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BREEDERS' DIRECTORY.

Cards of four lines or less will be inserted in the Breeders' Directory for \$15 per year or \$8.00 for six months; each additional line, \$2.50 per year. A copy of the paper will be sent to the advertiser during the continuance of the card.

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SWINE.

TOPEKA HERD OF LARGE BERKSHIRES.—Young boars ready to use. Choice weanling pigs. Mature sows bred. H. B. COWLES, Topeka, Kas.

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HICKORY HERD OF Poland-Chinas. Our 100 pigs for this year are of fine quality. They are highly bred and of outstanding individual merit. Orders booked now at reasonable prices. T. J. Beresford & Son, Ceresco, Neb.

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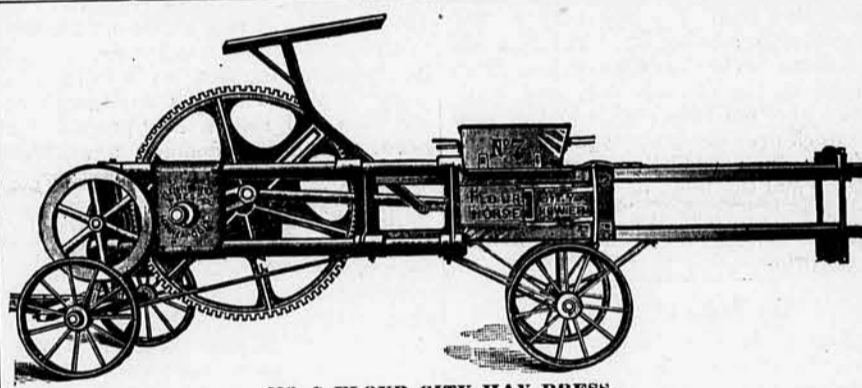
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H. H. HAGUE, Walton, Kas., breeder of recorded Poland-China hogs, Cotswold and Merino sheep. Twenty varieties of land and water fowls. Stock for sale. Eggs in season. Stamp for reply.

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Have taken more and larger premiums than any other firm on any breed. 500 pigs for this season's trade. Send for photo card and prices, or come and see them. We are also breeders of pure-bred Percheron horses.

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WALNUT GROVE STOCK FARM. POLAND-CHINA SWINE.

For sale, aged and young stock at reasonable prices. The stock is select bred, of best strains and good individuals. Call or write for catalogue. Let me know what you want, and the matter shall have prompt and satisfactory attention.

W. B. McCOY, Valley Falls, Kas.

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Poland-China Swine, Buff Cochon Fowls. Inspection invited.
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Oldest, largest and the prize-winning herd of the West. Prize-winners at five State fairs in 1892. Sweepstakes bull and cow. Des Moines and Lincoln, 1892, also sweepstakes herd at Topeka and Peoria. At World's Fair won first and sweepstakes and stood second place in grand sweepstakes all breeds. Herd headed by Iowa Davyson 10th Young bulls sired by him and young cows and heifers bred to him for sale at bargains. Call or write to

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G. W. GLICK, ATCHISON, KAS. Breeds and has for sale Bates and Bates-topped SHORT-HORNS. Waterloo, Kirklevington, Filbert, Cragg, Princess, Gwynne, Lady Jane and other fashionable families. The grand Bates bulls Waterloo Duke of Shannon Hill No. 89879 and Winsome Duke 11th at head of herd. Choice young bulls for sale now. Visitors always welcome. Address **W. L. CHAFFEE, Manager.**

J. T. McFEE, LENOX, IOWA,

Breeder and importer of Cotswold and Shropshire Sheep. A large importation just arrived from the most noted flocks of England. My flock now numbers over 350 registered sheep of both sexes, and are for sale at bed-rock prices. Can furnish card-loads if desired. Correspondence solicited.

JACKS and JENNETS

FOR SALE. I have the largest and finest assortment in the State, send for catalogue. **A. W. HOPKINS, Peru, LaSalle Co., Ill.**

HENRY W. ROBY, M. D., SURGEON.

Office 118 Sixth Ave. West, TOPEKA, KAS.

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In the famous James River Valley, So. Dakota, FOR SALE EXCEEDINGLY CHEAP. Will take Live Stock in part payment on any of these lands. People living on RENTED farms, desirous of improving their condition, can obtain information FREE that will assist them, by writing **S. W. NARREGANG, Aberdeen, So. Dak.**

The Stock Interest.

THOROUGHBRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

OCTOBER 25—Craicer and Bell, Horses, Cattle, Sheep and swine, Neely, Leavenworth Co., Kas.

PROFIT AND LOSS IN STEER FEEDING.

BY PROF. C. C. GEORGESON.

There are some sharp contrasts in the results of the steer-feeding reported in Bulletin No. 39. Only three lots out of the five show a profit on the right side of the ledger, while two are on the wrong side. The difference is due to the feed. The general outlines of the experiment have been noted in the *Industrialist* long ago, giving feeds, weights and gains; but the financial standing of each lot has not been noted here, and perhaps our practical feeders are more interested in this view of the case than any other; for, after all, the profit is the test by which to measure the merit of any method of treatment. The profit and loss account stands as follows:

LOT I.—THREE STEERS.
(Feed, balanced ration.)
Dr.
Mixture of 10 pounds corn meal, 5 pounds shorts, 2 pounds bran, 2 pounds oil meal, increased to 4 pounds oil meal during last 60 days.

To cost of three steers @ \$37.36.....	\$112.08
To feed from arrival to beginning of experiment.....	4.77
To feed during experiment.....	65.47
To freight, yardage, and hay when sold.....	4.91—\$187.23
Cr.	
By three steers 4120 pounds @ \$5.30 per cwt.....	\$218.86
Profit on lot.....	\$31.18
Cost of feed per head.....	23.41
Loss per head.....	10.37
Total cost per head.....	62.41
Total returns per head.....	72.78

LOT II.—THREE STEERS.
(Feed, corn meal and molasses.)
Dr.
To three steers @ \$37.36.....\$112.08
To feed from arrival to beginning of experiment..... 5.62
To feed during experiment..... 74.06
To freight, yardage, and hay when sold..... 4.91—\$196.67

Cr.	
By three steers 3870 pounds @ \$4.75 per cwt.....	\$183.82
Loss on lot.....	\$12.85
Cost of feed per head.....	26.56
Loss per head.....	4.28
Total cost per head.....	65.55
Total returns per head.....	61.27

LOT III.—THREE STEERS.
(Feed, oil cake.)
Dr.
To three steers @ \$37.36.....\$112.08
To feed from arrival to beginning of experiment..... 4.21
To feed during experiment..... 78.33
To freight, yardage, and hay when sold..... 4.91—\$199.56

Cr.	
By three steers 3850 pounds @ \$4.90 per cwt.....	\$188.65
Loss on lot.....	\$10.91
Total cost per head.....	66.32
Cost of feed per head.....	27.52
Loss per head.....	3.44
Total returns per head.....	62.88

LOT IV.—FIVE STEERS.
(Feed, ear corn in barn.)
Dr.
To five steers @ \$37.36.....\$186.80
To feed from arrival to beginning of experiment..... 8.03
To feed during experiment..... 71.50
To freight, yardage, and hay at sale..... 8.19—\$274.52

Cr.	
By five steers 6600 pounds @ \$5.10 per cwt.....	\$336.60
Profit on lot.....	\$62.08
Total cost per head.....	54.91
Total returns per head.....	67.32
Profit per head.....	12.41
Cost of feed per head.....	15.91

LOT V.—FIVE STEERS.
(Feed, ear corn in yard.)
Dr.
To five steers @ \$37.36.....\$186.80
To feed from arrival to beginning of experiment..... 8.21
To feed during experiment..... 85.23
To freight, yardage, and hay when sold..... 8.19—\$286.43

Cr.	
By five steers 6810 pounds @ \$5.15 per cwt.....	\$350.71
Profit on lot.....	\$64.28
Cost of feed per head.....	14.88
Total cost per head.....	57.29
Total returns per head.....	70.14
Profit per head.....	12.85

Lot V., which was fed outdoors, shows a profit of some 44 cents per head more than lot IV., fed in the same manner, but tied up in the stalls. This is owing to the fact that they brought 5 cents more per hundred. At the same price lot IV., fed in the barn, would have made the best profit. Lot V. brought this extra 5 cents because they were heavier to the extent of 210 pounds on the day of sale. The steers were divided into lots soon after their arrival in the fall, and lot V. put in the open yard, while lot IV. was tied up in the barn, and never having been tied

before this lot fretted unduly under the restraint thus forced upon them. Consequently they did not feed well until they became used to the conditions, and owing to these circumstances the outdoor lot gained 423 pounds more than the indoor lot in the three weeks of preliminary feeding before the experiment began. When the experiment began the gains of the two lots were almost exactly alike, but the indoor lot ate less for the gain made than the outdoor lot. Thus it happened that at the close of the experiment lot V. was heavier than lot IV. by the amount they had gained during the preliminary feeding. However, during shipment, they shrank more than lot IV., so that on the day of sale they were only 210 pounds ahead.

It apparently argues against housing fattening cattle. But this is not a safe conclusion. The records show that during the 129 days the experiment lasted the indoor and outdoor lots made practically the same gains, while the outdoor lot ate in that time 2,172 pounds of ear corn and 1,150 pounds fodder more than the indoor lot. This amount of feed was worth a total of \$11.63. Now, if the indoor steers had been accustomed to confinement, lot V. would not have gotten the start of them during the preliminary feeding, and they would not have been heavier on the day of sale, in which case both would have brought \$5.10 per cwt. The indoor lot would then have made the best showing to the amount of \$11.63, the value of the feed which lot V. ate more than lot IV. The experiment does show, however, that steers which have not been accustomed to confinement will make but poor gains until the effect of the restraint wears off.

I conclude that it will pay well to shelter steers which are used to being housed. But instead of tying each steer in a stall, I would turn several together in a loose box. Then I would let them out for exercise a few hours in the middle of each day, and while they were out turn hogs into the pens to work over the droppings and waste. Under such conditions, with docile steers and the labor of handling them reduced to a minimum, I am convinced that fattening cattle can be housed with profit.

The Battle of the Colors.

EDITOR KANSAS FARMER:—In the FARMER of September 27, I gave an account of the winners of grand sweepstakes prizes for bulls in the beef breeds at the great Columbian exposition, showing that the winners in three of the four classes were white and roan Short-horn bulls, two of them from Canada, but I neglected to state that the great champion bull of all the beef breeds, Young Abbottsburn, was bred in Canada, and, of course, the Canadians claim his victory as virtually their own. While there was only one premium to be awarded in each class, the judges assigned relative rank to all competitors, and as no animal not of outstanding excellence would be a competitor, it will be interesting to note the color and breeding of all Short-horns in the contest. In class for 3 years and over, third place was assigned to Robbins' Gay Monarch (Short-horn), a roan, bred by W. S. Marr, of Scotland. His sire was William of Orange (red), grandsire Athabasca (white), great-grandsire Journalist (red and white). Gay Monarch's dam was a roan, granddam red and white, great-granddam a roan.

In two-year-old class, Messrs. Potts' Chancellor (Short-horn), was given fourth place. Color, red. Bred by Potts & Son, of Illinois. His sire was red. Dam was imported Lavender 47th (red). She was by Chancellor (red), out of Lavender 12th (roan), she by Count Bickerstaff 2d (roan).

In yearling class, third place was won by H. F. Brown's Short-horn, Fifer. Color, red. Bred in Illinois. Sire and dam both red. Grandsire was 7th Baronet of Linwood (red), bred, presumably, by Col. Harris, whose herd is of all the standard colors. Her granddam was a roan.

To sum up: The winners in grand sweepstakes prizes in beef breeds were one Hereford and one white and two roan Short-horn bulls, the three Short-

horns all bred in Canada, where the roans predominate, and if one color is prized above another, it is the roan. Of the other three Short-horn bulls that were placed by the judges, one was an imported Scotch-bred roan, with a near white and roan ancestry, and two American-bred reds, one of which was out of an imported cow with a near roan ancestry, and the other with a Linwood-bred grandsire and a roan granddam. "When Greek meets Greek (or breed meets breed), then comes the tug of war." In this contest, the greatest ever fought on American soil, if the breeders of exclusively red Short-horn cattle can find a single crumb of comfort, I fail to see it.

A KANSAS BREEDER.

Alfalfa and Sorghum for Cattle.

Professors F. A. Gully and M. Moss, of the Arizona Experiment Station, have published in a bulletin details of an experiment in feeding in which valuable information was developed as to the best method of feeding the two crops most easily and reliably produced in a very large territory, extending at least as far east as the center of Kansas.

"Alfalfa and sorghum are mentioned as the two most profitable sources of cattle food on irrigated lands in Arizona. To compare each of these feeding stuffs with the other and with a mixture of the two, three lots of native steers each were fed from November 18 to January 1, seventy-one days, as follows: Lot 1, sorghum alone; lot 2, alfalfa alone; lot 3, alfalfa and sorghum mixed. They were fed in separate fields, twice daily. The sorghum was a mixture of saccharine and non-saccharine varieties. It was cut as the seed was ripening, shocked in the field, and fed whole. The amount of each food given was regulated by the appetites of the animals. During the trial the lot on sorghum gained 29.8 pounds, the lot on alfalfa 78.3 pounds, and the lot on the mixture of sorghum and alfalfa 96.4 pounds per head, showing a decided advantage from feeding the two foods together.

"Following this trial, the three lots were all fed to March 1 on alfalfa alone. During this time the largest gain, 43.2 pounds per head, was made by the lot which had previously received sorghum; the next largest, 35.23 pounds, by the lot which had received alfalfa alone. The steers were very wild, so that much difficulty was experienced in weighing the individuals of each lot separately. This was done, however, on several dates. The results of these weighings show that 'without exception the wildest steers in each lot made the least gains.'

"In this experiment alfalfa alone gives a much better result than sorghum alone, but the combination of the two is superior to either fed singly, and this is what might be expected, judging the two feeding stuffs from their chemical composition.

"Sorghum—stalks, leaves and seeds—is rich in carbonaceous but deficient in nitrogenous matter for a complete food.

"In considerable experience in feeding cattle with sorghum, it has always given good results, but we have always fed it with grain of some kind, or cotton seed and its products. * * * We prefer the large sweet varieties for cattle feeding. We found this winter—and it agrees with our experience in Texas and in Mississippi—that the cattle would eat the stalks of the sweet varieties nearly clean, while of the non-sweet kinds they would eat the heads, some of the leaves, and reject most of the stalks. Feeding the two kinds together, they take the sweet first."

The Problem of Cattle Feeding.

The problem of filling the feed lots with cattle this fall, says *National Stockman*, is one that is agitating the minds of more farmers than usual at this season of the year. Will it pay to feed cattle this winter? is a question that is hard to answer. It is a question that cannot be answered at this "stage of the game." The answer, among other things, depends upon (1) the price you have to pay for feeders; (2) the price you will get for them



Friendly Regard
is never entertained by the children for a medicine that tastes bad. This explains the popularity among little ones of **Scott's Emulsion**, a preparation of cod-liver oil almost as palatable as milk. Many mothers have grateful knowledge of its benefits to weak, sickly children.

Prepared by Scott & Bowne, N. Y. All druggists.

WHAT Leather! Vacuum
Leather Oil in it; 25c and your money back if you want it.

Patent lambskin-with-wool-on swob and book—How to Take Care of Leather—both free at the store.

• Vacuum Oil Company, Rochester, N. Y.

when they are fed out; (3) upon the price of the feed; (4) upon the kind of cattle fed.

Present prices for feeders seem low enough. Good feeders, though, are exceedingly scarce, and considerable expense must be calculated upon in gathering up a lot of good cattle. Prices are lower than they were at this time last year, and are not out of proportion to the prices for fat cattle.

As to the price for the stock when fed out, it is hard to predict. There are indications for better prices for fat cattle in the near future, but as a "doubtful thing is very uncertain" it is best not to bank too heavily upon such an advance. The close marketing of cattle in the West and the light corn crop east of the Mississippi river should certainly have a beneficial effect upon values before the season is over. Close money will prevent many feeders from filling their pens as liberally as usual. This will have some effect upon the supply later on. A good many arguments could be offered in support of the theory of an advance in cattle prices, but the finest theories sometimes cannot be demonstrated.

The price of feed is not extravagantly high now, but the corn crop of the entire country will undoubtedly be below the average, and this fact may have a decided effect upon future prices. Values will also vary as to locations. Where shipping facilities are not good in many of the middle and eastern sections of the United States corn will be much higher than indicated by the general market quotations. Indications seem to point to pretty good prices for feed, especially in the eastern part of the country.

The fact that much depends upon the class of cattle turned into the feed lots this fall should not be lost sight of. No feeder can afford to put high-priced grain into low-grade cattle. As scarce as corn will be in many sections of the country a loss of money would be a merited punishment for those who fed it to a mean class of cattle. If there is an advance in the price of cattle it will be upon the better kinds, and in all probability it will be confined to these grades. The feeder who wants to market his grain through his cattle this year to the best advantage must select his feeders with more care than usual. The profits of feeding will be found in the best quality of cattle, regardless of size.

Initiative and Referendum Lectures.

On direct legislation through the Initiative and the Referendum. State being organized. Write for plan, date, etc. W. P. Brush, Topeka, Kas.

Agricultural Matters.

THE RELATION OF THE RAILROADS TO THE IRRIGATION PROBLEM.

Condensed from a paper read before the Inter-State Irrigation Convention, at Salina, by Thomas Knight, of Kansas City, representing the Rock Island Railroad.

Sydney Smith, in one of his inimitable definitions, describes a corporation as "a something which possesses neither a body to be kicked, nor a soul to be damned," and it would appear that at the present day this somewhat terse analysis still holds its own as an approximation to the truth. But it may be that as the railroad interest had not attained that importance in the witty parson's day that it has done in our own, we may except the railroads at least from this pungent summary of disqualifications, and charitably endeavor to regard them with a little more favor than an entire acceptance of this *dictum* would imply.

There is one aspect in which I would, at the outset, ask you to regard the railroad. From the road which groans beneath the impetuous rush of the bob-tail mule-car to the system which embraces half a continent, I would impress upon you the fact that these roads are strictly out for business, and however poetical their advertisements and however artistic their chromos, they neither profess to exist upon sentimentality, nor do they yearn simply for the crown of wild olive which decks the brow of imaginative genius. Business, and remunerative business, first, last and all the time, is the burden of their song; and business, remunerative business, is its chorus.

And just because this is the case, the relation of the railroads to this irrigation question is a very close one. The days are entirely gone by when a thousand miles of railway might be built simply to convey a passenger or a few tons of freight between two points without any regard to the territory passed over or through in the operation. To-day, the local traffic, created and maintained over the whole of the district tapped by any road, is the source from which that road looks to derive its revenue, and by just so much as that road succeeds in securing this end, do we find that road prospering or tending towards a receivership.

Now, with respect to this "Great Plains" region, what do we find? We find that no less than five great systems are dependent, in the main, for their existence upon the business furnished them by this very region. The Santa Fe, the Missouri Pacific, the Burlington, the Rock Island, and the Union Pacific, with their branches and feeders (so far, at least, as their Western traffic is concerned), cover the country with their metals, and prosper and suffer with each change of fortune that affects it. I cannot conceive of any interest which is more vitally concerned in this whole territory than the railroad interest, nor can I conceive of these corporations maintaining a policy which should result in other than good to the district in whose progress they look for their own prosperity.

From some data furnished me by the Land Commissioner of the Illinois Central railroad, I find that every individual placed upon their grant is worth in hard cash to that company considerably over \$100 per annum in the increase of business his presence and operations secure to the road. I do not say that this is by any means the limit of the benefit derived from such settlement, but it is a well-ascertained part of it. Now, it takes but a very little calculation on the part of railroad officials to prove to them that this is the sort of thing they want to foster, and it takes but a very little more to show them very clearly that it would pay them far better to give a man a quarter section, provide him and his family with free transportation to enable him to reach it, and to ship him his hogs, dogs, bulls and geese *gratis*, than to cling to their land for some years in order to secure, in addition to the settler, some very few dollars from the sale of it. (I have purposely cited Illinois Central in this illustration be-

cause of its remoteness from our local interests here. The argument applies with as much force to any other road.)

With respect to the second error, that relating to the want of interest in the territory served by the roads which have no land grant, which want of interest is supposed to arise from absence of proprietorship in the land, I would point to the fact that these roads are no whit behind the others in the amount of money they expend in advertising the resources and capabilities of their territory, nor in the pains they take to secure settlement. So long as they can influence immigration they will strain every nerve to do it, and such of you who are conversant with railroad business need not be told that it is *not* the fare of a passenger or two that the roads are looking after, but it is the steady and constant movement of freight for which they look, with, of course, a good passenger business as a supplement.

