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INTER-STATE COMMERCE.

What the Kansas Railroad Commissioners Think on the Subject.

In July the Railroad Commissioners of this State received a letter from S. M. Cullom, chairman of the United States Senate Committee on inter-State Commerce, in which the views of this board were requested on the following points:

First—The best method of preventing the practice of extortion and unjust discrimination by corporations engaged in inter-State Commerce.

Second—The reasonableness of the rates now charged by such corporations for local and through traffic.

Third—Whether publicity of rates should be required by law; whether changes of rates without public notice should be prohibited, and the best method of securing uniformity and stability of rates.

Fourth—The advisability of establishing a system of maximum and minimum rates for transportation of inter-State Commerce.

The Commissioners replied as follows:

TOPEKA, July 20, 1885.

Hon. S. M. Cullom, Chairman of Select Committee on Inter-State Commerce, United States Senate:

DEAR SIR—We have heretofore been deterred from entering upon a discussion of the subject of your circular, embracing numerous questions pertaining to the subject of inter-State Commerce legislation, from the number and comprehensiveness of the questions propounded. To answer them, or even a part of them, adequately, would involve great labor, and presuppose a knowledge of a very great and difficult subject, which we cannot pretend to possess.

To your late invitation to state to the committee in a general way, our views upon such of the matters referred to in the circular as we deem of the most importance to the public, we feel inclined to respond.

In the first place we are of the opinion that a National Commission should be established, vested with certain supervisory powers over the subject of inter-State Commerce. Generally these powers should be confined to the functions of regulation, and not to the management of the business of inter-State Commerce. In this connection it may be observed that in our judgment it would serve no useful or practical purpose to give to such a commission the power to establish maximum rates for either passenger or freight traffic over inter-State lines of railways. The subject is too large and intricate to be intelligently dealt with by a single body of men, even though composed of men trained in the study and business of railroad affairs. This largely results from the fact that the situation, or conditions, in which railroads engaged in inter-State traffic are found and are operated, are quite different in almost every State.

Rates charged upon railroad traffic, when they become the subject of public or State interference should, in order to conform to the common law of reasonableness to the carriers as well as to the shippers, have relation to the

THE COST OF CONSTRUCTION, and to bringing the roads up to their present condition; in all cases, at least, where the expenditures for betterments, or cost subsequent to original construction, have become capitalized on the debt or stock of the road; the volume and character of traffic, both local and inter-State, which each road is

able to command; the expenses incident to the operation and management of the roads, and the amount of net revenue derived from the business available to meet the necessary or fixed charges, and to answer reasonable demands upon the company for fair dividends to stockholders.

To fix maximum rates without reference to these elements and conditions would involve the exercise of arbitrary power on the part of the State, and in so far as it defeated the fair and just expectations of those whose means have been invested in these important enterprises, they would suffer a despotic invasion of their legitimate interests. Such is the diversity of conditions existing among the numerous railroads of the country engaged in inter-State traffic, both in respect to physical conditions, character and amount of business, and their respective abilities to earn money, each road, in fact, possessing a development peculiar to itself, that any attempt, either by Congress, or a commission under its authority, to establish maximum rates for the regulation of inter-State traffic, would result in fixing rates sufficiently high as to enable the less favored class of roads to operate under them without detriment to their permanent prosperity, and this would be necessary if the principle of reasonableness of rates were to prevail, in which case the rates would be wholly inoperative, and furnish no criterion to the more favored class of roads, of the amount to be charged for a service rendered, or else in prescribing rates which, though not unfair to the last named class, would be unjust to the former class of roads.

A result so undesirable could only be obviated by establishing a separate tariff to the numerous roads in detail, adapting the tariff to the situation and conditions existing upon each line. This would be a work of such gigantic proportions that no single body of men, no matter how expert they might be in the work, could undertake with the slightest hopes of success. Yet, something like this would have to be attempted, if the rate-making power were given to a commission.

There are two classes of inter-State traffic over railroad lines, viz., commerce from and to points in the interior, to and from the seaboard, and commerce that covers State lines, but is still local. In the former case the great bulk of the commerce is carried over great distances, crossing a number of State lines, and employing several connecting roads to complete the transit. In the other the freight is carried from a point in one State to a point in an adjoining State. It is obvious that rates adapted to the hauling of heavy and bulky products, comprising the leading productions of the country, over great distances, either for Eastern consumption or foreign export, would furnish no criterion or basis for the transportation of the same products comparatively short distances between points in adjoining States in the interior. These products must, of necessity be moved at very low rates, at rates that do not remunerate the companies engaged in the work of transportation, but only furnish a small margin of profit over the bare expenses incurred in the performance of the service, from the fact that they are moved very great distances. The great cereal crops raised in the Mississippi valley, and the meat products of the trans-Mississippi, in the continued production of which the country is vitally interested, can only be maintained by a system of rates for their

transportation to the seaboard which, while they involve no absolute loss, but rather a margin of profit, would, if the same rates

WERE OBLIGATORY UPON THEM as to all traffic carried over their lines consign every road engaged in the business into absolute bankruptcy.

It is a fact, known to every man who has given any thought to the subject, that the rates now prevailing upon that part of inter-State Commerce which is concerned with the movement of Western products to the Eastern seaboard, are very much lower than were ever before devised by any railroad in the world; so low in fact, that were rates on their local traffic proportioned or adjusted to these trans-continental rates there is no road now in existence in this country that would derive sufficient revenue from its business to pay, in addition to its operating expenses, its fixed charges.

To devise a system of maximum rates, covering every species of inter-State traffic, on the basis of rates for long hauls from the extreme West to the East, would paralyze every railroad in the business. On the other hand, to equalize the rates as between long and short hauls, i. e., to introduce a proportionate equality in the rates between local and continental inter-State traffic, would, if railroad property is to be preserved, and its efficiency maintained, advance the rates on great distances to such an extent as to put an embargo upon the movement of the cereal crops of the extreme West and the trans-Mississippi region, a result which would be little less disastrous to the East than to the West.

It has been rendered possible for the great West to reach a rapid and prosperous development by a system of low rates upon the movement of the leading productions of that region to tide water. The attraction of the West, enhanced and made available by the unparalleled creation of railroad facilities, have induced a movement of population from the East to the West, thus relieving an overburdened labor market, and reducing those causes of discontent and restlessness among the employed laborers of the country that eventuate in serious disturbances of the established industries, and frequently threaten the public peace.

On the other hand the abundant production of food by the utilization of the Western lands, and its cheap distribution by railway lines to remote distances, lighten the burdens of the laborer and increase the ability of the country to carry on its industrial development.

It will be seen that the benefits derived from the low system of rates prevailing on the great movements of food products as compared with rates upon movements more local in character, are shared by each section of the country. And since these benefits are felt alike in every part of the country, it is no unjust discrimination to discriminate in the charges made upon long and short hauls.

It may be further remarked that this differentiation in rates is the result that has been brought about by no conventional or voluntary arrangement between companies operating inter-State lines of railway. But it has been forced by the natural laws of commerce operating upon geographical lines, which cannot be changed without changing the distribution of land and water on the continent, or by annihilating distance without the aid of steam, and any attempt by

the law-making power to contravene these natural laws thus necessitated by our geographical situation, would end in disastrous derangement of our commercial system.

It would draw out this paper to an undue and tedious length to point out in detail the evil consequences which would attend an attempt to force upon the carrying business of the country a system of maximum uniform rates applying to inter-State traffic. It would appear to be sufficient to say such a scheme would be utterly impracticable. The reasons already stated we think, render this obvious, but others might be given, as, for example, that a system of rates for inter-State traffic over trunk lines operating between great commercial centers like Chicago and New York where the volume of traffic has reached a maximum limit and the most commercial terminal facilities have been provided for the cheap and expeditious handling of freights would be unadapted to roads further West, whose traffic was of less volume, whose hauls were shorter, and whose terminal facilities were inferior. The impracticability, then, of establishing a system of

UNIFORM MAXIMUM RATES

to apply to all inter-State Commerce, would necessitate, if the power to make rates was conferred upon a National Commission, the making of differential rates substantially conforming to those systems now in existence, and this would involve the minute study of so vast a variety of interests, the adjustment of so many conflicting rights, and such an infinitude of detail, as to render such a project chimerical.

The rapid decline in rates within the past five years, especially those pertaining to inter-State traffic, carried on over the leading lines of the country considered with the fact that the causes which have brought about the reduction are still operating with undiminished energy, would seem to obviate any necessity of conferring upon a National railroad commission the rate-making power. The rapid development of immense wheat areas in India and Australia, and cheap ocean transportation from these new sources of supply to common points of consumption of the surplus of wheat producing regions, supply additional facts to those already existing.

While the power to establish maximum rates to govern inter-State traffic could not, as we believe, be wisely or usefully employed by a National Railroad Commission, such a body might usefully exercise the functions of entertaining complaints from shippers of undue and unreasonable charges on the part of railroad companies, and judge of the reasonableness or otherwise of the charges complained of. In this way a *prima facie* case might be made for the courts. Whether or not any given rate or charge for a specific service is a reasonable charge is frequently a question depending upon a great variety of facts, many of which are not readily accessible, and the pertinency and value of which can only be adequately judged by experts, so that if the shipper is left alone to pursue his ordinary remedy at law, without the preliminary aid which a commission may afford to him, the remedy, in most cases, is impracticable and valueless. Complaints of alleged extortion and of unjust discriminations might be investigated in like manner, and when evils of the

(Concluded on page 4.)

The Stock Interest.

PUBLIC SALES OF FINE CATTLE.

Dates claimed only for sales advertised in the KANSAS FARMER.
 September 18—H. M. Garlicks, Holstein-Friesians, Kansas City, Mo.
 October 28—Hon. T. W. Harvey, Turlington, N. B.
 November 3 and 4—Inter-State Short-horn Breeders, Kansas City Fat Stock Show.
 B. E. Ward & Son, Short-horns, first Friday of Kansas City Fat Stock Show.

The Sheep-Raiser of To-day.

This paper has been arguing in favor of holding on to a few good sheep, and learning how to meet the situation outside just as it is. In sympathy with that doctrine, the *American Sheep-Breeder and Wool-Grower* says that in many respects the sheep-raiser of to-day differs from the shepherd of other days; that is to say, his methods differ; for some one truly says that in all great essentials the man of to-day is the same as the man of ages ago. But the conditions of society are so unstable, that a man engaging in any kind of business in these days must have his wits about him more thoroughly than ever before. There are so many people out of employment, so many people seeking easy ways of making money, so many seeking to make a living "with their coats on," that society is kept in a perfect turmoil of inventions and shoddy substitutes for the staples of life.

The shepherd of other days was not vexed so much by questions of tariff, the invasion of foreign wools and spurious imitations. He did not always get high prices for his mutton and wool, any more than he always got high prices for his wheat and potatoes, but as a rule he charged it up to temporary natural causes. Now we have discriminating railroad charges, shaky tariffs, base adulterations, all in addition to the trials which beset the wool-grower in the days when there were no railroads and the wool-grower hauled his stock to the nearest town and sold it for what it would bring.

A short time ago sheepmen, with others engaged in producing things for people to eat and wear, were of the opinion that they would soon find a good deal of help in their business through the warring of other nations. But now this slight hope, based on the small amount of good that is always certain to follow the large amount of evil, has seemed to vanish, and once more the sheep-raiser, after depending for some time in vain for help in selling his wool upon the restoration of the old tariff, is brought face to face with the fact that he must go ahead and make the business win purely on its own merits without any outside aid or bolstering.

An idea which is fast gaining ground with practical sheepmen is that small flocks—comparatively small ones—are the most profitable. The popular notion in the range countries at least used to be that the larger the flock the greater the profits. This idea is fast being dissipated, and the days of handling sheep by the tens of thousands is numbered, even on the plains of Texas. Certain kinds of sheep do better than others in flocks of several thousands, but it is a fact which experience has demonstrated, that there is no kind of sheep which will thrive as well in a large flock as in a small one. In these huge bands of sheep a vast number die and a vast number are left, and none receive the attention which common economy demands. It may pay in one sense to have one herder attend to more sheep than two men could properly see to, but it pays in no other way; and it must be remembered that the item of expense involved in the wages of the man who attends the flocks is one which is either the largest or the smallest in the busi-

ness, for the profit or loss of the flock depends more on him than upon the man who furnishes the money and attends to the financial management.

In a general way it may be set down as a fact that to attempt economy in the pay of the man or men who look after the sheep every day is to turn what should be profit into loss, for men of experience know that the sheep-herder who pretends to work for the least pay is generally the most expensive individual that could be engaged.

The sheep-raiser of the present time seems to think he is beset with an unusual number of hardships, and so he has a great deal to contend with in order to make his business a success, but the hardships are simply incident to the competition and close figuring of the times.

With careful attention and an application of judicious business management sheep and wool-growing can be made to pay as well and better than in the "good old times" about which men are too prone to talk.

Grub in the Heads of Sheep.

This is one of the most destructive troubles among sheep, and also one of the most difficult to manage. In our last issue the subject was touched upon in answer to an inquiry. If the matter can be taken in time, danger may be removed by administering remedies that will cause frequent and violent sneezing, as snuff or turpentine. If there is some loose, fresh plowed ground in the pasture, it is said to be good, for the sheep will stamp it, and paw it, and raise dust to cover their noses in efforts to get away from the gad-fly which is the author of all the grub trouble. But we do not regard this as a certain remedy. Holes made in logs or thick planks or pieces of scantling—holes, say two inches in diameter, and smeared about the edges and sides with tar, and salt kept in the bottoms of the holes, so that the sheep, when licking the salt, will get tar on their noses, is good, also; but we believe that it is better to catch the sheep in the mornings just before going out to graze, and smear their noses lightly with tar, being careful to get it well about the edges of the nostrils, and on the lower parts of the inner surfaces. This method makes a reliable job of it. The shepherd then knows that the tar is just where he wants it. The tar (pine) is a specific against the attack of the gad-fly if it is used in proper time and well used.

To let the sheep run in wooded pasture is also a very good thing, and if the grass is long, or if there are some low bushes, like elder or pride of Virginia, so that the sheep can have their noses protected while eating, that is good. The fly lays eggs in the nose where they hatch and the larva or grub crawls up into the head through the passages of the nose. Anything that will keep the fly away from the nose will prevent the grub business wholly.

Every farmer's boy has observed sheep trying to shield their noses from the fly. They gather in bunches along fence corners, where there are any, at the roots of trees, where there are any, and out in the open sunshine, where there are no objects like trees, fences or walls to collect about. They hold their heads down close to the ground and try to have their noses secure from the fly in some manner. This is the best the poor things can do for themselves. If the farmer will help them by furnishing some means that the sheep can utilize themselves they will do it.

As to the time when remedial work should begin, it depends somewhat on the season and locality as to longitude, latitude, altitude, etc. But every active and intelligent farmer knows when the

gad-fly comes. It annoys horses about as much as it does sheep. In Kansas the work ought to begin early in June and be kept up until the latter part of September.

After the larva is deposited in the nose, the trouble is greatly aggravated, and after the grub gets into the head, if it is not removed, the sheep will die. And the difficulty of removing it is so great that it is safe to say in general terms that when a sheep has grub in its head its time is up.

Before the grub reaches the head it is sometimes removed as we have said by the use of substances that will produce sneezing. We have just read a suggestion worth considering in the *American Sheep-Breeder and Wool-Grower*, given in reply to queries on this subject. The writer suggests that if a sheep dies the owner may determine whether the cause of death was grub in the head, by breaking the skull and examining the inside. The remedy suggested is this: "Mix turpentine and spirits of camphor in a small bottle, and with the use of a feather insert some of the mixture in the nose of the sheep, which will kill the grub."

This remedy was tried successfully, and the writer adds—"We are informed that if turpentine alone is applied externally to the soft part of the head with a sponge or a piece of muslin it will be equally efficacious, and can be done much more rapidly, but of course will take more turpentine. This remedy we have never tried, but the other we have, and after using the mixture in the evening, observed the following morning a large number of dead grubs in the corals or pens."

It is said, too, that tobacco smoke blown into the nostrils will dislodge the grubs.

Breeds and Families.

A correspondent of the *American Agriculturist* gives the following illustrations of the difference between breeds and families:

"In the breeding of live stock, everybody realizes the subdivision of races into breeds. Among cattle we have Short-horns, Devons, Ayrshires, Jerseys, Dutch, etc., and it is impossible to establish definite limits to their multiplication. Among dogs we have pointers, setters, mastiffs, etc., in great numbers, and so among all the races of quadrupeds, birds, and even fishes, which come under the influence of intelligent breeders, breeds are multiplied. These breeds occasionally break up into sub-breeds, as setter dogs into English, Irish, Gordon, etc., and when carefully bred, they always break up into families. These are essentially short-lived from the nature of things. A family may possess strong peculiarities, great prepotency, and the individuals may bear to each other strong resemblances, but in the course of years, continued close breeding within the family will weaken the constitution, or lessen the profit to the keeper in one way or another, so that he is actually forced to take outside crosses, to maintain the character of the family. As an example, the famous family of Duchess Short-horns was first maintained intact by the Oxford cross, which finally became so blended with the Duchesses that other crosses were forced upon breeders, each one doing its share to dilute the blood and destroy the identity of the family. The highest value of families is for crossing and grading. Among the Jerseys as now bred, we see this strikingly shown. The great producers are all recent crosses of great butter families. These crosses between families serve in this way to intensify the characteristics of the breed. The blood of different families does not al-

ways unite well to produce the sought-for qualities. When this is so, the families are said not to "nick" with each other. Yet they may, and probably will nick well, crossed with others. Thus the blood of the famous English bull Rioter, when it has been crossed with certain other families, has produced great butter-making cows."

Attend to the Hogs.

We find this clipping—from what paper we have forgotten, and it is not credited:

Willing that others might profit by my losses as well as by my experience, I will note a few facts in regard to hog raising and their diseases. I am forcibly reminded to do this in as much as there are quite a number dying in this vicinity. Some of this fatality has been attributed to what is known as hog cholera. Possibly this has been true in a few instances, but more generally it has resulted from filth, inattention and vermin. From my own observation I am convinced of the fact that authorities on hog diseases do not put the estimate too high when they say "nineteenths of the hog diseases is the result of vermin," both internally and externally. Lice will pierce the skin, enter the head through the ears, infest the eyes, and attention not given, in time will cause death. This is not imaginary; I know it from experience. If they do not cause death they will cause a general debility, and hogs will not thrive so infested. Now don't say your hogs are not full of lice till you examine them; catch one or more, look in their ears, and you will find them as sure as you have hogs, unless they are fed on slops or milk from the house. Grease of any kind is a good preventive.

Now, what I mean by non-attention is this: Neglecting to give your hogs as much salt and sulphur, wood ashes, charcoal, and materials of like ingredients as they will eat; observing closely that they all come up to eat; if they are fed regularly, etc. Now, if your hogs have become lousy from non-attention, make a strong solution of tobacco, and while hot mix in sufficient hog lard to make a thin salve, and apply thoroughly, or wash them with a strong lye of wood ashes, or suds made from home-made soap.

This I would suggest to farmers more particularly who raise large numbers of hogs in woods pastures and lots; particularly those who have woods pastures; lice will infest the hogs, as they thrive best in shade. An animal of any kind will not be troubled much if in the sun a good part of the day.

I need not tell you what I mean by filth. I will simply say to you that the hog is one of the cleanliest of the brute creation if you will only give him an opportunity, notwithstanding his hogship likes to wallow in the mud.

In conclusion, I will say to those who have young hogs to examine them at once if sick, and if infested with vermin, treat not only those sick but the entire herd—as a pig once sick is almost sure to die.

To a hard-working horse, repose is almost as much a necessity as good food, but tired though he may be, he is often very shy to lie down, even when a clean bed is provided for him. Unless a horse lies down regularly, his rest is never complete, and his joints and sinews stiffen; and while it is true that some horses that sleep in a standing position continue to work for many years, it is equally true that they would wear much longer, and perform their work much better, if they rested naturally. Young, nervous horses not unfrequently refuse to lie down when first made to occupy a stall, and, when introduced into a town stable, the habit may be confirmed, unless inducements are offered to overcome the disinclination.

The best sheep is the most profitable one under all circumstances. A sheep that will not yield a profit, no matter how well-bred it may be, should have no place on the farm, under ordinary circumstances. We would not argue in favor of any one particular breed, for we believe that it is not so much the kind of sheep, as that the animals be good specimens of their particular breeds, and are given the best care. It does not matter whether a farmer wishes to raise mutton sheep or Merinos, as the profitability of sheep raising does not depend exclusively on the breed, but on the individual merits of the animals comprising the flock and the keep to which they are subjected.

The Veterinarian.

