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Agricultural Matters.

THE CAUSE OF HARD TIMES.

An essay read before the Blue Mound Farmers' Club, by Mr. Geo. Leary, Lawrence, Kas.
[Published by request.]

In endeavoring to search out the causes of the adverse times upon which we have fallen, the writer is conscious of having been actuated, solely, by a desire to arrive at the truth. This desire sometimes causes us to look upon dark pictures; but it is wisdom to be willing to know the worst and to provide for it. Sacred writ tells us that the love of money is the root of all evil, and both history and observation prove that man's inhumanity to man makes countless millions mourn. Just before his death the venerable Bishop Peck said of America's political-economic prospects: "Agitation and conflict are inevitable. This is no child's play. It will be the attempt of moral principle to break down the power of untold consolidated millions of money, to challenge and defy the most enormous class interest that ever trampled upon a free people. It will be the most terrible conflict ever known upon this continent." Already these prophetic words are being fulfilled. In the year 1862, when it became evident that chattel slavery would be destroyed by the civil war, the British bankers evolved a scheme for the practical enslavement of this whole nation, and communicated it to the banking fraternity of America through Hazzard's secret circular in these words: "Slavery is likely to be abolished by the war power and chattel slavery be destroyed. This I and my European friends are in favor of, for slavery is but the owning of labor and carries with it the care for the laborer, while the European plan led in by England, is capital controlling labor by controlling wages. This can be done by controlling the money. The great debt that capitalists will see to it is made out of this war must be used as the means to control the volume of money. To accomplish this the bonds must be used as the banking basis. It will not do to allow the greenback, as it is called, to circulate as money for any length of time, for we cannot control them. We can control the bonds, and through them the bank issues."

If men or devils are capable of inventing

a more diabolical plan for the subjugation of a free people, let them forever hold their peace, as this one will abundantly meet every want of the Prince of Darkness. It has been carried out to the very letter, with exactly the terrible results predicted.

The first act in this infernal drama was enacted when Wall street's deputation, 100 strong, made its descent upon the United States Senate to defeat the legal tender clause in the greenback bill. This august body proved itself incapable of resisting the golden arguments presented by the deputation, and, at their solicitation, inserted the demonetizing clause, "except duties on im-

is but partially paid or unemployed, financial ruin stares us in the face, and pauperism, irreligion and crime meet us on every hand. But, says one, how can these things be? Let us see. It is evident that there is greater monetary advantage in controlling labor than in owning it, as in the former case the master is under no obligation to feed and clothe the laborer while living, or to bury him when dead. By controlling the volume of money it can be made plentiful or scarce at the command of the money-maker, and wages can thus be reduced to a mere pittance. When money is plenty values rise when scarce values always fall. Now mark

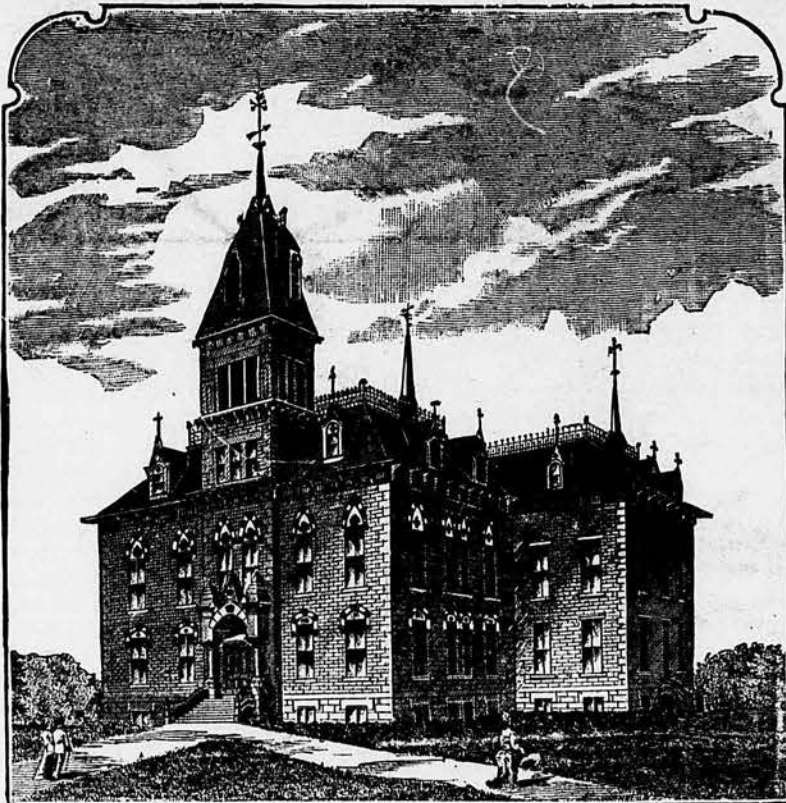
English landholders dwindled from 220,000 to 30,000

In 1865, to bring about the fiction of specie payments and furnish a basis for the so-called national banks, Congress entered in earnest upon the process of funding or shrinking the volume of lawful money by which the national currency was diminished from \$40 per capita to \$12. This piratical act has already destroyed billions of the people's property and added a load of more than \$500,000,000 to their burdens by way of interest on bonds. How many fill premature graves because of this oppression, God only knows. William Pitt, England's most vigilant and sagacious statesman, said: "If the Americans enter upon the process of funding, they will find their boasted liberties a failure." Can we not begin to appreciate the truth of this prophecy?