The Burlington and the Rock Island roads, without any land grant whatever, have found that it pays them well to institute and maintain, at an enormous expense, a staff of employes, whose duty it is to accumulate trustworthy information, geological, geographical and statistical, respecting every portion of the vast territory which they cover; these roads also expect every one of their employes to be sufficiently well informed upon these matters not only to answer questions put to them by the intending settler, but also to afford him definite and actual service in securing suitable location. All this, of course, applies equally to the land grant roads, but I cite it to show that whether with or without this aid, each road not only recognizes the value of such effort, but positively does its best to meet the requirements thus imposed upon it.

But above and beyond all this, the attitude of the railroads in this question will be found presently to force a very desirable consummation. Indeed, I do not know what more powerful factor can be looked for in the problem. The great mistake of the Western farmer is his eagerness for "more land, more land." Give him a whole section, and harass him every year for his taxes or for the interest on a pretty little mortgage, and he is perfectly happy, even if he hasn't got forty acres in cultivation, and even if off that forty acres he hasn't got a crop which he might have easily got from ten. He would rather be compelled to hew out a path to the creek through sunflowers as tall as pine trees and as tough as oak, for half a mile, let us say, than have a gravel walk to his well through a charming vegetable garden of half an acre. Well, now, the hand the railways will take in the matter is just this: They will show that man sooner or later that it is more to his interest to devote his sole attention to a half quarter section with irrigation, and get all that is possible to be had from that quantity, and to let seven other fellows come in and work the rest of the section in the same way than it can ever be for him to insist upon this wide expanse of weedy unprofitableness so dear to his heart now. And if you ask me why the railroads have anything to say about this, I reply that to them it means all the difference between a streak of rust and a few rotten ties dumped here and there on the prairie, and the substantial road-bed carrying a double track across a cultivated and productive garden country.

Now, then, I say that this irrigation of the "Great Plains" is a matter which touches the railroads right upon that very sensitive point, the obtaining of remunerative business from the whole of the territory through which they pass. And if it be found that in order to do this it is necessary to foster or encourage any local enterprise, they are going to strain every nerve to do just that very thing. And further than this, if they have to go at it in a very round-about way, it makes no practical difference—they will "get there" just the same. So, then, while it is legally and morally impossible for any road or combination of roads to step outside of their legitimate business as common carriers and undertake development of any kind, however valuable the same

might prove to them, sooner or later the whole of their influence and assistance must be given to such enterprise, simply because they are business corporations, they are dependent upon the success of just such enterprises, and above all because there is nothing in the world's history which permits us to think that any sufficient bar has ever presented itself against the power exerted by the love of gain and the march of commercial activity.

Gentlemen, this question of the relationship of the railroads to irrigation is one the importance of which places it far above the plane of the petty issues of so-called politics. It is a question into the consideration of which you cannot permit any other issues to intrude than the eternal issues of right and wrong. If we have in this country a possibility of any repetition of the scenes which have attended the opening of the "Cherokee Strip," then I say that it is our duty as individuals, or in our corporate capacity, to provide land, and habitable land, for the thousands whose actions proclaim that they require it. If by the placing of water upon these "Great Plains," we can do anything to people them with at least a portion of this great army of home-seekers and bread-makers, it has to be done, and it has to be done quickly. And no matter what other motives may lie at the back of the movement, if the railroads see that they can increase their dividends a half of one per cent. by their countenance, depend upon it, that countenance will not be wanting. But, perhaps, you will say: "Now this is all very well, but we should like to know just what the railroads are going to do in this matter. You have shown us the magnitude of their interests in this question; you have shown us how dependent they are upon the development of this great region, but you haven't shown us what practical assistance they will render us either in bringing down the water or in applying it to the land."

Very true, indeed; but I must meet those questions with just one other. "What can they do?" One of our great logicians once drew a subtle distinction between the virtue of emulation and the vice of envy. Emulation he described as the principle which induced a man to climb a ladder if he saw another man enjoying himself at the top of it, in order that they together might participate in the pleasure. Envy he explained as the feeling dominant in the man who knocked that same ladder over in order that neither of them should gain anything. I would not, of course, do more than suggest that very much of the legislation of the present day partakes somewhat of this latter character, but it is, nevertheless, a fact that when the times are ripe for co-operative enterprise between corporations and individuals, the way is surely blocked by some legislative impediment which, however praiseworthy the motive inciting it, proves none the less hurtful in its operation.

But this brings us down again to the point at issue. We have in this Western country an empire. What shall we do with it? I do not believe that any one of the enthusiastic delegates here will begin to admit that the "Great Plains" region is in worse case, or ought to be in worse case, than the sands of Egypt, the plains of India, or the arid regions of Africa. But you must either admit this, or you must admit that, at the very least, what has been done there may be done again to advantage here. And, again, I ask you, if this be the case, do you think it likely—will your common sense for a moment permit you to imagine that these railroad corporations, with their enormous money interests at stake and with their individual stockholders occupying every conceivable position throughout the nation—do you think it possible that they are going to remain supine? Do you think that their own necessities will permit such a thing?

Surely enough has been said to prove that the railroads and this convention are united in a common cause. Surely the inference is a fair one, that no stone will be left unturned by these corporations to help you in your struggle, and surely it is not too much to ask on behalf of these corporations, who derive their strength from your vitality, that you will give them credit for good intentions, even where the law forbids them to put the same into practical shape.

Keeping Corn Fodder.

EDITOR KANSAS FARMER:—I have a field of corn in the shock. The ground is covered with a luxuriant growth of crab grass, which I wish to pasture. I propose to haul the shocks off the field, and would like to know the best way to put it up to save it to feed during winter. It has but little corn on and I shall feed as it is, without husking. Now, I would like to have you or some one who knows, tell me how to handle it. I have had some experience feeding shock corn, but have always hauled direct from the field to the feed lot. D. G. TRAR.

Furley, Sedgwick Co.

If our correspondent had an old-fashioned Pennsylvania barn, the answer would be to store this fodder or fodder and corn in the barn. But, since the average farmer on the plains of Kansas has not yet progressed so far with his improvements as to possess so commodious a barn as is necessary to contain the large amount of fodder he has produced, some more primitive method must be resorted to. In the far western part of this State it is not unusual to store all kinds of forage out of doors, without much reference to protection against the weather. But even in the far west, there is probability of great loss from weather-bleaching and from waste of the most valuable part by the wind. In Sedgwick county, this method or even re-shocking cannot be recommended, because the rain of the fall months and the snow of the winter will certainly so damage it as to cause a loss probably greater than the gain from the use of the crab grass. The most available plan is to stack it in round stacks with the top to the center and the middle kept well filled. Such a stack topped out with hay well weighted down in the usual way, to prevent the hay from blowing away, will keep almost without loss until spring if desired, and may be fed with less waste than if brought directly from the field.

Government Crop Report.

The October returns to the Statistician of the Department of Agriculture make the general condition of corn 75.1, against 76.7 for last month and 78.98 for October, 1892. This falling off in condition is the result of the continued drought, which commenced in June and was not broken in the corn belt until the latter end of September. The drought was most severe in the principal corn-producing States. The averages of conditions in these States are as follows: Ohio, 70; Indiana, 61; Illinois, 66; Iowa, 93; Missouri, 69; Kansas, 64; Nebraska, 65.

The returns of yield per acre of wheat indicate a production of about 11.3 bushels, being 1.7 bushels less than last October estimate. The rate of yield in New York is 14.5 bushels; Pennsylvania, 14.0; Ohio, 15.0; Michigan, 13.0; Indiana, 14.2; Illinois, 11.4; Wisconsin, 13.3; Minnesota, 9.1; Iowa, 11.5; Missouri, 9.5; Kansas, 8.4; Nebraska, 8.7; South Dakota, 8.6; North Dakota, 9.5; California, 11.2. The small yield is the result of the drought during the fall, which caused poor germination and growth, the severe winter following causing considerable winter-killing. The low condition in many States is the result of the dry spring. The average yield would have been much less had not much worthless wheat been plowed up and the ground put in other grains. The quality of the Eastern, Southern and Pacific States is up to an average, while in the States from which the commercial supplies are obtained it is below an average. The States reporting the lowest averages as to quality are: Kentucky, 86; Illinois, 80; Wisconsin, 85; Iowa, 88; Missouri, 73; Kansas, 75; Nebraska, 84.

The average yield of oats as consolidated is 23.5 bushels, against 24.3 last year. The last report of condition was 74.9, against 78.9 the same month last year.

The average of the estimated State yields of rye is 13.3 bushels, against 12.7 last year. The average yield of barley is 21.7 bushels, against 23.7 last year. The condition of buckwheat is 73.5, against 77.5 last month and 85.6 October 1, 1892.

The condition of potatoes is given at 7.12, a loss of only 6-10 of a point since the last report. But three October conditions have been lower in the last decade—1887, 1890 and 1892. The condition of tobacco has improved slightly over last month, being 74.1, against 72.3 last month.

The Farmer's Forum.

This department is devoted to the discussion of economic questions and to the interests of the Alliance, Grange and kindred organizations.

ABSTRACT OF STATISTICS OF RAILWAYS.

The fifth statistical report of the Inter-State Commerce Commission, prepared by its Statistician, being the complete report for the above-named period, for which a preliminary income account was issued in December, 1892, has just been submitted, of which the following is an abstract:

MILEAGE.

The total railway mileage of the country on June 30, 1892, was 171,563.52 miles, being an increase during the year of 3,160.78 miles. This is the smallest increase in railway mileage reported for a number of years. The only groups of railways which show an increase in railway mileage in 1892 greater than the increase in 1891 are groups 1 and 6, that is to say, the railways lying in the New England States and in the territory east of the Mississippi river and west of Michigan and Indiana; but this is due to the fact that the increase in 1891 was abnormally small. The State of North Carolina leads in railway construction, showing an increase of 212.92 miles. The only other States which show an increase in excess of 150 miles are Louisiana, Michigan, Ohio, Pennsylvania and Wisconsin.

CLASSIFICATION OF RAILWAYS.

The total number of railway corporations on June 30, 1892, was 1,822, being a net increase of thirty-seven during the year. Of this number 899 maintained independent operating accounts, and 712 were independent operating companies. Of the 761 subsidiary companies 320 were leased for a fixed money rental and 186 for a contingent money rental, the remainder being operated under some form of traffic agreement not easily subjected to classification. There have been fewer changes in the organization of railways during the year ending June 30, 1892, than during any previous year. During the year nine roads were abandoned; nineteen were merged into larger corporations; seventeen were reorganized and sixteen were consolidated. The classification of railways according to length of line operated shows that there are forty-three companies in the United States having a mileage in excess of 1,000 miles, twenty-four companies operating a mileage between 600 and 1,000 miles, twenty-four companies operating a mileage between 400 and 600 miles, forty companies operating a mileage between 250 and 400 miles and 871 companies operating a mileage under 250 miles. The total mileage controlled by the forty-three railways operating over 1,000 miles was 99,231.74 miles, being 57.86 per cent. of total mileage. The railways which during the year were added to the class of railways operating a mileage in excess of 1,000 miles are the Philadelphia & Reading railroad, the Atlantic Coast Line Association and the Union Pacific, Denver & Gulf railway. The Lehigh Valley railroad, having been leased to the Philadelphia & Reading railroad company during the year, was dropped out of this class. The roads added to the list of railways operating a mileage of 600 miles and less than 1,000 miles are the Old Colony and the Philadelphia, Wilmington & Baltimore railroads.

EQUIPMENT.

The total number of locomotives on June 30, 1892, was 33,136. Of these 8,848 were passenger locomotives, 17,559 locomotives were assigned to the freight service, 4,355 were switch locomotives, and 2,374 were unclassified and leased. The increase in passenger locomotives during the year has been 130, and of freight locomotives 680. The total number of cars reported by carriers as their property was 1,215,092. Of these 966,998 were in the freight service, 36,901 were assigned to the company's service, and 35,978 were assigned to fast freight line service. In addition to the above cars owned, the companies report 146,339 cars leased. It should, however, be remembered that these figures are exclusive of cars

owned by private companies and leased to shippers for the purpose of transportation. The average number of locomotives per 100 miles of line is twenty; the average number of passenger cars per 100 miles of line is eighteen; the average number of cars used in the freight service per 100 miles of line is 708. These figures show a decided increase in density of rolling stock over the previous year. The number of passengers carried per passenger locomotive was 63,399, and passenger mileage per passenger locomotive was 1,510,273. The number of freight cars per 1,000 tons of freight was 1,627. This is a decrease of thirty-nine as compared with the previous year. There has been an increase during the year in the number of locomotives and cars fitted with automatic couplers and train brakes. The report shows a total increase in equipment of 27,139 and an increase in equipment fitted with train brakes of 68,537, and an increase in equipment fitted with automatic couplers of 75,299.

EMPLOYES.

The total number of employees in the service of railways on June 30, 1892, was 821,415, being an increase of 37,130 over the previous year. Assuming an increase in the total number of inhabitants during the year of 1,250,000, it appears that the ratio of increase in railway employees to the increase in population was one to thirty-four. The ratio of total railway employees to total number of inhabitants was one to seventy-nine. The railway industry makes each year larger demands upon the labor of the people. It is significant, however, to notice that the most of the increase in railway employment is confined to groups 1, 2, 3, 6 and 10, that is to say, to the territory east of the Mississippi and north of the Ohio rivers and to the Pacific slope. In groups 4 and 8 there has been only a slight increase, while groups 5, 7 and 9 show small decreases in the number of men employed by railways.

CAPITALIZATION AND VALUATION.

The capitalization of the 162,397.30 miles covered by the report was, on June 30, 1892, \$10,226,748,134. Of this amount \$4,633,108,763 were represented by stocks and \$5,053,038,050 by funded debt. Mortgage bonds amounted to \$4,302,570,993 as compared with \$4,081,621,675 for the previous year. The above figures show an increase in capitalization during the year 1892 of \$397,273,119. In view of the slight activity in railway construction, this increase in capitalization is worthy of especial notice. In large measure it is due to investments by large corporations in minor companies and to reorganization. In quite a number of cases, also, stock dividends or their equivalents have been issued. Of the total stocks and bonds outstanding, the railway corporations on June 30, 1892, held as their corporate property \$1,391,457,053, being an increase of \$108,531,337 over the previous year. Nearly one-fourth of the total railway stocks outstanding are the property of railway companies. The amount of stock paying no dividends during the year was \$2,807,403,326, or 60.60 per cent. of the total amount of stock. The aggregate amount paid in dividends was \$97,614,745, being an increase for the year covered by the report of \$6,496,832. The amount of funded debt, exclusive of equipment trust obligations, paying no interest was \$777,719,420, or 15.56 per cent. of the total amount outstanding.

PUBLIC SERVICE.

The total number of passengers carried by the railways during the year was 560,958,211. Passenger mileage during the year was 13,362,898,299, and passenger train mileage 317,538,883. The average journey per passenger was 23.82 miles, and the average number of passengers per train for each mile run was forty-two. The number of tons of freight reported by the railways as carried during the year was 706,555,471. Ton mileage was 88,241,050,225. Accepting these figures, it appears that the average haul per ton was 124.89 miles. The freight train mileage during the year was 485,402,369, and the average number of tons per train for each mile run was 181.79 tons.

EARNINGS AND EXPENSES.

The gross earnings from operation of

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railways during the year ending June 30, 1892, were \$1,171,407,343. The operating expenses were \$780,997,996. From this it appears that the net earnings from operation of railways were \$390,409,347. The income to the railways from investments was \$141,960,782, making the net income from operation an aggregate of \$532,370,129. The fixed charges during the year amounted to \$416,404,938, leaving a net income available for dividends of \$115,965,191. Of this amount \$97,614,745 were paid in dividends and \$4,314,390 in other payments from net income, leaving a surplus over operations during the year of \$14,036,056. The full report contains an income account for each of the ten territorial groups into which the railways of the country are divided, and shows great diversity in the results of operation. Thus, the income account of six out of the ten territorial groups shows a deficit instead of a surplus. These groups cover the territory lying south of the Ohio and west of the Mississippi and Missouri rivers. The passenger revenue for the railways of the country during the year was \$286,805,708. The receipts from mail service were \$26,861,143, and from the express companies were \$22,148,988. The freight revenue during the year amounted to \$799,316,042.

RAILWAY ACCIDENTS.

The number of railway employees killed during the year covered by the report was 2,554, being less than the number killed during the previous year. The number of employees injured, however, was in excess of the number injured during the previous year, being 28,267. The number of passengers killed was largely in excess of the number killed during the previous year, being 376 in 1892 as against 293 in 1891; while the number of passengers injured was 3,227 in 1892, as against 2,972 in 1891. An assignment of casualties to the opportunity offered for accidents shows one employe to have been killed for every 322 employes, and one employe to have been injured for each twenty-nine men in the employ of the railways. A similar comparison shows one passenger killed for each 1,491,910 passengers carried or for each 35,542,282 passenger miles, and one passenger injured for each 173,833 passengers carried or each 4,140,966 passenger miles. The largest number of casualties to employes resulted from coupling and uncoupling cars, 378 employes having been killed and 10,319 injured while rendering this service. Of the total number killed in coupling and uncoupling cars 253, and of the total number injured 7,766 were trainmen. The accidents classed as "falling from cars" were in this year as in previous years responsible for the largest number of deaths among employes, the number killed in this manner being 611. Of this number 485 were trainmen. Collisions and derailments were responsible for the death of 431 employes. Of this number 336 were trainmen. This class of accidents is responsible also for the largest number of casualties to passengers. Thus 177 passengers were killed and 1,539 were injured by collisions and derailments during the year. Collisions alone were responsible for the death of 286 employes and 136 passengers.

CONCLUSION.

The purely statistical portion of the report was followed by a review of the Statistical Division of the Inter-State Commerce Commission since 1887. The chief effort of the Division has been directed toward the establishment of uniformity in the form of reports from carriers demanded by the various railway commissions of the country, and in the method of accounting by railways. Certain difficulties in compiling an accurate and comprehensive statement

of interior transportation were pointed out and the report concluded with the recommendation that provision be made for a Bureau of Statistics and Accounts, which should have under its supervision the method of accounting by common carriers. It was argued that such a bureau would assist in the execution of the inter-State commerce law by creating those conditions under which the law would act automatically, and that a body imposed with the duty of judging of the justice or injustice of rates must have at its command complete and trustworthy statistics of transportation. It was further recommended that the express companies, corporations owning depot property, elevators, and the like, used by carriers for inter-State traffic, and carriers by water, so far as they are engaged in inter-State traffic, should all be required to make reports to the Inter-State Commerce Commission.

No. 7 Flour City Hay Press.

Our first-page illustration shows the No. 7 Flour City hay press, manufactured by the Kinnard Press Co., of Minneapolis, Minn. For horse power work the No. 7 has no equal. If properly operated its capacity is equal to that of a steam press. Until the advent of the Flour City press, all horse power presses were constructed of a style known as lever presses, either half circle or full circle, depending on the spring of the hay to return the plunger, and making two strokes of the plunger while the horses go once around. This has proven to be a slow method, and as the profit in hay-baling is in the quantity baled with the least expenditure of labor, it would therefore seem to be a good business proposition, when purchasing a press, to purchase one that has the greatest capacity. The Flour City press No. 7 makes eight strokes to one round of the horses, or four times the number made by lever presses. By feeding charges one-half the size that is usually fed to a lever press, it is plainly evident that the capacity would be twice as great.

One feature of the Flour City press that is appreciated by those who have operated lever presses, is the self-feeder. This improvement makes it an easier matter for the operator to put thirty-five to forty bales an hour through the Flour City press than to put sixteen to eighteen bales an hour through any machine that is not provided with a self-feeder. The No. 7 press can be driven by an ordinary threshing machine power, provided the tumbling-rod runs about ninety-five revolutions to one round of the horses. This machine can also be driven by steam or by a tread power, if desired, without any change whatever. The No. 7 press is provided with a front hitch for tumbling-rod for barn work, when so ordered.

For the simplest, strongest, most rapid, most enduring and in every way the best horse power press, call on or write the Kinnard Press Co., Minneapolis, Minn., for catalogue of the Flour City presses.

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SPECIAL ANNOUNCEMENT.

We have made arrangements with Dr. B. J. Kendall Co., publishers of "A Treatise on the Horse and his Diseases," which will enable all our subscribers to obtain a copy of that valuable work free by sending their address (enclosing a two-cent stamp for mailing same) to DR. B. J. KENDALL CO., ENOSBURGH FALLS, VT. This book is now recognized as standard authority upon all diseases of the horse, as its phenomenal sale attests, over four million copies having been sold in the past ten years, a sale never before reached by any publication in the same period of time. We feel confident that our patrons will appreciate the work, and be glad to avail themselves of this opportunity of obtaining a valuable book.

It is necessary that you mention this paper in sending for the "Treatise." This offer will remain open for only a short time.

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THE KANSAS SWINE EXHIBIT AT THE WORLD'S FAIR.

