF RIDING COAT.
Covers the entire saddle, and will keep you dry in any storm.
Sold everywhere. Illustrated catalogue free. A. J. Tower, Boston.

CHICAGO VETERINARY COLLEGE, INCORPORATED 1883.

For annual announcement and further information apply to the Secretary, 79 to 85—12th Street.
CHICAGO, ILL.

MICA
TILE GREASE
PAT MAY 12 - 1885
IS THE
BEST.
USE IT

PATRONIZE HOME INSTITUTIONS.

THE SOUTHERN KANSAS RAILWAY IS A KANSAS ROAD,

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

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

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

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

REMEMBER that by purchasing tickets via this line connection is made in the Union Depot at Kansas City with through trains to all points, avoiding transfers and changes at way stations. THROUGH TICKETS can be purchased via this line at any of the regular Coupon Stations, and your baggage checked through to destination, East, West, North or South.

PULLMAN SLEEPERS on all night trains. For further information, see maps and folders, or call on or address
S. B. HYNES,
Gen'l Passenger Agt.,
Lawrence, Kansas.

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

Burlington Route
H. & ST. J. K. C. ST. J. & C. B. R. R.

5,000 MILES IN THE SYSTEM, with Elegant Through Trains containing Pullman Palace Sleeping, Dining and Chair Cars, between the following prominent cities without change:

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

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

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

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

"BURLINGTON ROUTE"

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

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

T. J. POTTER, VICE-PRES. & GEN'L MGR., C. & O., CHICAGO.
PERCEVAL LOWELL, GEN'L PASS. AGT., C. & O., CHICAGO.
I. F. BARNARD, GEN'L MGR., K. C., ST. J. & C. B. R. R.
H. & ST. J., ST. JOSEPH.
C. DAWES, GEN'L PASS. AGT., K. C., ST. J. & C. B. R. R.
H. & ST. J., ST. JOSEPH.

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.

READ THIS.—Fancy-colored Rabbits for sale. Address Joe Shellabarger, 123 Harrison street, Topeka, Kas.

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

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

ELECTRIC CONDUCTOR FOR WIRE FENCES.—With a lateral collector on each wire and perpendicular conductor, with ground attachment, it effectually protects wire fences, live stock and persons from being killed by lightning. It strengthens the fence, and avoids the necessity of using so many posts. Patented May 12, 1885. Agents wanted. Address Dr. Chas. Williamson, Washington, Kansas.

Wanted at the Fairs!

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

KANSAS FARMER,

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

KANSAS FARMER CO.,
TOPEKA, KANSAS.

BUTTER AND CHEESE making apparatus and supplies of every description. D. H. ROE & CO., 253 and 255 Kinzie St., Chicago, Ill.

Hart Pioneer Nurseries,
[Established, Dade Co., Mo., 1857; Ft. Scott, Kas., 1865; Incorporated, 1864.]

FORT SCOTT. : : KANSAS.

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

EXCELSIOR HERD OF POLAND-CHINAS

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

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

THE ELMWOOD HERD

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

BREEDERS OF

SHORT-HORN CATTLE

AND

BERKSHIRE SWINE.

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

Premium Berkshires very cheap.

BLUE VALLEY HERD and STUD OF SHORT-HORN CATTLE,



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

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

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

WM. P. HIGINBOTHAM, Proprietor.

Pioneer Herd of Holstein Cattle

DUROC JERSEY SWINE.



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

HEREFORDS!!



Important information for the breeders and stockmen west and southwest of the Missouri river!

60 acclimated imported

Hereford Bulls for Sale!

They represent blood of Horace, Lord Wilton, The Grove 3d, and other prize-winning sires. Thirty 18 months to 2 years; thirty 14 to 18 months old.

Selected from best herds in England. Recorded in A. H. R. or eligible and entered for record in Vol. V. Illustrated Catalogues.

G. E. HUNTON, Breeder, Abilene, Kansas.

May 1st, 1885.

(U. P. Ry., 163 miles west of Kansas City.)

KANSAS FARMERS' MUTUAL FIRE INSURANCE CO.,

—OF—

ABILENE, : KANSAS.

OFFICERS:

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

—INSURES—

Farm Property and Live Stock

AGAINST

Fire, Lightning, Tornadoes and Wind STORMS.

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

AGENTS WANTED in Every County in Kansas.

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

THIS PAPER may be found on file at Geo. P. Rowell & Co.'s Newspaper Advertising Bureau (10 Spruce street), where advertising contracts may be made for it IN NEW YORK.

IT WILL BE AN ADVANTAGE to always mention the KANSAS FARMER when writing to advertisers.

The AULTMAN & TAYLOR THRESHING MACHINERY!

PATENTED ON AN AULTMAN TAYLOR STEAM TRAC



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

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

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

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

Threshermen, See the New Improvements for 1885!

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

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

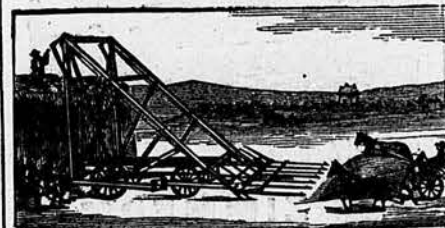
We can refer to a number of parties who bought Aultman & Taylor Machines when we first came to Kansas City, twelve or thirteen years ago, and are still running them. Can any other machines show such a record? No. Is not the Aultman & Taylor the cheapest to buy, even at 50 per cent. more money than other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

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

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

THE DAIN IMPROVED AUTOMATIC HAY-STACKER and GATHERERS!

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



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

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

Vehicles for All Kansas and the Southwest!

BRADLEY, WHEELER & CO.,

Manufacturers' Direct Distributing House for



OUR JUMP SEAT.

BUGGIES OF EVERY STYLE AND GRADE.

Concord Buggies, Buckboards, etc. Garden City Plows and Cultivators. Bradley Mowers and Rakes. All goods sold under our own name and guarantee! Catalogues and full information promptly furnished. Inquiries or visits solicited from every body.

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

KANSAS CITY.

COMPLETE, AUTHENTIC, ORIGINAL. LIFE OF GEN. U. S. GRANT.

His early life, military career, tour around the world, &c. Octavo, 550 pages, illustrated with steel and wood engravings, maps, battle plans, &c.; bound in extra cloth, elegant design, plain edges, \$2.00; gilt edges, \$2.50. Sample copies mailed on receipt of price. County and State agents wanted for this valuable work; apply immediately, stating experience, territory wanted, &c. Liberal terms.

SEED WHEAT

CROP OF 1885, READY BY JULY 10TH.

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

SAMUEL WILSON, Mechanicsville, Bucks Co., Penna.

WOOL!

LUCAS & WYNN,

Wool Commission

MERCHANTS,

221 and 223 } CHICAGO, ILL.
Kenzie street,

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