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

SWELLED ANKLES.—We have a mare five years old, perfect in every respect, but while standing in the stable her hind ankles give way, like a person's ankles turning; in traveling they seldom trouble her. Can you tell the cause and cure, if any? Is it likely to injure her permanently? [If the horse is continually stabled, apply linen bandaging soaked with strong decoction of oak bark.]

BLOODY MILK.—I have a fine heifer with her first calf, and occasionally she gives bloody milk for a few days. She has all the good feed she can eat. Please tell me what causes the trouble, and what should be done to prevent it. [The causes of bloody milk are various; any blow or injury to the udder might produce it. If it comes from only one or two teats it is probably caused by some injury to that part of the udder, or to the teats themselves; but if from the whole of the udder it may proceed from some derangement of the system. A red sediment at the bottom of the milk often occurs in the disease called "red water." Heifers with their first calf are not infrequently troubled in the manner mentioned from a congestive state of some of the small blood-vessels of the udder. A mild laxative may be given; about half a pound of Epsom salts and a teaspoonful of ground ginger in a quart of water, and the udder may be gently hand-rubbed, with the hand well greased.]

ACUTE ENTERITIS.—One day last week I was called to see a mule that had been ailing for about twenty-four hours. When I first went he was standing with his fore feet somewhat straddled and suffering very much. On examination, I found his ears and mouth cold, his pulse very high, quick and wiry, his gums and lips a very dark purple, his tongue was dark and cold. He seemed to be swelled a little, and when he would step his feet would move very quick and in a semi-circle; at intervals he would jerk and the muscles would twitch, almost amounting to spasms, and at last he fell in one of the fits; he would then struggle and beat his fore feet against himself. Not being much of a horse doctor, I gave some soda and water, and for a few minutes it seemed to give him ease, when all of a sudden he was taken worse than ever, and after thrashing himself at a furious rate a few minutes, he died about 9 o'clock p. m. The next morning he was cut open; his bowels were all afloat in water, his small intestines were also full; his gall and liver seemed to be all right. His lights were somewhat puffed, with now and then a hard substance or clot of blood in the air cells. The kidneys were solid and in proper shape, and the water above spoken of was about the color of a healthy animal, a light tinge of red. Could see no other sign of disease. However, he had been troubled with very loose bowels all the time he was ailing. Did not urinate very often, but when he did there was the usual amount and of natural color. He was two years old last spring, had not been worked or rode, and was running on pasture with plenty of water. From the meager descriptions that I have been able to give, can you give me, through your veterinary column, what the disease was, also the care and cure, and oblige? [The mule died of acute enteritis—inflammation of the bowels—and it is very probable that by the time you first saw him gangrene of the bowels had already taken place, and when it does death very soon follows. Some of the most eminent veterinary practitioners contend that when an animal of the horse species becomes attacked with acute inflammation of the bowels, it never recovers, and the writer fully endorses the opinion. The treatment consists in placing the animal in a large, well-bedded, box-stall, and in the early stage giving doses of sedative medicines, such as ten-drop doses of tincture of aconite root every two hours for five or six doses. The pain should be controlled by large doses of opium or morphine, injected subcutaneously, mustard smeared over the abdomen, or blankets steeped in hot water and wrapped round the body, also help to relieve the pain. Warm water injections may be used, but not too fre-

quently. Medicines having a purgative effect should not be given, as they only tend to diminish the animal's chances of life.]

The Suwanee River.

The other day two or three of us went to that spot famous in song and story—the Suwanee river. The ride to the gulf has already been described: suffice it to say that the trip was swift and agreeable. The jungles had lost none of their beauty, the splendid magnolias were in bloom, the grand oaks were garlanded with gigantic grapevines, and the moss was as gray, silken, and fantastic as ever. One takes a small steamer going for some distance along the gulf, and, after a night's rest, looks from the sheltered deck upon the lovely Suwanee. The river is quite as large as the upper St. John's, bending in and out in innumerable curves for over one hundred miles. In its clear waters you can see the fish leaping and swimming. Every bend throughout its entire course seems more graceful than the last; every stretch more romantic and beautiful. Nowhere is the verdure more tropical, and as far as the eye can reach one sees an unbroken line of symmetry. If some gardener had the care of the trees on either side his work would call for hearty admiration, but it is all the handiwork of nature, that magnificent wall of green—not a shrub seems to be broken, not a faded leaf can be seen, on a long, vast, unbroken hedge of emerald, and underneath a greensward like a carpet, interlaced with lines of gold and bars of silver, where the sun throws vivid or fainter beams down athwart the cool, deep shadows.

"Dar's whar de old folks lib," says a swarthy deckhand, as he doffs his rimless hat, show broad white ivories and laughing back to laughing faces ashore. Sure enough, in yonder tiny bend is a little hut built of logs and two or three colored children stand on the greensward to see "de boat ride." And if to add pathos and reality to the poet's vision, there comes out an old, old man, his head whitened with the frost of age, and stands leaning on a stick to watch us out of sight.

And later on comes the moon to add to the witchery of the surroundings. Over yonder the river has washed in under the live oaks, the tall cypress, and the pines. Years ago the Indian in his wigwam dotted these shores. I have no doubt they were as wild, and perhaps as wayward, as their brothers of the West—rejoicing in scalps, brandishing the war-knife with savage satisfaction, and setting fire to the peaceful habitations of the white settlers along the borders. In all probability the poetry of the splendid river was much of it lost upon their uncivilized natures, though its waters may have kept them cleaner than the majority of their race. They did have some music in them, however, for notice the names of their towns and rivers. By and by we reach a plantation, but it is in ruins. Yet it blends well with the soft, sad beauty of the night. Whether or not it is "de ole plantation," who can tell. We know that once it was peopled with happy family groups, "massa's children and massa's slaves. The tinkling notes of "de banjo" were heard under the eaves, the negroes sang their plaintive melodies, while "de white folks" took their ease on the now deserted lawn that slopes so gently down to the water's edge. We stop at several landings, one of which are the famous iron springs, and wherever we go, the wonders of foliage, or color, of water and sky, challenge our admiration. It is the paradise of the South—the wonder-wilds of Florida—and tourists who did not investigate its beauties have lost much that would make memory a pleasure.—*San Francisco Chronicle.*

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, 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.

Address, J. E. Lockwood,
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Consumption, Coughs and Colds cured by Dr King's New Discovery. Trial bottles free.

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

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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 Chieftain; grandsire, the great show stallion Topman. To insure, \$25. H. W. McAFEE.

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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.

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COTTONWOOD FARM HERDS, J. J. Mails, 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.

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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.

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ONE DOLLAR per thirteen for eggs from choice Plymouth Rock fowls or Pekin ducks. Plymouth Rock cockerels \$2 each. Mark S. Salisbury, Box 931, Kansas City, Mo.

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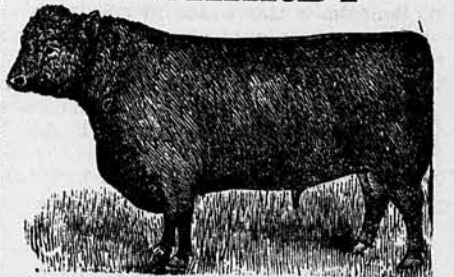
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at bed-rock figures. There are few better-bred Trotters in Kansas.

GRADE ANGUS and GALLOWAY cows at farmers' prices. Send for Catalogue.

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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.

(Continued from page 1.)

classes named were found to exist, and remained uncorrected in accordance with the judgment of the commission, an adequate and appropriate remedy could be invoked through the courts, the remedy being facilitated and remedied practically by the previous investigation of the commission. Nearly all causes of complaint on the part of shippers, arising in the business of transportation, except those wherein unliquidated damages are involved, might usually be committed to the investigation and correction of such a commission, and we feel safe in expressing the opinion, based upon the experience of State commissioners, that cases would seldom arise in which coercive power would have to be invoked to make the correction effectual.

There is one other question embraced in the circular that we will touch upon, but rather by way of suggestion than argument, viz., the importance of maintaining uniformity and stability in rates.

We have already pointed out the impracticability and the undesirability of establishing uniform rates or rates proportioned to the number of miles hauled, of any given product, covering every species of interstate traffic. But this reasoning will not apply to rates for the transportation of freight between two given points, between Chicago and New York, for example.

The maintenance of uniform and stable rates upon all the leading mercantile products moved to and from common commercial centers is important to the public interest, as well as the railroad companies engaged in the carrying of those products. These evils are greatly aggravated where the rates are not required to be open and public. It is plain that where such a state of things exist a portion of the commercial community obtains secret advantage over the rest. Their business is placed upon a

MORE EASY AND LUCRATIVE BASIS.

They are enabled by this means in periods of sharp competition to undersell their less favored competitors, or when the rates rapidly fluctuate, as is generally the case when instability is the rule, and the temporary reduction fails to affect the price of the article, the profits of the more favored class of tradesmen are unduly swollen. Indeed, in periods when rates are unstable, the benefits of temporary reductions are seldom shared with the consumer, but they are so much added to the profits of the middle men.

Another evil growing out of the element of instability is the temptation which is offered merchants to take undue advantage of temporary reductions to overstock themselves, frequently involving themselves in the toils of embarrassment. This is the source of perhaps the worst forms of unjust discrimination, and introduces into legitimate business the elements of gambling.

Besides, what are called rate-wars among railroads are not undertaken with any view of subserving any public good, and whatever of temporary benefit they may bring to a few, is more than offset by the injustice and wrong done to the rest, and the disturbance they entail upon legitimate business. But the main object is to disable competitive lines from engaging in a fair competition for a share of the business which a few seek to grasp; the ultimate object being not to bring about permanent reductions in rates, but to fasten themselves more securely on the country as an unchecked monopoly.

Railroads engaged in inter-State Commerce are employed also in local traffic. The communities which they immediately serve cannot dispense with them. They must have a source of maintenance or cease to exist, or exist with a greatly impaired usefulness and efficiency. Inasmuch as their legitimate support is wasted in destructive rate-wars a high standard of local rates must prevail necessarily. Either this alternative must be accepted, or, what is worse, the destruction of the efficiency of the road. It is easy to perceive that this state of things gives rise to grievous complaints by local shippers of excessive charges and unjust discriminations.

While it is true that a very considerable disparity must of necessity exist between rates for local hauls and those for transcontinental traffic upon the food products of the

country, for the reason that these, to continue to be produced at a living profit, can bear but a limited transportation charge, no matter how great the distance hauled, yet the difference should not be so great as to give rise to just complaints or unjust discrimination.

It is probably not within the competence of legislation to wholly eliminate from the business of transportation all the evils that are incident to it, or grow out of it. But that they may be checked and mitigated by wholesome provisions and vigilant administration, may with reason be assumed.

The business of a common carrier concerns the whole public and it is in the nature of a public function. All rates should be required to be made public. The granting of secret rebates, or drawbacks or other advantages to one shipper or a particular class of shippers over others similarly situated should be prohibited under penalties.

Since the violent fluctuations of rates consequent on rate-wars between rival lines results usually in discriminative benefits to a few at the ultimate expense of the public, means should be taken to at least accommodate this disturbing element to the business interests of the country; as a means to this end we venture to suggest that contracts or agreements between rival companies to carry on inter-State traffic upon given rates should be invested with a legal status, and be enforceable with appropriate action. Such agreements should in all cases be first

SUBMITTED TO A COMMISSION, established by Congress, whose judgment as to the reasonableness of the rates agreed upon should be requisite to give such agreement validity. By this means the public would be guaranteed against unreasonable or excessive rates upon inter-State commerce, and the railroad companies be afforded some protection against unpracticed proceedings among themselves, and against each other. This suggestion is made upon the assumption that for a service rendered, a railroad company is entitled to a fair and reasonable remuneration, and that it is neither fair nor good policy to ask that it be done for less. Upon this basis and with proper guarantee that this condition be secured, it is difficult to conceive what fundamental objection could exist to the enforcement of this character of contract.

We venture to refer to another matter, though it is not embraced in your circular—the organized combinations among the various classes of railroad employees, through which claims are made upon the companies and compliance with these demands coerced by strikes, entailing serious losses both on companies and the public by arresting the operation of railways affected. They

GIVE PROMISE OF GREATER TROUBLE in the future unless some method can be devised to settle the disputed claims without resort to strikes. Some of these organizations have adopted rules which hamper and interfere with the company's right to manage its own property and business. They assume for these organizations the right to sit in judgment upon and revise and reverse the action of the manager or other executive head appointed by owners of property in matters pertaining to the employment and pay of employees. In thus denying the right to the company of freedom of contract, these organizations, so far as they are concerned or affected, assume a joint management of the business in their own interests. While companies may for a time yield to superior force embodied in these organizations, they cannot recognize the claims or assumptions on the part of their employees as valid. On the other hand workmen feel that so long as they remain faithful and efficient in the line of their employment they ought to be able to feel secure in the permanency of such employment; that, when liable to be discharged, either for or without cause, at the arbitrary will or pleasure of one man, a man who practically commands their means of sustenance, they, to a certain extent, surrender their own rightful freedom. The strikes that most frequently occur take place upon inter-State lines of railway, the striking combination extending into two or more States.

It is submitted that to a National Railroad Commission might be submitted the power to arbitrate and settle disputes arising between the companies and their employees under such legal regulations as might be appropriately provided, and under such arbitration should be compulsory.

We remain yours,
THE BOARD OF RAILROAD COMMISSIONERS
OF KANSAS.

Correspondence.

WESTERN KANSAS.

By-way Notes of a Prospector in Southwest Kansas.

Kansas Farmer:

I have been rambling in this new and marvelous country for a few months, and herewith give the readers of the KANSAS FARMER the benefit of my observations. My tours have been in the present boundaries of Minney and Hamilton counties. The soil, except the range of sand hills extending along the south side of the Arkansas river and varying in width from two to ten miles, is almost universally a rich, sandy loam, carpeted with buffalo and grama grass. A few miles from the Arkansas, and indeed all the water courses, the surface stretches away on a vast level as true as if smoothed by some gigantic plane. Whole townships can be found with no hint of a break on their lawn-like surface. There is absolutely no choice in the sections so far as the soil and surface counts in the selection. The land that is here called rough and undesirable is either undulating or broken into hills. In many of the eastern counties of the State it would be classed as good farm lands.

The one supreme problem of Western Kansas is that of rainfall. Will seasonable and sufficient rains fall to make this an agricultural country? The same inquiry was as universally asked in the early settlement of Eastern Kansas, and answered then much more frequently in the negative than now. Whether wisely or not the faith of the people in this section is almost unanimous in the steady and certain increase of the annual supply of moisture. The argument, though not new, is that the soil, trodden for ages by the buffalo, antelope and wild horse, and baked by the sun, was rendered impervious to the few rains that did fall, and hence little or no moisture was held in solution. Breaking the surface has a two-fold effect—it takes up the rain, and, by capillary attraction, pumps from nature's secret wells below its latent wealth of moisture, causing the conditions of dew. It is also argued that the planting of trees and shrubs and leafy crops is an important factor in the solution of this important question. My personal opinion, being a verdant tenderfoot, is of little value, but the assertion is ventured that all settlers should prepare for frequent dry seasons, just as the East must expect a surplus of rain every third or fourth year. Assuming that the above theory is correct, there will, almost inevitably come seasons when crops will be complete or partial failure, and every family coming here to make this a home should provide against such a contingency.

The rapidity with which the tidal wave of settlement is marching westward has never had a parallel in the history of the State. The abundant rains of this and last year insures its continuance for another year at least. I predict that every desirable homestead, by this time next year, will be occupied. Congress will, without doubt, repeal the timber culture and preemption laws and this may delay the taking up of all the public lands by the time stated.

There is one detriment to the actual settlement of this, and I may say all new countries, in this: Too many men take up claims with no intention of making a home, but with the sole purpose of selling out, and therefore makes only a sham of improvements. The second installment of settlers will be the men who will make this desert bloom and bear fruit.

The towns are marvels of activity and growth. Garden City, one of the newest, liveliest towns of the frontier, and one where any one could take his family for a permanent home, and had, and is having, a rapid and healthy growth. Syracuse, the future county seat of Hamilton county, and only laid out a few months since, is having a pandemonium of saw and hatchet racket. It gives promise of one of the permanent business points in this part of the State. A bridge is under contract to be completed, I have been informed, by the last of September, which will open up all the new and fertile lands lying south of the river. The latest venture of a town is one now being platted just on the line of Colorado to be Trail City. The only trail now open for

cattle South is along the State line, and it is expected that a permanent cattle trail will be established along that route. If so, a new Dodge City, in all its glory of all-night saloons, gambling establishments and dance halls, will spring into existence in a month's time. A red-hot, rustling, Jay-Eye-See going town will be the next wonder.

Through the courtesy of Thos. H. Ford (who, with his brother A. E. Ford and A. E. Ford and Frank Warlaumont own one of the most beautiful ranches in Western Kansas) I have just made a visit to what was once Stanton county, and the country south of Syracuse. The country is rich, beautiful and almost wholly untaken. As I rode over its vast expanse, I felt impressed by three mighty sibilants—silence, sunshine and soil. I could but reflect upon the folly of tens of thousands of hard-working tenants of the States East of the Mississippi, who could come here and obtain 320 acres of this incomparable land for the mere hardship of a few years of frontier life.

The trip South was fraught with novel sights of droves of fairy antelopes and of the wildest of wild horses, and enlivened by several battles with hideous rattlesnakes.

While at the Ford ranch, I witnessed for the first time the sickening sight of branding cattle. It seems to be one of the necessities, but it is one of the most heartrending sights I ever beheld in the punishment of animals. The pitious cries of the helpless creatures, as the red-hot brand roasted its way into their quivering flesh, still ring in my ears.

Permit me in closing this prosy letter, to extend an open palm with my heart in it, to the entire outfit at Ford's ranch—T. H., A. E. and J. W. Ford, Frank Warlaumont and Jesse Boyd. May their herds be as prolific as Jacob's of old and the bachelors all speedily become benedicts. CAREY.

Crops and Stock in the Southwest.

Kansas Farmer:

I have just returned from another cruise through Edwards, Comanche, Pratt and a part of Barbour counties, and am better pleased than ever with the prospects of crops. A great deal of the corn is hard enough to make a crop if no more rain should fall, and I have never seen better corn crops in any country or State than I see in southwest Kansas. The finest crop that I have seen for many years I saw on Mr. Carpenter's farm in the southwest portion of Pawnee county. The field contains twenty acres and stands full ten feet high, with the largest ears I most ever saw, and the ears are filled to the point. Mr. C. tells me that he has another field equally as good. He has several acres of splendid potatoes and a good supply of other vegetables of various kinds. His sheep are looking fine, but have a little scab.

I saw a few cornfields that were severely injured by the drouth and hot sun, as I crossed the Rattlesnake bottoms, but none on the sandy uplands. Everything there was green and growing. It was different on the hard soils, and especially on the north side of the Arkansas river. Corn and potatoes had suffered severely, and some farmers had already commenced to cut up their corn for the fodder. More people are becoming convinced that sand is the most reliable, and the sandy hills, both north and south, are being taken up very rapidly. Little land can be found now, even of the roughest, to pre-empt or homestead.

Stock of all kinds are looking fine and I seldom hear of any mortality among any. Cattle are down, and sheep can't get any lower. There are some inquiring for sheep, and a few are buying for future herds.

The country is settling very fast, and land is still on the rise. We have an occasional shower and but very little wind. The summer has been the warmest that I have seen in Kansas. There are more preparations for wheat than there were last fall. Some threshing has been done, and a few crops turned out better than was expected. Money is extremely scarce, but we are learning to do without it. Larned still keeps up the boom; many fine buildings are still being put up. We have four lumber yards now, and all are doing a good business. It is a great town for windmills and forest trees, as well as fruit trees and vegetables. Although the health of the population is good, and sickness and deaths are rare, still the

drug stores are rapidly increasing, and the sale of medicines, in the shape and form of beer, whisky and hard cider, is immense.

W. J. COLVIN.
Larned, Pawnee Co., Kas.

"Clydesdale Pedigrees and Stud Books." Kansas Farmer:

"What is the difference between a stallion with a pedigree and one without?" or what is the difference between a Clydesdale horse being recorded in the Select Clydesdale Stud Book of Great Britain and Ireland? Many people I find have confused ideas regarding this matter, and I will therefore endeavor to explain the difference.

The Clydesdale Stud Book of Great Britain and Ireland is the only Scotch Stud Book that is recognized in this country, inasmuch as it alone contains correct pedigrees extending back nearly a century, and the great bulk of which are duly authenticated and vouched for. The Select Stud Book so-called, is in reality no stud book, as it contains no pedigrees tracing back more than one or two generations, and many of the entries in the book have neither sire or dam mentioned. Indeed, the most of the entries in this Select Stud Book are comprised of animals not eligible for registry in the proper stud book.