The World's Fair exhibit of swine closed at Chicago last Saturday. It was generally conceded by breeders, both American and foreign, that it was the best collection ever assembled at any time or place within the history of swine breeding. Of the several breeds, Kansas was represented only by the Poland-Chinas, three herds, all told, in an array of forty-four exhibitors from eight States, viz., Ohio, Indiana, Illinois, Iowa, Minnesota, Nebraska, Missouri and Kansas. Nebraska sent out thirteen herds, Iowa nine, Ohio, Illinois and Missouri five each, with Indiana and Kansas three each and Minnesota but one. Notwithstanding that Kansas as a State offered comparatively nothing as an inducement for her swine breeders to make an exhibit, yet three breeders—R. S. Cook, of Wichita, W. E. Gresham, of Burrton, and Dr. P. A. Pearson, of Kinsley, had the courage and faith enough to fit up show herds and add new laurels to Kansas live stock history. Every well posted individual in Kansas swine industry will readily recognize that at least half a score of old-time breeders were better able financially to make an effort to show at the World's Fair than those who did and won a front place in American swine history.

It is needless to say that every breeder who went to the show with his herd expected something, and it is but natural that he should think so. Whatever may have been the difference of opinion as to type, conformation or utility as a porker, it is enough to say, "I showed my herd at the World's Fair and did my level best to get to the front."

It was very patent to the close observer that medium-sized, smooth, compact, yet growthy, individuals got the preference in the ring over the larger and more coarsely conformed ones west of the Mississippi. The Eastern idea of type appears to be somewhat different from that of the West. In speaking of the Eastern idea we refer to Ohio and Indiana, in contradistinction to the country west of the Mississippi river, where size and early maturity, in other words, the most money in the earliest possible time.

The Kansas herds won more money in proportion to the whole number shown in the Poland ring than any of the States west of the river, and the three herds sold and sent out more individuals than any others at the show. Mr. Cook showed ten of his 125 head and won seven prizes. Took first on the young sow, Gem, 6 months and under 12, that was sired by Lawrence Perfection 27899, and out of Beauty's Prospect 51128. This is a very fine individual, wide out, a well-arched back, clean and typical in the face, deep and well down in the ham, and stands as perfection on her toes. She is a model Poland and well worthy the front place at the Columbian. Beauty C., a sister of Gem, won fourth prize. This little miss, while not quite so good in her lower line as is her sister, had just enough Kansas style about her to stand fourth place in a strong ring of hopeful and expectant competitors, and that we think enough to record about her, while she has the pleasure in saying "howdy" to her Missouri, Iowa and Nebraska sisters who were less fortunate than she. Mr. Cook also won fourth on pig under 6 months. This youngster had fifty competitors. Won first on herd under 1 year bred by exhibitor; second on herd under 1 year; second on four swine, the get of one boar, and second prize on litter under 6 months. The reader will observe that all prizes won were on animals under 12 months of age. The herd has been built up during its nineteen years of existence by selecting out of its own number for mating with a view of securing brooders that would produce large litters and support them after farrowing, in other words, selecting the best sucklers in each of the several families of which the herd is composed. Among the boars that have been lately used is De Ef Boy 17203 O. P. R., whose dam was Fruitful, a noted prize-winner sired by Seldom Seen, who led in the prize rings from Ohio. Lawrence Perfection 27899 is the sire of Cook's prize-winners at the World's Fair. Longfellow 29785 is an extra fine young fellow, and it was he that won first in herd bred by exhibitor. Banner Boy 28441 is an extra good yearling, and has already won several first places at county and district fairs. Another young, vigorous fellow is Tecumseh Duke Vol. 16, that has been used for the coming spring pig crop. The U. S. and Corwin strains largely predominate in the herd. Among the sales made were two of the young sows, both prize-winners, to D. F. Risk, Weston, Mo.; a choice boar to W. F. Abbott, Union City, Mo.; another boar to P. K. Tucker, South Dakota.

Mr. Gresham entered ten of his seventy-five and won six prizes, taking third on boar over 6 months and under 12; first on boar under 6 months in a ring of fifty entries; fourth on sow under 6 months; third on litter under 6 months; first, \$50, on boar any age, by Standard Record, and first, \$50, on four swine, produce of one boar. The boar taking first prize under 6 months

went to Watkins & Broadway, Center-ville, O., for \$100. The third prize boar went to Jones Bros., Mt. Elgin, Ontario, Canada. Others went to Louisiana, Illinois and two to California. This herd was founded in 1874, by its present owner, and now consists of the best blood that money could buy. Among the boars now at the harem is Seldom Found 23037 O., 7815 S., sired by King Butler 5577; dam Darkness 2d 17124. Another prize-winner, Graceful's Index 27089 O., and Darkness Index 10085 S. The brood sows belong mainly to the Darkness, King Butler, Corwin, Graceful and Tecumsehs. The litter that won the World's Fair prize is the produce of the great Darkness F. 22450 S., 73222 O., and she by King Butler 5577, dam Darkness 2d 17124. Mr. Gresham has refused \$500 for Darkness F., and if her produce of the future make as good showing as did her babies at the Columbian, most any progressive breeder would, like Mr. Gresham, refuse to part with an animal such as she.

Dr. Pearson starched up on his fifteen years' experience in swine breeding, and shipped for Chicago with five of his home herd of seventy-six head. Every Kansas swine breeder that visited the Kansas State fair two years ago will recollect Pearson's first prize winner and sweepstakes boar, Dandy Jim 5442 S. He defeated Illinois, Missouri, Kansas and Nebraska, and on his way home after the fair met his death by being smothered in a box-car. He was valued at \$1,000, and since a judgment has been obtained in court for \$900, on the grounds of carelessness of the railroad company that contracted to return him home. The Doctor entered at the Columbian Dandy Jim Jr., that now weighs, in his short two-year-old form, 870 pounds. The reader will find his number in the Standard Record, 8498, since changed to Pearson's Medium 9990 S. The dam of Dandy Jim Jr. was Broad-Back 1193, she by Great Western 2427, and he by Give or Take 1497. His grandsire was Climax 2d 3892, and he by Climax 526. On further consultation of his pedigree the reader will find that he reaches Corwin blood four times through Look No Further, First Choice, Lord Duffield and Give or Take All. But enough of pedigree. He has a very broad back, carrying it throughout, well arched ribs, short and clean-set neck, a typical head and ear, large, flinty bone and extra well up on his feet. While not fitted or forced for the show yard, he weighed, at 15 months, 700 pounds. Last year he won first at Kansas State fair, first at Hutchinson, and at the Kansas Southern District fair took first and sweepstakes. His get are remarkably fine fellows. Many of the young daughters of Dandy Jim Jr. have been bred to a toppy boar out of a full sister of Free Trade. This commingling of prize-winning blood no doubt will ably sustain the reputation of Pearson's herd. As we stated before, the big, smooth, growthy and early-maturing fellows did not seem to suit the ideal of the judges, at least so thought many of the on-lookers. I know it is but natural to lean towards one's own State, yet the Doctor is to be congratulated on the one fact, that had there been more than four prizes in class his herd would have stood in some instances sixth, if not for a fifth place. As it was, Dandy Jim Jr. attracted more attention than any single individual in the Poland-China division of the show, and to his credit twenty-three of his sons and daughters were sold to go to an even dozen States. The females in the herd, we think, should have ranked farther up in the show. With all the three Kansas exhibitors that went it practically alone, while other States, some of them, at least, paid all expenses from time of leaving home until the return, are to be congratulated on their success, and by their efforts to keep Kansas along in the front ranks of the swine industry should receive the good wishes of every patriotic citizen of the State.

Kansas City Live Stock Review.

Our correspondent writes from Kansas City under date October 13:

"Receipts of cattle this week, 50,230; hogs, 28,820; sheep, 10,210, against 45,229 cattle, 28,027 hogs and 15,255 sheep for former week. With this heavy run of cattle here this week, 13,000 received in one day, Tuesday, with heavy receipts all the week in Chicago, prices on best fat cattle are 10 to 15 cents lower than last week, and fair fat and medium fat natives and Colorado 20 to 25 cents lower than best time last week. Fair to good cows and heifers 10 to 20 cents lower, good canners 10 cents lower, and common old canner cows very much lower; some packers refuse to buy them at any price. Bulls steady, calves steady. Good feeders strong and generally higher than last week; good style stock steers about steady, common ones slow sale.

"Hog receipts moderate and prices 5 to 10 cents lower than a week ago, but the outlook for good, fair prices on hogs is good, as most localities report short hog prospects.

"With less sheep this week prices have been steady at last week's prices, with little more inquiry for feeding sheep."

The Horse.

Horse Markets Reviewed.

KANSAS CITY.

Tough & Son, of Kansas City stock yards, write the KANSAS FARMER:

"The horse market has steadily increased its demand the past week, mostly from the South, who want good, smooth mares and geldings, weighing from 900 to 1,150 pounds, fat and well broken. The increased demand from the East, as also the numerous letters from country shippers, has convinced us that farmers generally have, in consideration of the falling off in prices, made up their minds that it is folly to hold their stock longer with no prospect of any improvement in the price of horses and mules until the great surplus is used up, and that every dollar spent in feed, or further expense, is just so much thrown away, and have concluded to ship and close out at market rates.

"The regular sales by auction will begin on Tuesday, October 17, in the new building, which is pronounced second to none in the country. The managers have the assurance of a large number of Eastern and Southern buyers being present, and expect to offer them a nice selection of stock to pick from, and invite all interested in the horse and mule trade to be present and see for themselves."

PRIVATE SALES.

DRAFT.	
2.....\$190	1.....\$102½
1.....95	2.....200
DRIVERS.	
1.....\$85	1.....\$80
2.....165	1.....95
1.....100	3.....92½
SOUTHERN.	
2.....\$105	2.....\$115
1.....45	1.....42½
2.....75	2.....80
5.....250	1.....50
1.....55	1.....60
STREETERS.	
1.....\$70	1.....\$72½
1.....67½	1.....75
1.....65	2.....130
WESTERN HORSES.	
22.....\$500	18.....\$360
20.....375	22.....260
38 colts.....210	1.....20
1.....25	1.....22½
1.....35	1.....40
3.....100	1.....25
4.....80	

CHICAGO.

J. S. Cooper, commission salesman of horses, Union stock yards, Chicago, says: "Monday's great holiday disturbed trade early in the week, and since then receipts have been rather large to warrant strong prices. Judging by the ruling prices for some weeks, a low level of values has come to stay, and the sooner all parties interested—the farmer, breeder and shipper—become aware of that fact, the better for them selves and the trade generally. The demand is about equal to the receipts, and the bidding at auction spirited and prompt at the reduced valuations. There have been no material changes in the past week, drivers with some speed selling very well, with small chunks and general-purpose horses selling relatively better than the larger and commoner grades. Draft, common and thin horses are in poor demand, except that a limited number of the former, of good quality, always find ready sale at fair to good prices."

Horse Notes.

Nancy Hanks will be bred to Arion next spring.

Arion recently trotted a half in 1:01¼, a 2:02½ gait.

Arion trotted a mile in 2:07¼ at Lexington, Ky., last week.

A. H. Moore, who owns Director, the sire of Directum 2:06½, recently offered \$50,000 for the latter horse.

Brown Hal has three in the 2:09 list—Hal Dillard 2:08½, Hal Braden 2:08¼, and Hal Pointer 2:05¼.

Nettie, by The King, owned by Harry Downing, Marshall, Mo., won both her races last week at the State fair and lowered her record to 2:24¼.

Free Coinage 2:11¼, a three-year-old, and Joe Patchen 2:09, a four-year-old, both Kansas horses, are two of the most sensational pacers of the year.

Directum 2:06½, Guy 2:09½, Hulda 2:08½, Little Albert 2:10, Magnolia 2:10, Pixley 2:09½, and Walter E. 2:10, are the new 2:10 trotters this year.

In the free-for-all pace at Lexington, last Thursday, Robert J. won in three straight heats, with Manager second and Flying Jib third. The time was 2:06¼, 2:07¼ and 2:07¼.

The black stallion, Joe Patchen, owned by J. G. Taylor, of Burlington, Kas., is probably the fastest green pacer of the year. He paced a mile at Wichita in 2:09, and also went a trial half in 1:00¼, a 2:01½ gait.

Unprejudiced writers acknowledge that there was no combination to beat Alix in the Chicago free-for-all trot, and the gush

Shipping Horses.

Always have something to put on wounds. Phenol Sodique arrests inflammation immediately. Natural healing follows.

Just as good for all animals. HANCE BROTHERS' & WHITE, Philadelphia. At druggists. Take no substitute.

about "sweet little Alix" is tiresome. There is no doubt that the race is the greatest ever trotted, and there is also but little doubt that Hulda would have won it if she had not been disabled after she had won two heats.

Jack Curry, driver of Alix 2:07½, has written to the Cumberland Park club, of Nashville, asking that they hang up a purse for Alix and Directum. He says he will trot Alix against Nancy Hanks, Belle Vara and Directum, or will go against each of them singly. He bars nobody, three heats in five.

The fastest trotting race in history was the free-for-all at Lexington, Ky., last Wednesday. Directum won in 2:09¼, 2:08½ and 2:08, losing the second heat to Pixley in 2:08¼. The average time for the race was 2:08½. There is a story to the effect that Monroe Salisbury had Directum severely whipped after the second heat, which he lost by slowing up on the home stretch, and that he continued to administer allopathic doses of the whip till the terrific battle was over. The story will probably be authoritatively denied.

The following horses are the big winners in the trotting world this year: Walter E., \$10,250; Margrave, \$8,920; Directum, \$9,000, Harrietta, \$5,000, and Double Cross, \$6,725. The most notable winner is Director's Flower, the game and speedy little two-year-old by Director. She won six races in succession, while in her first race she finished second. Hulda and Ellard won three each. Hal Pointer leads the pacers with a total of \$7,150, and Major Wonder stands in second place, the consolation race at Buffalo, in which all his competitors were distanced, earning him upward of \$3,000. This season twelve horses won over \$5,000, and fourteen more earned over \$3,000. Last year only two horses earned \$5,000, Black Nightingale heading the list with a total of \$7,500, and H. C. T. winning \$5,000. Last year Flying Jib led the pacers with a total of \$3,000.

"TO ALL CATARRH SUFFERERS

I Recommend Pe-ru-na," Says Mary Massey, Clinton, Texas.

She Speaks from Experience.

The tendency of catarrh of the head is to pass downwards through the bronchial tubes to the lungs. Anyone who has had catarrh of the head a year or more finds the disease gradually progressing downwards. In some cases the progress is rapid, and in other cases it is slow; but, sooner or later, if catarrh is allowed to run, it will go to the lungs and set up the disease known as consumption. It is doubtful if consumption is ever caused by anything except catarrh.

The catarrh usually begins as a cold in the head or throat, and is neglected until it becomes chronic; then it begins to dawn on the victim that he has catarrh. Unless he is very foolish indeed he will not rest easy until the catarrh is entirely cured. Thousands pay no attention to it until it is too late.

If Pe-ru-na is used the cold never becomes chronic, and hence catarrh is prevented. But after catarrh has become thoroughly established Pe-ru-na will cure it, but it will take much longer. Even in cases where the catarrh has already attacked the lungs and the symptoms of consumption have shown themselves the Pe-ru-na will cure. A great many cases of genuine consumption have been cured with Pe-ru-na after the patient had been given up to die.

For further particulars send to the Pe-ru-na Drug Manufacturing Company, of Columbus, O., for a free copy of "Climatic Diseases," which gives much information on catarrhal diseases.

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Lightest Running, Self-Feeding, Fastest Pressing, Simplest and Best. KINNARD PRESS CO. Minneapolis, Minn.

The Home Circle.

To Correspondents.

The matter for the HOME CIRCLE is selected Wednesday of the week before the paper is printed. Manuscript received after that almost invariably goes over to the next week, unless it is very short and very good. Correspondents will govern themselves accordingly.

The Cathedral Chimes.

I climbed the winding stairway
That led to the belfry tower,
As the sinking sun in the westward
Heralded twilight's hour.

For I thought that surely the music
Would be clearer and sweeter far,
Than when through the din of the city
It seemed to float from afar.

But lo, as I neared the belfry,
No sound of music was there,
Only a brazen clangor
Disturbed the quiet air.

The ringer stood at the key-board,
Far down beneath the chimes,
And patiently struck the noisy keys,
As he had, uncounted times.

He only knew his duty,
As he did it with patient care,
But he did not hear the music
That floated through the air.

Only the jar and the clamor
Fell harshly on his ear,
And he missed the mellow chiming
That every one else could hear.

So we, from our quiet watch towers,
May be sending a sweet refrain,
And gladdening the lives of the lowly,
Though we hear not a single strain.

Our work may seem but a discord,
Though we do the best we can;
But others will hear the music,
If we carry out God's plan.

—Congregationalist.

SHIRKING.

This title seems to have excited the pens of several old-time "Home Circle" friends, and no doubt many others have become interested in the remarks of the four who have already written in answer to Mrs. Wilder's suggestions in September 13th issue.

The word itself may not be very pleasing, yet the thoughts drawn from it are certainly instructive and have the approval of many of our readers who have written us upon other matters and incidentally mentioned the fact that they were interested in the articles.

Mrs. Wilder's explanation this week will entirely satisfy Mrs. Ferguson as to the appropriateness of the term used; and as there are three replies to be given they will be placed in the order received.

MANHATTAN, KAS., October 7, 1893.

I like the idea of the friend from Goodland, in FARMER of October 5, of enlarging the "Home Circle" and the interchange of ideas in regard to home work, cares and duties. In paper of week previous a puzzled housekeeper wishes she knew what to "leave out," and she brightly says she "leaves out the copying and condensing of her postal card communications for the FARMER." One does not like my term, "systematic shirking." I use "shirking," not in its lower meaning, but the "higher," for I think it is higher to "leave out, avoid, get off from" doing less important work in order to get time for more important. I did not tell about my "systematic shirking," hoping others would take up the subject and tell of their methods of doing work easiest. In bread-making there is a vast difference in methods, and some women make it a very hard task. In bed-making and care of chambers, in mending, in sweeping, in cooking, and what is the most healthful food and easiest prepared, in washing, ironing. In washing windows most of women forget the "dust-cloth." Never wash them in soapy water. Use clear water and wipe with clean cloth and polish with paper. Some use kerosene in water. After having a careless "help" turn a saucer of kerosene on a good carpet I abolished kerosene. But I do use a clean dust-cloth often on inside and big feather duster on outside, or a long-handled brush, bought for the purpose. Let others give experiences.

C. F. WILDER.

LENORA, KAS., October 8, 1893.

I desire a place in "Home Circle," and have been induced to tell my desire by Mrs. Wilder's letter in your issue of September 13. I was pleased with her remarks and was inclined to write at once to KANSAS FARMER and express my approval; but, had I done so, it would have been proof that I did not at all believe in shirking.

I can agree perfectly with what Phoebe Parmelee, "Samuel's Wife" and Mrs. Ferguson have written in answer to Mrs. Wilder, but I wish to mention one matter that I have noticed, and fear that too many farmers' wives are inclined to shirk in one direction decidedly to their great disadvantage, and that is in the matter of reading. Of course, I hear many say: "Read? Why, I have no time for reading. When I have worked hard all day, as I am obliged to do, I am too tired to read at night and am only too glad to go to bed and sleep." The weariness from much work is all too

true, but I am firmly convinced that by proper forethought an hour—some time between 5 a. m. and 10 p. m.—can be set apart for mental improvement, even in households where "woman's work is never done." I was educated in this opinion by my own good mother, who was a farmer's wife who "did her own work" and was the mother of fifteen children, all but one of whom she brought safely through the interesting periods of measles, whooping cough and mumps, and otherwise brought them up in an exemplary manner. To her, reading was a rest, and she endeavored to devote one hour each day (on Sundays more, of course,) to this manner of resting. And that hour often had to be from 9 p. m. to 10 o'clock. Her children followed her example, and, if the truth must be told, I often shirked a whole lot of work set apart for me while I labored several hours very diligently reading a love story. Of course, it was awful for me to do so, and I try to teach my children to choose better reading, for the best of books can now be brought within the reach of nearly every family. Speaking of cost of books, reminds me that a few days ago I "dusted" the books in my one book case. They were very dusty, for I had shirked that work for several months. On the upper shelf I found one—an old one which had belonged to my grandfather. On the first leaf I read: "James Stevenson, his book, bought in Donegal, 1784, price £1 2s." The next book to it was one similar in size, in which was written my father's name, etc., as follows: "James Martin, his book, bought in Harrisburg, Pa., 1824, price \$3." Much prettier books in every respect can now be purchased for 50 cents, though possibly the reading matter itself could not be improved, as the title of one was "Justification by Faith."

I really would like to write more, but my postal card is entirely filled and I have to write my name on the other side, just as though it had fallen over.

MARY MARTIN JOSELYN.

PAXICO, KAS., October 8, 1893.

Phoebe Parmelee's remarks in the FARMER of September 27, led me to look up Mrs. Wilder's letter, which I had certainly "shirked" or overlooked. But, oh! dear! dear! those dainty garments and immaculate windows and unmarked doors would make one doubt almost whether Mrs. Wilder is really and truly a farmer's wife, living on a Kansas farm, with all the multiplicity of duties such a position implies, to say nothing of the care of the small children. But perhaps hers is one of those bright, sunny temperaments which, combined with robust health and strength, make things easier than to some less happily constituted mortals, and perhaps she has no little half worn-out garments to grieve over and no little graves on the hillside. With me the difficulty is not to know how to shirk, but how to get enough done. Still, I believe there are some who slave themselves to death, almost, to keep their houses clean and neat and their children well dressed, and so make the meat and raiment more than the life.

I once, many years ago, heard Prebendary Cadman preach, and he took for his text, "Whatever ye do, do it heartily, as unto the Lord." Now, can we not carry this thought with us in our daily and often irksome duties—wash dishes "as unto the Lord," mend stockings "as unto the Lord," clean the windows "as unto the Lord," as well as superintend missionary meetings in the same spirit.

I think we ought to congratulate Mrs. Wilder on one point, and that is, she has roused two or three to answer her remarks. I believe we should all like to write oftener, but when the leisure comes the body is often too weary to put connected thoughts on paper. I hope we shall have the benefit of some more postal cards.

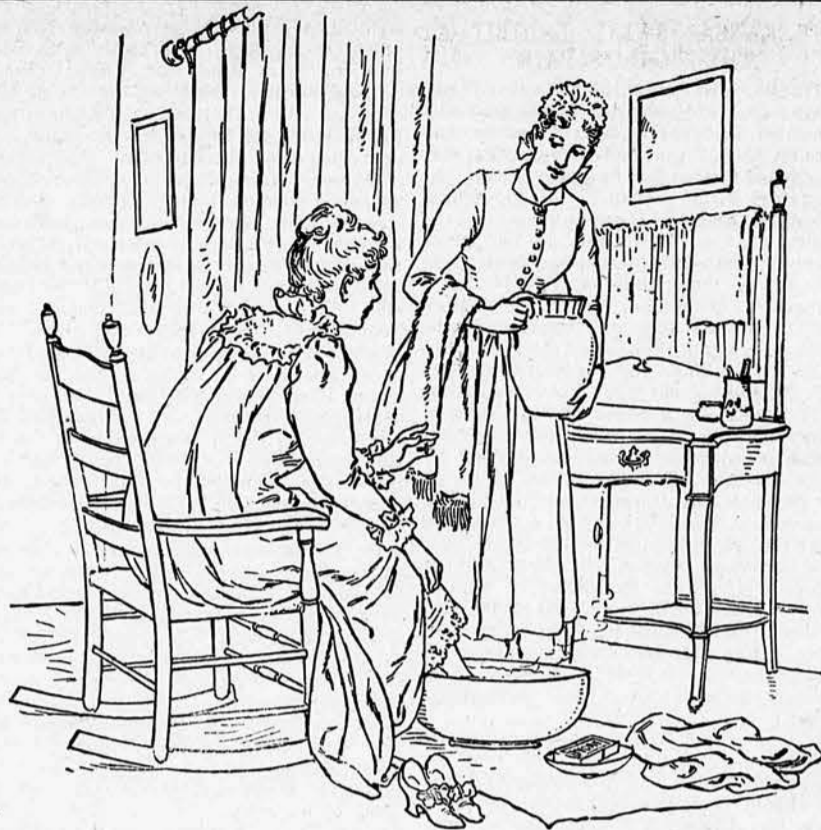
We shall soon have to think of preparing Christmas presents. Of course, the easiest way is to send off to Chicago or elsewhere for them, but I think it much better for the children to make some of them themselves at home. Cannot some one give some ideas for little Christmas remembrances, moderately inexpensive and tolerably easily made?

ENGLISHWOMAN.

"The Book of the Fair."

Part No. 3 of this work has been received, and although the KANSAS FARMER folks have been favored with an actual view of the great fair, yet this book is highly valued for the elegant engravings and description of the wonderful sights in the "White City," which will continue to keep the memory fresh with the delights there experienced.

The Bancroft Company, of Chicago (Auditorium building), are publishing this work, which will consist of twenty-five numbers, and is intended to preserve in convenient form all the principal objects of interest still to be seen in this, the greatest show ever exhibited on earth. There will be no less than 2,000 pictures in the book complete, and, judging from those contained in the first three numbers, they will constitute the most complete and artistic Album of World's Fair Views and descriptions. The



Nature intends women to have beautiful and painless feet as well as beautiful hands, and they should not be spoiled when childhood is left behind.

Every night or morning immerse the feet in warm water; wipe every part carefully with a cloth covered with Ivory Soap; rinse in clear warm water and rub until they are in a glow. Avoid shoes that press uncomfortably, as they will cause deformity, also those that are too loose. Use Ivory Soap. It floats.

G. 24.

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paper, type and pictures are all of the finest quality that American skill can produce, and that is equal to saying the finest in the world. The parts cost \$1 each, and by sampling a number or two every one will be inclined to get all the rest.

Bismarck Loves Music.

Prince Bismarck years ago said that his favorite musical instrument was a hand organ. He did not mean by that remark, however, that he was no admirer of the "heavenly maid." On the contrary, the ex-Chancellor is a great lover of music and musicians. In the course of a speech to the members of the Gesang Verein Orpheus of Barmen, not long ago, he paid a high tribute to the art, recognizing its aid in shaping the destinies of Germany and in carrying out his far-reaching plans.

"In music," said the Prince, among other things, "I am unfortunately not your equal. In the multitude of things I was compelled to study in my youth music was neglected. But despite that, I love it. I am thankful to music because it helped me so effectually in my political efforts. The sound of the German song won the hearts. I count it, in fact, among the aids which led to the success of our strife for union. Practical examples are not always easy to cite, but the first which I now recall is that of the Becker Rhinesong in 1841. Its influence was mighty. The rapid adoption of the song by the people—then mostly particularists—had the effect of two army corps. Later came the 'Wacht am Rhein?' The singing of that war song on the battle-fields in winter, when food was scarce, strengthened the heart of many a soldier, and the heart-feeling is everything in battle. Therefore, I do not wish the German song to be overlooked as one of the war aids of the future. I wish to thank you for the aid given me by German singers in appreciating the national idea and carrying it beyond the borders of the Fatherland. We should hardly have remained in such close relations to Vienna had not Haydn, Mozart and Beethoven lived there and created a bond of art between the Lower Rhine and Vienna.

"Yes," added the Prince, "our relations to our third ally, Italy, were of a musical nature before they became political. The first conquests which Italy made with us were musical conquests. I am no enemy of Italian music, despite my preference of the German school; on the contrary, I am an admirer of it. In this sense I thank you as the guardians of music—continue to cultivate it. The German cannot resist the effect of music. He is in the proper humor when he hears music.

"It is a fortunate thing that our ruling families are not enemies, but cultivators of music. This art would not have reached so high a state of perfection in our country had it not always been cultivated by the ruling families."—Boston Globe.

For Whom Do Women Dress?

It has been asked, "For whom do women dress?" The general verdict is that it is not only to please the opposite sex, but to please themselves. It is an uncharitable view to take of the question to insist that women dress for the purpose of exciting the envy of sister women. In discussing this problem the New York Press says: "It is a fact to be thankful for that all the fads of all the reformers in creation cannot reform the inherent delight of the civilized woman in beautiful and graceful things. She loves dainty gowns, flowing laces, pretty jewels and jaunty bonnets because it is the feminine nature to do so. She arrays herself as she arrays the interior of her home, as becomingly as her purse and the mandates of fashion will let her, not because she wants to dazzle other women or fascinate the masculine sex, but because she craves neatness, refinement and artistic charm. If the civilized woman dwelt alone on an island she would cull the prettiest flowers for a corsage bouquet and choose to eat and sleep in the pleasantest and cleanest place she could find. If she lived in a country without a man in it she would still regard the fit and hue of her garments as matters of essential importance. Of course, women are not unmindful of the opinion of the opposite sex. They like admiration, if it is respectful, and they are a great deal happier when their dress is cordially praised by the one particular man whose approbation they value above most things terrestrial. But they select their garb primarily, not to gain masculine flattery, but in obedience to the dominant instinct which makes the modern woman a constantly refining and uplifting force."

ELY'S CATARRH CREAM BALM

Cleanses the Nasal Passages, Allays Pain and Inflammation, Heals the Sores. Restores the Sense of Taste and Smell.

THE CURE FOR CATARRH COLD IN HEAD
HAY FEVER
DEAFNESS
HEADACHE

ELY'S CREAM BALM 50c

TRY THE CURE. HAY-FEVER

A particle is applied into each nostril and is agreeable. Price 50 cents at Druggists or by mail. ELY BROTHERS, 56 Warren street, New York.

10% ABOVE FACTORY COST

ONLY \$8.47 buys a \$95.00 Singer Style Machine. \$18.98 buys Highest Grade modern style machine in the world. 25 different styles at intermediate prices. Warranted 10 years. We are the only manufacturers selling machines direct. Send for catalogue No. 250. Terms for securing a sewing machine FREE.

CHICAGO SEWING MACHINE CO., Chicago, Ill.

The Young Folks.

The Maize in Norway.

By an inn of wildest Norway—
A dark ford below,
And the peaks of the Norraka Field, above,
In a waste of gleaming snow;
And, between, the somber fir trees,
The mead where the kine fed free,
And a mountain torrent leaping down
To be lost in the maelstrom sea—
There, in a narrow garden,
One breezy August morn,
I saw, beside its hardy flowers,
A cluster of Indian corn!

And I said to blue-eyed Lena,
With braided flaxen hair,
The child of the inn who had brought me forth
To see her small arterre,
"Your land lies far to the frozen north,
And a day your summer spans;
Why do you plant the tropic maize
When frost the harvest bans?
Barley and oats and rye you may reap
Ere yet the snows fall cold,
But the stately maize, the grain of the sun,
Will never yield its gold."

"'Tis true," the maiden answered,
"That frost our harvest bans,
But we plant the beautiful waving maize
To please the Americans,
They smile when they see its shining leaves,
And say, on their boundless plains
It grows like a forest, rich and tall,
In the warmth and mellow rain;
And the bins are filled with its blessed gold
Before the bright year wanes"

"O, child," I said, "you have planted well!"
And I thought, that August morn,
As I looked at peak and stream and tree,
The dark ford and the grassy lea,
There was naught so fair on shore or sea,
As that cluster of waving corn.
—Edna Dean Proctor, in *Youth's Companion*.

TRUTHFUL JONES AND A JAGUAR.

"You are under the impression that you are thinking, eh?" said Jones, in a gentle, soothing tone, as he turned to Jackson Peters and observed that young man with a fatherly air.

Peters maintained his silence for another moment or two, and then answered: "No, I hardly dignified my mental gymnastics with that term. I was simply turning over in what passes for my mind the notion of how little true greatness is appreciated. I told a friend your circus-tiger story, and he pronounced it a monumental, epoch-marking lie."

"My young friend," returned Jones, "you are not associating with the right sort of people. There was nothing improbable about that story. Circus tigers frequently escape; surely your friend could believe this. A tiger's tail is long and supple and easily tied in a knot; your intelligent friend could not deny this. The hole in the fence was only very slightly larger than the tiger's plain, unknotted tail, so, of course, after the knot was tied it was impossible for him to withdraw it, and his capture was easy. If your friend thinks that a tiger under such circumstances would tear off his tail and go bounding across the country without it, why, all I've got to say is that he has less intelligence than a friend of so brilliant a young man as you are should have."

"He didn't doubt any of these things," explained Jackson Peters. "Nor did he suppose that a tiger would leave his tail behind. What he wanted explained was how you induced the tiger to back up and put his tail through the knot-hole in the fence."

"Jackson, I am glad your scholarly and penetrating friend raised this question. I will explain. I had on the side of the high board fence opposite to the tiger a large tin pail of sweet cream. The idea of the sagacious animal was to put his tail through the knot-hole, insert it in the cream, withdraw it and then lick off the adhering cream. I tied the knot in his tail before the farsighted beast could complete the execution of his well-laid plan. What you want to do, Jackson, is to get the tail off of a stuffed tiger, load it heavily with lead, and then use it to beat some sense into the head of your valued friend. If the able gentleman ever gets to know half as much as that tiger he may count it the luckiest day of his life."

"While on the subject of tigers and that sort of thing, I want to mention a little experience I had a few years ago with a mountain lion in Montana. You may call it a mountain lion, or a jaguar, or a panther, or what you will—it makes no difference, of course—the fact remains that it was some ten or twelve feet long, almost as big as the circus tiger. You may remember my dog Bones—I mentioned him recently in connection with certain wolf operations. Bones, you will recollect, did not make a specialty of wild beasts; he preferred the society of man, and the only wild animal I ever saw him bristle up to and put to flight was the common cotton-tail rabbit. He went at rabbits with a ferocity which was awe-inspiring, but the mere sight of the picture of a wildcat in a book of natural history would cause him to howl dismally and creep under my chair."

"I had a large cattle ranch in Winchester Trigger valley. The country was new then and overrun with Indians and wild beasts. I went out one day on horseback to look after some stray stock. When about twenty

miles up the valley my horse stepped in a prairie-dog hole and broke his leg. I shot the poor beast to put him out of his misery, and proceeded on foot. I forgot to say that Bones was with me. I soon found that my rifle was heavy, so I cached it and pressed on. I was going across a little open park, when I was startled by the fierce, almost human, cry of a jaguar. I looked back and saw the beast bounding toward me, covering thirty feet at each jump. My first thought, of course, was of the unfortunate Bones. Tucking him under my arm, I ran. I reached a small cottonwood tree about three yards ahead of the enraged panther, and climbed it, still holding close to my valuable dog.

"We remained in the tree some two hours, during which time the baffled jaguar screamed and roared below, and, as it were, beat the air to a foam with his tail. I remained calm. Poor Bones, however, was in an agony of fear, and clung to a small limb on which I had placed him with desperation. I was becoming sleepy, and was arranging for a nap on my limb, when my attention was attracted to a cloud of dust about a mile away. I soon saw that it was a band of mounted Sioux Indians, and that they were coming directly for me. Gentlemen, it was not a time for esoteric speculation; rather it was an occasion for prompt, decisive, buzz-saw action, and I hope I may venture to say that I am not altogether out of place at such a time as this.

"Reaching in my pocket, I drew out my knife and hastily cut off the branch to which Bones clung. It was a small branch and made a pole about ten feet long, with Bones glued to one end of it. The Indians were now less than 200 yards away. Taking the other end of the pole in one hand, I hurriedly began to descend. The jaguar had spied the Indians and stood looking at them. Their blood-thirsty yells swept down the narrow valley like a destroying wind. The tiger screamed back at them in a voice which drowned their cries as Niagara might drown the ticking of a lady's watch. When six feet from the ground I made a flying leap and lit astride the back of the tiger. Swinging my pole around, I held Bones about a yard in front of the beast's nose. He leaped for the unhappy dog with all the fierceness of his cruel nature, whetted as it was by hunger. Of course he did not get him, as I retained my hold on the pole and my position on his back. Pointing Bones toward the Indians, I charged them, the tiger thinking to get the dog at every bound. My appearance so terrified the savages that they turned and fled ignominiously. I chased them two miles, scattering them right and left, and by joining my own cries with the yells of the tiger and howls of poor Bones, I readily scared a number of the Indians to death. When the last one had disappeared, I turned the tiger in a broad curve by swinging Bones slightly to starboard, and rode him to my ranch. The distance was twenty miles, which I covered in one hour and thirty minutes, the optimistic animal thinking that he would grasp Bones at the next jump for the whole way. I was so pleased at the success of my experiment that I kept the jaguar, tamed him and used him for a saddle beast during the two years that I staid in Montana. I soon taught him the use of the bit and the spur, however, as the exertion of holding Bones out before him was too great."

"Would you advise me to tell my friend this story?" asked Jackson Peters, after Jones had been silent a moment.

"No, sir, I would not," answered Jones, decisively. "Evidently your friend has no appreciation of an artistic tiger story. Tell him that story of your own about the uncle of yours who was ridden on a rail by discriminating fellow-townsmen till he got to like it, and indignantly tore off a cushion put on the rail by some kind-hearted ladies. That ought to just about fit your friend's caliber."—*Harper's Weekly*.

Bird Strategy.

One of those feathered nuisances, the European sparrow, was seen, fussy, spluttering and scolding as they all are, hopping about among the stones. At a little distance a sparrow-hawk was seen darting in the direction of the sparrow, but quickly making a detour, so as to avoid attracting his attention, and sweeping in from the rear of the little sputterer. At the right point the hawk swooped down for his breakfast. But the sparrow was promptly "on to" the exact size of the situation, and as the hawk darted down for him the sparrow darted off, coming right down to his best time, but darting ever closer to the ground and in a zigzag motion—first one way and then the other, so that his pursuer, swift as he notoriously is, was put to his trumps to catch him. If the sparrow had swept off in a straight line in the air, or in any sort of a curve, the hawk would have had him in a flash. And the little fellow knew it. Every zigzag he made in his darting flight the hawk had to follow, and at a little disadvantage, for he didn't know, till he saw it, which way the fugitive would go next. But the game would evidently be finished, even at that rate, very quickly, and to the

sparrow's sorrow. What then, in his last extremity, did the frightened little fellow do to save himself? He darted in between two boulders, where the space was just big enough for him, but not big enough for his pursuer. The baffled hawk sat glaring down at him from the top of one of the boulders, but the sparrow knew he couldn't get at him—and after a few minutes the predatory bird was scared away, and the sparrow permitted to come forth from his hiding place—which he, however, did not venture to do till he was satisfied the hawk had gone.—*Hartford Times*.

Only One Brave Man.

"One day in October, 1877, I was staging it in northern California," said Thomas M. Spencer. "There were six of us in the coach. We were talking about stage robbers. Suddenly there was a halt, and one of the party said, 'Speak of the devil and he will appear.' Well, we all got out and stood in a line and gave up our purses and watches. The driver had thrown off the mail bag and the Wells-Fargo safe. There were two robbers, neither of them masked. They were not polite like the knights of the road of romance, but swore continuously. The job was done in about five minutes, and the robbers told the driver to go ahead. We did so for a half mile or so, when one of the passengers, a silent man, whom I had taken for a commercial man, said to the driver: 'Go slowly and wait for me at the ford.' He then produced a Winchester from the bottom of the coach and started back over the road alone.

"Who is he?" we asked the driver.
"Wells-Fargo man, I guess; never saw him before, but I guess he knows his business. If he comes back, he will have got them; if he don't, they'll have got him."
"Twenty minutes later we heard some rapid firing. We stopped at the ford. Nearly an hour passed, and then the man who had gone back appeared on the trail. He walked slowly, as if in pain, and a bloody handkerchief was tied about his head. 'Drive back and get the box,' he said to the driver. 'Did you get 'em?' asked the driver. 'Both of 'em,' he replied.

"We drove back. In the middle of the road where we had been held up, both men lay dead. The Wells-Fargo detective, calculating that they would stop to rifle the mail bag and the strong box, divide the plunder and then separate, had quietly walked back. One of them he dropped with his Winchester before he was suspected; the other got in one shot before he fell, and that had struck the brave man a glancing blow on the head. Our property was all restored to us. We helped bury the dead robbers by the roadside. The brave officer refused to accept the purse we hastily raised for him."—*St. Louis Globe-Democrat*.

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Although there has been talk of continuing the World's Fair as long as fine weather lasts, it will be wise for those who desire to see the exhibits at their best, and indeed for those who want to make sure of seeing them at all, to do so before October 31.

R. G. McConnell, who was sent by the Ottawa government on an exploring expedition in the Mackenzie river district, is reported to have arrived at Vancouver, and reports that he has discovered the source of the Mackenzie river to be a lake at the head of the Findlay river and that gold was found by him in abundance for 250 miles along the Findlay river.

SUBSCRIPTION AGENTS, NOTICE!

Agents of this paper who have not reported within the last month will please write us at once if they wish to continue. Persons are writing in every day asking for agencies and any agent who does not report as above directed will have his place filled by some one else. We are willing to pay agents liberally for their work and now is the time of year to be active. Let us hear from you with some names.

The fad for issuing bonds and the concomitant circumstances of bond litigation seems not to prevail just now in Kansas. In notes of thirty-four transactions, propositions and controversies about municipal and other bonds, the *Boston Financial Gazette* compares the country from Maine via the lakes, the northwest country, the Pacific slope, the Gulf and Atlantic States and touches most of the interior, but not in the entire round-up does the name of Kansas once appear.