To show the worthlessness of a record in this select stud book, I may state that at the exhibition of Clydesdales in connection with the World's Fair at New Orleans last winter, several noteworthy animals were debarred from competition on account of their not being recorded in the regular stud books; and the fact of their having certificates from the Select Clydesdale Horse Society was not sufficient to enable them to compete as Clydesdale. I also notice that most of the State Fairs now offer premiums for Clydesdales recorded or eligible for record into the recognized stud book; that is, the Clydesdale Stud Book of Great Britain and Ireland and the American Clydesdale Stud Book.

This Select Clydesdale Stud Book and the records, therefore, are practically of no value whatever, and only mislead the people who attach any importance to such records.

I am, etc., JUSTICE.

A Talk About Wheat, Insects and Weather.

Kansas Farmer:

At least one of the problems which has so much perplexed the minds of our farmers here has been solved by Prof. Snow in his interesting and very instructive essay in the June report of the State Board of Agriculture.

During the month of May the wheat in this section promised much more than a half crop, but a change came over it—that is much of it—its life-blood seemed to be ebbing away, and in ten days many farmers who before had prospects of a half crop found the prospects wholly blasted. The question with every one was "what is the matter with the wheat?" Some said Hessian fly, others said chinch bugs, still others said it was a freeze, while many others frankly acknowledged that they did not know. I belonged to the last class. I examined the wheat thoroughly and could find nothing; was satisfied it was not the Hessian fly. Prof. Snow steps forward and says it is the Wheat-straw worm.

We are much obliged to the Professor for his introduction to this stranger who has so recently come into our midst for the first time, and for the valuable information he hands over concerning the peculiar habits and characteristics of the gentleman.

The sudden and unexpected appearance before us of both the Hessian fly and the Wheat-straw worm it seems to me, should command a halt all along the line. Farmers should stop, set down and consider what course it is best to pursue in order to dislodge and put to flight these deadly foes of the wheat crop, and at the same time make general agriculture most profitable. The standard remedies, Prof. Snow says, are "the burning of the stubble and rotation of crops." Rotation of crop means tame grasses, clover, timothy, orchard grass, etc.

Now, if this seeming calamity forces us into a system of farming of much higher merit, a system which preserves a due equilibrium of crops, including tame grasses, and at the same time preserves and increases the fertility of the soil to an indefinite period, then this evil may in the end become a blessing to us. It may, however,

be well enough to say just here, that had there not been a Hessian fly or a Wheat-straw worm in Kansas, that the wheat crop of Osborne county could not have been very much over a half crop for the reasons given by Major Sims in the June report. It was not a wheat year. The wheat gods were off on a journey. It got no start in the fall, and the unmerciful cold of winter penetrated its poorly sheltered home and it surrendered. The season has had no parallel in the history of wheat culture in Kansas, and the well established rule that "early plowing is the best," for the first time has had an exception. This rule it was believed, heretofore, had absolutely no exceptions, but this year without a single exception in our county the wheat on the earliest plowed ground was the dearest in the spring. Of course I can see a reason for it now. When the early plowing was done the ground was dry and broke up in clods, and the rainfall afterwards was not sufficient to pulverize them. The soil remaining in lumps during the winter the cold entered more freely and froze out the wheat. When the late plowing was done the ground was in better condition and the wheat came up better and was in better shape for the winter. Last year the most enterprising farmers suffered the most, while the lazy "hog it in" fellows come out ahead. Still, I prefer to be classed among the enterprising fellows.

This year our ground as soon as the crop was off, was in the best condition for plowing, and with the exception of having been too wet some days, it has been in excellent condition ever since, and some of our farmers have over one hundred acres plowed already for wheat and rye. Our corn crop is the biggest ever known in the county. It is simply immense. M. MOHLER.
Osborne, Kas., August 8, 1885.

Ellsworth County--Farmers' Union.

Kansas Farmer:

It is very seldom we see anything in the FARMER from Ellsworth, the geographical "hub" of the State of Kansas—and I would not miss it far if I should add, the United States.

This county has been favored with plenty of rain. A large acreage of corn was planted, which is very fine. Corn has not been affected by worms or insects of any kind. Potatoes are large and of an excellent quality. Melons are immense, as well as all other products of the soil. Fruit, with the exception of peaches, will average with other years. Stock of all kinds have made a fine growth and are healthy.

The farmers are, or should be, happy with their productions; but prices are so low that it does not pay to sell, excepting in beef and pork.

The Ellsworth County Farmers' Union, an organization composed of our best farmers, is doing a good work in co-operating, and beneficial results to the organization are being realized. I was well pleased with L. Peters' article; but the protection he is after can only be secured by the united effort of the farmers through organizations of farmers' societies, which must grasp the political as well as agricultural interests of the Nation. Let farmers make it a rule to elect a farmer to every position they are eligible to fill, from township offices to the Presidential chair, and then, and not till then, will the farmer realize that his calling is an honorable one and his labor remunerative. No class of men labor so hard and receive so little for their labor as the farmers, and no class of men are more to blame for this lamentable condition than the farmers themselves. They must organize into State and National unions and demand their rights with their votes, a power that will not be slighted, overlooked and pigeon-holed like a petition, but it will be heard and respected.

For the benefit of the readers of the FARMER, I will send a copy of the constitution of the Ellsworth County Farmers' Union, and urge upon the farmers the necessity of organizing at once. If the editor will grant so much space, I will not ask his indulgence again. D. B. LONG.
Ellsworth, Kas.

[Next week we will print the constitution and by-laws of the Ellsworth County Farmers' Union.—Ed. K. F.]

The last report of the French Department of Agriculture shows a falling off of more than one million acres in vineyards, owing to the ravages of the phylloxera.

About Tame Grasses.

The following correspondence was handed to us for publication. It explains itself, and is well worth reading:

HAYS CITY, Kas., July 16.

A. E. Taylor, La Fontaine, Wilson county, Kansas:

DEAR SIR:—I have just read your letter to the KANSAS FARMER—"Tame Grasses Mixed," and would like to ask you what time of the year is the best to seed with these mixed grasses.

You do not like the alfalfa, but give no reasons. I have a small pasture of alfalfa that I seeded especially for a Jersey cow and calves. Although it produces well, my cow and horse will not eat it if there is anything else that they can get that is green. Nor will they eat it when made into hay. I have tried to starve a cow to eat it and she would actually grow poor standing in alfalfa knee deep, with two good messes of chop night and morning. I propose to plow it under, as I consider it almost worthless as a forage plant, and shall seed to some other grass for pasture.

Yours, etc.,

M. J. R. TREAT.

REPLY.

LA FONTAINE, Kas., Aug. 5, 1885.

Mr. M. J. R. Treat, Hays City, Kansas:

DEAR SIR:—Yours asking me to give the time of year to seed tame grasses mixed (mentioned in KANSAS FARMER) to hand. Would say that I have had the best success seeding in early spring as soon as the ground is in order to work after March 1st. I will further say that I have had good luck seeding millet stubble land. I usually cut my millet a little high and then in the spring when I get ready to sow my grass seed I hitch a team to a revolving harrow that has been well sharpened, drive into my millet stubble just as I find it, let one of my boys drive the team while I sow the seed behind the harrow. After we get over a few acres, the boys will go back and harrow over again what we have sowed, and then we will sow another few acres, and so on until the field is finished. I have had good luck sowing this way. The main cause of the failure in this part of the State is on account of the soil being too loose. This plan gets away with that, and the millet stubble serves a purpose as a protection through the summer.

Now, this is my plan for sowing tame grass either mixed or unmixed. I know that it is not very popular, but I had rather risk it than any that I have tried or seen tried, though I think it very essential that your millet land (when you are going to follow with this mixture) be plowed deep and harrowed down very level.

Yours truly, J. E. TAYLOR.

From Osage County.

Kansas Farmer:

Having seen nothing in your much esteemed paper from the farmers in this county, I take the liberty of sending you a few jottings.

Farmers are busy putting up hay, of which considerable will be put in stack this season. Grass is the best I have seen for several years. Corn is the main cereal that is cultivated to any great extent and promises a good yield, although the summer has been exceedingly wet, and the farmers have had difficulty in keeping their fields clean from weeds. The corn on the upland is fully as good as that in the bottoms and much cleaner. The heavy rains this spring and summer have caused the bottoms to be very nearly untillable, weeds taking the start of the corn.

I think it would be a good policy if the farmers would generally lay more tile and drain their bottom fields thoroughly. It would in the long run by a large increase in crops.

The web worm visited us, but no material damage was done. At places, I have noticed he killed the weeds; but where there has been no weeds it cut the roots of the corn so that the corn is now lying flat with the ground in small patches.

Oats promise a fair yield. Potatoes and vegetables are splendid and will be a full crop. Fruit is somewhat scarce, excepting small fruit and apples, of which there will be about half a crop. Peaches none; nearly all the older and larger trees have been winter-killed and are fast dying out. I think farmers must abandon setting out young peach trees in Kansas, as the climate is not suitable any more, it being too cold and windy.

Millet promises to be good this year, and in fact it hardly ever fails to produce a good crop if sown on the right kind of soil and under proper circumstances. But owing to

the scarcity and high price of the seed last spring, but little of it was sown. Farmers ought to thresh more of their millet so as to get plenty of seed. It will pay.

On the subject of tame grasses I am much interested. The common prairie grass is not going to last long and will soon disappear from our fields. Farmers are eagerly looking for a better substitute, and more tame grass is being sown every year. Orchard grass seems to prevail as the best, both for grazing and for meadow. It seems to be hardier, notwithstanding the drouth and dry winds of the late summer, and the heavy rains in the spring, better than any other grasses. Blue grass is hard to get a good start, but after it has fairly got a start it makes excellent pasture. Some red clover has been sown, and alfalfa seems to thrive well.

Success to the KANSAS FARMER, may it find its way to the home of every farmer in Kansas; may it never cease to be interesting and wide-awake to ever farmer in the State.

Yours Respectfully,

J. A. ANDERSON.

Osage City, Osage county, Kas.

From Russell County.

Kansas Farmer:

As harvest is past I will try and once more give your readers a few more items from Russell county. Our wheat has been put up in good condition, and is of a fair quality; oats are very short straw, but well filled; spring wheat that was put in early is a good crop; rye is good but only a small acreage sown: corn is the best we have ever had in this county; millet is extra, both in quality and quantity. Threshers are busy cleaning up the grain that was not stacked. We have had all the rain we could utilize this summer, except a short time, when oats were heading out; oats and the early June grass are the only things that suffered.

The immigrants that came this spring are nearly all here to stay and are doing well. There are still some pieces of Government land in the county, mostly rough land that is suitable for grazing, and considerable railroad land yet unsold.

I see our States Prison Warden in his report for '83 and '84 claims a larger increase of crime in the counties where prohibition is most rigidly enforced. I would like to have some kind of an explanation or reason for it, as that is not the way it works here; for the more thoroughly prohibition is enforced the less crime there is.

Stock of all kinds are looking well. Sheep have not paid very well this summer on account of the low price of wool. A good many people are paying more attention to raising colts and it appears to pay well.

RUSSELL COUNTY FARMER.

[The truth about prohibition and crime is, that in any and all places, where strong liquors are not used as beverage, there is a much higher grade of morals in the community. But, among most sober people, occasionally a villain appears. The report mentioned is not worth anything as a statistical document beyond the mere facts relating to the number of prisoners, and the expense of maintaining them. If you want to obtain facts that are trustworthy on this subject go to the county and city records. Where the law is enforced in all the State for a number of years, then the penitentiary figures may be of some value as to the State; and they will then be more reliable as to counties; but the local records will always be better for local purposes.—Ed. K. F.]

Bismarck Fair.

The Bismarck Fair managers have purchased a beautiful and well-bred driving horse, which they propose to give away to the patrons of the Fair, every person who buys a full-fare ticket of admission to the Fair will be allowed to guess on the weight of the horse. A record of every guess will be kept and will be open to the inspection of all guessers when the record is closed—Sept. 12th, at 2 p. m. The horse will then be weighed on the city scales, and the party who guesses the nearest of the weight will be required to pay \$1.00 on receipt of the horse.

Excursion to Kansas City.

The Topeka Press Club will give an excursion to Kansas City, Saturday, August 22d. The round trip costs but \$2. The train will leave the Union Pacific depot at North Topeka at 7 a. m., and returning, leave Kansas City about 7 p. m., giving about ten hours to visit the metropolis. Secure your tickets by Thursday for the only excursion this season to Kansas City.

The Home Circle.

Weighing Sugar and Butter.

Old Farmer Ray came home one day
With groceries from the Center;
And jumping from his queer old shay,
He called out, like a Stentor,—
"Ho, there! Bring out the steelyards, Ruth!
I'm some mistrustful, I am,
Friend Barton's scales don't tell the truth,
And I'm a-going to try 'em!"

So then his wife the steelyards brought,
And farmer Ray proceeded
To weigh each article he'd bought,
To see if aught was needed
To make it of the proper weight,
And, lo! the trial ended,
The sugar lacked just one pound, eight,
Of what had been pretended.

Into his shay jumped Farmer Ray,
And whirled round in a jiffy;
Then out the gate, and down the way
He started off, as if he
Were riding for his life. "I'll teach
The rascal to cheat me, sir!"
He muttered. "I'll make him a speech,
As sure's my name ain't Caesar?"

Arrived before the Center store,
He roughly shouted, "Whoa, sir!"
To Dobbin; then turned towards the door,
To seek the guilty grocer.
There, at his desk, friend Barton stood,
So smiling, fat, and ruddy,
One felt at once, he was too good
To injure anybody.

"Oho! Back, are ye, Farmer Ray?"
Pleasantly quoth friend Barton;
"Left suthin' that you brought here, hey?
Wall, now, I felt right sartin!"
But here the farmer cut him short;
"Yes, sir!" he cried; "you've hit it!
I did leave somethin' that I bought,
And I've come back to git it!"

"I'd like to know," continued he,
Though well-nigh choked with choler,
"How much white sugar, usually,
You sell folks for a dollar?
Ten pounds, eh? Wall, you jes' weigh this;
Two dollars' wuth complete it
Pretends to be; but if it is,
Then I'll agree to—eat it!"

With this he threw the sugar down
Before him, and awaited
His answer, with a threatening frown.
The grocer, thus berated,
Looked up, amazed, apparently;
Although his mouth was working
Oddly enough, and in his eye
A humorous gleam seemed lurking.

"What, neighbor Ray, d'ye mean to say
There's less than twenty pounds there?
Wall, now, that's funny, anyway.
Why, neighbor, I'll be bound there
Was twenty when I tied the string,
I'll tell you how I know it:
You'll grant that this, if anything,
Is evidence to show it."

"You brought some butter in to day,
All into balls made nicely;
Just twenty of 'em, said to weigh
A pound apiece, precisely.
Wall, when I took 'em from the pail,
(Jes' so's to save the bother),
I put all twenty in one scale,
An' weighed your sugar in t'other."

"An' so you see it must be right,
An you have made an utter
Mistake. However, if you aint quite
Convinced, I'll git that butter!"
"Oh, don't do that! I beg you won't!"
Quickly exclaimed the farmer,
"I assure ye there aint no need on't!
Whew! Aint it growing warmer?"

He paused, and stood and wiped his brow,
With his immense bandanna,—
A very different person, now,
In look and tone and manner.
A sickly smile replaced his frown;
And 'twas no voice of thunder
In which (with eyes that would drop down)
He owned he'd made a blunder.

"You're right! you're right! 'Tis plain as
day!
I was mistaken!" said he.
"Wall, wall, I must be on my way!
I've stayed too long, already."
So saying, he humbly took once more,
From where he'd lately thrown it,
The sugar, and went out the door
As if he had not shown it.

"Wall" said the grocer, watching this
Retreat with quiet laughter,
"I guess them butter-balls o' his
Will weigh a pound hereafter."
"Wall," said the farmer, in his shay,
Pondering the case, "the fact is
I've had a lesson in weighin' to-day
I'm going to put in practice."
—Youth's Companion.

An electric tooth-pulling machine, which is quick and almost painless in its operation, is said to pull seven teeth in five seconds. A pair of forceps protrude from a nickel tube which is connected with a wire. The forceps are applied to the tooth, the operator touches a spring, a spiral arrangement within the tube winds up in a wink, draws down the forceps like a flash, and in an instant the tooth is jerked from the jaw and cast on the floor.

"Sour Husbands."

Doubtless your readers will think this a new subject upon which to write, and indeed you are right; but we cannot all truly say it is an unheard of fact that many of our "lords of creation" are somewhat "soured" as the season advances; nor is it longer a matter of wonder, when we ourselves realize to what extent they (especially do I speak of farmers) have been exposed to the burning heat of summer.

We all realize how soon milk will sour when exposed to the elements, and any other delicate material, will as easily become fermented. Our little ones at play, will soon tire in the heat of summer, become feverish, fretful and cross, and we, their mothers, strive by coaxing them with pleasant words, to beguile their weary hours into a peaceful, restful, noon-tide nap in the hammock, or other refreshing nook. But the children of older growth cannot always be decoyed into the restful meshes of old Morpheus, but take a hasty dinner, and off to the fields again; and when night-time draws her mantle around her, the average farmer (and little wonder) is little less than a "wolf in sheep's clothing." His strength of physique exhausted, his nerves unstrung, his system heated to ten times its usual warmth. And is it any marvel that after a night's tossing of unnatural restlessness, week following week of similar experience, our farmer friends nearly all present the same haggard, worn expression. Their work has crowded them all summer, owing to the lateness of the spring, and there has been little opportunity for taking the needed occasional holiday.

I know not when this state of affairs may be improved, as our summers seem to become more and more intensely heated from the influence of old "Sol;" but of one thing I am confident, we wives can assist in a great degree in cheering and making their lives more bearable during the heated term, by making and sending to the field cooling drinks of lemonade, cherry or berry wine, fresh made—not the fermented kind—and diluted with the coldest water the farm affords. Why it makes my little farmer just giggle in his sleeves, to see the little girls come near the fields with their brimming vessels of the refreshing draughts. It pleases the tired laborer to know the dear ones in the home are mindful of his wants. And ladies, are we all as careful of our summer diet as we can afford to be? Do we not expect our husbands and children to possess stomachs akin to those of the torpid alligator when we prepare meals composed of greasy meat (pork especially) and corresponding articles for our loved ones, building up? Now, I don't go one cent on the same food for hot weather that we relish in cold, zero weather.

Perhaps you will say, "she is wandering from her pet subject." I think our manner of diet has just as much to do with the happy contour of the grown up boy, as with the little prattler upon the carpet, in ratio to the amount consumed by the elder over the little urchin. Any provider for a family would much sooner provide articles for cooling, wholesome dishes for summer diet than the disgusting greasy trash of the average African. Yes, indeed! I do think, and firmly believe our common fare, has much to do with the happy (or otherwise) condition of our husbands. Less sour bread, fewer sour husbands. That the latter exist to an alarming extent, where good rich bread is the rule cannot be denied, and where the owner of such commodity does not stir the soil, but dandy, begloved, dudsish husbands, pampered upon sweet-meats from their mother's knee. With such I am not dealing just now. Ladies lets hear more about sour husbands, their cause and cure.

MYSTIC.

Claribel is Here.

Sickness in the family and too much to do has kept me silent for a long time. Mrs. E. R. Brown has it about right in one paper in regard to hard-working housewives contributing to the paper, while it is plain Bramble bush—I think it is, said in an old number that "she did not see why women could not get time to read." If she had all the work to do for five or more, part of them children, sewing and mending included, she could easily see, at times at least, how it was done.

It is deplorable that the mothers of the

land are not able to be better informed—all of them, I mean—of course many can be, of the innumerable questions asked by the young American. We ought to be prepared to answer the most reasonable and to keep posted on current events outside of the improvement we ought to make in deeper works. I wish there was more good literature bound in cheap form; for some very desirable works are beyond our purse sometimes, and we have to deny ourselves. Plenty of light trash can be obtained cheap.

Cousin Agnes, greeting, I am afraid you are not conceded a very hearty welcome; but don't be abashed, its our way; we are not so bad as we appear to be. "What's everybody's business is nobody's business," is very true. I do not doubt that several thought—"I do hope Mrs. Hunter or some of those able ones will write her a welcome letter." Perhaps it is my duty, able or not.

As to the chicken business, I had no trouble raising them if I could get them hatched. I used an artificial brooder heated by a lamp, the heat over instead of under them.