The Union Pacific railway has at last gone into the hands of receivers. Many fortunes, and colossal ones, have been accumulated at the people's expense out of the construction, operation and wrecking of this property and the road is at last, according to the showing on which the order for the receivership was granted, so burdened with debt that the equitable protection of the interests of those who have rendered it service, furnished it supplies and loaned it money requires that the United States court should take possession of the property and have it administered and operated under the court's direction. The order appointing the receivers was issued last Friday, simultaneously from Topeka and Omaha. It is difficult to see how the stock of the company can be actually worth anything, and yet the last sale of this stock reported for the week ending October 10 was at 16½ cents on the dollar.

THE OPENING OF THE CHEROKEE COUNTRY.

The opening up to settlement of a country containing 10,000 square miles is an event in the history of the agriculture of this country which is worthy of note. It adds more than 6,000,000 acres to the producing area and will furnish 160-acre farms for upwards of 37,000 families. Were such a thing possible in any European country, it would be signalized as a great national event which would mark an era in the history of the nation. Here, we think but little of it. We note the incidents connected therewith as reported in the daily press; reflect for a moment on the greatness of our country, and, perhaps, comment on the bounty of the government which gives such vast areas at a low price to needy citizens, then drop the paper and go about our business.

The subject is worthy of closer scrutiny. It must occur to any one who has read the details of the "opening," that the methods adopted inflicted unnecessary and extraordinary hardships on many of the intending settlers, and that the lands by no means went to those who were the most deserving. It was generally understood, from the beginning of negotiations with the Indians, that when the "Strip" was to be finally opened, the lands would go to those who were first to claim them, and subsequent events proved that this was the policy of the government. In consequence of this, hundreds, if not thousands, of persons have camped on the borders of the "promised land" or sojourned in towns near the border for more than a year, in order that they might be ready to make the race when the signal was given. Just when the "opening" would occur was uncertain, and eager and earnest home-seekers were anxious to be on time. They broke up their homes and staked their all in the hope of obtaining a piece of land on which to build a new home, under brighter and more promising prospects, only to find that they were crowded out, at the last moment, by parties with swifter horses, or, alas! with loaded revolvers, who obtained the claims they so long dreamt of possessing. The policy of the government caused these men to suffer real hardships. They spent their time and substance on a forlorn hope, and disappointed and disheartened they are compelled to return whence they came.

Again, it was to be presumed that all should have an equal chance, and that the government would take care that such should be the case, but, as a matter of fact, the race went to the swift and the battle to the strong. It is a noted fact that swift horses were brought from long distances to be used in the race. The poor man with no horse or with but a slow team of work horses, had no chance against such competitors. In other cases, according to reports, the persuasive power of a Winchester or a loaded revolver, in many instances decided who was to be the owner of the claim. Such occurrences are not merely unjust, they are criminal. But, under the policy of the government they were inevitable. Nor did the intending settlers from a distance stand an equal chance with those who lived near the border, who had opportunities to examine the ground beforehand. The corner-stones which marked the quarter sections were hard to find in the tall grass, and only he who had looked them up beforehand could be certain that he was on the quarter of his choice. The "sooners" thus had an undue advantage, which is also chargeable to the policy of the government.

According to reports, there was a loss of human life. The daily press reported at least ten men killed and others wounded in affrays which had direct connection with the claims. In like manner there was a destruction of vehicles and other property, which, in the scramble, would, perhaps, be inevitable. Again, the policy of the government attracted many times more people to the "Strip" than could be supplied with land. Just what per cent. of those who made the race were successful, is, of course, not known, but it is comparatively small. In the eastern part, where the crush was greatest, it is estimated that only one

in five, or 20 per cent., succeeded in establishing a claim. In the western part, it is estimated that 70 per cent. were successful. But, at best, many thousands were disappointed and spent their time and money for naught. The policy of the government is responsible for this, too.

Aside from all this, there is the actual personal hardship to which all were exposed, old and young, the strong and weak, alike, owing to the method of registration adopted by the government. Men and women stood in line for two, in some cases three, days and nights and actually slept in their tracks on the bare ground, under the open sky, in order to maintain their position in the line. Such are some of the incidents which marked the opening of the Cherokee country. Now, since there are other Indian reservations, in various parts of the country, which will doubtless be open for settlement some time, it is worth while to see if these features are necessary accompaniments to the settlement of a new country. They are all directly chargeable to the method adopted and could have been avoided without any additional expense to the government.

The government could have opened an office in each of a few of the western towns and required all who desire to obtain a claim to register at one or the other of these offices. Each applicant should be required to furnish proof that neither he nor his wife was the owner of a farm already, such statement to be certified to by the county judge or other responsible official from the county and State where the applicant resided. The evidence required on this point should be of such a nature that it would represent the truth in the case. Allotments might then be made somewhat on this wise: At the expiration of the time for the filing of applications, the numbers of all applications might be put in a suitable receiver and numbers to designate each quarter section of land or town lot in another receiver. The officials of the government could then, at their leisure, decide the claims by lot, first drawing a number from the application box and then a number representing the town lot or quarter section to which the person would be entitled, whose application bore the first number. It is objected that this would be a lottery. Is it any more of a lottery than the system under which the lands were opened? None of those who made the race on the 16th of September knew what sort of claims they would get, or indeed whether they would get any. By settling the matter by lot, in some such manner there need be no loss of time or money, or any injury to health or property. Those who obtained claims could go and locate them at their leisure, and those who failed to get any would lose nothing in the attempt. It would avoid the deplorable loss of human life. It would prevent the numerous contests which the present system entails and the government stamp on the certificates would forever settle the validity of the claim.

AS SHYLOCK SEES US.

The *Boston Financial Gazette*, of October 12, has an editorial in which it remarks upon the value of our farming lands and sees in them the usurer's chance. It says: "It is of interest to note the advance in the value of farm property, as compared with city property, which has occurred during the past year, particularly in the fertile farming sections of eastern Nebraska and Kansas, and in many parts of Missouri, Iowa and the Dakotas, for it exemplifies the value of well-located farm property as security for loans, as compared with town and city property.

"During the past sixty days in the areas mentioned, farms have sold at higher figures than at any time during the past five years, and have brought all the way from \$25 to \$50 per acre. No such prices, comparatively, can be shown to have been realized on urban or town realty; in fact, there has been no market for it. The trouble with very many portions of the West is that the towns have grown in advance of the farming section, and there is, therefore, every reason to believe, and plenty of indications, that farm lands

are to experience an appreciation in value, rather than 'town lots,' for some time to come."

DEBTS AND CIVILIZATION.

Not unusually debt is deprecated. The *KANSAS FARMER* has recently taken occasion to show the absorbing power of interest-bearing debt and has no disposition to revise its belief that, in general, debt is to be shunned as an evil thing. But there are those who hold that the debts of a community or State are a fairly accurate measure of the civilization of that community or State. This doctrine is not unlikely to be promulgated with great vigor from New York and with considerable energy from Colorado. For, while measured by this standard Kansas is quite "highly civilized," these States take rank above her. According to the census, so far as completed at the time of issuance of the latest bulletin, September 4, the per capita mortgage indebtedness of the States was as follows:

1. New York.....\$268	13. Missouri..... \$80
2. Colorado..... 26	14. Oregon..... 78
3. Kansas..... 170	15. Wisconsin..... 72
4. Minnesota..... 153	16. Indiana..... 51
5. Massachusetts... 144	17. New Hampshire 50
6. Nebraska..... 128	18. Maine..... 49
7. Pennsylvania... 117	19. Florida..... 40
8. Connecticut.... 107	20. Alabama..... 28
9. Rhode Island... 106	21. Tennessee.... 23
10. Iowa..... 104	22. Georgia..... 15
11. Illinois..... 100	23. Arkansas..... 13
12. Vermont..... 84	

The relation of debt to estimated valuation presents a somewhat different order than the above, but while Kansas is here advanced to the second place, with debts amounting to 28.13 per cent. of the value of her property, New York still maintains first place with 28.17 per cent.

It is doubtless true that Kansas has paid a larger proportion of her debt since the census was taken than any other State, so that at the present time, measured by the debt standard, she is doubtless quite "uncivilized." This may be the reason why some people, when out of the State, are ashamed to register from Kansas.

That debt is an invention of civilized society, there is no doubt. Savage and barbarous peoples scarcely ever owe anything—probably for the reason that they cannot get trusted. Their wisdom in keeping out of debt is compulsory. But the highest wisdom is to have good credit and keep out of debt. That there are times when it is wise for the individual to use more capital than he possesses, there is no question. But the indiscriminate assumption of debt with interest obligations almost always leads to disaster. Rev. Thomas Dixon recently gave the following figures in a sermon: "It is estimated that our production of wealth is \$2,800,000 per day above all expenses of production and maintenance of workers. The average cost of the United States government per day, exclusive of certain sums of the budget not counted as legitimate governmental expenses, is vastly over \$1,000,000 per day. The interest on our public bonds is \$370,000 per day; the interest on our railroad bonds, \$200,000 per day; the interest on private debts, \$2,400,000 per day; dividends to absentee holders of railroad, bank and industrial stock, \$400,000, the grand total of our daily indebtedness amounting to \$4,370,000. Our net daily income from production with which to meet this indebtedness, being only \$2,800,000, it does not take much figuring to see that we are running in debt at the rate of \$1,570,000 a day. It is easy to see that such a scheme of economics is bound, in the long run, to ruin the society which maintains it. Its only result can be the accumulation of practically all the wealth of the nation in the hands of the creditors, who must become themselves fewer with the process of liquidation."

These figures are approximately correct and are within the truth. They constitute a warning, as well as an indication, that while debt may be possible only under conditions of civilization, it may become also an agent for the destruction of the system under which it is fostered.

It is stated that the Arkansas Valley Land and Irrigation Company, with headquarters at Larned, will have sown 2,000 acres of wheat before the end of the present seeding season.

AN IMPORTANT DISCOVERY.

Kaffir corn has heretofore been classed as a non-sugar-yielding sorghum and its juice was supposed to be entirely destitute of saccharine. An analysis made a few days since, at Medicine Lodge, disclosed a content of 6 per cent. of sugar in a sample of Kaffir corn. Whether this characteristic has been gradually developing under the favorable skies of Kansas, or whether this particular sample is a sport, is not known, and really makes but little difference in a practical sense, and is immaterial as related to the interest in and the value of the discovery.

It is well known that Kaffir corn endures vicissitudes of climate better than any other plant that has been cultivated on the dry uplands of the plains. It is now demonstrated to have a tendency to produce sugar. It is not improbable that skillful crossing may be made to produce a hybrid having the seed-yielding qualities of the Kaffir corn, its ability to flourish under the trying circumstances of drought and also the eminent sugar-yielding qualities of the best sorghum. The value of such a plant to the semi-arid plains can scarcely be computed. It is to be hoped that the work of seed-development so well begun by the United States Department of Agriculture will not be abandoned, as has been suggested, but will be enlarged and extended as its importance demands. Not only should be included sorghum, Kaffir corn and other plants which give promise of doing so much to assist in rendering the plains productive, but the work of improving and adapting to the circumstances under which it is desired to cultivate them should be extended to every plant produced on the farm. It may be answered that this promising work should be taken up by individuals, or at most, by the experiment stations. However this may be, the fact should not be overlooked that the reclamation of the semi-arid regions is a matter of national concern, and is every year becoming more important. Individuals of wealth and leisure sufficient to enable them to devote the necessary time and expense gratuitously to such experimental work generally have too little sense to do it successfully. The case is far different from that of the development of high-grade stock, in which latter case the sale of the excellent animals produced has generally proved amply remunerative for the latent time and labor expended. But in the case of plant seeds the case is different, for reproduction is so rapid that the monopoly of the market is speedily destroyed.

The KANSAS FARMER has often urged the importance of this matter. Indeed it was a suggestion of the writer hereof which culminated in the establishment of the Experiment Station at Sterling, which has shown by actual work what signal improvements may be rapidly produced. But it is now no time to let the matter drop. There is probably no industrial experiment which can now be entered upon so certain of far-reaching and valuable results as that of the improvement of cultivated plants by the methods well known to science.

BET SUGAR IN CALIFORNIA.

It is expected that the output of the present season at Chino, California, will reach 15,000,000 pounds. The acreage planted to beets to supply that factory is 4,300 acres at Chino and 800 acres at Anaheim. Up to and including October 5 there had been harvested 35,956 tons. Raw sugar is being produced this season, although the factory manufactured Standard Granulated for the first season. The industry is making satisfactory progress in the locality of Chino, all the farmers, according to reports, being enthusiastic on the subject of the crop and its profits to them. It is by far the most profitable crop grown in that valley, and it is questionable whether the factory will be able to take care of the largely-increased crop which is foreshadowed for next year.

The Watsonville Sugar Company has 6,388 acres in beets this year. The yield will be about twelve tons, and thus far the beets average 14 per cent. sugar. This factory is producing raw sugar

testing about 92%, as in previous seasons. Operations were begun September 15, and the factory is now cutting 650 tons of beets per day.

party, who is something of a rustler, issue a call for a preliminary meeting, at which a temporary organization can be effected and a program made up. This done, let each one become a committee to advertise and rustle and "load up" with talk. Select some representative men, men who have made a success in some one line of farming, to lead in the discussions or present papers. This means women too. Then call upon the professors of the Agricultural College and Experiment Station for help. They will be glad to come and will be well worth hearing.

We hope that farmers' institutes will be organized in every county in the State during the coming winter, and the KANSAS FARMER will pledge itself to do all in its power to make of them a success. This State has for many years been holding ten or more institutes in as many different counties each winter, and their value to the farmers of Kansas is incalculable.

SAVE THE CORN FODDER.

PROF. C. C. GEORGESON.

There is a deplorable waste of corn fodder everywhere in the West. Millions of tons of good feed are annually left in the fields, a prey to rain and wind, which might be transmuted into beef and mutton. It is worth our while to consider this question. Under the present condition of low prices for all agricultural products, the profits from the farm must largely come from the savings of what we now allow to go to waste. Americans, as a class, are noted for their desire to do things on a large scale and for a certain carelessness, closely allied to contempt of details and the doing of small things. It is probably largely owing to this spirit that so many of the Western farmers allow their corn fodder to waste. The fact that they have feed enough to carry their stock without it does not alter the case or palliate the offense against economy. If not needed for the amount of stock carried, then increase the herd in order to turn it to account. The reason that foreigners, who settle down among us, as a rule, are prosperous and if they do not grow rich, as many of them do, at least make a very comfortable living out of the farm, is mainly to be found in that they allow no such waste to take place. The farmers in the Eastern States are aware of the value of corn fodder. There the traveler does not see whole fields of dry corn stalks left unused to be disintegrated by the winter storms. The writer recently met a young intelligent farmer from Connecticut who, after having spent a couple of weeks at the World's Fair, improved the opportunity to look through the great West in order, as he stated, that he might learn some useful lessons which he could put in practice on his farm, upon returning home. He confessed that he was surprised beyond measure to learn that our farmers, as a rule, only save the grain from the corn plant. He explained that he was accustomed to see the corn cut and the fodder fully utilized, or even, in many cases, to see the leaves stripped from each plant by hand, when the corn began to harden, in order that they might be saved while fresh and green, thus making an excellent quality of hay. The latter process is, of course, not to be recommended here, but it is practical and in the line of true economy to cut the corn as soon as the grain reaches maturity and to utilize the stalks for feed. It is not enough to say that the herd is turned into the field after the ears are gathered and that the cattle then pick up all that is worth having. This treatment often entails a double loss, not only of the fodder, but also in stock, caused by the fact that many of them stuff themselves with the dry material, which causes impaction that frequently terminates in death. They are also sometimes poisoned by the development of an organism in the corn stalks left thus exposed, which is, as yet, not fully understood. This is the so-called corn stalk disease that has caused the death of hundreds of cattle every winter. This disease does not develop if the stalks are cut and shocked as soon as the corn matures. It is safe to estimate that cattle in a stalk field do

not get over 25 per cent. of the available feed. They first rush through and hunt out the ears that have not been picked or which have been dropped on the ground, breaking down and trampling under foot much feed in the process.

The wind soon whips off the best portion of the dry leaves and the tougher and more woody portions, which remain hanging to the stalk, only, is left for the cattle. It is not uncommon to see herds in such fields in mid-winter, when the snow is flying, trying to eke out a miserable existence from the now almost bare stalks.

But perhaps the greatest loss entailed by the farmer, who utilizes his corn stalks in this manner, is that incurred by the falling off of flesh in the cattle. Cattle which are wintered in stalk fields, unless they are regularly fed in addition, will lose an average of 100 pounds per head or more if they have it to lose, and it should be borne in mind that this loss must be made good in the spring before growth or gain in weight can take place.

There are now many excellent corn-cutters on the market, most of them worked by one horse and attended by one or two men. A couple of active boys can, with such a machine, cut eight to ten acres a day at a cost not to exceed 25 cents per acre, and no farmer can afford to let the stalks go to waste to save the slight outlay. A fair average crop of Western corn will furnish from a ton and a half to two tons of stalks to the acre, more than half of which will be consumed by the cattle, when judiciously fed out, through the winter. It is safe to estimate that each acre will furnish a ton of feed which, in actual feeding value, is worth at least as much as half that quantity of first-class timothy hay. The actual money value will, of course, fluctuate with the relative scarcity or abundance of fodder, but it is not putting the figure too high to say that one year with another good corn stalks are worth \$3 per ton as feed, or from \$3 to \$5 per acre. If the farmer cannot turn it into cash in the fall, he can turn it into beef during the winter, and good beef is always a marketable article.

THE GAME LAW.

EDITOR KANSAS FARMER:—Please give the substance of the quail law as passed by the last Legislature. Are violations of that law criminal offenses? ALEX. GARDNER.

Richland, Kas., October 4, 1893.

Section 1 of chapter 93 of the laws of 1893 specifies what game shall not be killed, as follows:

"It shall be unlawful for any person or persons, at any time, to catch, kill, shoot, trap or ensnare any partridge, prairie chicken, mocking bird and blue bird. *Provided*, That no provisions of this act shall apply or interfere with persons who may have in their possession or raise for sale any birds or pets, or may at any time catch, kill or entrap any of the birds mentioned in this section on his or her own premises, controlled by such person for his or her own use."

Section 2 provides that it shall likewise be unlawful to buy or sell any of the above named birds.

Section 3 provides that violation of the provisions of section 1 or 2 shall be a misdemeanor punishable by a fine not exceeding \$25 and costs.

Section 6 provides that the act shall not apply to birds taken for the sole purpose of preserving them as specimens for scientific purposes.

The law took effect May 18, 1893.

Hogs, Cattle and Corn.

A Chicago live stock firm gives the following as the result of correspondence with reference to supply of hogs, pigs, cattle and corn, the comparison being with 100 as representing last year:

	Hogs.	Pigs.	Cattle.	Corn
Illinois.....	82	90	81	85
Iowa.....	88	105	83	119
Wisconsin.....	87	107	87	119
Minnesota.....	86	103	95	114
South Dakota.....	91	101	97	108
Nebraska.....	88	104	93	93
Kansas.....	78	93	84	85
Missouri.....	82	101	93	116
Indiana.....	81	92	80	73
Ohio.....	85	103	84	85
Michigan.....	78	96	75	87
General average.....	85	100	88	100

Get up a club for KANSAS FARMER.

FARMERS' INSTITUTES.

As the county normal is to the teacher, so is the farmers' institute to the farmer—a place of instruction for those whose school days are past. The teacher, whose days are spent in the "shop work" of the school-room, finds the normal a personal necessity for brushing up his memory and clearing out his wits by contact with others in the same business. He meets older and better teachers, from whose greater wisdom and experience he gains much. He is in contact with younger and less experienced teachers to whom he gives much, and, in the giving, gains much himself.

The farmer is a man whose school days are long since past and whose sources of information, aside from the daily experience of his work, are limited, in a large degree, to but two channels. These are the agricultural paper and the farmers' institute. The farmer of to-day who would win in life's work has abundant need for all the wisdom, knowledge and experience he can get, and he who will not improve these opportunities is indeed unwise. In the institute the farmers of a neighborhood or county assemble with their wives and sons and daughters to discuss their business interests as farmers. Politics and religion are tabooed as important subjects to be discussed elsewhere.

The proper preparation of the soil; the planting, cultivation and harvesting of crops; the care and feeding of live stock; domestic economy; the adornment of home grounds; the amenities of farm life and "how to keep the boys on the farm," are questions which, among others, will afford ample scope for the exchange of ideas among those who may attend a three-days' session.

Surrounded, as he is, by new conditions the farmer of the West needs information; he needs experience, and, moreover, he needs it "bad." In the farm paper he will have a friend who will give him much of this; in the institute he can absorb the good things there provided, and can "talk back" to his heart's content; thus getting valuable information at first hand and testing its value at once. "It is more blessed to give than to receive," and in the exchange of ideas at a farmers' institute the one who gives his ideas and experience is doubly the gainer.

Admitting the value of the institute, the question of how to do it becomes of interest. From an experience of years in farmers' institutes, the writer would glean a few facts. Let some interested

Horticulture.

DWARFING PLANTS IN JAPAN.

At a meeting of the nurserymen's section of the Horticultural Congress recently held at Chicago, Mr. Henry Izawa, gardener, of the Imperial Japanese Commission to the Columbian Exposition, read a paper on some Japanese nursery practice, from which we make the following extracts:

"The art of dwarfing plants is so little known in other lands that a short description of its process is not out of place here. The successful Japanese nurseryman must not only be a good grower, but must also be an artist, conversant with the general arts and customs of his country. The pines may be considered the most important of all trees in Japan, and great care is taken in their cultivation and preservation. The most popular ones are *Pinus Densiflora*, *Pinus Parviflora* and *Pinus Thunbergii*. They are generally grown from seed, and great care is taken to select the choicest quality of seed. In the spring of the second year, when the seedlings are about eight inches in height, they are staked with bamboo stakes and tied with rice straw, the plants being bent in different desirable shapes. In the next fall they are transplanted to a richer soil and are well fertilized. In the following spring the plants are restaked and twisted and tied in fanciful forms. This mode of treatment is given until the seventh year, when the trees will have assumed fairly large proportions, the branches being trained in graceful forms and the foliage like small clouds of dense green. The plants are now taken up and placed in pots one and a half feet in diameter, and are kept well watered; every succeeding year great care must be taken to keep new shoots pinched back. After another three years of this treatment the trees are virtually dwarfed, there being no visible growth thereafter.

"The dwarfing of bamboo is another important branch of the Japanese nursery business. A few weeks after the shoots begin to grow, and when the trunks measure about three inches in circumference and about five feet in height, the bark is removed, piece by piece, from the joint. After five weeks, when the plants get somewhat stout, the stem is bent and tied in. After three months, when the side shoots grow strong enough, they are all cut off five or six inches from the main trunk; they are then dug up and potted in sand. Care should be taken not to use any fertilizer, but plenty of water should be given. Cut off the large shoots every year, in May or June, and after three years the twigs and leaves will present admirable yellow and green tints.

"Dwarfed Thuyas are produced by grafting. Let a *Thuya Lobbi* seedling grow in fertile soil until it becomes about five feet in height, then in the middle of spring we cut off all the branches, leaving the trunk and top branch. With a quarter inch chisel a cut is made in the thickest portion of the trunk one inch deep, at distances of two or three inches space, so that the trunk can be bent more easily in the desired direction. Rice straw is twisted around the trunk, which is bent in many curious forms and fanciful shapes. In the spring of the second year of this treatment the plants are potted in rich soil; in two years more, when the plants have assumed permanent form, *Thuya obtusa* is grafted on the stem of *T. Lobbi*.

"The process of grafting is, in brief, as follows: We give plenty of fertilizer to the plant of *Thuya Lobbi*, and in early spring take two-inch shoots of *Thuya obtusa*, cut the ends slantwise and insert them in the smaller portions of the *Thuya Lobbi* trunk, using one graft to every inch on the trunk. We then wrap the grafts with rice straw and take them to a shaded, windless room with the temperature of 35° Fahrenheit. For three weeks the temperature is raised 1° or 2° daily, and by that time a little breeze may be admitted; the temperature of the room is kept at 60° degrees for two weeks, and at 70° for two weeks, and then leaves will start from the grafted twigs. In

the latter part of the spring, when the temperature in and out of doors becomes uniform, the plants can be safely transferred to some shady position out of doors. In the fall, when all the grafts have taken good hold, all the remaining shoots of *Thuya Lobbi* are cut off. Transplant every year in good rich soil. Six years will be sufficient to produce handsome specimens of dwarfed Thuyas. All kinds of conifers are treated in a similar manner. There is also a great demand for curiosities in mixed grafted conifers, that is, six or seven kinds of conifers on one plant.

"Maples form one of the best materials for the artistic fancies of the Japanese graftsman. Many times a great many different varieties are grafted on one stem. Seedling maples are spliced and tied together when growing. After they have formed a union the desired shoot is cut off. This is kept up until ten or twenty varieties are obtained. Maples thus grafted form lovely features for lawns, their varying hues and types of foliage enhancing each other's beauty.

"The aesthetic idea shows itself in every line of Japanese industry, and especially in the case with our nursery and landscape gardeners. The most inexperienced need not fear any difficulty in our mode of gardening if he but uses his mind and efforts in the right direction. The skillful artist introduces into his miniature garden not regular geometrical forms, but anything odd, irregular and artistic. To us gardening is not mathematics, but an art; hills, dales, rivulets, waterfalls, bridges, etc., vie with each other in presenting their quaintest forms and fancies and harmonious symmetries. Dwarfed plants of all descriptions deck the scene here and there in thousands of peculiarly artistic shapes. We derive lessons from nature and strive to imitate her as much as is practicable, although on a smaller scale."

Apples as Food.

Chemically, the apple is composed of vegetable fibre, albumen, sugar, gum, chlorophyl, malic acid, gallic acid, lime and much water; and the German analysts claim that the apple contains a larger percentage of phosphorus than any other fruit or vegetable. This phosphorus is admirably adapted for renewing the essential nervous matter—lethicin—of the brain and spinal cord. It is, perhaps, for the same reason, rudely understood that old Scandinavian traditions represent the apple as the food of the gods, who, when they felt themselves growing feeble and infirm, resorted to this fruit for renewing their powers of mind and body. Also, the acids of the apple are of signal use for men of sedentary habits, whose livers are sluggish in action, these acids serving to eliminate from the body noxious matters, which if retained, would make the brain heavy and dull, or bring about jaundice or skin eruptions and other allied troubles. It is also the fact that such fresh fruits as the apple, pear and plum, when taken ripe and without sugar, diminish acidity in the stomach rather than provoke it. A good, ripe, raw apple is one of the easiest of vegetable substances for the stomach to deal with, the whole process of its digestion being completed in eighty-five minutes.—*English Paper.*

Fruit Trees and Planting.

The planting season begins during the latter part of this month, and it is very important that proper care be taken in the selection of fruit trees.

Our advice is, always, buy at the nearest home nursery where choice and suitable trees can be had. Deal only with persons or firms whom you know, or have reason to believe are well established.

If a person lives near a nursery and requires a large number of trees, perhaps he can go to the proprietor, make the purchase and do his own digging. He can then take as much time as he likes, exercising special care in securing the roots in the best possible condition. If at a distance, write to the several nurseries advertising in the KANSAS FARMER, secure their price list, and when ordering state that the trees must have good roots.

If the ground is neither too wet or

too dry and it has otherwise been thoroughly prepared by sufficient plowing, it is as well to plant in the fall, because the ground is then firmly settled around the roots and the trees can leaf out

and run in finely-pulverized soil, leaving no crevices or cavities.

7. Plant no deeper than before taking up, but raise the earth an inch or two to allow for settling.

8. Mulch when danger of midsummer drought is feared.

As a necessary supplement to these rules, as well as for years afterwards, keep the ground clean and mellow for several feet at least around each tree.

A few additional rules for subsequent management should not be neglected:

9. Manure should never be placed in contact with the roots, but may be placed on the surface.

10. Allow for the length of the roots as great as the height of the tree, and cultivate to a corresponding distance.

11. Never set young trees in a grass field, but always where the ground can be cultivated and made mellow.

12. If the roots chance to be frozen when out of the ground, they may be restored without injury if compactly buried in mellow soil before thawing.

Do You Study Politics?

Whoever studies political questions should read all sides. The official State paper, the *Topeka Advocate*, is still at the head of the reform movement, and is giving its readers a more reliable report of the situation in Congress than any other Western paper. It receives its information in the shape of editorial correspondence.

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Among the Ozarks.

"The Land of Big Red Apples" is the title of an attractive and highly interesting book recently issued. It is handsomely illustrated with views of south Missouri scenery, including the famous Olden fruit farm of 3,000 acres in Howell county. It pertains entirely to fruit-raising in that great fruit belt of America, the southern slope of the Ozarks, and will prove of great value, not only to fruit-growers, but to every farmer and home-seeker in other States looking for a farm and a home. Mailed free. Address J. E. Lockwood, Kansas City, Mo.

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In the Dairy.

Conducted by A. E. JONES, of Oakland Dairy Farm. Address all communications Topeka, Kas.

State Fair Dairy Notes.

The Holsteins had it all their own way this year, as far as the milk and butter test was concerned, although the amount of butter was much less, with one exception, than has been made in former years, when the Jerseys were competitors.

If Mr. Stone's Holstein cow, Gerben 4th, had been fresh, it would have been nip-and-tuck between her and Mr. Cheney's cow, Netherland Curran.

Four Holstein cows were entered in the milk and butter test at the fair on Friday. It was expected that one or more Jerseys would be in the competition, but they failed to show up at milking time. The test was for a single day. The appended table shows the facts in connection with the results from each cow:

Name of Cow.	Owner.	Time of Milking.	Lbs. of Milk.	Per Ct. Fat.	Av. Per C. Fat.	Est. mated Butter.
Netherland Curran.	H. W. Cheney, North Topeka	Morning 11.5 Noon 11.5 Night 9.5 Total 30.5	18.5 18.5 9.5 46.5	3.2 3.2 4.4 3.2	4.01	2 lbs.
Princess Pele's Metchichide.	C. F. Stone, Feibody	Morning 10.5 Noon 10.5 Night 9.5 Total 30.5	20.5 20.5 9.5 50.5	2.4 2.4 3.8 2.8	3.19	1 lb. 9 1/4 oz.
Shady Brook Sylvia.	H. W. Cheney, North Topeka	Morning 10.5 Noon 10.5 Night 9.5 Total 30.5	16.5 16.5 9.5 42.5	2.8 2.8 3.2 2.8	2.98	1 lb. 2 1/2 oz.
May Overton's Metchichide.	C. F. Stone, Feibody.	Morning 15 Noon 15 Night 8.5 Total 38.5	15 15 8.5 38.5	2.5 2.5 4.8 3.8	3.36	1 lb. 4 oz.

BUTTER SCORE.

The scoring of the butter entered in competition was done according to a scale of points arranged by Mr. Wright. According to this scale 55 was allowed for flavor, 25 for grain, 8 for color, 8 for salt, and 4 for packing. In scoring according to this scale it was designed to drop a point for each quarter of a cent which, in the opinion of the judges, deficiency in any line would cause it to be marked off in market value. This rated the exhibited butter according to its commercial value, which is the only just standard. In judging as to color and salt, a sample of A. E. Jones' Jersey butter, which scored 94 points and was perfect as to color and salt, was used as the standard. Judged according to the above scheme, the butter entries stood and were awarded premiums as below:

Creamery—Lyndon Creamery Company, 92; Meriden Creamery Company, 91.

Twenty pounds dairy—J. E. George, Burlingame, 94; Mrs. Sills, Pauline, 89.

Ten pounds dairy—Mrs. Sills, 89 1/2.

Dairy roll—Mrs. Thos. Broadbent, 92; Mrs. Peter Heil, 91; Mrs. Sills, 90.

The working dairy was one of the best attractions at Horticultural hall.

It is hoped that the ladies will take a hand at butter-making next year, and give the men a chance to laugh.

If arrangements can be made, it is proposed to have a full working dairy every day in the week, at the State fair next year.

A novel feature of the dairy display at the fair this year was the exemplification of modern methods in the art of butter-making.

The granular butter, after it had been salted in the churn, had so much the appearance of pure gold that many persons asked if it had not been colored artificially.

Some of the ladies were very much amused to see two men with white

aprons on churning and working butter. One gentleman remarked that as the ladies had engaged in politics, that of necessity the men would need to take charge of the dairy work and bring up the children.

Mr. R. L. Wright, the dairy expert, and Mr. A. E. Jones, of the Oakland dairy, gave some instruction in the art of ripening cream, churning and producing butter in granular form. A gentleman from Texas, who witnessed all the operations with much interest, declared that such butter as was made there, would bring \$1 a pound where he lived. The result of this method of manufacture was butter that scored 96 points, two points more than the best butter on exhibition.

The State Fair and the Dairy.

For several well-founded reasons, the display of dairy cattle at the State fair was unusually small this year. Coming in contact as it did with the World's Fair, and again several exhibitors fearing a repetition of last year's experience in regard to premiums, thought it best to give the fair a wide berth, in the meantime hoping that the association can be placed on a footing that will admit of no cavil as to an exhibitor getting all that is due as soon as the Superintendent's books are turned in. At the proper time this department of the KANSAS FARMER will make such suggestions as we believe will work a reform in the showing of dairy cattle and kindred products, and render all needed support if other lines are placed on an equal footing.

World's Fair Dairy Notes.

The thirty-day test ended on the 28th ult., and next week will give figures in full.

Where is the point in figuring on a general-purpose cow, if you have to slaughter her in order to realize on the beef.

The Jersey cow, Brown Bessie, celebrated the closing of the thirty-day test by making over three pounds of butter in a day.

Three Jersey cows and one Short-horn made more than sixty pounds of butter in thirty days, or two pounds and over per day.

Merry Maiden has gone the way of many of her good sisters. She has been purchased by Mr. C. I. Hood, the Sarsaparilla man, of Lowell, Mass.

In all probability Merry Maiden will be the sweepstakes cow of the three tests, Brown Bessie coming in as second. The third, fourth and fifth will also be Jerseys.

The day after the thirty-day test ended, the Jersey cows, with a few exceptions, were seen eating their straw bedding, part of their ration having been withdrawn.

The Wichita fair management hit upon a novel and effective scheme this season for keeping down the dust, which on many fair grounds, this and every year, has made attendance disagreeable instead of pleasurable. In this case all the roads, paths and areas of bare ground were covered with a goodly layer of straw, which served most effectually to prevent the wind from raising the clouds—almost waves—of dust that were to be seen everywhere outside the grounds. A dozen good loads of straw did the business and the entire expense was not more than it would have cost to sprinkle the grounds in the ordinary way for one day, while the result was much more satisfactory. Fair managements will do well to make a note of this and pattern after their Wichita brethren next year. The experience in the detailed case proves beyond question that there is little or no need of allowing fair grounds to be dusty and dirty.

All parties wishing to obtain fish to stock ponds and other waters in the State of Kansas can get them free by letting me know right away. No cost for the fish outside of the cost for shipping.

J. W. WAMPLER,
State Fish Commissioner,
Brazilton, Kas.

Get up a club for the FARMER.

Highest of all in Leavening Power.—Latest U. S. Gov't Report

Royal Baking Powder

ABSOLUTELY PURE

The Poultry Yard.

Feeding in the Fall.

EDITOR KANSAS FARMER:—As cold weather comes on, it is nearly always necessary to commence increasing the ration of the poultry, if they are to be kept in a good, thrifty condition. While they have a good range they will be able to pick up more or less of their food, but their opportunity to do this gets less in the fall and early winter. With all classes of poultry one way of feeding can nearly always be followed to a good advantage, and that is to give a good feed of whole corn every night, just before the fowls go to roost. There is no grain that excels corn as a food to maintain heat and warmth, and by giving a liberal feed at night the fowls will be more comfortable.

Generally it is best now to commence feeding at least twice a day, letting the night's feed be of whole corn, and the morning feed given as soon as they fly down from the roost, and different materials should be used so as to add variety to the rations. One good way of making up a good morning feed is to have a pot into which all of the table scraps can be put. These should be cooked until soft, and then if any thickening is needed, stir in sufficient wheat bran to secure the proper consistency. This, if properly prepared, makes a good ration every morning during the winter. A little later the fowls should be fed three times a day, regularly. They never should be fed so well but that when the weather will permit they will be willing to take plenty of exercise. Good exercise is necessary to their health, and they should never be so well fed that they will not take plenty of exercise.

It is a good plan to separate the fowls that are to be fattened and marketed from those that are to be wintered over. A different ration as well as more liberal feeding is necessary with those that are to be fattened for market than with those that are to be kept over winter, and especially with the hens that are expected to lay eggs. But, with all, the rations should be sufficient to keep thrifty, and the quantity of the rations should be determined by this, as on some farms the opportunity to forage and pick up food is much better than on others, so that a ration that would be ample with one would be insufficient with others.

Sorghum seed, turnips, beets, the cabbages that failed to head, and much other material of this class can be used to good advantage in feeding, and in many cases will not only secure better thrift, but at less cost. N. J. S.

Poultry Notes.

Fowls that get no milk need more meat.

Let the young poultry have free range as soon as possible.

Feed only soft feed in troughs, scatter grain of all kinds on the ground.

Cooked food fattens more readily, because it is more thoroughly digested.

Poultry should be fed fat-producing food for several days prior to marketing.

Charcoal is a blood purifier, and should be kept where the hens can get it.

When duck eggs are set under a hen it is best to make the nest on the ground.

Ducks grow faster than chickens, are free from vermin and less liable to disease.

Feed for growth or for eggs and not merely for subsistence if poultry is to pay profit.


Always have the nests so that the hens can walk into them rather than jump down.

Feed and water the setting hens regularly, and have grit and a dust bath in the room.

Hens should never be fed so well that when they are given a good range they will not forage a good portion of the time.

The *Boston Traveller* says: "A school boy built a hennery, thus improving his mechanical skill, and then bought a small number of barn-door fowls, and took care of them while attending school and doing his proportion of 'chores.' In a year and a half he cleared, after paying for everything his fowls consumed, \$140, and spent no more time with his fowls than his schoolmates did in their amusements, and without doubt caring for his pets gave him as much satisfaction as anything else he could have done. He made his money simply by having a regular daily system of cleanliness, and feeding those few fowls, and properly caring for their eggs and increase."

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References: Metropolitan National Bank, Chicago, and this paper.

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The Family Doctor.

Conducted by HENRY W. ROBY, M. D., consulting and operating surgeon, Topeka, Kas., to whom all correspondence relating to this department should be addressed. This department is intended to help its readers acquire a better knowledge of how to live long and well. Correspondents wishing answers and prescriptions by mail will please enclose one dollar when they write.

Wholesome Bread.

The most widely distributed book in the world tells us that "As a man thinketh, so is he." Now let us paraphrase that statement a little and see what good we can coax from it. "As a man eateth, so is he." To a very large extent that is true. If a man wishes to be strong and vigorous in body and mind he must surely eat good, pure, nutritious food, and neither too much nor too little of it. Take the item of bread, which is such a large part of many people's food. It makes all the difference imaginable as to how the bread is prepared for eating. A majority of people in this country use the whitest and finest flour they can find in the market for bread-making. And while it makes very handsome and dainty-looking bread, yet it is the most nearly non-nutritious of any bread that comes to table. It is almost entirely starch, and only produces a little fat and a large amount of animal heat in the body, as the phosphates, the real nutrient elements of the grain, have been bolted and sifted out and fed to the lucky animals about the place. The nerves, and muscles, and bones, need all the phosphates of the grain, along with the starch and carbon, to produce perfect construction or repair of the body. It is a matter of amazement to see people spend so much money for bread and then deliberately sifting out and feeding to the hogs and cattle the very best and most valuable part of it. If every man, woman and child in the State averages a barrel of flour a year for their bread, then we should consume in Kansas about 1,500,000 barrels of flour. And if we have thrown to the dogs or hogs a million and a half barrels of food (and by all odds the best half) to obtain so much starch to starve on, what a commentary is it on our wisdom and intelligence! The money waste of such an insane proceeding is appalling, to say nothing of the health and vital waste coupled with it. It is said that a Dutch farmer will sell all that anybody will buy from his farm and then live on what is left. And that practice would work very well if he had left what now so largely goes to the stock in the way of shorts, middlings and bran. For if these were properly prepared they would constitute a much better food than that which most people save and eat. It has been found by experiment that a dog will starve to death in forty days with all the fine white bread he will eat, and that cattle and horses thrive and grow fat and sleek on bran.

The true way to have the best bread is to grind all the wheat together quite fine and not sift out anything, or at most the very coarsest portions of the bran, and even that should be reground and returned.

There is much nourishment in good corn bread, which is eaten so largely in the South. And then, who does not know the sweet and nourishing properties of real rye bread? *Chambers' Journal* recently said:

GERMANY'S BLACK BREAD.

There is no doubt that the Germans are the strongest people on earth, and probably the most prolific, and I believe it is owing to their eating black bread. A great deal of the nourishment must be wasted in refining flour as it is now done by all civilized nations. The bread is made more palatable, perhaps more digestible for weak and worn-out stomachs, but black bread must be the true staff of life.

The Germans do not eat much fresh meat. There may be in some other parts of the country, but along the Rhine you never see cattle grazing in pastures. I did not see one sheep in all my tramps, and the only cows I saw were the poor things hitched to heavy carts, doing the work of oxen. There is no milk along the Rhine, to speak of. I got no taste of cream, and the eggs I had were stale.

Black bread, then, is what this people live on, and with it they thrive and grow to be mighty conquerors.

People who live largely on rice and potatoes (both extremely starchy foods), are very effeminate and scrofulous in comparison with wheat and corn and rye-fed people. At the World's Fair, the finest specimens of superb physical development that we saw were the South Sea Islanders from Samoa, who feed, they said, on vegetables, fruit and fish mostly. Of the vegetables, yams predominated, while the oriental rice and curry-eaters were the poorest specimens we saw.