Fanny Field, I was surprised that your chickens did not prosper, for I really thought you knew everything concerning that branch of business. I raised nearly every chick that I could get hatched from a Common Sense Incubator; had a nice dry hen house with board floor, and a little run made of laths till they were old enough to run farther away and return; fed plenty of boiled eggs with occasionally a mess of Cayenne and again black pepper, bread-crumbs and milk to drink. If I had tried to raise them before grass started should have planted boxes with wheat or rye and given to them, as I think green food is necessary. O, do let's have this subject discussed. Mrs. Hunter, please drop your temperance pen and give your experience, or don't you raise chicks?

I do feel interested somewhat in temperance; but unless one lives in or near a community where liquor is sold freely, so that they often see the bad effects of it or have some dear friend too indulgent, they seem to forget its existence. In our quiet country homes we do not realize what a terrible curse it is, while those in cities see the suffering it causes nearly every day.

I wish our editor would print the song, poem, or whatever it is—"O that land of Kansas," spoken of by Mr. Hunter. I never heard of it before, presume many would like it, as the readers of the KANSAS FARMER are all interested in that land of Kansas.

Won't some one tell us of Agnes Weir? What can have happened her? I would like to ask some one to, but then they do not respond very well.

Please, Mr. Editor, give us your way of pickling ripe cucumbers. CLARIBEL.
[Look under head—"Inquiries answered."
—Ed.]

How to Keep the House Cool.

With a little attention to some simple principles the condition of indoors during a heated term can be made comparatively comfortable, but if they are neglected extreme discomfort is inevitable. Keeping the house comparatively cool is an easy matter. In early morning the atmosphere which has become cooled off during the night is cool and refreshing. If the windows have been open admitting a circulation of air, that indoors is at the same temperature as that outside. But as the sun climbs up the sky the outside air heats up till by 10 a. m. it is like a furnace. If the doors and windows have been left open the temperature rises inside with that outside, and while the house affords shade from the direct rays of the sun, the air in it is just as hot as it is under a tree or an open shed. But if early in the morning, when everything was cool, the windows, doors and blinds had been shut, shutting in the cool air and shutting out the heat, the rise in temperature inside would have been gradual and it would have remained several degrees cooler throughout the day than the outside air.

In the kitchen, where the work and cooking has to go forward, such plan is perhaps impracticable, but not so with the other portions of the house. As soon as the sun is down the windows and doors should be thrown open, so that the inside may cool off again during the night. In a heated term with the mercury up in the nineties the sleeping rooms get so heated up during the day that they do not get cooled off by bedtime, especially if there is an unventilated attic over them. Such an attic becomes hot as a furnace, and with no escape for the hot air, prevents the chambers under it from cooling off. Every attic should have a ventilator in the roof, or gable windows, which should be kept open during warm weather, which will greatly aid the cooling off. The same principle which applies to the living rooms applies to the cellar. If we would keep it cool and dry we must exclude the hot air during the day by closing and shading the windows, and open them at night to admit the cool air; otherwise the hot air dur-

ing the day, laden as it is with moisture, will come in, and meeting a cooler air will deposit its moisture by condensation on the walls, making the cellar at the same time warm and damp.—Farmer's Review.

Health in the Household.

Permit me once more to call upon the thousands of readers of that instructive and entertaining page devoted to the home and the housewife. The spring with its malarial mists and clouds and dews is at hand, and as usual, many will be laid by from work and confined to the house if not to the bed in consequence. It is to point out how these and the usual summer complaints are to be avoided that tempts me once more to address you. We are surrounded by evil influences that stalk forth in the darkness, not only to attack us, but the young, the weak and the debilitated of both sexes; and, as it has been my privilege to meet with many such cases and to aid nature in overcoming them, a few words now may be of advantage to many.

First then as to the season. It ought to be evident to all that the same system of feeding practiced in winter should not be attempted in spring or summer. I am not considering whether that system was right or wrong, but, however right it may have been, it should be changed now. The Creator has provided us with that which is good for food, not only with regard to season, but also to that of climate; hence, we do not find the earth producing the same thing here, as there, or now as then. If then the earth buds and blossoms, and brings forth fresh something fit for food now, that it has not produced during the months of winter, it is evidence to me that the work, the habits and the vital functions of man need them, and that he who would follow nature and live naturally, will turn over a new leaf and act accordingly.

The foods craved by the animal instincts in cold weather are of a stimulating and heating character, as is that of the inhabitants of extreme northern climates; and as we gradually approach a more temperate season or climate do those same instincts call for that which is equally nourishing, but of a much less heating and stimulating nature. Not to make the change, therefore, but to continue the same habits far into the spring is to find the system in a feverish, heated, and constipated condition; itself irritating and debilitating and provocative of many of the diseases that flesh is heir to. It is not necessary that the change be made arbitrarily, suddenly, or all at once; the seasons do not so change, but to modify, graduate so to speak, the table supplies and the general habits as that the blood may be less heated and the system somewhat relaxed.

This question of cooling off the system prevails in almost every household, but as a rule medicine is resorted to as the sole and only means at hand to supply nature's demands, and to relieve the bowels. This practice will be seen to be at variance with both nature and science, it proceeds upon the theory that no matter what our habits or the character of the disease with which we are afflicted nature has provided a remedy in the form of medicine to apply which is to be cured, although we continue the same routine of habits and practices which brought on the disease. When, however, we remember that the blood is made of that which we eat, drink, and breathe, we will the more clearly see that, if we would change its nature or condition, we must modify or change that from which it is produced.

If then we have in good part subsisted upon meats, last year's vegetables cooked in grease, light biscuits made with fat, and well buttered, puddings and pies composed largely of fat with plenty of good, strong hot coffee, to swim them all in, in the stomach, it is about time to call a halt and give the latter organ a rest. Bread is an article of diet that is acceptable and healthful all the year round, but to be adopted to the requirements of life it should consist of all there is in the grain; in a word, be made from unbolted flour. Milk is very refreshing, nourishing and cooling drink now, and may safely be made a substitute for coffee. Eggs are in season, and properly cooked, are both nourishing and easy of digestion. Spring vegetables are coming, and a dish of asparagus, of lettuce and onions, or of boiled kale or spinach, are relishable. We have a few good potatoes yet and some apples, and will have until new ones come. A spring chicken now and again would not be out of place if not fried in fat, and once in a while a piece of mutton or of fresh beef would do good. With these we have various meals which made into mush and eaten of an evening, with milk or cream, form one of the very best dishes we have to sleep on over night. We keep them in variety and change as taste may suggest; thus we have cracked wheat, wheat meal (unbolted flour) oat meal and Indian meal, and to these some add barley meal, all of which having the shell of the grain ground with the finer particles, provide bulk as well as nutriment, just the reverse of concentrated foods, are easily digested and agree with nearly every stomach.

And as every good housewife has a spring cleaning up of the house, so let every member of the family make it a point to bathe frequently, and rub and scrub the skin thoroughly, thus starting the blood into circulation, thoroughly cleansing the skin and opening the pores so as to enable the vital system to throw off the poisonous particles within, breeding irritation and fever, and leading to incurable disease and death.—Household.

The Young Folks.

The Seen and Unseen.

There were watchers by the bedside,
And silence in the room;
There was morning light and shadow,
From a night of troubled gloom;
There were hearts akin to breaking,
There were souls bowed down with grief;
There were drinkings deep from sorrow's
cup
In moments all too brief.

There were farewells sad and tender,
In whispers soft and low;
There were waitings for the Messenger
Of measured step and slow;
There were earthly warfare ending,
There was cease from worldly strife;
There were mortals made immortal,
There was death and endless life.

There were watchers by the bedside,
Whose forms we might not see;
There were spirit voices chanting
In sweetest melody,
There was morning light upbreking
Into Everlasting Day,
When the watchers and our dear one
Went up the heavenly way.

—Good Housekeeping.

Boy's and Girl's Diaries.

The diaries were out in full force—'Liza's scented morocco-covered beauty, Tim's long slim affair, and Tinitot's bunch of brown paper, stitched together to form a book. "Oh dear!" groaned 'Liza, "I haven't written here for five days, and the only thing I can remember is that we didn't have a picnic Thursday!"

"What's a diary for, anyway?" asked a skeptic.

"To tell what happens every day," said Tinitot, with pencil in her mouth.

"To teach you to stick to it, and be orderly," said Tim laughing at 'Liza, who seldom persevered in anything.

"To put down the kind things people do for you; and lots of things you want to remember, and not to go sentimentalizing along about your feelings and all that," cried 'Liza, who hated nonsense and whose journal, when she did write it was a model of conciseness.

"A diary is a history," said Uncle Jack. "There's your history of the United States; that's Uncle Sam's diary."

"He has somebody else to write it for him," grumbled Tim, enviously.

"I kept a journal once," admitted the skeptic, "but I didn't know how. I wrote too much each day and grew tired of it and I burned it up. Tenseness and clearness are the good points of a diary. You'll improve your style, 'Liza, by keeping one. If more people formed their style by keeping diaries, editors wouldn't have so many wordy articles to spoil their tempers! nor we read so many jokes about "carloads of manuscript to spoil ours!"

"Robinson Crusoe kept a 'terse' diary," observed Tim. "Just put a notch for each day. That was short enough!"

"I knew a very busy boy once," said Uncle Jack, trying to look as if that boy was not himself, "who found from experience that, if he was going to keep a diary at all, it must be wonderfully short; so he wrote just one fact for each day. I do assure you it took a great deal of judgment to decide upon the most interesting facts."

Then Uncle Jack showed them a battered old book.

"Wednesday," read 'Liza, "Nothing much. Awful hot. Thursday—Thunder storm; creeks overflowed. Friday—Rowed in boat on creek; tipped over; pretty wet. Saturday—Camped out last night, and tied Bob's and Titus's toes together while they were asleep. They got mad at each other. Sunday—Saw J. H. He is just home from school. Monday—Stuffed a squirrel skin. Tuesday—Ma made plum cake. Bully."

"Such judgment in selecting the most interesting facts!" commented the skeptic, and they all laughed.

FRANCIS J. CLARKE.

Churchill, Ottawa Co., Kas.

Whether or not one could catch a ball thrown from the top of Washington monument, led the catcher of a local base-ball club to make a similar trial recently from the top of the waterworks stand-pipe in Erie, Pa. The height was 248 feet, and upon the seventh attempt the deed was accomplished, but the catcher declared the sphere weighed a ton.

Story of Charles the Cat.

On June 1, while the family at 200 West Forty-fourth street, New York, was moving out into the country, an enterprising young tomcat stole into the house. When everybody threw something at him, instead of beating a retreat he flew up to the third story.

One of the front windows was open and the cat decided to go out on the broad stone ledge and wait for the excitement to quiet down. He went to sleep out there, but not for long, for the slamming down of the window sash roused him, and with a wild yowl of terror he presently beheld the last inhabitant of the house lock the front door and disappear in the distance.

The cat's name was Charles. It was forty feet to the street. Cats have jumped or fallen as far as that before, but Charles was young, and he felt that he could never do it and live. He stuck to the window ledge.

Night settled down, the cats in the neighborhood came out, but Charles was silent. He knew that the Maltese puss across the way would never believe that he was staying up there because he liked it, and he did not desire to appear ridiculous in her eyes.

But when the day began to break, and the other cats went home, his pride left him and he broke down. When the new policemen came on the beat, and the carts rumbled by, Charles filled his lungs full and screeched and mewed plaintively and steadily, gazing down pitifully upon the passers by, and doing all he could to show his distress. But the policeman paid no heed, and the passers by either looked casually for a stone, or, thinking it was a cat that wanted to howl, let him howl.

The sparrows arrived, and took in the situation. They gathered on the neighboring ledges and mocked Charles hilariously, or maddened him by continually flying up and down. They also declined to supply him with a breakfast. He got no dinner or supper either, and night and day and night passed, until he lost all track of time. When the rain fell, he lapped it from his craggy coat, and once when a bewildered sparrow did alight on the window ledge, he got it and ate all but a feather or two. In his rational moments he howled for help.

At last a man stopped in the street and, first of all his kind, showed an interest in the poor cat's fate. It was on Monday last as night was settling down for the twenty-first time since Charles's solitary imprisonment. The good red face of the dumpy man who looked up was that of Excise Commissioner Morris. He stopped and struck his forehead in astonishment. Charles stretched out his neck and yowled a despairing yowl. He had never met Commissioner Morris before and didn't hope for much. But his sad tones had gone straight to the Commissioner's heart, and, rushing up the steps he almost rung the bell off. No one came. Then he made a break for the fire alarm, to call out a hook and ladder truck, but changed his mind, and struck out for Mr. Bergh's office instead. On the way he reflected that it was late, and bore off for Police Headquarters. There he told the cat story, and then he went home and went to bed.

He could not sleep. All night long Charles's hungry eyes haunted him and Charles's plaintive moaning rang in his ears. At 7 o'clock yesterday morning, wan but enthusiastic, he was at Twenty-second street and Fourth avenue waiting for Mr. Bergh's men to open shop. When they came the Commissioner told his tale. Officer William Smith, slipped a revolver into his hip pocket, and officer George Sanders, colored, provided himself with water and cat meat, chopped up fine. Together they sallied forth, with the delighted Commissioner in the wake, and soon bore down on Charles's island home. They ran up the steps, and Charles said to himself bitterly: "Oh! pull the bell and go away, as they all do." Even when he heard the key grate in the lock, and the tread of the Commissioner sounded on the stairs, Charles could not believe his ears. But when the door of the room behind him opened he could no longer doubt that deliverance was nigh. Officer Smith threw up the sash. Officer Sanders spread out the cat meat and water, and Commissioner Morris beamed while Charles flew off the window sill and into the grub. Eager hands picked up his emaciated form and started with him for the hospital of the society. But a boy on the street said:

"Mister, dat's de tomcat what belongs to de butcher. I seen him on de winder more'n a week."

Charles was released and flew to his home, while Officer Sanders flew after the youth who had seen a cat suffering and passed by on the other side. Of the two, Charles was the only one that got there.

Commissioner Morris went home, and the officers proceeded on their work of mercy. They had the key to a house in West Fortieth street, and went to it. Here the scene changes from one of cat meat, deliverance and joy to deep tragedy. Hardly had they entered the house when an unearthly scream rent the air, and a wild-eyed cat came at them. The officers retreated into the parlor and held a consultation. Officer Sanders admitted that cat meat and water was no sure cure for a case of this kind, and Officer Smith pulled out his revolver. The door was opened cautiously and the two officers threw out small pieces of cat meat. The wild-eyed cat made another desperate charge and met her death by a gun-shot

wound. The officers went home and made these two reports:

Cat rescued, fed, and set at large.

Cat crazed by hunger and thirst, destroyed.

How Ivy Screens a House Wall.

The common belief that ivy trained against the walls of a dwelling house produces damp walls and general unhealthiness is fallacious. The very opposite is the case. If one will carefully examine an ivy-clad wall after a shower of rain he will notice that while the overlapping leaves have conducted the water from point to point until it has reached the ground, the wall beneath is perfectly dry and dusty. More than this, the thirsty shoots which force their way into every crevice of the structure which will afford a firm hold act like suckers, in drawing on any particles of moisture for their nourishment. The ivy, in fact, acts like a great coat, keeping the house warm and free from wet. One more virtue it has in giving to the ugliest structure an evergreen beauty.

The Fiddle and the Bow.

The fashionable girls of Philadelphia have taken up the fiddle and the bow. The outlay for instruments is often extravagant. One young belle has what she declares is a Stradivarius 150 years old. She has had it inlaid with pearl. The addition has ruined its tone. Still, that doesn't matter, since she has made the instrument an oddity and can say that its cost has been nearly \$700. Another enthusiast has a fiddle that she declares was a favorite of Paganini's. Its present extraordinary tone may be due to the fact that it is all tied up with old gold ribbons. Her teacher warned her that the tight bands would impair the quality, but the young woman answered that the difference didn't seem much to her mind, and in any event she was determined to retain the ribbons, because they suited her complexion.

Plants Used by Man.

It is stated that the number of plants used by man at the present time does not exceed 3,000. Of these about 2,500 are cultivated in America. The varieties used for food do not exceed 600. Of edible fruits and seeds there are 100 classed as vegetables, 100 as roots and bulbs, 50 varieties of grain, about 20 of which produce sugar and syrup. In addition to this, perhaps 30 kinds will yield oil and 6 kinds wine. The number of medicine supply plants is nearly double that of the fruit-yielding, amounting to 1,140, about 350 of which are employed in the various branches of industry. Of the latter 76 furnish dye-stuff, 8 wax, 16 salt, and more than 40 supply food for cattle. There are no fewer than 250 kinds of poisonous plants cultivated, among which are only 66 of a narcotic sort, the remainder being classed as deadly poisons.

Choosing Friends.

Friendships that arise out of intellectual juxtaposition are not of the kind that are valued the most. The links that bind us to closest friends are forged by the heart. Human ties thus formed are not easily broken. If a friend of long years is cast aside for the novelty of higher intercourse and new faces, which a close intimacy may reveal to be empty and hideous masks, the loss may prove the overwhelming catastrophe of one's life. Rather let it be the rule of human intercourse to secure a friend for all eternity when one is found worthy to share the palace of the soul. Bear with his humors, guard against estrangement that begins and ends with mutual recrimination, prove helpful to him as opportunity offers and value him for his inherent worth. "When the pot no longer boils," says Petronius Arbitrator, "farewell, friends"—that is to say, the friends of fortune; so poverty is the best test. Let our friends be the salt of the earth, for men are known by the company they keep. The Savior's intercourse with his chosen disciples, the humble fishermen of Galilee, was the apotheosis of friendship, and an example for all races of men.—Interior.

The Ways of Monkeys.

On my second voyage to Eastern Soudan we stopped at Khartoum during the rainy season. I suffered much, even more than I am suffering here in New York, from fever and chills. In the long, tedious hours of leisure we made a collection of monkeys, and those animals cheered me up many a time in my physical and mental troubles. We played with them, and at the same time undertook their training, and that in a fashionable manner. So we gave them riding lessons. An old, fat lazy donkey had the honor to serve as horse, and, although the apes showed disgust and fear at first, one single lesson was sufficient to initiate them into the secrets of the noble sport, and in a few days they were, in their way, masters in the art. They would mount the donkey three, four and five at a time, the first one embracing fondly the neck of the trotter with the fore hands and cramping his hind-hands convulsively in the pelt of the animal's abdomen; the next one taking hold of his comrade, and securing his equilibrium in the same way by means of the hands, and so on in a file. A funnier sight than this, four or five grinning apes closely nestled to the donkey's back, can hardly be imagined. The gray-haired trotter sometimes had to suffer from the mischievous riders, and did not conceal his

feelings, to the great amusement of his tormenters. Besides playing, the monkeys were instructed in many little arts and tricks, and on that occasion I learned to appreciate them as smart and most sagacious creatures.

But passion makes them blind—unlike men, as it is said by the monkey-haters—as if men always kept quiet, composed, even-minded, and sober! As well as the apes in general, our baboons were passionately fond of strong liquors, and had a peculiar propensity for mersia, a kind of beer made of the grains of duria by the inhabitants of the Soudan. Brandy was not to their taste, but unfortunately, they made an exception one day. After having swallowed copious quantities of mersia, each one of the troop was offered a big glass of date brandy, which he drank. As a consequence they became completely intoxicated, insolent, passionate, bestial, and grinned and gambled in a fearful manner; in one word, they offered the hideous aspect of drunken men. The next day thirteen of the drunkards were suffering from the consequences of the spree, and looked sick unto death. All food gave them nausea; they turned away with disgust from mersia and even from wine, a favorite beverage in ordinary time; the only things they accepted were lemons, of which each one ate an average of twenty pieces. In this wretched state they comforted themselves like men, and would, doubtless, have enjoyed a sour hering if it had been possible to secure this antidote in the country of the Mahdi. In the evening they felt better, and were all right the next morning. I hoped this hard lesson would teach my pupils the advantages of abstinence, but, alas, I was mistaken once more in my life. They drank and reveled all the same, and from that day drank brandy with predilection. More than that, they claimed their rum every day as a privilege.—Popular Science Monthly.

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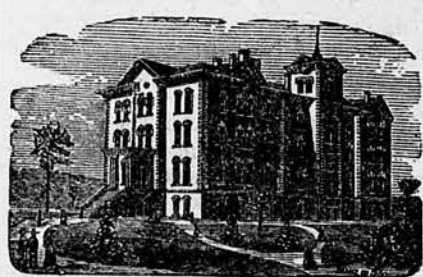
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The Illinois State Fair is to be held at Chicago, September 14 to 19.

Foot and mouth disease was recently discovered in Bedfordshire, England.

Immigration into Kansas this year exceeds that of any former year in our history. And still there is room. Come right along.

The editor is under obligations to Senator Plumb for a copy of the report of the Senate committee on Labor and Education in four volumes.