"The longer I live," said Sydney Smith, "the more I am convinced that half the unhappiness in the world proceeds from little stoppages, from a duct stopped up, from a vexed duodenum or an agitated pylorus. My friend sups late. He eats some strong soup, then a lobster, then some tart, and he dilutes these esculent varieties with wine. The next day I call upon him. He is going to sell his house in London and retire into the country. His expenses are hourly in-

creasing and nothing but a timely retreat can save him from ruin. All this is the lobster, and when over-excited nature has had time to manage this incumbrance, the daughter recovers, the fiancés are in good order and every rural idea is effectually excluded from his mind. In the same manner, old friendships are destroyed by toasted cheese, and hard salted meat has led to suicide. Unpleasant feelings of the body inevitably produce corresponding sensations in the mind."

New Books.

Every lawyer in Kansas, and many beyond her borders, know the genial and scholarly Supreme Court Reporter, Hon. A. M. F. Randolph. To know him is to be fascinated and delighted. To sit and listen to him is to be edified and exalted. To remember him when alone is a benediction. He may well be called a living cyclopedia of literature. Quote some trite saying in his hearing and he will straightway tell you Balzac or Montaigne or Milton or Zoroaster or Shakespeare wrote it, and he will give you the context, and quote some interesting literary reminiscence to help you set it like a jewel in your mind. Kansas is now the great storm center of this whole country, around which all the forces of mind in politics, religion, law, medicine, legislation and education, are being hurled with tremendous energy, in the midst of which lies a vortex of unparalleled turbulence. But out of it all must come new light, new grace, new capacity, new energy and a race of intellectual giants.

It has been thought that criticism and comment on the works of Shakespeare was already as full and complete as the ideal half bushel of Scripture. But just when we begin to say, "we have all that has been or can be said of Shakespeare," in walks our genial friend Randolph, and, with a smile, lays down before us "The Trial of Sir John Falstaff." And as all the star-gazers rejoiced when Barnard found Jupiter's fifth satellite last year, so the lovers of Shakespeare will rejoice over this new treasure of the library. Having for many years reported the decisions of our own Supreme court has conferred upon Mr. Randolph peculiar fitness for the work in hand. And this new report of that famous trial of Falstaff glows with not only the written opinions of all the literati of the world on the case at bar, but the *obiter dicta* of the trial court itself, as well as its former rulings and decisions. And then, over and beyond all, we have what may well be styled "The commentaries of Randolph" out of all literature translated and illumined by the light of his own great soul. It will now be much easier to say, "Shakespeare is finished."

With rare skill and fidelity, quotations, translations, speculations and comments are knit together in a compact and handsome volume of nearly 300 pages. To the lover of Shakespeare there is not a dull line in the whole book.

The Kellam Book Co., Topeka, have the book on sale.

A Sparrow Farm in Maryland.

It is alleged that the English sparrows are bred on a considerable scale for sale as reed birds and rice birds. Plucked and strung, they look about the same and their flavor is said to be not far inferior. Not long ago a writer published an account of a successful sparrow farm in Maryland. According to his story the birds destroyed the produce of his acres. To kill them by poison or shooting seemed useless, inasmuch as their numbers were constantly augmented by new supplies propagated in the cities, which followed the line of the railway, picking up droppings from the grain cars. Finally it occurred to him to turn the affliction to a useful purpose. He covered the walls of an old barn inside with partitioned boxes made in pigeon-hole fashion, each pigeon-hole big enough to accommodate one sparrow family. Each pigeon-hole communicated with the outside of the building by a hole bored through the wall, while its back was on hinge, so that it could be opened and looked into from the interior of the barn if desired. There were 1,400 of these boxes in all, and nearly all of them were occupied by breeding birds within a short time after they were completed. Food being plentiful, they lost no time in taking possession of such convenient quarters.

These birds will average five broods in a season, with from four to seven in each brood. When protected and supplied with food in plenty the loss is very small and the increase enormous. The person quoted claims to have sold 10,000 sparrows during the first summer to dealers, chiefly in Baltimore, at an average price of 15 cents a dozen. The increase of stock was fully 20,000, but he took only half of them. The full-fledged young were invariably taken from the boxes together with the parents at night, in order that none might remain to tell the tale and give the alarm. This was important, because sparrows are, of all feathered creatures, the most intelligent, possibly excepting the crow. The outlay required for the plant was stated to be very small. Such a farm will quickly stock itself, inasmuch as the sparrows are more numerous now in every State of the Union east of the 100th meridian than all the native birds together.—*Boston Transcript*.

Gossip About Stock.

The veteran breeder of Poland-China and Large English Berkshire swine, Mr. T. A. Hubbard, of Rome, Sumner county, Kansas, sounds his bugle in this week's issue of the FARMER. He informs us that he did not have time to enter the show ring this year, as he has been engaged in putting in about 600 acres of wheat, yet he has about 250 head of Polands and Berks, of which about fifty are one of the best topky lots of young boars he has ever bred on the farm. About forty head of young sows will be disposed of at reasonable prices. Among the Poland boars lately used were Challenge 4989, Cleveland 6807, Tom Corwin 12853, Gilt Edge 11451, Dandy 11180, Chip 2156, Hubbard's World Beater 4493 and Reciprocity 7921. In the Berkshire yards, Jumbo 12771, Royal Duke 13923, Stumpy Duke VI. 16468, Fancy Boy 15329, Champion 13975, Joker 19000, Hubbard's Model 25791 and Gladstone have been used.

Roleo, sired by Nephew, son of Hambrino, dam Camma, daughter of Norway, son of Gen. Benton, has recently made a record that is one of the most remarkable of the season. He is three years old, and after only five weeks training was entered in the races at Cuba, N. Y. During his first race he made three heats in 2:23, 2:23½ and 2:20¼, earning first money, purse \$300. The first time he was hitched to a trotting sulky and driven over a regulation track he showed a 2:32 gait, and with less than a week's training he trotted a half in 1:18½. Before he had been in training two weeks he showed quarters in 36 and 36½, and at the end of three weeks he trotted a half mile on two occasions in 1:09, and did it easily. He was entered in the three-minute class, in which there were nine entries, seven of which started in the race. He never broke once during the scoring and was slowed up on the home stretch in each heat he won. His driver claims that he could easily have made a record of 2:20 if he had been allowed to go at his full speed during the heat. He is a bay, sixteen hands high, weighed 1,200 pounds as a two-year-old, and is perfectly level-headed and kind. He is undoubtedly a first-class race and stock horse. To be sent to the Afton Stock farm, Goddard, Kas.

The FARMER takes pleasure in introducing to its readers Mr. James Qurollo, a very successful breeder of Large English Berkshires. He started in six years ago with the best that money could buy, and laid a foundation that has proved a wonderful success. At the late Inter-State fair held at Kansas City, with the four crack Missouri herds as competitors, he won first and sweepstakes on the yearling boar, King Lee 2d 29801, and at the St. Louis exposition, in a still stronger ring, took first on King Lee, also sweepstakes, and took second money on sow under 1 year. Mr. Qurollo breeds S. C. Brown Leghorns and Bronze turkeys. Has now in the hatch for 1893, 300 chickens and about fifty Bronze turkeys to select from. Among other ribbons taken at Kansas City was first on cockerel over seventy-six competitors, also won first on best cockerel and four hens. All the representatives shown by Mr. Qurollo are excellent animals, and that the same were appreciated, his numerous sales at both fairs justifies us in commending the stock bred by Mr. Qurollo. His farm is located on the Hannibal & St. Joe railroad, thirty-eight miles northeast of Kansas City, and being easy of access for Kansas people, he invites personal inspection of his stock and desires to extend his personal acquaintance and the merits of his swine, chickens and turkeys. He says, "If your friends cannot visit me personally, tell them to write me and I will take pleasure in supplying them with what they want in my line."

How to Sow Alfalfa.

The directions given by the prominent seedsmen, McBeth & Kinnison, of Garden City, will be found sensible and easily understood. Their large experience and extended observation enable them to give directions which the amateur will do well to study and follow:

"It is generally considered best to sow alfalfa on fall plowing. If no land which it is desired to seed was fall-plowed, however, early spring plowing may be made to do nearly as well. Plow the ground deep—you can't plow too deep—as soon as it is dry enough to work, and harrow it well. The harrowing should be repeated every few days until seeding time, both to keep down all weed growth and to reduce the surface soil to finest possible tilth.

"Alfalfa seed should not be sown very early. It is well enough to sow red clover while there is yet frost in the ground, and before spring is more than a promise, but alfalfa seeding should be deferred until warmer weather. Nothing is gained by sowing earlier than the middle of April, and there is seldom loss through waiting until May.

TOBACCO HABIT EASILY CURED

HILL'S DOUBLE CHLORIDE OF GOLD TABLETS will completely destroy the desire for Tobacco in from 3 to 5 days. Perfectly harmless, cause no sickness, and may be given in tea or coffee without the knowledge of the patient, and will cause him to voluntarily quit smoking or chewing in a few days. **DRUNKENNESS and MORPHINE HABIT** may be easily cured at home by the use of Hill's Special Formula Gold Tablets.

IMPORTANT. A remedy that requires the patient while taking it, to give up the use of Tobacco or Stimulants, has no curative powers. Beware of such nostrums. When taking HILL'S TABLETS the patient need make no effort in his own behalf, and we permit the use of Tobacco, Liquor or Morphine until such time as it is voluntarily given up. HILL'S CHLORIDE OF GOLD TABLETS are for sale by all first-class druggists at \$1 per package. **BEWARE OF FAKE.**

The wonderful success of Hill's Tablets has caused many worthless imitations to be placed upon the market. If your druggist does not keep Hill's Tablets, but offers you something "just as good," shun it—he is deceiving you in order to sell something in which there is a greater profit.

REMEMBER, we guarantee a complete and permanent cure, or failing, will refund the money paid us. FREE. A pamphlet of particulars together with testimonials from persons who have been cured by the use of our TABLETS, will be sent free on application.

If your druggist does not keep Hill's Tablets, send us \$1.00 and we will forward you package by mail. Address **THE OHIO CHEMICAL CO.,** #1, 53 & 55 Opera Block, LIMA, OHIO.

Light frosts do not kill the young plants, but they do retard their growth that later-sown plants often make the best showing by June 1.

"Liberality in the use of seed is advisable. It is very difficult to re-seed thin patches, and the best plan is to guard against having those thin patches by heavy seeding. The rule is to sow twenty pounds of seed per acre, but this will bear some modification. On bottom land, if the soil is in good condition, and you intend to roll well after seeding, fifteen pounds per acre will be ample to produce a thick stand. If the soil is not in the best condition for the germination of the seed, proportionately more will be required. On upland, twenty pounds of seed per acre is the minimum amount to be recommended, and if the ground is not in good condition it will be economy to sow twenty-five pounds.

"Some alfalfa growers still follow the practice of seeding with a nurse crop, but there is little in favor of this method and much against it. The removal of the nurse crop is always at a time when heat and dry weather are very hard on the unprotected young alfalfa plants. If any nurse crop is sown it should be harvested with a header, so that there may remain a considerable length of stubble to serve as protection for the alfalfa.

"The seed may be sown either broadcast or with a drill, but whichever method is selected, care should be taken that the seed is well covered. Common grass seed needs but the slightest covering, but alfalfa, like all leguminous plants, does better with moderately deep seeding. An inch is none too deep. After seeding, the ground should be run over with a roller, to pack the earth firmly about the seed and insure its early germination and rapid growth."

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Whites 100 Pigs for sale.
Illustrated catalogue free.

The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the KANSAS FARMER.

TENDER MOUTH.—I have a very fine young mare that is very tender in her mouth. She will hardly bear the weight of the lines. I have tried several kinds of bits but none do any good.

ANSWER.—Bathe the corners of the mouth twice a day with a strong solution of alum to heal and harden the flesh, then use a straight bit covered with leather; have the bridle loose enough so that the bit will not press the corners of the mouth when the lines are not pulled.

PEPPER FOR COLIC.—Is there any danger in giving black pepper to a horse for colic? A neighbor of mine says he has known black pepper tea to be given in such strong doses as to cause death.

ANSWER.—Black pepper, although a good remedy in some cases when given in proper doses, becomes an irritant poison when given in large quantities. It irritates and inflames the entire alimentary canal; it first acts as an excitant and then as a depressant.

We must ask our patrons again to send their inquiries to us earlier in the week. We frequently receive letters just after our copy has been mailed, that had been posted on Saturday, with the expectation of seeing a reply in the next week's issue, but which, on account of their late arrival, had to be left over until the next week.

Kind Words.

Rev. E. T. Abbott began, in the KANSAS FARMER for August 16, a series of articles covering pretty thoroughly the subject of bee culture. He will try to answer just such questions as a beginner in the business would be likely to ask.

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When writing any of our advertisers please state you saw their advertisement in KANSAS FARMER.

MARKET REPORTS.

LIVE STOCK MARKETS.

Kansas City.

October 16, 1898. The receipts, from January 1 to 5 p. m. to-day, compared with the receipts for the corresponding time last year, were:

Table with columns for 1898, 1897, and Gain or loss 1898. Rows include Cattle, Calves, Hogs, Sheep, and Horses & M's.

CATTLE—Receipts, 8,896 cattle; 454 calves. Only a small proportion were well-fatted first grade steers. Market quiet and medium grades weak.

DRESSED BEEF AND SHIPPING STEERS.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Dressed Beef and Shipping Steers.

TEXAS STEERS.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Texas Steers.

TEXAS COWS.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Texas Cows.

TEXAS BULLS.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Texas Bulls.

TEXAS HEIFERS.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Texas Heifers.

TEXAS CALVES.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Texas Calves.

COLORADO STEERS.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Colorado Steers.

COLORADO COWS.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Colorado Cows.

The run of native cow stuff was not large and what were on sale generally brought steady to strong prices and sold early. The first trade was considered the best. Calves were firm especially in choice grades. Dehorned feeding bulls were active and firm. Common bulls were slow.

COWS.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Cows.

BULLS.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Bulls.

HEIFERS.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Heifers.

CALVES.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Calves.

STOCKERS AND FEEDERS.

Table with columns for No., Wt., Pr., No., Wt., Pr. for Stockers and Feeders.

HOGS—Receipts, 2,165. The receipts were too light to make an active market. Market weak top, \$6 60; bulk, \$5 35@6 50.

PIGS AND LIGHTS.

Table with columns for No., Dock, Av., Pr., No., Dock, Av., Pr. for Pigs and Lights.

REPRESENTATIVE SALES.

Table with columns for No., Dock, Av., Pr., No., Dock, Av., Pr. for Representative Sales.

SHEEP—Receipts, 2,116. Market quiet to weak.

Table with columns for No., Dock, Av., Pr., No., Dock, Av., Pr. for Sheep.

CATTLE—Receipts, 22,000. Best steady, others weak; 4,000 Texans, steady; 7,000 western, weak. Beef steers, \$3 40@5 50; stockers and feeders, \$2 25@3 45; bulls, \$1 50@3 25; cows, \$1 00@2 90; Texas cows, \$1 50@2 25; Texas steers, \$2 35@3 10.

HOGS—Receipts, 25,000. The market steady. Mixed, \$6 20@8 30; heavy, \$6 10@8 75; light weights, \$6 15@6 85.

SHEEP—Receipts, 24,000. Market 10a30 lower, half unsold. Natives, \$1 50@3 30; lambs, per cwt., \$2 75@4 80.

GRAIN AND PRODUCE MARKETS.

Kansas City.

October 16, 1898. In store: Wheat, 461,652 bushels; corn, 18,933 bushels; oats, 16,931 bushels, and rye, 11,140 bushels.

WHEAT—Receipts for forty-eight hours, 175,800 bushels. The market was unsettled and slow, but as the day advanced Chicago became more active and higher and the market toward the close showed fair life and part of the early decline was recovered. By sample on track on

S. M. WOOD & CO., Real Estate, Loan and Exchange Agents,

TOPEKA, KANSAS. Special bargains in large or small farms, ranches, grass lands or city property. Also large exchange list all over United States in Lands, Merchandise or Stock.

H. P. DILLON, President. ORGANIZED 1882. J. W. GOING, Secretary. CAPITAL \$100,000.00.

Shawnee Fire Insurance Company

Of TOPEKA, KANSAS. Losses paid over \$120,000. Eleven years of successful business. Insured against Fire, Lightning, Cyclones, Windstorms and Tornadoes. Agents wanted everywhere in Kansas.

the basis of the Mississippi river (local 6c per bushel less): No. 2 hard, 15 cars 59 to 60 pounds at 56 1/2c, 10 cars 59 pounds at 56 1/2c, 4 cars at 56 1/2c, 11 cars 60 pounds at 57c and 6 cars choice, 61 pounds at 57c; No. 3 hard, 1 car at 53c, 15 57 to 58 pounds 55 1/2c, 9 cars at 55 1/2c, 15 cars 57 to 58 pounds at 56c; No. 4 hard, 1 car at 56c, 1 car at 54c, 1 car at 52c; rejected, 1 car at 25c; No. 2 red, 2 cars at 59 1/2c, 3 cars 59 to 60 pounds at 60c; No. 3 red, 1 car at 55 1/2c, 3 cars at 58 1/2c, 5 cars 57c, 2 cars choice at 58 1/2c; No. 4 red, 1 car 52 pounds at 52c, 2 cars at 53c, 2 cars at 54c and 1 car at 55c.

CORN—Receipts for forty-eight hours, 60,600 bushels. Arriving more freely, but under the influence of a good demand values hold about steady. By sample on track, local: No. 2 mixed, 3 1/2@32c, as to billing; No. 3 mixed, 30 1/2@31c; No. 2 white, 32 1/2@33c; No. 3 white, 31 1/2@32c. Sales: No. 2 mixed, 5 cars local at 31 1/2c, 6 cars local at 31 1/2c, 10 cars local at 32c; No. 3 mixed, 3 cars local at 31c; No. 2 white, 5 cars local at 33c; No. 3 white, 2 cars local at 31c.

OATS—Receipts for forty-eight hours, 59,000 bushels. By sample on track, local: No. 2 mixed, 25 1/2@26c as to quality and billing; No. 3 mixed, 24 1/2@25c as to quality and billing; No. 4 mixed, 22 1/2@23 1/2c, as to quality and billing; No. 2 white, 27 1/2@28c, as to quality and billing; No. 3 white, as to quality and billing, 26 1/2@27c; No. 4 white, as to quality and billing, 24@25c. Sales: No. 2 mixed, 3 cars at 26c; No. 3 mixed, 4 cars at 24 1/2c and No. 3 white, 1 car at 27c.

RYE—Receipts for forty-eight hours, 1,800 bushels. Market dull and values weak in sympathy with wheat. By sample on track on the basis of the Mississippi river: No. 2, 44@45c; No. 3, 42@43c.

FLAXSEED—Slow sale and lower. We quote at 91c per bushel upon the basis of pure.

BRAN—Demand fair and values steady. We quote bulk at 45c per cwt., and sacked at 55c per cwt.

HAY—Receipts for forty-eight hours, 390 tons. Steady and in good demand. New—Fancy barn prairie, \$7 00@7 50; choice, \$6 25@6 75; low grades, \$4 00@5 50; timothy, fancy, \$3 50@4 00; choice, \$3 50@4 00.

BUTTER—Low grades are a little slow, but all good table grades are active and firm. Creamery, highest grade separator, 25@27c per pound; finest gathered cream, 23c; fine fresh, good flavor, 21c; fair to good, 18c. Dairies—Fancy farm, 19@21c; fair to good lines, 14c. Country store-packed—Fancy, 18@20c; fresh and sweet packing, 14c.

EGGS—Market slow but steady. Fresh candied, 16c.

POULTRY—A good feeling exists for springs, of which there is quite a good run. Hens are steady and demand sufficient to keep things cleaned up. Turkeys are firm and very few coming in. Ducks slow. We quote: Hens, per pound, 6c; roosters, old and young, 15c each; springs, large, 6c; small, 6 1/2c; turkeys, hens, small, 8c; turkeys, gobblers, 8c; ducks, old, 5c; spring, 6c; geese, full feathered, to: goslings, 6c; pidgeons, 75c per dozen; veal, 80@100 pounds, 4 1/2c.

GAME—The quail is a good healthy market on the streets for all kinds of game. Prairie chickens in good request and the supply only fair, while values are firm. Quail is in request and the arrivals are very light. Ducks are a little more plentiful, but the trade can handle considerable more than is now coming. Plover is very scarce and not many turkeys on sale, for which there is a quick demand. Venison steady. We quote: Ducks, mixed, per dozen, \$1 50; teal, \$1 50; mallard, \$2 50. Plover, per dozen, \$2 00. Prairie chickens, per dozen, \$3 00@3 25. Quail, per dozen, \$2 25@2 50. Rabbits, cottontails, per dozen, 75@1 00. Squirrels, per dozen, \$1 00. Turkeys, per pound, 10c. Venison, carcasses, 9c; saddles, 13@14c.