Look at the trees about the premises, now, and remove all indications of insect presence, such as webs, curled leaves, dead and black twigs

Corn is on the go yet. Much of it is so near the stopping place that it may be said to be out. It is hard enough to cure well if the stalks were cut up.

The KANSAS FARMER spent considerable time in securing an accurate list of Kansas fairs, which were extensively republished by the press, none of which to our knowledge has given credit except the El Dorado Republican, published by T. B. Murdock.

Indiana is making a big fuss over her oats crop. They expect a good deal of hay too, and some potatoes. They don't talk much about wheat, but a Hoosier is always on deck, and he and his sisters and his cousins and his aunts and the boys intend to hold a State Fair at Indianapolis beginning September 28, and they will have a good one, we doubt not.

THE PUBLIC LANDS.

The President recently issued a proclamation under the law passed at the last session of Congress, requiring all fences and other obstructions to be removed from the public lands, so that the right of the settler to locate his home wherever he may select on the public domain shall be protected.

This is a very proper thing to do. The KANSAS FARMER has been opposed from the beginning to the taking up of large bodies of the public lands by anybody and fencing them in or placing any other obstructions upon them. The public lands are for the people, to be selected by them where they will, in small tracts, and to be used for homes. In the earlier part of our history, and until 1862, public lands were sold, upon advertisement, in large tracts to the highest bidder. But as early as 1840, some men began to see that that was bad policy. Rich men speculated in those lands, amassing great fortunes, while poor men were compelled to buy at second-hand. In 1841 the pre-emption act was passed, and after that a poor man could purchase a quarter section at \$1.25 per acre if he would live on it and declare that he wanted it for a home; but men who could pay for more land could buy in larger tracts without living on them. Several efforts were made to pass a homestead law, but the bill did not pass both houses of Congress until in the last year of President Buchanan's administration, and he vetoed it. At the first regular session of Congress in Mr. Lincoln's administration the homestead law which we now have was passed, and it became a law early in 1862.

The intention of the law was to reserve the public lands for the use of the people, and the only exceptions that have been made were those in which large tracts were given to aid in the construction of railways. There has been some abuse of privilege in this direction, not on the part of the Government, but on the part of railway companies. The intention of Congress was to aid the development of the country and make it desirable for enterprising people to go and make homes on the public lands where the new railroads would help them to carry their products to market. The first act of Congress granting lands for such purposes was that from which came the Illinois Central railroad. The policy was continued about twelve years and abandoned. Since that time there have been no grants of public lands in large quantities, except for educational purposes, and in case of the admission of Colorado as a State. But in all cases of the large grants to corporations municipal (as State) or private, the intent was to benefit the people at large.

But in no case has the Government ever intended that particular individuals should enjoy special privileges on the public lands. No man ever had any lawful right to appropriate to his own use and enjoyment any part of the public domain except in strict accordance with the law then in force; so any obstructions placed on public lands by persons was unlawful. Within the last twenty-five years the grazing of cattle on the Western prairies has grown to enormous proportions. Men have organized themselves into companies able to command millions of dollars, bought cattle by thousands, and put them on the public lands. It requires about twenty acres of land to feed one animal in that way. A herd of one thousand head requires about twenty thousand acres of land. A herd of twenty thousand head requires about four hundred thousand acres. A county that is twenty-four miles square contains 368,640

acres, not enough to graze one such herd. There are many very large herds and many small ones. The cattle are branded and range almost at will. They get mixed. The wealthy companies are organized and they have regular round-ups, and every company knows his brand and takes it on foot in money or in money at the market. But the poorer men are not organized, and they have no round-ups. Their cattle get mixed with the big herds and there is trouble; or cattle belonging to the big herds get mixed with those belonging to small herds, and then there is trouble. The little men must be squeezed out or their cattle must be fenced out, and the latter seemed to be the easier and shorter way out of the trouble. So the strong companies began to enclose vast tracts of land, running their fences many miles over the public lands where a penniless pioneer has as much right as a cattle king. Complaint was made long ago against this fencing of the public lands, and the attention of Congress was called to it through the Interior Department, and at the last session the fence law was passed. It is under that act that the President's proclamation is issued requiring the immediate removal of the fences, and warning all persons against in any way hindering the free settlement of the public lands by persons who desire to take and hold homesteads. Suits had been begun in the United States courts against a number of companies that had enclosed tracts ranging from ten thousand to a million acres. The courts decided against the cattlemen and ordered the fences removed at once, but the defendants appealed to the Supreme court of the United States, and it was thought best, in order to stop fooling in a clear case of wrong, that Congress should authorize and require the President to make the way of the settler clear.

The St. Louis Fair

Opens Monday, October 5th, and continues for six days. The revision of the premium list, which has just been completed, contains twenty-four departments and \$73,000 is offered in premiums. The management are erecting 700 new horse stables, 500 cattle stalls, 800 sheep and swine pens, a poultry house for 3,000 fowl and nineteen exhibition halls in addition to those already upon the ground. The Veiled Prophets will parade Tuesday, October 6, and the Trades Procession Thursday, October 8. The streets will be illuminated by electric and calcium lights together with 150,000 gas jets. \$400,000 has just been expended on improvements and sixty-five acres added to the ground. Races will be given over the new mile track every day during Fair week. Two carloads of lions, tigers, monkeys, tropical birds, herbivorous animals and venomous reptiles will be added to the Zoological Garden as a special attraction to the Fair. A rate of one fare for the round trip has been made by all railroads running within 500 miles of St. Louis.

Any of our subscribers desiring a copy of the premium list will receive one free by addressing Festus J. Wade, Secretary, 718 Chestnut St., St. Louis, Mo., and stating they are subscribers of this paper.

The report of the Kansas State Board of Agriculture dated August 10, puts the probable wheat yield at—winter wheat, 9,648,640; spring wheat, 1,250,000; total, 10,898,640 bushels. The estimate for corn is 198,000,000 bushels. The area of corn is about 5,000,000 acres. The estimate on oats is 29,000,000 bushels. Potatoes and millet are reported good (100); broom-corn, flax and sorghum a little less.

Save the Cornfodder.

It is time now to begin calling attention the importance of cutting up corn. There is very little feed of any kind that is better than cornfodder for cattle, sheep and horses, if it is cut at the proper time and well-cured in shocks. And every blade of cornfodder saved is that much gain over the careless way of letting it dry on the stalk and hang there for cattle when they come. All the fodder well saved is just that much clear gain, and it is worth more, acre for acre, than prairie hay, and to let it die on the stalk is about that much lost, for winter stalks are worth very little as feed.

But it must be cut and cared for at the right time, because (1) if it is not, the wind will whip the blades nearly all off, and (2) what are left will be so dry and brittle as to be worth little more than a bundle of old brooms. Every person living on prairies, and especially Kansas prairies, knows how easily the wind moves, and with very little provocation; and every farmer knows that when corn blades become dry on the stalk they are very easily broken off by the wind. All of us, times without number, have seen cornstalks whipped so clean of blades by the winds that they looked like as many peeled hoop-poles. And the blades were not left lying about among the stalks on the ground; they were blown into dust and the dust blown away. They were gone, all gone. Some are left usually, little bits about the shoe near the stalk, but in no ordinary case is more than one-fourth of the blade fodder left when snow flies.

There is some left usually, but it is almost valueless. If a farmer will turn his cattle into such a stalk-field, say about Christmas, and give the animals nothing else to eat, he will soon learn about how much dead cornstalks—stalks that were never cut up, are worth as feed. It is little better than so much dried moss. A cow might as well eat dried leaves.

But when the stalks are cut at the proper time, the leaves make fodder nearly equal to good timothy hay. The time to begin cutting the stalks is when the ears may be considered out of danger from frost. The kernels are out of milk, have their full size, and do not yield to pressure of the fingers. Opening a kernel with a knife blade, the interior presents a finished, corn-like appearance. At that time, the lower end of the stalk a foot or two up is whitened and dead-like, and the lower blade is dead, but the upper part of the stalk and most of the blades are still more or less green. Cut the stalks then and put them in good-sized shocks well stood up, and the corn and the fodder will save in good condition.

Aside from the matter of getting so much good fodder, there are two other advantages gained. The stalks are removed from the ground and will not be in the way of the plow, and they are put into manure. These are both important items. Animals do not eat the stalks unless they are hungry, or eating for pastime; they eat the blades only, and there is where the nutriment is. The stalks are left, and they are put on the manure pile if the feeding is done in barns, or left on the ground to rot if the feeding is done in a feed-lot.

The size of shocks is not very important. Seven or eight rows of cornstalks put into one row of shocks makes them a very good size if the stand is good and the corn heavy. We would not put less than seven nor more than twelve rows of stalks in a row of shocks. When the stand is thin, or when the stalks are light, the shocks will take more corn rows. But a strip wider than twelve rows requires too much walking in put-

ting up the shocks. If the cutting is done by hand, it is better to take an odd number of corn rows, as seven, nine, eleven, putting the shocks on the middle one, thus making the walking space on either side the same width. The ground cut over for one shock ought to be about square. When a shock is begun, set the first handful against a hill of standing corn, set the second on the other side, both as nearly straight up as they will stand, then build around that beginning, setting every handful carefully and truly facing the center; that is, not leaning to one side so as to be liable to fall or to settle to one side thus twisting the shock or pushing it down. See that every shock is evenly and regularly built; that is, as nearly round as possible, with every part of the outside the same distance from the center.

If shocks are well put up, there is little danger of their blowing down; still it is better to tie them as soon as set. A cornstalk may be used for that purpose, if there is nothing better. Rye straw is the best thing for that work. But anything that will bend easily and can be fastened will do. Tie as near the top as possible so as to bind the whole shock.

By the terms of the President's proclamation, the fourth day of September is the limit of time allowed the cattlemen to get off the Cheyenne and Arapahoe reservations with their cattle, and an order has been issued to Gen. Miles to be ready on that day to see that the order is enforced.

The fairs have begun, and it is to be hoped that the farmers will profit by them. The bane of agricultural fairs is the presence of the gambling element. If a fair cannot be run without a school of gamblers to help, better let it stand still. Farmers and their families do not need to learn the arts and mysteries of the gaming table. It would add nothing to their usefulness or honor. And the boys can get along quite as well if they never see a gambler or his tricks. Every fair management should rigidly exclude every immoral performance, no matter what it is nor who is offended.

C. F. Stone, Peabody, Kas., recently wrote to the *American Sheep-Breeder*: "The sheepmen in this locality are feeling better and more encouraged than they have before in the past two years, though there have been thousands of old scabs fed and disposed of forever. Now, the tendency is to keep fewer and better sheep, and still raise more wool. The sheepmen are getting waked up to the idea that it takes no more feed to keep sheep that will shear from eight to ten pounds of wool than it does to keep those that shear only four or five pounds." That is what this paper has been predicting all along, and it tells a hopeful story.

People of all classes in England are complaining of hard times. In the *Scottish Agricultural Gazette*, we find this news item: The Earl of Strathmore presided on Wednesday at the President's dinner held in connection with the Highland Society's show in Aberdeen. His lordship, in proposing the toast of the Society, referred to the agricultural depression, and remarked that if he were asked to suggest a remedy for the present position of affairs it would be that the landlords should remember that, prices now being the same as they were, the tenant farmers could not naturally pay the same rents. There was, however, the other side of the question—that farmers must remember that they could not be making very large profits, and that they must try to tide over these times in the hopes of better prospects."

Inquiries Answered.

PICKLING CUCUMBERS.—Cucumbers for immediate use may be pickled by making a brine—a saturated solution of salt, all the salt the water will take up; cover the cucumbers with it, adding water if necessary. The brine will act sufficiently in one night if poured on hot; if cold, give it twenty-four hours. Drain, and pack in a jar and scald vinegar with cloves, cinnamon, and a lump of alum big as a marble for two gallons of cucumbers. Pour the spiced vinegar hot on the cucumbers and add a piece of horseradish root as large as a human finger, and if desired two or three green peppers. These pickles are ready in three days, and with the horseradish will keep indefinitely. If the whole roots of horseradish is not at hand, use some of the horseradish grated for the table. For family use or the market, as occasion requires, pack the cucumbers in salt, "the coarse fine salt" is best, covering them properly. When needed for pickling, freshen them in water three days, changing the water twice, or four days if they are desired fresh, and add cold vinegar, spice if wanted, and the piece of horseradish.

GLANDERS.—Please inform me if there is any law in Kansas concerning Glanders, if so what is it; also, how long after contact will it be before the disease makes its appearance?

The law is very indefinite. We send you a copy of the *FARMER* of June 3 last, which contains a statement of the rules adopted by the Live Stock Sanitary Commission under the law.—The length of the period of development of glanders varies a good deal; but usually the first symptoms appear in ten to twenty days. If you keep a file of the *KANSAS FARMER*, refer to the issue of July 22.

GRAPE VINES.—To what age will a vineyard bear profitably, and would it be judicious to plant a row of grapes between the rows of an apple orchard, the trees being thirty feet apart?

—You need not take on any trouble about the age of a bearing grape vine. It will beat you in the race of life if you take as good care of it as it deserves. Grape vines may be planted between apple tree rows and would do well about four years if the trees do well; after that the vines would become weak and in a few years be worthless. Grape vines need sunlight at least part of the time, and they need the exclusive use of the soil near them all the time.

DAIRYING.—If C. B. A. will write to the Dairyman Publishing Company, 158 Clark street, Chicago, telling what he wants and naming this paper, he will get good information. His request will be granted in next week's *FARMER*.

We have frequently suggested to our readers that a liberal use of lemons in families is a good thing for health. And in particular cases of ailment, as the *Medical News* says, lemon juice is very good. The way to get the better of a bilious system without blue pills or quinine is to take the juice of one, two or three lemons, as appetite craves, in as much water as makes it pleasant to drink without sugar, before going to bed. In the morning, on rising, at least half an hour before breakfast, take the juice of one lemon in a goblet of water. This will clear the system of humor and bile with efficiency, without any of the weakening effects of calomel. People should not irritate the stomach by eating lemons clear; the powerful acid of the juice, which is always most corrosive, invariably produces inflammation after a while, but properly diluted, so that it does not burn or draw the throat, it does its medical work without harm, and, when the system is clear of food, has abundant opportunity to work over the system thoroughly.

As to the weight of milk, the Illinois Dairymen's Association have adopted the standard of Mr. Borden, of condensed milk fame, which for quantity is: eight and five-eighths pounds per gallon. This is now quite generally accepted, not only in this country, but in Europe as well. The quality of milk has also been determined upon by the Illinois State Dairymen's Association,

after a number of tests, as follows: Water, 87.5; solids, 12.5—in a scale of 100 parts.

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.
Coffee 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 23-26; 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 28 to October 2; Secretary, John B. Shaffer.
Harper County Agricultural and Mechanical Association, Anthony, September 1-5; Secretary, J. W. Glendenen.
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 22-25; 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.
Nemah 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.
Saline 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. Epy.
Neosho Valley District Fair Association, Neosho Falls, September 21-26; Secretary, O. S. Woodard.
Decatur County Exposition Society, Oberlin, September 23-25; 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.
Osage 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.
Parsons 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. Sells.
Peno 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.
Rush County Fair Association, LaCrosse, October 1-2; Secretary, E. F. Brown.
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.

Late Patents to Kansas People.

List of patents granted to citizens of Kansas for the week ending Tuesday, August 11, 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:

LABEL.

No. 4541.—A. Gay, Concordia, corn-husker's salve.

Miss Minnie Vorhis, who won the prize for essays at the last commencement at Elmira college by delivering as her own composition an old article from *Scribner's Magazine*, has returned the medal.

A botanical phenomenon was witnessed last season on the shore of Todos Santos bay, Lower California, where an apple tree blossomed and bore large, perfect fruit on its trunk an inch from the ground.

Good sheep are not necessarily confined to any distinctive breed or type. The best sheep for any man to keep is the kind that is most profitable to him, and what particular breed this may be depends entirely on the markets, situation and surroundings of the flock-owner.

THE MARKETS.

By Telegraph, August 17, 1885.

STOCK MARKETS.

New York.

BEEVES.—Receipts 55 car loads. Dull and lower, but the feeling at the close was better. Poor to prime native steers 4 60a 6 20, extra do. 6 25a 6 45 ordinary and "Texas do. 4 10a 4 40. **SHEEP.**—Receipts 18. No improvement in prices, but a little better feeling. Sheep 3 00a 4 75, lambs 4 65a 6 25. **HOGS.**—Receipts 8,606. No trading in live hogs.

St. Louis.

CATTLE.—Receipts 2,700, shipments 800. Market steady for all good grades. Native shipping steers 4 75a 5 75 fair to good Colorado steers 4 25a 5 20 good native butchering steers 4 25a 4 65. **HOGS.**—Receipts 2,700, shipments 2,900. Market slow and weak. Packing 4 25a 4 45, butchers' and Yorkers 4 65a 4 75. **SHEEP.**—Receipts 1,900, shipments 2,500. Best grades steady, but poor stuffs dull. Good to fancy muttons 3 00a 4 00, common to medium 2 00a 2 75, lambs 2 50a 4 50, Texans 1 75a 3 25.

Chicago.

The Drovers' Journal reports: **CATTLE.**—Receipts 9,000, shipments 2,800. Snipping steers 4 20a 5 97½ stockers and feeders 3 00a 4 1. through Texas cattle 1 5a 25c lower at 2 90a 4 00. natives and half breeds 4 25a 5 25, wint red Texas 3 75a 4 10. **HOGS.**—Receipts 11,000, shipments 3,500. Market steady. Rough and mixed 3 90a 4 25, packing and shipping 4 25a 5 00, light weights 4 00a 5 00, skips 3 00a 3 30. **SHEEP.**—Receipts 370, shipments 850. Market slow. Natives 2 00a 4 00, Texans 2 00a 2 90, lambs per head 1 00a 3 10. The Drovers' Journal special Liverpool cable quotes American cattle steady, the best selling at 12½c per lb. dressed.

Kansas City.

CATTLE. Receipts since Saturday 2,607. Shipping steers 4 65, feeders 3 50a 4 00, stockers 2 60a 3 25. **HOGS.** Receipts since Saturday 3,397. Extreme range of sales 3 50a 4 40, bulk at 4 25. **SHEEP.**—Receipts since Saturday 124. Demand fair for good Fair to good muttons 2 50a 3 00.

PRODUCE MARKETS.

New York.

WHEAT.—Weak and low. No. 2 Chicago 87½c store, ungraded red 85a 97c, No. 3 red 92½c, No. 2 red 95a 95½c. **CORN.**—Ungraded 52a 54½c, No. 2 5½c.

St. Louis.

WHEAT.—No. 2 red, cash 92½a 92¾c, August 92½a 92¾c. **CORN.**—Lower and slow. No. 2 mixed, cash 43½a 44½c. **OATS.**—Pretty firm. No. 2 mixed, cash 23¾a 24¼c.

Chicago.

There was a decidedly dead feeling in wheat again to day and the market finally closed 13c under Saturday. The receipts did not show any particular increase, but the shipping demand was light.

WHEAT.—Sales ranged: August 81½-82c, September 82a 83½c, October 84½a 85½c, No. 2 spring 81½a 82c, No. 3 spring 81c, No. 2 red 88c, No. 3 red 83.

CORN.—Rule active but weaker. September 45½a 45¾c. **OATS.**—Cash 25½a 25¾c.

Kansas City.

WHEAT.—The market was still on the down grade. No. 2 red cash sold at 73½a 73¾c, August was nominal. September opened at 75½c and sold down to 75c.

CORN.—No. 2, cash, no bids nor offerings; August 34½c, bid 35c asked; September, 10,000 bus at 34¾c, September, first half, 5,000 bus at 35c.

RYE.—No. 2, cash, no bids, 45c asked. **OATS.**—No. 2, cash, no bids, 22½c asked.

FLAXSEED.—1 10a 12.

BUTTER.—Firm and unchanged. Quotations: Creamery 16c, good 12½a 13c, fine dairy 10c, medium 6a 7c, Young America 11c, roll 10a 17c, store-packed 10a 12c.

EGGS.—Market higher at 10c per dozen.

CHEESE.—We quote: Full cream, 13c; flats 10c; Young America 13½c.

ORGHUM.—0c per gallon. **BROOM CORN.**—We quote: Hurl 3a 4c, self working 2a 3c, common 1a 1½c, crooked 1a 1½c.

Horticulture.

Gathering and Marketing Apples.

To those farmers that raise apples for purposes of making money as well as saving it, the gathering and marketing of them is very important. What follows on this subject was written by a Canadian farmer and printed in the *Farmer's Advocate*. There are some suggestions in it well worth reading by farmers in Kansas:

Few farmers plant apple orchards wholly for home use, with no expectation of money profit. Indeed, many, now-a-days, depend upon the produce of their apple trees for a substantial portion of their annual income; and, although it is an open question whether an acre devoted to an apple orchard yields as much, on an average, as an acre of wheat, or corn, or potatoes, considering the low prices and failures of late years, yet certainly the money seems to come in with less exertion, and consequently, if there is a failure, it is less accounted of than when the much hard labor in plowing, sowing and harvesting results in vexatious disappointment.

Early apples are sometimes profitable, especially fancy stock, such as Early Harvest, Red Astracan, and Duchess of Oldenburgh, providing a sufficient amount of time and attention can be given them in the busy month of August. The trees need to be picked over several times, selecting each time those apples which have reached their full size and color. Only fine and perfect samples should be shipped as fancy stock, and these may be put up in small packages such as peach baskets or crates, and made to present the most attractive appearance. The rest of the crop of first-class early apples will need to be sold in barrels, as none but the very choicest will pay to put up as described, and the second-class should not be sent to market at all.

It is nearly always best for the farmer to sell his own fruit, if he is near any good market, and even small towns and villages will gradually open up a custom for the man who can spare the time to visit them regularly with the finest fruits of the season. Growers, however, of early apples and other fruits living near to railway stations, will often find it convenient to ship by express either to fruit dealers in the towns and cities, or on consignment to commission men. In our large cities like Toronto and Montreal, this commission business is rapidly on the increase, and there are now many most reliable firms who receive daily consignments of summer fruits on every train, which they sell at a fair wholesale price, on arrival, to fruit dealers in the city, or in towns and villages outside. They render weekly account sales to the shipper, and return the proceeds, after deducting express charges and a commission of ten cents on the dollar of gross receipts.

The best time to begin gathering winter apples is about the first of October, but a week earlier is none too soon for such kinds as ripen early, for example, the King and the Greening. A sufficient number of hands should be provided to gather the whole crop by the middle of October, after which time there is danger of frosts. Each picker should be provided with a good ladder and swing-handle basket, to which a wire hook is attached for hanging it to the rounds of the ladder. Careless pickers, who throw apples into the baskets like so many potatoes, should be at once discharged, for every little bruise lessens the value of the fruit for keeping.

The packing may be done either in the orchard or in a packing house, but in no case should it immediately follow picking; because when apples heat in barrels or heaps they show up their imperfections. All tendencies to spot or decay will therefore discover themselves to the packer, and all apples still remaining sound may reasonably be expected to remain so until opened up in winter.

Most growers empty the apples into heaps on the grass, or on straw, in the orchard, where they have a free circulation of air; but if one has a cool, airy fruit-house, it would be better to bring them inside at once, where they would be safe from wet and frost, and where the packing could be done comfortably in weather unfavorable for out-door work.

If the latter plan is thought desirable,

the barrels should be taken into the orchard, filled to the chime by the pickers, headed up each night, marked with the name of the variety, and laid down upon their sides until it is convenient to draw them indoors. In this way they may be stored in a small compass, and easily emptied out when packing time comes.

Few farmers will find it to their advantage to pack their own apples, if they can make a sale without; for every often buyers representing large houses will pay just as much for barrel for apples unpacked, this operation being considered too important to trust to growers, who could scarcely avoid serving their own interest a little, even if they were skilled in the art.

A packing table may be used to great advantage where the apples to be handled are in barrels. It should be about twelve feet long and three feet wide, with a narrow strip three or four inches high around the edge, and be covered with cloth. The whole affair may be cheaply set up for temporary use, with planks and barrels, and securely fastened. Upon this two barrels may be emptied at a time, and the fruit be readily sorted into baskets hung conveniently under the table.

The apples in each barrel should be of uniform size. Thus a barrel of first-class apples may be either large or small, but in no case must any second-class apples be smuggled in, for nothing will sooner destroy a packer's reputation than a fine fruit at the head and poor fruit in the middle of a barrel. By second-class apples we mean all knotty, misshapen, spotted or cracked ones; and all such must be disposed of in some way outside of a respectable market.

If an evaporator is accessible, it will afford the most profitable way of disposing of all inferior fruit; but, if not, let it either be converted into cider, or saved as an appetizer for the horses during the winter.

The barrels should be prepared by head-lining, or nailing two strips of hooping in such a way as to secure the head by tightening all hoops except those at the tail end, nailing them fast in place with small nails, and by removing the "take-out" head with its corresponding top hoop. If out-of-doors the barrels should be set upon a plank so as to rest upon a firm bottom.

The first two or three layers of apples should then be laid against the proper head, stem downwards, so that, when opened, the apples will present a nice even appearance; but great care needs to be exercised not to make the show end present a better sample than the contents will warrant. It is, however, generally allowed to choose well-colored apples for opening.

The apples may then be gently poured into the barrel, lowering the basket each time as far as possible; and, after each basketful, they are shaken down and made to lie closely. The barrel should be filled to about one inch above the chime in case of firm apples, and about two inches in case of such apples as the Ribston and Fameuse, which tend to soften; or, if for foreign shipment, they need still closer packing. The head should then be brought to its place by means of a screw or an iron lever press, the hoops tightened and fastened with nails reaching into the head, and this end also lined as before described.

The barrels are now ready for the address; and few realize the importance of tidiness in this respect, and of offering fruit for sale in a neat, tidy package. Stencil plates can be easily cut by any tinsmith, and with these and a blacking brush, the name and address of the consignee, the name of the shipper, and the name of the apple may be neatly marked upon the head of each barrel.

The apples may be shipped either by boat or rail, according to convenience; if by rail, from one hundred and thirty to one hundred and fifty barrels is a carload, and will be carried at a special rate.

A discussion of the various markets for winter apples must be laid over until some future number. Suffice it to say that really first-class fruit need seldom go begging for a buyer, and in any large city will command its market value. If the grower cannot make the sale himself, he can readily find some reliable commission merchant to do it for him at reasonable charges. With such cities as Toronto, Montreal and Chicago around us, accessible both by steamboat or railway, every farmer should be able to place his apples where they will bring the highest prices, while the larger fruit-grower will venture upon such foreign markets as Liverpool and Glasgow, where he will sometimes do better, and sometimes worse, than he could do at home.

The Poultry Yard.

Profit in Keeping Poultry.

W. H. Yeamans some time ago wrote for the *Indiana Farmer*: There are always conditions that at times make the various departments of farming profitable. During one year the enormous yield of potatoes will reduce the value of that esculent so low that its cultivation is discouraged, and in nine cases out of ten the year following witnesses a reaction, simply for the want of planting a sufficient crop, whereby prices go up inversely as they were down the year previous. It is for this reason therefore that an experienced farmer declares that he thinks the most profitable mode of procedure is to grow a crop every year and then the markets are sure to equalize the profit. Again, another crop will bring a living price at one season of the year, while in a majority of cases at another season it will be greatly advanced. This is the case with the crop of onions; a majority of growers prefer to market soon after ripening, while a few always hold through the winter for the spring market and a usual advance of price. On one occasion onions so held over would not sell for any price, while they brought 50 cents per bushel in the fall; but it is most often the case they are worth double the money in the spring that they are in the fall.

Then, too, there are certain products whose value depends upon their being produced out of the ordinary season; thus, many kinds of vegetables that are the result of hot-house culture, being brought into market some weeks sooner than by ordinary cultivation, bring enormous prices because of their rarity, and this principle applies very largely to the keeping of poultry. The average farmer does not take such care of his poultry in winter as is calculated to produce eggs, and the result is a marked scarcity, and consequent high prices; the same also applies to the production of young chicks which in early summer are worth two or three times as much as they are later in the season. Now it has been fully demonstrated by practice that with proper care and attention hens may be made equally as prolific of eggs in winter as in summer, and the whole secret lies in having warm quarters; such, in fact, as can be heated by a stove in severe weather, and then by furnishing a variety of food, an abundance of eggs will be produced; and further, hens may be allowed to sit, so that broods of young chicks may be started in life by the time the season is sufficiently advanced to allow of their being turned out of doors. It should be the aim of all farmers to perform in the best possible manner whatever they undertake, and there is nothing in which there is such a laxity as in the keeping of a few fowls which are usually left to shift for themselves.

Chicken Cholera.

A correspondent of the *Rural New Yorker* gave the following: "Here is a remedy, or preventive, of the chicken cholera, which I have used for ten years. While my neighbors have been losing nearly their entire flock, mine have been healthy, and I have never had a case to my knowledge. Take a barrel, saw in halves, put about three quarts of unslaked lime in one of the halves, together with a half pound, or a pound (to suit the necessity) of alum; fill the half-barrel with water; when slaked and settled take from one pint to one quart (as the case requires) and put in every pailful given the fowls to drink. The lime will answer for the second half-barrel of water, but the same quan-

tity of alum should be added as before. If continued daily during the sickly season, I can from my experience assure your readers that their fowls will not be troubled with chicken cholera."

Poultry-Keeping for Women.

Before me is a letter from a woman who labors under a misapprehension regarding the amount and nature of work connected with poultry-keeping. The writer says: "I am out of health—unable to do hard work, but still feel that I must do something toward earning my living. I have read that poultry-keeping is a light and profitable employment for people who are not strong, and I feel disposed to try it. I live near a good market for poultry products, and can have the use of a few acres of land. If I could manage to earn, clear of the expense of keeping the fowls, \$200 or \$300 a year, I should feel quite independent."

The above is a fair sample of many letters that I have received from half-invalid women, who desire to engage in some light employment that will bring in ready money, and I think it is almost time to put in a protest, not against the letters, but against the perpetual reiteration by some poultry writers of the "old, old story," to the effect that poultry-keeping is a very suitable and profitable occupation for women who are not strong enough to engage in any money-making employment that requires downright hard work. Success in poultry-keeping can only be won by constant care, close attention to minute details and plenty of hard work thrown in. A semi-invalid may undertake some of the lighter work connected with poultry-keeping—she may even assume the entire care of a small flock of fowls, and doubtless her health will be benefited by the out-door air and exercise, but she must not expect to derive any great pecuniary benefit from her labor in the poultry yard; she certainly must not go into the business with the expectation of making a living by it. I do not write this to discourage the half-invalids, but to warn them against indulging in hopes that cannot be realized, and going beyond their strength in the vain effort to accomplish the work that would tax the energies of a well woman. Let your work be according to your strength. But for women who possess an average amount of health and strength, or who have or can get the use of a few acres of land, I can recommend the poultry business as a means of livelihood. I know several women who are supporting themselves and others dependent upon them from the proceeds of their poultry; and other women may do equally well, provided they begin right and stick to the business. Poultry-keeping has none of the drawbacks that many occupations present to the women who have themselves and children to support. Poultry-raising has always, so far as my knowledge extends, been considered women's work, and a woman can engage in it without fear of being pointed at as a "dreadful creature," out of her "proper sphere." Next, it is work that can be done at home, and the children, instead of being a hindrance, can be taught to help in many ways. Thirdly, one can start with very little capital, and the business soon yields an income; it is not like investing money where one must wait six months or a year for "dividends," and last but not least, the profits—if the business is rightly managed—are sure; first-class poultry products will always sell at paying prices, and the woman who once masters the poultry business need have no fears about the future—so far as this world is concerned.

For farmers' wives and daughters who desire to do some extra work that will pay in cash, I know of nothing that will pay as well in proportion to the time and capital invested as a small flock of fowls well cared for.—*Fanny Field, in Prairie Farmer.*

Recipe for gapes in chickens: In one pint of dry meal stir one teaspoonful of spirits of turpentine; then mix with hot water and feed hot. This will supply about fifty chickens. Feed once a day for a few days, then feed as you think they need it. This is an old English remedy.

Ordinarily much of the value of hen manure is lost to the poultryer by allowing it to remain on the floors of the hen-houses and covering it with ashes or lime to keep in the ammonia, and then trampled under foot until it becomes a part of the floor itself.

Ducks thrive best on a variety of food, with plenty of grass as principal feature. Feed them grain at night.

In the Dairy.

Large or Small Cows for Dairying?

It is probably true that the most noticeable difference between large and small cows in the dairy is in the fact that a large animal frame requires more feed to sustain it and keep it in working order independent of the food required to produce the milk or butter. A Jersey, for instance, may require as much feed to produce a hundred pounds of butter as a Short-horn does, but as to the mere matter of supplying the animal wants, the small cow has the advantage. That is the reason we suppose why a mule will do as much as a horse on less feed. It does not require as much to support its smaller body as the horse does to support a larger one.

A writer in the North British *Agriculturist* discusses the subject ably. We copy from the Canadian *Breeder*:

On few matters relating to dairy practice is there so much difference of opinion among breeders as the size dairy cows should be, so as to make them most profitable. Much as many of them differ, they, as a rule, in purchasing a new animal, always prefer the large one to the small, other things being equal. Much of the debatable ground among breeders is taken up by persons insisting that small or medium-sized animals are the best, simply because these particular persons happen to have small or medium-sized cows; and to assist in making anything else more fashionable than the class they possess would, to a greater or less extent, be to lower the value of the ones they presently hold. There is no doubt but that a great amount of the differences of opinion on other matters which crop up in daily life are in a great part formed by the effect the proposed alterations are likely to have on the parties interested. There is no disputing the fact that a particular small or medium-sized cow has given more milk than some other large one; or even that a particular herd of small or medium-sized cows has beaten as milkers some other one composed of larger ones. No one doubts the fact, but that does not prove that for the food consumed large cows, as a rule, are worse milkers, or less profitable milkers, than smaller animals, breed, age and quality all along being taken into account.

At the present time public opinion is unmistakably settling the matter in her own way, and by the old law of supply and demand, by setting a higher money value on full-sized animals than on small ones. Ten and twenty years ago small teats like thimbles were all the rage among Ayrshire showing men, but public opinion decreed that such small teats were a nuisance and loss, and must be abolished, and now the fashionable Ayrshire teat may be considered an inch longer and half an inch thicker than it was then. The present style of teat is yet, I consider, too small; and from personal intercourse with dairymen in other parts of Britain and elsewhere, I feel confident in saying that the smallness of the teat of the Ayrshire has done more to hinder the spread of it as a dairy animal throughout the country than all its other faults put together. In our west-country fairs and auction marts the favor in which large cows and large teats are held is very noticeable at the present time; for a big cow, be she ever so coarse or ugly, if she has good-sized teats, readily sells, even during the present depression, at a good fair price, whereas small cows with small teats are wanted by no one, even supposing they have a good appearance of milk. Such cows can only be sold at what is called a sacrifice, although I question the justness of the expression; for with the extra labor required in milking and the liability to loss through not being milked dry, it will often be found that they are dear at the small money paid for them.

Few classes of cow-keepers have the opportunities of finding where large or small cows are more profitable than towns' dairy-keepers have, where the animals are changed almost every year; yet these men, as a rule, prefer the largest class of cows. If such holds good in crowded, ill-ventilated, and overheated town byres, much more must it be true in regard to cows in exposed situations; for it stands to reason that a small cow, like everything else

small, must be cooled quicker than a large one, and to keep up the normal heat of the body she must use more food, proportionately speaking, than the large one. Whatever butter, cheese, or milk is produced must come from the food after the up-keep of the body has been provided for, and in the case of small cows there must be less left for that purpose. It is well known that exposed farms or districts generally produce small animals, although not because the small animals are more naturally fitted for subsistence in such a locality, but because of the scarcity of food, and its waste by exposure, little is left for the building and up-keep of a large frame.

Unfortunately very few reliable experiments have been carried out on the subject which would give unmistakable evidence that either the one class or the other was the more profitable. A few have, however, been more or less methodically carried out at different places and at different times, which may be fairly relied on, such as the following: At Frankenfelde, Baron Ockel tested Ayrshires and other small-sized cows against the largest size of Holland cows, four of the latter weighing as much as five of the former. He came to the conclusion that the small cows required 3½ lbs. of hay for every 100 lbs. of gross live weight to produce a certain quantity of milk, while the large cows required 24.5 lbs. per 100 lbs. of live weight to have the same effect. Thinking that the Ayrshires might be unfavorably placed, as they were incomers into the country, he selected four animals of the native cows he had been experimenting with, and put two of the largest in one stall, and two of the smallest in another. Each pair were then fed alike for sixteen days, all food being weighed when given, and any left being re-weighed and deducted off. Both lots were weighed at the beginning of the trial, and at the end it was found neither had gained or lost in weight. During the experiment the large cows consumed 14½ lbs. of grass per 100 lbs. of gross live weight; while the small ones took 16 lbs. per 100 lbs. live weight. The large cows yielded 7½ quarts of milk; while the small ones gave 5½ quarts. The large ones required 1.60 of their gross weight as food for their support; while the small ones took 1.50. In several of the German agricultural schools, where a large number of experiments have been made on cows belonging to that locality, it was also found that the largest cows gave the best yield of milk in proportion to the food consumed. Again, at the Eldina agricultural school in Pomerania, Dr. Rhode estimated that very small cows may require as much as 9 lbs. of hay to produce a quart of milk, while, he thinks, very large ones, of the Holland breed, weighing up to 12 cwt. or 12½ cwt., may produce one quart for 5 or 6 lbs. of hay. With Dr. Rhode's experiments I can scarcely agree, more especially as the report on them bears unmistakable evidence about it that there might be other factors at work, the effect of which has not been taken into account. The small cows used were generally Jerseys, Ayrshires, or Tondern cows, and his figures make these breeds compare very unfavorably with the large Dutch cows.

It must, however, be remembered that quantity of milk, although a great factor in dealing with a dairy animal, is not everything, the crucial test being the amount of butter, cheese or fat (I mean beef) which each produces for a given quantity of food, under equal conditions. Looked at in this light, the order of breeds was almost reversed at the last milking trials held lately in London. The subject is as yet very imperfectly understood, and deserves considerably more attention than has yet been devoted to it. The movement, however, lately taken by our show-yard directors in giving prizes for the heaviest milkers—date of calving, quality and quantity being taken into account—is undoubtedly a step in the right direction. Should their endeavors be met with approval, and turn out a success, they might give prizes for the heaviest milkers, say three and six months calved, indisputable evidence of date of calving being made as sure as possible before competition; as it is well known the most profitable dairy cow is not always the one which gives the most milk shortly after calving, but the one which keeps her quality well up on to the sixth, seventh or eighth month, and in exceptional cases even later. The subject is a pretty wide one, and has been little attended to, so that an open and untrodden field in research is yet open to those who care to tread it.

Bitter Cream.

Some of the causes of cream being bitter, are thus given by a correspondent of the *Country Gentleman*. They will strike the reader as being about correct:

First—ragweed in the pastures. This is a frequent cause when cows are fed in stubble or mowing lands. The flavor given by ragweed is a disagreeable, intense bitter, quite different from that caused by fermentation of the milk.

Second—mildew, but especially the red spotted mildew which forms upon the cream in damp cellars, and appears in spots about the size of a split pea. This is caused by the impregnation of the cellar with spores of the mildew, and is very difficult to get rid of. The only way I have succeeded in doing it is by burning sulphur in the cellar, which is kept tightly closed for a time, until the walls are saturated with it, and afterwards by keeping the air dry by means of a box of freshly burned lime kept in it until it is air-slaked.

Third—keeping the milk too long without skimming, until the whey separates and the cream floats upon it, also by keeping the cream too long without churning. Thirty-six hours are long enough for either, which makes the cream three days old when it is churned.

Fourth—imperfect cleaning of the milk-pails or the churn, and having curd in the seams or corners. Putrid casein has a bitter flavor, and very rapidly communicates the same to milk and cream, the cream appropriating nearly the whole of it.

Fifth—the farrow condition of the cow, or her advanced state of pregnancy, will cause this trouble.

Sometimes the addition of as much powdered saltpeter as will lie on a silver three-cent piece, or about five grains to a six quart pan of milk, will prevent the bitterness, and to give the cow a dose of two drachms for a week will have the same effect. I have found two grains of salicylate of soda to four quarts of milk will prevent mold, even in a musty cellar.

Happiness at Home.

Domestic happiness depends in a very great degree on the enjoyment that is derived from simple pleasures. If a mother devote herself entirely to work she cannot make an attractive home for her husband and children, any further than the wants of the body are concerned. A boy will like to come home at meal times, and to sleep, if his mother provides him with good bed and board; but if that is all she prepares for him he will seek entertainment in the streets at other hours, and each year of his life will find him less able to enjoy the innocent pleasures that belong to a happy home. A girl who sees her mother so devoted to household care that she allows herself no time for anything else learns to look upon domestic duty as mere drudgery, and avoids it as far as she possibly can.