POTATOES—Offerings good and demand fair at steady prices. Northern and Colorado in good condition. Fancy, per bushel, 75c; fair to good, 50@60c.

VEGETABLES—Beans, navy, California, per bushel, \$2 25@2 30; country, \$2 00@2 15; beets, per bushel, 50@60c; cabbage, per 100 pounds, \$1 50; celery, per bunch, 10@15c; cranberries per barrel, \$8; egg plant, per dozen, \$1; onions, per bushel, 45@50c.

FRUITS—Grapes plentiful and the movement good, especially to the country. Apples are slow, with offerings all that are wanted. Apples, choice, per barrel, \$2 50@3 25; common, \$1 50@2 00. Grapes, per pound, 3c; New York Concorda, per basket, 23@25c.

BROOMCORN—Harled, green, 4 1/2c per pound; green, self-working, 3 1/2@4c; red-tipped, do., 3@3 1/2c; common, do., 2 1/2@3c; crooked, half price.

WOOL—Steady and in fair demand. Missouri, unwashed, per pound, heavy fine, 9@10c; light fine, 10@13c; combing, 13@15c; low and carpet, 12@14c. Tub-washed, per pound, choice, 25@27c; medium, 23@25c; dingy and low, 19@22c.

WHEAT—Market opened at 61 1/2c, sold up to 61 3/4c and closed at 61 1/2c.

CORN—Market opened 37 1/2c, sold up to 37 1/4c, at which figure the market closed.

OATS—Market opened at 25 1/2c and sold up to 26c, at which figure the market closed.

St. Louis. October 16, 1898.

WHEAT—Receipts, 85,000 bushels; shipments, 9,000 bushels. Cash declined sharply, 57 1/2c, options opened lower, rallied 3/4c, fell 1/2c, then advanced stiffly and closed 1 1/2@1 1/4c above Saturday. October, 55 1/2c; November, 57 1/2c; December, 61 1/2@60 1/4c. May, 69 1/4c.

CORN—Receipts, 128,000 bushels; shipments, 58,000 bushels. Irregular, cash lower, 35@35 1/2c; options advanced without any setbacks and closed 1/2@3/4c above Saturday. October, 35 1/2c; December, 34c; May, 37 1/2c.

OATS—Receipts, 110,000 bushels; shipments, 17,000 bushels. Cash and October, lower, 26 1/2@23 1/2c; November, 27 1/2c; May, higher, 31c.

Liverpool. October 16, 1898.

WHEAT—Easy; demand poor; holders offer freely. California, No. 1, 5s 3d@5s 9d per cental [59 1/2@60 1/2c per bushel]; No. 2 spring, 5s 4 1/2d@5s 6d per cental [58 1/2@59 1/2c per bushel]; No. 2 winter, 5s 3 1/2d@5s 4 1/2d per cental [57 1/2@58 1/2c per bushel].

STEKETEE'S Pin Worm Destroyer



Never failing to destroy the worst case of WORMS IN HORSES. A SURE REMEDY FOR Worms in Horses, Hogs, Dogs, Cats, and a splen did remedy for Sick Fowls, or Roup, and is better known as

Steketee's Hog Cholera Cure.

ASK YOUR DRUGGIST FOR STEKETEE'S HOG CHOLERA CURE. Price 50 cents; by mail 60 cents. U. S. stamps taken in payment. Address,

GEO. G. STEKETEE, GRAND RAPIDS, MICH.

Mention KANSAS FARMER when answering.

DOUBLE Breech-Loader \$6.00. RIFLES \$2.00. WATCHES. GUNS BICYCLES \$15

POWELL & CLEMENT CO. 166 Main St., Cincinnati, O.

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the Board of Public Works of the State of Kansas, at Topeka, Kansas, until 2 p. m. on Wednesday, November 8, 1898, and opened immediately thereafter, for all labor and material required in the excavation of a Physics and Engineering building for the State University at Lawrence, Kas., under the provisions of House Bill No. 281, approved March 11, 1893, in accordance with the drawings and specifications prepared therefor by Seymour Davis, State Architect, copies of which may be seen at the office of the Board, State capitol grounds, after October 18, 1898.

Each bid must be accompanied by a certified check for a sum not less than 3 per cent. of the amount of the proposal, made payable to S. M. Scott, President of the Board of Public Works, State of Kansas, and to be forfeited to the State of Kansas, as liquidated and assessed damages by the successful bidders if they fail to enter into contract and give the required bond on or before November 15, 1898.

The right is reserved by the Board to reject any or all bids, and to waive any informality in any bid if it is deemed in the interest of the State so to do.

No proposal will be received after the time above designated.

Each proposal will be enclosed in an envelope, sealed and marked "Proposals for work and material required in the excavation of a Physics and Engineering building for the State University, at Lawrence, Kansas," and addressed to Wm. Wykes, Secretary of the Board of Public Works, Topeka, Kansas.

Companies or firms bidding will give their individual names as well as the firm name with their addresses.

The attention of all bidders is called to chapter No. 114 of the session laws of 1891, which they are expected to comply with in all State contracts.

All bidders are invited to be present at the opening of bids either in person or by attorney. WM. WYKES, Secretary. S. M. SCOTT, President.

NOTICE TO CONTRACTORS.

SEALED PROPOSALS will be received at the office of the Board of Public Works of the State of Kansas, at Topeka, Kansas, until 2 p. m. on Monday, November 13, 1898, and opened immediately thereafter, for all labor and material required in the construction and erection of an additional wing and assembly room to the Kansas State Normal School, at Emporia, Kansas, under the provisions of House Bill No. 150, approved March 10, 1893, in accordance with the drawings and specifications prepared therefor by Seymour Davis, State Architect, copies of which may be seen at the office of the Board, State capitol grounds, after October 23, 1898.

Each bid must be accompanied by a certified check for a sum not less than 3 per cent. of the amount of the proposal, made payable to S. M. Scott, President of the Board of Public Works, State of Kansas, and to be forfeited to the State of Kansas, as liquidated and assessed damages by the successful bidder if they fail to enter into contract and give the required bond on or before November 20, 1898.

The right is reserved by the Board to reject any or all bids, and to waive any defect and informality in any bid if it is deemed in the interest of the State so to do.

No proposal will be received after the time above designated.

Each proposal will be enclosed in an envelope, sealed and marked "Proposals for work and materials required in the erection and completion of an additional wing and assembly room for the State Normal School, Emporia, Kansas," and addressed to Wm. Wykes, Secretary of the Board of Public Works, Topeka, Kansas.

Companies or firms bidding will give their individual names as well as the firm name with their addresses.

The attention of all bidders is called to chapter No. 114 of the session laws of 1891, which they are expected to comply with in all State contracts.

All bidders are invited to be present at the opening of bids either in person or by attorney. WM. WYKES, Secretary. S. M. SCOTT, President.

COMBINATION PRICES BROKEN.
 An Offer to "Kansas Farmer" Readers
 That No Other Paper Published in
 America Can Duplicate.

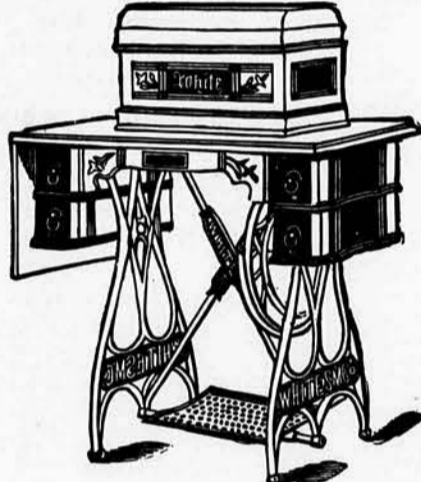
It is an acknowledged fact that the White Sewing Machine, after twenty years trial, is a leader as one of the very best family machines in the world. In close competition it was awarded, in 1888, Premium Centennial Exposition, Cincinnati, Ohio, above all competitors; 1889, gold medal, Exposition Universal, Paris, for the best family machine.

Prices at which these machines are listed to be sold through agents: On account of agents' commissions and the expense of team, office and other expenses, it is estimated to cost for every machine sold through agents \$15 to be added to the factory price. To meet these expenses the old-line sewing machine companies list their machines as follows:

- No. 2 1/2—Three drawers, oak, listed.....\$50
- No. 3—Five drawers, oak, listed..... 55
- No. 10—Seven drawers, oak, listed..... 60

These machines are all warranted by the company and the warrant delivered to the purchaser for every machine sold. Every machine is nicely adjusted in every part, supplied with the best attachments manufactured, so as to enable the agent to show superior work and compete with any machine manufactured through a contest or left out on trial.

Every machine is adjusted to take up all slack or lost motion, so that when it has been in use ten years it can be made to run same as new by taking up all the slack motion caused by the wear, with a screw-driver. The instruction book explains all this by cut and diagram, also how to thread and operate the machine, with the use of every attachment illustrated and explained.



NOTICE—The slaughter we make on these old-line prices: We will furnish these machines, express charges prepaid, at any express office in Kansas, including one year's subscription to the KANSAS FARMER, at these very low figures:

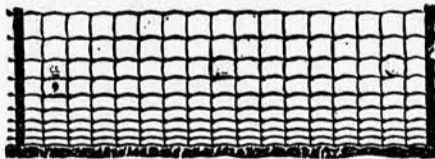
- No. 2 1/2—Three drawers, oak, White machine, \$22.
- No. 3—Five drawers, oak, White machine, \$23.
- No. 10—Seven drawers, oak, White machine, \$24.

We challenge proof from any one to show where any paper, periodical or advertising agency can offer the White machine for sale at prices below those established for agents.

How can the KANSAS FARMER do this? We will explain:

We have secured a large stock of White Sewing Machines from a large dealer who runs several branch houses for the sale of White Sewing Machines. These machines were bought very low on account of buying in large quantities and for cash. A 6 per cent. discount was allowed to wholesale dealer. The financial stringency and demand for money compelled the sale of these machines for money in hand, which will enable us for the present, and so long as this announcement appears in our paper, to offer to our patrons the White machine at prices never before heard of.

We warrant every machine perfect and new, same as received from factory.
 Address, KANSAS FARMER CO., Topeka.



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Having been proved indispensable in a good wire fence, our competitors are drawing on their imagination for a supply. We have a simple test, which will prove that ours has more than all others combined.

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HIGH ARM FREE TRIAL
 For ten days in your own home.
 \$60 Kenwood Machine for - \$24.50
 \$50 Arlington Machine for - \$20.50
 Standard Sloggers, \$9.50, \$15.50,
 \$17.50, and 27 other styles. We ship first-class machines anywhere to anyone in any quantity at wholesale prices. All attachments FREE. Latest improvements. Send for free catalogue and save money. WE PAY THE FREIGHT. NO MONEY REQUIRED IN ADVANCE. Address (in full) CASH BUYERS' UNION, 158-164 W. Van Buren St., Dept. 105, Chicago, Ill.

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And add \$1 in value to your Cockerels. Invented by me, after practical experience of many years at caponizing. They do the work right. Cause no deaths. A boy can do the work with them. Are simple, plain, durable, practical and cheap. Will last a lifetime. Explicit instructions sent with each set. Price, \$2.50 postpaid. Dow's "Caponizing" a book that tells you all about the work. The advantages, tools required, how to do it, age, time, how to feed and dress a Capon. Everything. By mail, paper, 25 cents; cloth, 50 cents. Address

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 LIVE STOCK COMMISSION MERCHANTS,
 Chicago, St. Louis, Omaha, Sioux City and KANSAS CITY STOCK YARDS.

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 And respectfully ask a continuance of their former patronage. Your business solicited.
 Money advanced to Feeders. Market Reports sent Free on application.

The Kansas City Stock Yards

Are the most complete and commodious in the West and the second largest in the world. Higher prices are realized here than further east. This is due to the fact that stock marketed here is in better condition and has less shrinkage, having been shipped a shorter distance; and also to there being located at these yards eight packing houses, with an aggregate daily capacity of 9,000 cattle, 40,000 hogs and 4,000 sheep. There are in regular attendance sharp, competitive buyers for the packing houses of Chicago, Omaha, St. Louis, Indianapolis, Cincinnati, New York and Boston. All of the eighteen railroads running into Kansas City have direct connection with the yards.

	Cattle and calves.	Hogs.	Sheep.	Horses and mules.	Cars.
Official Receipts, 1892.....	1,571,155	2,397,477	438,268	32,505	97,462
Slaughtered in Kansas City.....	727,981	1,805,114	218,009		
Sold to feeders.....	213,923	4,260	29,078		
Sold to shippers.....	446,501	586,563	48,259		
Total sold in Kansas City.....	1,388,405	2,395,937	295,246	15,974	

C. F. MORSE, General Manager.
 E. E. RICHARDSON, Secretary and Treasurer.
 H. P. CHILD, Assistant Gen. Manager.
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 For the Best Corn-Huskera.
 Better than a "red ear"—eh?
 Everybody purchasing a bottle of Husk-Cura receives a certificate entitling him to enter the contest.
 HUSK-CURA puts an end to and prevents cracked hands, from which so many corn-huskera suffer.
 The rare inducement offered makes it a boon to agents. They make from \$5.00 to \$40.00 per week.
 Agents wanted in every township. Single bottles 50 cents; by mail 60 cents. Send 60 cents for trial bottle.
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The Most Successful Remedy ever discovered as it is certain in its effects and does not blister. Read proof below.

KENDALL'S SPAVIN CURE.

SMITH'S FORD, N. C., Nov. 29th, 1892.
 DR. B. J. KENDALL CO.,
 Gentlemen:—I have the pleasure of writing you again in regard to my mare, about whom I wrote you about two years ago, she being afflicted with Blood Spavin. After following the directions you gave me for using "Kendall's Spavin Cure" I obtained perfectly satisfactory results after using six bottles.
 The Spavin Cure was not known in my part of the country until I purchased the first bottle, now all my neighbors use no other liniment but "Kendall's Spavin Cure." It is all you claim. You may publish this if desired.

Very respectfully, ADAM BRITAIN.
 Price \$1.00 per bottle.

DR. B. J. KENDALL CO.,
 Enosburgh Falls, Vermont
 SOLD BY ALL DRUGGISTS.

TOWER'S FISH BRAND SLICKER
 The Best Waterproof Coat in the World!
 The FISH BRAND SLICKER is warranted waterproof, and will keep you dry in the hardest storm. The new POMMEL SLICKER is a perfect riding coat, and covers the entire saddle. Beware of imitations. Don't buy a coat if the "Fish Brand" is not on it. Illustrated Catalogue free. A. J. TOWER, Boston, Mass.

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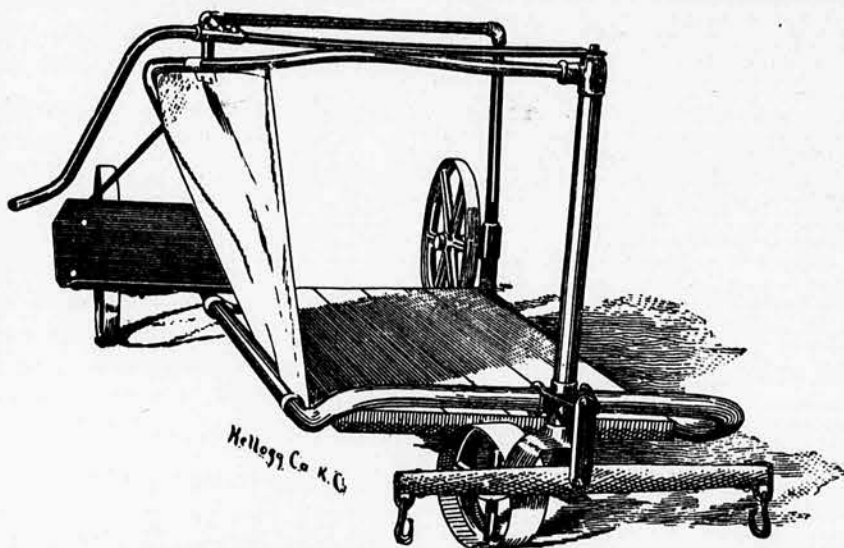
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Grinds more grain to any degree of fineness than any other mill. Grinds ear-corn, oats, etc., fine enough for any purpose. Warranted not to choke. We warrant the PEERLESS to be the BEST and CHEAPEST MILL ON EARTH!
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(General Western Agents for the CHAMPION WAGON, The Horse's Friend.)

Water Queen FORCE PUMP.
An improvement on all other methods of pumping. Has four times the capacity of these-called double-acting pumps. Costs less, weighs less, wears longer. Is easily operated and will not freeze. All attachments of the best material. Adapted to hand, windmill or steam power. Every pump guaranteed for strength, durability and capacity. No charge if not as represented.
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SOLD EVERYWHERE WILL WEAR TWICE AS LONG AS ANY OTHERS. TRY IT!
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This cut shows our \$5.50 Harness which we make a specialty of and DEFY COMPETITION.
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We do not specially solicit purchasers for the watch alone, as our offer is made for the benefit of subscribers. Otherwise we are not in the watch business.

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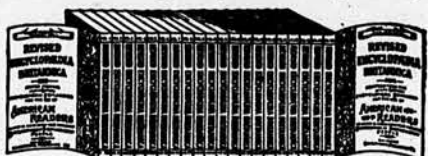
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THE STRAY LIST.

FOR WEEK ENDING OCTOBER 4, 1893.

Sumner county—Wm. H. Carnes, clerk.
PONY—Taken up by J. P. Jennings, in South Haven tp., P. O. Hunnswell, September 11, 1893, one black horse pony, wire cut on left fore foot, blind in left eye, about 9 years old.
HORSE—By same, one black or brown horse, about 8 years old, white in face, right hind foot white.

Montgomery county—G. H. Evans Jr., clerk.

MARE—Taken up by W. V. Toner, in Caney tp., P. O. Caney, September 16, 1893, one brown mare, 2 years old, no marks or brands.
COLT—By same, one bay mare colt, white stripe in face.

MARE—By same, one brown mare, 5 years old, no marks or brands; three above animals valued at \$65.
MARE—Taken up by J. H. Ray, in Caney tp., September 9, 1893, one iron-gray mare, 3 years old, scar on both front feet; valued at \$20.

HORSE—Taken up by Mrs. J. E. Gunsalls, in Fawn Creek tp., September 2, 1893, one gray horse, 9 years old, wire cut on right shoulder; valued at \$15.

FOR WEEK ENDING OCTOBER 11, 1893.

Douglas county—F. D. Brooks, clerk.

COW—Taken up by Geo. W. Knight, in Marion tp., September 17, 1893, one black cow, 8 years old, branded T on left hip, right ear split; valued at \$15.
COW—By same, one black cow, 10 years old, branded O on right hip, both ears clipped; valued at \$15.

Edwards county—F. H. Hanson, clerk.

HORSE—Taken up by J. H. Wonseller, in Lincoln tp., September 13, 1893, one sorrel gelding, five feet five inches high, hind legs white, bald face, notch cut out of top lid of right eye, 4 years old; valued at \$20.

HORSE—By same, one black gelding, five feet high, 8 years old, star in forehead, hind feet white, right hock wire cut; valued at \$40.

Hodgeman county—H. B. Heem, clerk.

PONY—Taken up by W. F. Hann, in Marensa tp., P. O. Marensa, September 5, 1893, one sorrel mare pony, thirteen hands high, weight 750 pounds, left hind foot white, branded m J B on left thigh; valued at \$15.

FOR WEEK ENDING OCTOBER 18, 1893.

Sumner county—Wm. H. Carnes, clerk.

HORSE—Taken up by W. H. Lawrence, in Guelph tp., P. O. South Haven, September 22, 1893, one blue-roan horse, 10 years old, saddle and harness marks.
PONY—By same, one gray pony, 8 or 10 years old, foretop cut short; two animals valued at \$40.

MARE—Taken up by D. W. Benton, three-fourths mile east of Wellington, September 21, 1893, one small brown mare, 3 or 4 years old, small blaze in face, white hind feet, branded O on left shoulder; valued at \$20.

2 MULES—Taken up by Wm. T. Boatright, in Creek tp., P. O. Argonia, October 12, 1893, two mules—one brown and one gray, four feet ten inches high, 12 years old, no marks or brands; valued at \$40 and \$10 respectively.

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From October 15 to 31, all A., T. & S. F. Agents will sell Round-Trip tickets to Chicago at just as low rates as were made for "Chicago Day." These tickets will not have a string tied to them; but will be good on all trains in any kind of a car. The World's Fair ends October 31. The curtain will probably not be rung up again. If you miss this chance to see the most wonderful exhibition of American pluck, genius and push ever gathered together on this continent, you miss the great opportunity of your life. If you go and do not go on the Santa Fe, another opportunity is missed, viz., that of traveling on a first-class line—shortest between Kansas City and Chicago.

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