There is nothing children wish for so much as sympathy, and this can be given without interfering with any domestic avocation. There is nothing in sewing or cooking or washing or ironing that need absorb the thoughts so that a mother cannot talk to a child, or listen to its story book, while she is engaged with them. I have observed that women who thus keep their sympathies open to their children do not grow nervous and prematurely old, like those who fix their minds entirely upon the work that engages their hands, and who have only impatient words to give their children when they try to talk with them while they are at work. There is nothing in the recollections of my own childhood that I look back upon with so much pleasure as the reading aloud my books to my mother. She was then a woman of many cares and in the habit of engaging in every variety of household work.

Whatever she might be doing in the kitchen, or dairy, or parlor, she was always ready to listen to me, and to explain whatever I did not understand. There was always with her an under current of thought about other things, mingling with all her domestic duties, listening and modifying them, but never leading her to neglect them or to perform them imperfectly. I believe it is to this trait of her character that she owes the elasticity and ready social sympathy that still animates her under the weight of almost four-score years. How much I owe to

the care and sympathy she gave to my childish years, I cannot measure.

I am induced to speak of my own personal experience on this point, because mothers not unfrequently deny that they can talk and work at the same time; and find in their various needful occupations a ready excuse for giving their children short answers, and keeping them away from their presence as much as possible. My purpose is to recommend as a duty that I have not seen practiced with success, and which I am not sure is entirely within the power of every parent who is willing to perform the duties belonging to that holy office.—*Practical Farmer*.

Statistics of Bible Manufacture.

At the Oxford University's own paper-mill, which is situated at Wolvercote, near Oxford, 375 tons of rags have been consumed in making 250 tons of paper for this issue of the revised version. It would cover 2½ square miles. It would go round the world in a strip of 6 inches wide, or, say, if the pages were laid open one after another, it would go round the world. The sheets piled in reams as they leave the mill would make a column ten times the height of St. Paul's or folded into books before binding at least 100 times the height. The copies, which are being prepared by the Oxford University Press alone, would, if piled flat one upon another, make a column more than fourteen miles high or 370 times the height of the monument. If piled end on end they would reach seventy-four miles high or 1,943 times the height of the monument.—*Pall Mall Gazette*.

Disinfectants.

A word about disinfectants. There are many kinds—some much easier of application than others, and some whose value is not disputed. For a common, cheap disinfectant, chloride of lime is good, but sulphate of iron, ordinarily known as copperas, is probably better. For those unable to purchase or apply the others, this simple direction may be of service: Put fifty pounds of copperas into a basket or some other porous receptacle, and suspend it in a barrel of water; after it has stood a day or two, use liberally of the liquid thus formed by pouring it into vaults and drains, and over the ground about your doors where any filth has been allowed to accumulate. If you cannot use it on so large a scale, dissolve a pound or two in a pail of water as you need it, and use freely from time to time. These suggestions heeded, the body kept clean by frequent bathtings, the food plain and well cooked, all unripe fruit and stale vegetables prohibited from the table, we may almost defy those maladies which, like diphtheria, scarlet fever, dysentery, typhoid fever, consumption and cholera, destroy so many homes and desolate so many hearts. We need have no fear that too much care can be taken to have our homes, from cellar to garret, scrupulously clean. Until they are, we must stand responsible for the consequences that will surely follow our carelessness and neglect.—*Good Housekeeping*.



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Gossip About Stock.

A herd of pure bred Devon cattle has been established at Independence, Mo., by S. K. Knox.

The receipts of live stock at the Kansas City Stock Yards last week were: 999 horses and mules, 1,647 sheep, 8,238 cattle and 56,912 hogs.

Monthly live stock sales have been inaugurated at Hutchinson, Kas. Such sales, properly conducted, are of great benefit and convenience to farmers. Every county should hold such sales.

From July 22 to August 10, inst., 203 carload of beef cattle were shipped from Dodge City. All the cattle were destined for Kansas City or Chicago markets, except seven loads which went to Cheyenne.

On September 18, at St. Joseph, Mo., H. M. Garlicks will make a public sale of imported Holstein cattle. This will prove a most excellent opportunity to secure an animal of this rare combination beef and milk breed.

A representative of this paper had the pleasure of a brief visit to that enterprising Kansas Hereford establishment of G. E. Hunton, Abilene. The herd is the pride of Dickinson county, and justly deserves the patronage he is receiving. If any of our readers want a first-class Hereford call on Mr. Hunton and mention this paper.

Kansas can boast of Berkshire breeders now who can show stock that will compare favorably with the best in the world. They were fortunate in starting right and securing the very best breeders that money could purchase. Such Berkshire breeders as A. W. Rollins, Manhattan, Samuel McCullough, Ottawa, M. B. Keagy, Wellington, Jas. Elliott, Abilene and other Western breeders have been of incalculable benefit to swine improvement.

Emporia Republican: Hogs are dying off with the cholera in various parts of the county, and are being thrown into the water courses. It would be far more beneficial to health if they were buried or burned. Plenty of soft stone coal distributed through the feed lots for the hogs to eat, and a gallon of coal oil put into each barrel of clean slops, stirred well, and fed to the hogs three times a day, will in a short time rid the place of cholera. It is a positive cure and a sure preventative against this much dreaded disease.

Last week a KANSAS FARMER representative enjoyed the opportunity of a visit to the Berkshire establishment of M. B. Keagy, Wellington, Kas. It seems impossible to raise better Berkshires that can be seen at this establishment, a happy result of starting right with strictly first class stock. Last year Mr. Keagy readily disposed of his surplus stock. This season he has sold \$800 worth and orders booked for fall delivery in Kansas and Nebraska. It is doubtful whether he can fill all orders—the usual result of advertising good stock in the KANSAS FARMER.

The prospect for an abundant corn crop in central Illinois this fall continues favorable. This is leading farmers to look about for hogs or other live stock to which the surplus may be fed. Doubtless many hogs as well as cattle will be brought here within the next few months. In view of the possibility of swine plague or other contagious diseases being thus introduced, farmers cannot be too careful as to where and what they buy. The Board of Live Stock Commissioners are supposed to have an oversight of these matters, but as their attention is directed more particularly to cattle diseases, farmers who would avoid losses from swine plague or other maladies among their hogs must look out for themselves. Great care should be taken not only in buying, but in feeding, watering and management generally. This word of warning is applicable as well in other parts of the country. At this time of year particularly, special pains should be taken to keep the hogs in the best condition of health and thrift, for at no other season do they seem so liable to contract disease. Sulphur and powdered copperas each five pounds, wood ashes two bushels and slaked lime one bushel all well mixed together and placed under shelter within reach of the hogs will do the latter good by way of keeping them free from worms and lice and thus the better able to resist contagious or infectious diseases and the influence of malaria so prevalent during the latter part of summer

and in the fall. During night the germs of swine plague are thought to collect on the damp grass, and the malarial air is believed to settle near the surface of the ground. For these reasons it is strongly recommended that hogs be kept from going on pasture in the morning until after the dew is off. Of all our farm animals the hog carries his head lower than any other and is therefore all the more exposed to the evils of bad air settling near the ground. PHIL. THURFON.

What Shall we Do with Our Rags?

Kansas Farmer:

This is a question we often hear asked. Our economic mothers and grandmothers of the olden times taught us to save all the "scraps" and carefully sort them for the uses adapted to each. There were the little rolls of strips for cut fingers. Who cannot remember running to mother or grandmother to have a cut finger bound up, and here she would say, "poh, child this is nothing to what the poor soldiers are suffering." But that was small comfort to the little ones. Then, there was the larger strips for bandages in case an ankle be sprained or an arm broken and the doctor be sent for in a hurry. Square pieces for mending garments received due attention according to quality. Also pieces for quilts and comforts. They were sometimes colored yellow with lye and copers. Then came the inevitable "carpet strips" to be sewed winter evenings, which also had a bath in the yellow dye. And last, the "paper rags" carefully saved till the "tin peddler" came along with his wonderful store of cups and pans for the housewife and toys for the children. Many a bright, shining tin was added to the dresser, and trumpets gave de ight to the "wee ones."

But these primitive days with their household economies are things of the past, and this wiser generation burn up these rags and import others by the ship load from Europe with all their filth and disease thrown in free of charge to inoculate our cities and country.

Some are not so tidy as to burn up the rags, but allow them to accumulate in back yards and alleys. What fine picking the poor wails, and old, decrepid men and women of some of the Eastern cities would have in Kansas; it would be a real bonanza. How carefully they rake all the ash heaps, some selecting bits of paper, shoes, rags, nails, bits of copper, coal (their only fuel), old shoes (these have their special use and ground and pressed and enter into "decorative art work." A pair of fine kid boots will bring 25 cents; this is really a bonanza for the poor creatures.) If they only knew of this wonderfully rich field for their efforts no doubt the city officials would find a solution to the problem—"What shall we do with our paupers?" and send them out by the car load as they do ship loads from Europe.

Kansas is not only rich in cereals, minerals and fruits, but in rags as well. The Buffalo bones of the vast plains are gathered up, sorted and sent to Eastern cities to be utilized in various ways, why not the rags? But a better solution of the question would be for some enterprising man (or woman) to start a paper mill. We are told that by saving our rags, even if we do not get much for them, we in turn get our fine paper at a cheaper rate. This is an object. It may not be known to all that waste paper is used by the mills, and the letters accumulating at the dead letter office are now made into paper for congressional use.

There is another view to be taken of this wastefulness—the children of to-day are growing up with wasteful, extravagant habits. Teach them to be careful of that which is least and they will be of the greater and more important matters. If we have not a paper mill let us have one.

M. M. DAVIDSON.

Topeka Stock Yards Sales.

The representative sales of live stock at the Topeka stock yards for the week ending Saturday, August 15, are as follows: Calves weighing from 155 to 175 lbs., 5 cents; Texas ponies, \$30 to \$35; hogs sold at 4 cents; thirteen stockers sold at from \$20 to \$25; forty-seven sheep, weighing from 80 to 84 lbs., sold from \$2.90 to \$3; milk cows without calves brought an average of \$25; with calves, \$35; some fifty fat cows and heifers, weighing from 800 to 1,000 and 1,200 lbs., sold at from \$2.75 to \$3.15; the prevailing price was \$3 per cwt.

"Crossest Man in Alabama."

"De crossest man in Alabama lives dar," said the driver as we approached a way-side home, near Selma, Ala., to ask accommodations for the night. At supper, and after it, "mine host" scowled at every one, found fault with every thing earthly, and I was wondering if he would not growl if the heavenly halo didn't fit him, when incidental mention being made of the comet of 1882, he said: "I didn't like its form, its tail should have been fan shaped!"

But, next morning, he appeared half-offended at our offering pay for his hospitality! My companion, however, made him accept as a present a sample from his case of goods.

Six weeks later, I drew up at the same house. The planter stepped lithely from the porch, and greeted me cordially. I could scarcely believe that this clear-complexioned, bright eyed, animated fellow, and the morose being of a few weeks back, were the same. He inquired after my companion of the former visit and regretted he was not with me. "Yes," said his wife, "we are both much indebted to him."

"How?" I asked in surprise. "For this wonderful change in my husband. Your friend when leaving, handed him a bottle of Warner's safe cure. He took it, and two other bottles and now—" "And now," he broke in, "from an ill-feeling, growling old bear, I am healthy and so cheerful my wife declares she has fallen in love with me again!"

It has made over again a thousand love matches, and keeps sweet the tempers of the family circle everywhere.—Copyrighted. Used by permission of American Rural Home.

A Grand Opportunity.

In the remarkable growth of industries of all kinds in the West, there has been nothing to equal the rapidity with which the live stock interests have assumed vast and enormous proportions. It is only a question of time until Kansas and the country surrounding will be the live stock center of the world. Recognizing these facts and being aware that the Western National Fair at Bismarck Grove, Lawrence, September 7 to 12, will be the only great fair in Kansas this year, the breeders of fine stock from all over the country are making entries and securing stalls for exhibition at this great fair to such a remarkable extent that there is now not the slightest doubt that the Bismarck Fair will present its patrons the finest, largest and most complete live stock exhibition that has ever been made in the West. Not only are breeders from outside States bringing the pick of their herds in great numbers, but there are now a large number of important breeders of pure stock in Kansas who will do their best to vie successfully with competitors from abroad. We need not mention the benefits which our readers can enjoy by inspecting this great show. It is the duty of every farmer and stockman to keep thoroughly posted and abreast with the improvements and progress of the times in the development of live stock. That there will be an unprecedented number in attendance we earnestly hope.

Book Notices.

FRANK LESLIE'S SUNDAY MAGAZINE—For September opens with a profusely-illustrated article on "The Bible in English," tracing the history of the English versions from Wyclif's to the latest versions. Accompanying this article are portraits of thirty of the Old Testament Revision Company, and Wyclif, Coverdale and Tyndale, besides other illustrations. Illustrative papers on "Madagascar," "Picturesque Bits of Jamaica," "Warwick and its Neighborhood," and "Scenes at Chautauqua Lake," will interest the geographical student. Bernhard Klein, Auguste Panzeron, Johann Simon Mayer and Samuel Parkman Tuckerman are sketched in the Sacred Musician series; "The Prodigal Son," with two illustrations, is the subject of the Parable, and "The Rival Kingdoms of Judah and Israel," the subject of the Bible History article. This last has seven fine illustrations. Adventure is provided in "Elephant Trapping in Ceylon," "The Azgaggers, or Sword-hunters, on the Nile," and "The Prisoners' Adventure." Dr. Talmage's sermon on "The Boy Home," and his editorial comments treat on fresh and timely topics. The two serial stories increase in interest, and there are several good short stories and poems, besides an attractive and abundant

miscellany. Published by Mrs. FRANK LESLIE, 53, 55 and 57 Park Place, New York city, at 25 cents a number, or \$2.50 a year, postage paid.

For Sale.

Forty choice 3-year-old steers, 100 choice 2-year-old steers, 200 choice yearling steers, 100 heifers, 1, 2 and 3 years. Address, WOLFF & McINTOSH, Topeka Stock Yards, Topeka.

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THE STRAY LIST.

HOW TO POST A STRAY.

BY AN ACT of the Legislature, approved Feb 27, 1866, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisement, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice. And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper free of cost, to every county clerk in the state to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5.00 to \$50.00 is affixed to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the FARMER for a violation of this law.

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

Broken animals can be taken up at any time in the year.

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

No persons, except citizens and householders, can take up a stray.

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

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

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

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

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

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

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

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

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

Strays for week ending August 5, '85.

Rush county—L. K. Hain, clerk.

PONY—Taken up by Robert Stephens, of Belle Prairie tp., one bay mare pony, white spot in forehead, 6 years old, both ears rounded off, branded T on left shoulder, F on right hip and 7 on left hip; valued at \$25.

PONY—By same, one bay mare pony, white spot in forehead, 5 years old, branded F on left shoulder and 1 on right hip; valued at \$20.

PONY—By same one dark bay mare pony, 4 years old, branded T on left shoulder, 7 on left hip and F on right hip; valued at \$20.

Ellsworth county—N. H. McCoy, clerk.

COW—Taken up by Geo. L. Kitchell, of Empire tp., one red-roan cow, 3 years old, crumpled horns, under-bit in left ear.

CALF—By same, one white sucking calf; both foregoing animals valued at \$20.

HEIFER—By same, one dark brown heifer, about 2 years old, no marks or brands; valued at \$21.

Russell county—H. C. Hibbard, clerk.

COW—Taken up by Jacob Harnish, of Plymouth tp., (P. O. Dorance), one red cow between 2 and 3 years old, ear cropped, no brands.

Franklin county—L. Altman, clerk.

STEER—Taken up by John S. Mallory, of Franklin tp., one red and white spotted steer, 1 year old, marked with smooth crop in right ear and slit in left ear; valued at \$16.

STEER—By same, one red 1-year-old steer, same ear-marks as above; valued at \$16.

HEIFER—By same, one red heifer, same ear-marks as above; valued at \$16.

Butler county—James Fisher, clerk.

PONY—Taken up by Jesse Varner, of Lincoln tp., July 2, 1885, one brown mare pony, branded A on left shoulder, 8 or 10 years old; valued at \$40.

Strays for week ending August 12, '85

Harvey County—John C. Johnston, clerk.

PONY—Taken up by J. R. Price, (P. O. Burrton), June 23, 1885, one chestnut sorrel mare pony, about 3 years old, branded X J B on left shoulder, dim brand on left hip, white spot in forehead, collar-sore on point of left shoulder, saddle marks on back, medium size; valued at \$25.

Barton county—Ed. L. Teed, clerk.

PONY—Taken up by Franz Keast, of Walnut tp., July 1, 1885, one roan mare pony, 13 hands high, branded S L y; valued at \$20.

Graham county—H. J. Harwi, Clerk.

COW—Taken up by Norman Edwards, of Gettysburg tp., April 23, 1885, one dark brindled cow with reddish head, white in forehead, 8 or 4 years old, drooping horns; valued at \$20.

Marshall county—H. C. Woodworth, clerk.

STEER—Taken up by Thos. McMahon, of Franklin tp., July 22, 1885, one red steer, about 2 years old, white spot on knee and white spot on each side; valued at \$30.

HORSE—By same, one roan horse, 9 years old, both hind feet white, branded V on left hip; valued at \$30.

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.

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

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

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.

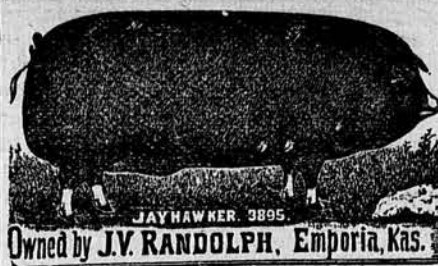
We have tried Small Yorkshires thoroughly, and are satisfied that they cannot be excelled as a profitable hog to raise. They are very docile and mature rapidly. Send for prices and catalogue to

WM. BOOTH & SON,
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REGISTERED BERKSHIRE PICS!

By Imported Boars, boxed and shipped at ONE-THIRD THE USUAL PRICE, by

MCHATTON & SONS,
MEXICO, MO.



Established in 1868.

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

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

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

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



EARL OF CARLISLE 10459,

A son of Imp. Royal Carlisle 3433 and Imp. Fashion, and Duke of Wellington 12922, 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.

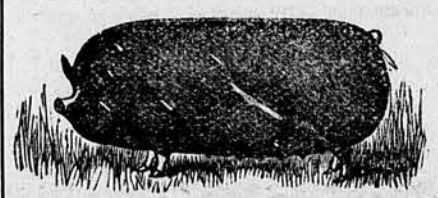
I would always prefer parties to

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.

PLEASANT VALLEY HERD OF Pure-bred Berkshire Swine.



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

S. MCQUILLUGH,
Ottawa, Kansas.



Send stamp for Circular and Price List.

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

—Breeder of—

IMPROVED POLAND-CHINA HOGS Of the Highest Type.

All well pedigreed. Correspondence solicited

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

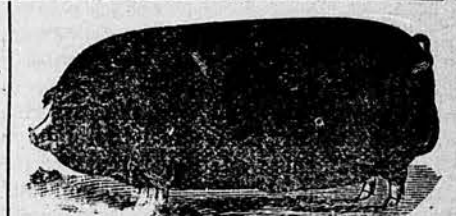
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Having been a breeder of Poland China Swine in Kansas for seventeen years, it is with pride as well as pleasure that I announce to the people of the New West that I am offering the finest lot of Pigs that I have ever seen offered, representing the 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.

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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

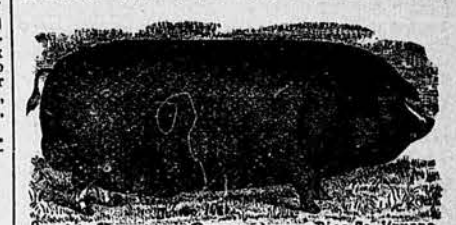


RANKIN BALDRIDGE, Parsons, Kansas.

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.

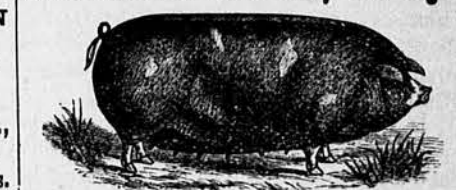
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Owned by TRUEDELL & PERDUE, Lyons, Rice Co. Kansas.

Breeders of Thoroughbred Poland-China Swine, Lyons, Rice Co., Kas. Our herd carries the blood of the most noted strains, headed by three of the best boars west of the Mississippi river. 100 choice show pigs now for sale; also sows bred, and boars ready for service. Stock recorded in the American Poland-China Record. Correspondence promptly answered. Prices reasonable and satisfaction guaranteed.

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 Jay-hawker 2639, Ottawa King 2885 (the champion hogs of Franklin county), and Buekeye Boy 24 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.

EMPIRE BREEDING FARM,

G. M. EMRICK, 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**

The Busy Bee.

Controlling Bees.

Nature has provided the honey bee with weapons to defend its stores, and combativeness sufficient to use them when necessary, says Mr. T. Brasel in the *Farmer and Dairyman*; and he continues: If the bees were powerless to repel an enemy, there are a thousand lazy depredators, man not excepted, who would prey upon the fruits of their industry, leaving them no store. Had it been thus arranged, this industrious insect would probably have long since become extinct. It behooves us, in view of these characters, to ascertain what are considered as insults. First, all quick motions about them, such as running, striking, etc., are noticed. If our movements among them are slow, cautious, and respectful, we are often allowed to pass unmolested, yet the exhalations from some persons appear to be very offensive, as they attack some much sooner than others, though I apprehend there is not so great a difference as many suppose. When an attack is made and a sting follows, the venom thus diffused in the air is perceived by others at some distance, who will immediately approach the scene, and more stings are likely to be received.

The breathing of a person into the hive, or among them when clustered outside, is considered in the tribunals of their insect wisdom as the greatest indignity. A sudden jar, sometimes made by carelessly moving the hive, is another. After being once thoroughly irritated in this way, they remember it a long time, and are continually on the alert; the moment the hive is touched they are ready to salute a person's face. In adjusting the boxes and frames, some of the bees are apt to be crushed or cut into. Their surviving comrades are very liable to remember this, and to retaliate as occasion offers. Bees never make an attack while in quest of honey or on their return until they have entered the hive. It is only in the hive and in its vicinity that we may expect them to manifest this irascible disposition. I must disagree with any one who says we are always warned before being stung. Two-thirds of them sting without giving the least intimation. At other times when fully determined on vengeance, they will strike the hat, and remain a moment endeavoring to effect their object. In this case one has merely to hold down the face and protect it from a second attack, which is quite sure to follow, as they fly horizontally the face held in that position is not liable to be attacked. When they are not so thoroughly angry, they often approach in merely a threatening attitude, buzzing around very provokingly for several minutes in close proximity to one's ears and face apparently to ascertain our intentions.

If nothing hostile or displeasing is perceived they will often leave; but should a quick motion or a disagreeable breath offend them, the dreaded result is not long delayed. Too many people are apt to construe these threatening manifestations into positive intentions to sting. Persons using liquor or tobacco are never successful bee-keepers. Smoke is a controlling agent. The ability to subdue the irascibility of these insects by the judicious use of smoke, has been so clearly demonstrated by years of successful practice, that little need be said concerning the necessity of it further than to consider the best modes of applying it. Old English bee-masters of the past were familiar with the stupefying effects of "puff-ball," a well-known fungus found in this country as well as in Europe, which our vet-

eran bee-keepers also largely used in their earlier experience. Tobacco next came extensively into use and for many years was considered the *sine qua non* of controlling agents; although delusive in its effects, it arouses such an antagonism in the bees that the repeated use of it but serves to insure irritability. Although Mr. Quinby recommended it in the previous editions of his work, he had, for a number of years, discontinued its use, having found partially-decayed wood, which will burn without blazing, to be an efficient substitute. In all of his late writings, he discontinued the use of tobacco, and advised wood instead.

This, That and the Other.

Great Britain and Ireland contain 30,000,000 head of poultry, and Great Britain's annual egg bill amounts to \$31,250,000.

Michigan holds the championship of the Union as a shingle manufacturing State. From 1,649 establishments, 2,584,717,000 are made per annum.

Twenty-five hundred different kinds of poisonous fishes have been tabulated by the Tokio University of Japan. Fishing must be sometimes dangerous pastime in Japan waters.

The Mexican government has given notice to the different steamship lines running to that country, that, owing to the ravages of the locusts, corn will be admitted free of duty, and that every encouragement will be offered to the American product.

The elephant can go. A very good ivory is now made from bones and scraps of sheepskin. The next improvement will be the playing of the game of billiards by machinery. When this is done young men can stay at home and improve their minds.

The value of raw cotton exported from the United States during 1884 is estimated at \$170,000,000, while that manufactured in the mill's of this country was valued at about \$90,000,000. The value of cotton goods exported during that time was \$11,095,119.

Thirteen must be a lucky number. John Bennett, of West Fairfield, Pa., died of consumption at the age of 60, leaving a family of thirteen children. All are alive and well to-day, the oldest being 87 and the youngest 60. Sickness has never troubled the family.

"Mystery gold," a composition of platinum, tin and copper, which stands the ordinary acid tests and is said to weigh as much as pure gold, is in favor in England for articles of jewelry, and has been availed of by counterfeiters for the manufacture of sovereigns.

Chili seems to have been very successful in her railway experiments. That Republic now owes on account of enterprises of that kind \$22,470,000. In 1883 they earned a revenue of \$5,516,049 on a capital of originally less than \$60,000,000, and which is now reduced to \$22,450,000.

The United States has 17,000 dentists, who use a ton of gold and five tons of other metals and make 4,000,000 artificial teeth annually. Only one American in eighty is found to have perfect teeth, and one-third of the population make more or less use of the artificial product.

The *Indian Medical Gazette* records the deaths of seven shepherds in the Belgium district from being struck by hailstones of the size of cocoanuts. A large number of animals were killed by the storm, which from accounts, produced missiles quite as dangerous as the Russian cannon balls.

Soft shell crabs when out of the water are very sensitive to thunder and lightning, and whether on train or steamboat or in crates in the market, 75 per cent. of them, according to a New York dealer, are killed by a thunder storm. The cause of this is not understood, but the dealer in question thinks they are scared to death.

Among the more fastidious Europeans there is an impression that the flavor of tea is wholly ruined by a journey on salt water. All the crowned heads and wealthy nobility of Europe use tea, therefore, which costs them three times the prices paid in America for a brand bearing the same name, but which is brought by Russian traders in immense caravans overland from China. The trade is very profitable.

Save time and money by using Stewart's Healing Powder for cuts and sores on animals. Sold everywhere, 15 and 50 cts. a box. Try it.

Stock sheep should be kept in a good thrifty condition, but not fat, says the *Canadian Breeder*. Keeping sheep over-fat for any length of time is injurious, and the judicious farmer avoids this condition in his stock flocks.

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.

During the season of heat and biting insects, it is humane, as well as profitable, to furnish farm animals protection against both when not grazing. Fairly dark sheds will do this.

The time to buy is when every one is anxious to sell; then the market is overstocked and prices are depressed below their natural level. If this be true, there never was a better time to invest in sheep than just at this particular period.

KANSAS FARMERS' MUTUAL FIRE INSURANCE CO.,

—OF—
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family weekly paper. Also each week we give a sermon by REV. T. DE WITT TALMAGE, worth the price we charge for the whole year. In addition to the continued stories, weekly sermons by Brooklyn's most noted divine, and general literary miscellany, every issue contains the following: Illustrated sketches of prominent men; letters from all parts of the world, news of the week, happenings of interest in Missouri and Kansas, full and reliable market reports, political goings-on. Washington news and special department's carefully edited for Farmers, Little Folks, The Family Circle, and business men generally.

The present publishers have conducted *The Times* for fifteen years and have learned by experience that genuine merit wins more friends than anything else. The public can therefore rely on us to add every improvement desirable, and to spare no expense in keeping our paper at the head. We are encouraged by our largely increased list of subscribers, now numbering over 63,000, to continue the

REDUCED PRICE OF \$1.00 a year, and will therefore receive subscriptions at this low price. EVERY FARMER, CRAT, EVERY WESTERN MAN, EVERY HOUSEKEEPER AND EVERY INTELLIGENT NEWSPAPER READER in this section will find something every week in *The Times* worth our price of \$1.00 a year. Specimen copies free. Remit by postal note, money or registered letter, to THE TIMES, Kansas City, Mo.

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

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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.

CURES ALL OPEN SORES, CUTS FROM BARBED WIRE FENCE, SCRATCHES, KICKS, CUTS, &c.
STEWART'S HEALING POWDER.
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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.

Protect the sheep from the grub-fly in some way. Far their noses if no better way can be found.

The Orange County Farmer is satisfied that sheep husbandry could be much more extensively carried on in this country than it now is, with profit to the farmer, exceeding the ratio made from dairy farming. This is particularly true where large tracts of land can be bought at merely nominal rates.

A kind disposition is a very important quality in a horse, and should be looked after very carefully in selecting one for practical use. Especially should breeding animals be selected or rejected according to the development of this characteristic. A horse with an unruly disposition is very many times of little or no account.

A correspondent of Country Gentleman says: "My opinion is that the Silver-spangled Hamburgs are the best layers and I have heard others say so, too. They are very handsome, and are not nearly so wild as the Brown Leghorns. They are fine fowls for eating, as their flesh is juicy and sweet, but they are not the fowls for the market, as their skin has a blue color. For eggs, they cannot be excelled. Their eggs are of moderate size, not quite so large as those of some of the larger breeds. In some instances, one hen has been known to lay from 275 to 300 eggs in a year. They are non-sitters. The chicks are easily raised, being very hardy. I would advise those who want profitable fowls to try the Silver-spangled Hamburgs."

The subject of in-breeding is one on which there is much to be said on both sides. Briefly, against the practice, it may be said that the tendency of close breeding is *always* to reduce vigor and stamina, and nothing but uncommon strength of constitution in the stock can withstand this tendency toward deterioration. In favor of the practice, it is generally known that characteristic marks or traits may be fixed more rapidly and surely by in-breeding than by out-breeding, excepting such traits or qualities as great size or vigor, which are directly attacked by the process of close breeding. Altogether, excepting in rare instances, we are opposed to in-and-in breeding as productive of lasting evil effects capable of outweighing the good produced. Close breeding has filled many a poultry yard with weakly, rumpy fowls. A true lover of animals will be very loth to follow any practices that will diminish that health and vitality he prizes.

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.

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H. C. TOWNSEND, G. P. Agt.,
J. H. LYON, W. P. Agt., St. Louis, Mo.
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Established 1866.

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Resembles fine leather: for ROOFING, OUTSIDE WALLS, and INSIDE in place of Plaster. Very strong and durable. CARPETS and RUGS of same material. Catalogues with testimonials and samples, Free.

W. H. FAY & CO., Camden, N. J.

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.

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A. A. DeLoach & Bro., Atlanta, Ga.
Prices wonderfully low. Send for large catalogue. Mention this paper.

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WIND MILLS never blow down, a record no other mill can show. Sent on 30 days' trial. Also feed grinders, shellers, pumps, etc. Agents wanted. Catalogues free. CHALLENGE WIND MILL AND FEED MILL CO., Batavia, Kane Co., Ill.

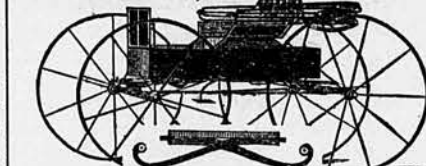
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Stutzman Improved, best make for farmers and fruit-growers. Within the reach of all. 8 sizes. Price, \$8.00 to \$50.00. Address
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Rock Drilling, Well Digging, Pipe Driving, Prospecting Machines and Outfits.
GENERAL WELL SUPPLIES
MANUFACTURED BY
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Only \$10.
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Agents Wanted.
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Send for Wholesale Prices etc.
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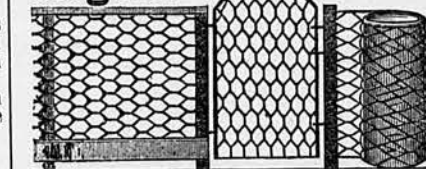
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16,000 SOLD. Economical, Durable and Fire Proof. Will pay for itself in 30 days use, out of sale of its own products.
FREE! Our Illustrated Catalogue and Treatise.
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OVER 400,000 IN USE.



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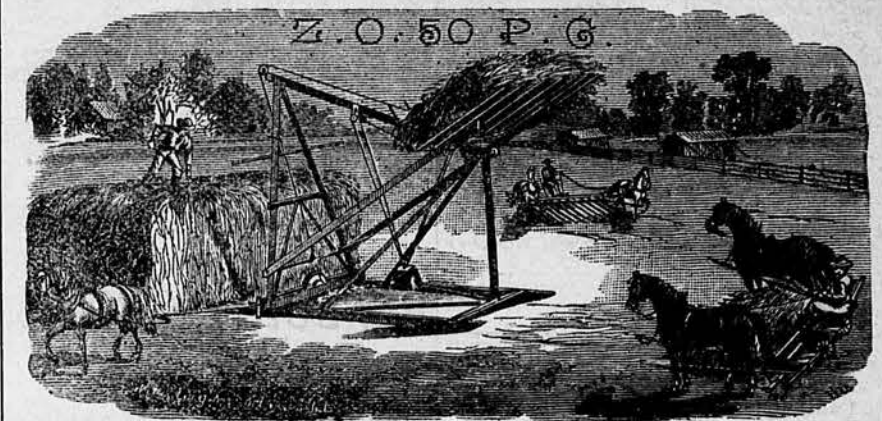
Is the best general purpose wire fence in use. It is a strong net-work without barbs. Don't injure stock. It will turn dogs, pigs, sheep, and poultry, as well as horses and cattle. The best fence for Farms, Gardens, Stock ranges, and Railroads. Very neat, pretty styles for Lawns, Parks, School-lots, and Cemeteries. Covered with rust-proof paint, or made of galvanized wire, as preferred. It will last a life-time. It is better than boards or barbed wire in every respect. 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 newest cheap iron fences now made. The Best 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 Geared Engines for grinding etc. For prices and particulars ask Hardware Dealers, or address, mentioning paper,
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Iron Roofing, Siding, Ceiling

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Twenty to forty acres of Hay put up in one day, at a saving of from 50 to 75 per cent. The hay is not touched with fork until on the rick in splendid shape for stacking. They make the farmer perfectly independent, even with a large crop of hay on hand, at a time when it is difficult to get reliable help, at great expense.

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It builds Ricks or Stacks 20 to 25 feet high, and elevates from 300 to 1,000 pounds at one time.

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These statements verified by thousands of the best farmers in the land.

Write for Catalogue giving full particulars.

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GENERAL AGENTS FOR KANSAS AND WESTERN MISSOURI.

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

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ADAMS WIND MILLS
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SPLENDID TWELVE YEARS RECORD
TIME-TRIED. + STORM-TESTED.
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READY MADE WIND MILL TOWERS,
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FOR WIRE FENCES
Preserves fences from damage and live stock and persons from being killed by lightning.
Agents wanted.
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FOR HORNED ANIMALS, Or Bull Conqueror.
Pat. April 8, 1884. Entire Patent or Territory for sale. \$5 and \$5.50 per set. Sent to any part of U. S. on receipt of price. Circular and testimonials sent on application. Enclose stamp for reply. Address
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"For Sale," "Wanted," and small advertisements for short time, will be charged two cents per word for each insertion. Initials or a number counted as one word. Cash with the order.

FOR SALE—One Plummer Fruit Evaporator. Nearly new and in perfect order. Capacity 15 bushels per day. Inquire at this office.

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

Cattle for Sale!

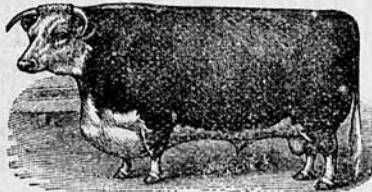
I will sell 100 head of CHOICE GRADE SHORT-HORN COWS bred to Hereford bulls, and four FULL-BLOOD BULLS, in lots of twenty-five or more, on three or four years' time, payable in yearly installments.

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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. Leehorns, Mammoth Bronze Turkeys, Toulouse Geese, Aylesbury and Mammoth Pekin Ducks. Eggs in season. Send for circular and mention KANSAS FARMER.

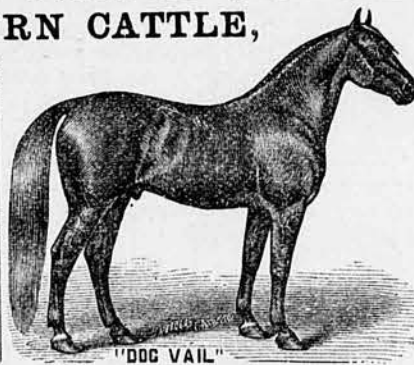
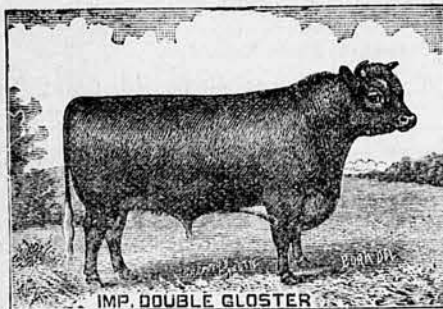
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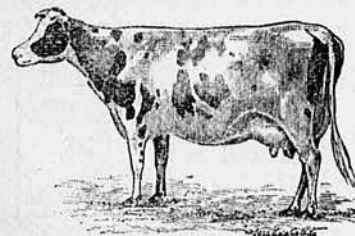
Such as Cruickshanks, Roses of Sharons, Young Marys, Phyllises, Josephines, and other good sorts. Also

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.

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

Cows and Heifers Bred to Best Netherland and Anglie Bulls.

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

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

MILK RECORDS:

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

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

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

BUTTER RECORDS:

Five Cows have averaged 20 lbs. 7 ozs. in a week. Nine Cows have averaged 19 lbs. 1/2 oz. in a week. Fifteen Cows have averaged 17 lbs. 6 ozs. in a week. Six three-year-olds have averaged 14 lbs. 3 ozs. in a week. Eleven three-year-olds (the entire number tested) have averaged 13 lbs. 2 ozs. in a week. Six two-year-olds have averaged 12 lbs. 1 1/2 ozs. in a week. Fifteen two-year-olds (entire number tested) have averaged 10 lbs. 8 1/2 ozs. in a week. The entire original imported Netherland Family of six cows (two being but three years old) have averaged 17 1/2 lbs. in a week. This is the Herd from which to get foundation stock. Prices low for quality of stock. SMITHS, POWELL & LAMB, Lakeside Stock Farm, Syracuse, N. Y.

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—OF—
KANSAS.

On account of no State Fair being held at Topeka this year,

The Marion County Agricultural Society

Will hold a State Fair at

PEABODY, KANSAS,

SEPTEMBER 1, 2, 3 and 4, 1885.

LIBERAL PREMIUMS & PURSES.

Competition open to the World.

Greatly reduced Railroad Rates to exhibitors and visitors.

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

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

KANSAS FARMER CO.,
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[Established, Dade Co., Mo., 1857; Ft. Scott, Kas., 1865; Incorporated, 1884.]

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.

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THRESHING MACHINERY!

ENTENDED ON AN AULTMAN & TAYLOR SEPARATOR



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.

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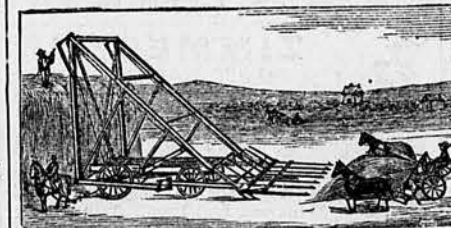
Threshermen, See the New Improvements for 1885!

On Separator and Engine, which places this machinery still further in advance of all competitors. The light-running, double geared 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 Reighley, 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 machine 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.

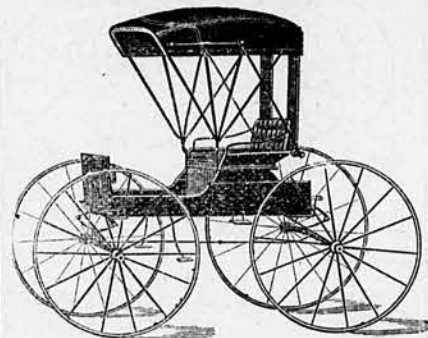
Will save 50 to 75 per cent. in the cost of putting up hay over the old way. Does away with the hard labor of putting up hay; hay not touched with a fork from the time it leaves the mower until it is on the stack; is put up better than it can be done by hand, so that hay keeps better and is worth more. 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. Makes 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.

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Wagons, Carriages,
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WATERTOWN SPRING WAGONS.

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 everybody.

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

KANSAS CITY

100 HOLSTEIN-FRIESIANS

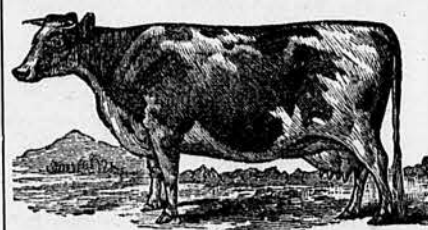
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Auction!!

FRIDAY, SEPT. 18, 1885,

AT KANSAS CITY, MO.,

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