In 1862 the law creating national banks was passed. It provided that the bonds of the nation might be deposited by private corporations of not less than five persons with the Comptroller of the Currency, which corporation should receive the interest the same as other holders of bonds, and besides as a gratuity (except 1 per cent. on their circulation) 90 per cent. of the face of the bonds in bank bills, to loan to the people for what they could get. This amounts to a donation of this sum during the existence of the bank charter, to men already rich. The law provides that these banks may increase their issues to any extent they please up to 90 per cent. of all the national bonds out, and when they have, by inflation, caused people to embark in new enterprises and involve themselves in debt to get them homes or for other purposes, they may suddenly draw in their issues and compel payment when prices are reduced by contraction to half what they were when debts were contracted. A few years ago when the extension of their charter was under discussion in Congress, they threatened, if the bill providing for funding at 3 per cent. passed, to withdraw \$200,000,000 of their issues and create the worst panic the country ever saw.

When they desire to draw in a haul they begin silently, as the newspapers say, to strengthen their reserves. Now the good people, innocent of any knowledge of what a reserve is, suppose it must be a good thing to strengthen almost anything, and are pleased with the announcement. The law creating the national banks requires them to keep in their vaults in the Eastern cities 25 per cent. and in the rest of the country 15 per cent. of their deposits in lawful money, the only money that will under all circumstances pay debts. Of course this large part of the debt-paying currency is so situated that it can pay only the debts of the banks, and is no part of the actual medium of exchange. When they wish to make a squeeze nearly 3,000 national banks begin adding to this idle money and, of course, contracting the volume of the currency that fixes prices and pays debts. Many more private banks of one kind or another follow their example. Every sharp-visaged Shylock in the country who tries to keep his money in easy reach understands what that all means, and begins drawing in his loans and piling up his money to keep it secure till he can use it to buy property at one-fourth its value, a time not far ahead. Reserves are strengthened all round and there is little money left to pay debts or sustain prices or pay laborers. The poor man who has been struggling to secure a shelter that he may call his own where he may gather his loved ones, and has perhaps paid all but the last payment, sees that terrible attachment, a mortgage, wrest it from his grasp and turn his family shelterless into

(Continued on page 4.)



CAMPBELL UNIVERSITY, HOLTON, KAS.

[See article headed "Campbell University," elsewhere in this paper.]

ports." It is said that the incorruptible old patriot, Thaddeus Stevens, cried like a child when he saw this villainy finally accomplished. About this time many Congressmen, known to be poor, became suddenly rich. Then the banks hoarded gold and silver and decried the nation's credit, until it required \$2.85 of the people's money to buy \$1 in currency that would pay import dues.

This war upon the nation's credit was scarcely less calamitous than that waged against the nation's life. Had our legislators been as honest and patriotic as those of France during the late Franco-German war, we might have been provided with a full legal tender currency based upon the country's credit, and sufficient for all our needs. Instead of this, and rejoicing in the possession of the most favored of all lands, we have been, through recreant statesmanship and political jugglery, forced to run the gauntlet of a depreciated currency, of currency-bearing bonds, of gold-bearing bonds, of funding acts, of so-called credit-strengthening acts, of national banks and repudiated contracts, all in the interest of capital, until in the name of outraged humanity we protest against any further additions to this chapter of national infamy. Even now there are no occupations that are sure to be profitable but office-holding and banking. As a result we have a great crop of money-loaners and office-seekers. Commerce is everywhere paralyzed, confidence is broken down, labor

what this circular says about the Treasury note or greenback, which they say the banks cannot control, and which they admit stands in the way of controlling us. They are not stupid enough to say that it is not money. They do, in effect, say that it is the free-man's money; while national bank bills, the swindle they have put in the place of it, they admit is the instrument of our enslavement. It is always safe to learn wisdom from an enemy. What he wants concerning us is precisely what we do not want if we are wise. Mark, further, their declaration that capitalists will see to it that a great debt will be made out of this war. They do not even claim that a great debt need to be made out of the war; and figures show, that but for their handiwork, the war was actually paid for at its close, and if they had not interfered to enrich themselves and enslave us, less than ten years would have sufficed to cancel the debt they had unjustly heaped up, and we would have been freed from the burden which they evidently mean we shall never lay down until we die, and leave our posterity in slavery.

A little candid reflection will convince any intelligent mind that in effect the national debt has been increased, not lessened. When the younger Sir Robert Peel had settled this same financial policy upon England his father said to him: "You have doubled my property, but you have ruined your country." In half a century the number of En-

The Stock Interest.

THOROUGHbred STOCK SALES.

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

OCTOBER 8—John Lewis, Short-horns, Miami, Mo.
OCTOBER 9—John Lewis, Poland-Chinas, Miami, Mo.

The Value of Clover and Clover Hay in the Food Ration.

Clover hay is the peerless ally of the stock-feeder when cost of production and value in a well-ordered ration are both considered. These asserted qualities are superadded to the royal one of being the most important crop grown in any system of crop rotation that looks to the economy of soil fertility and to maximum yields for the completed rotation. The presentation of these latter factors belongs to another field, and possibly not in the line of the purposes of the *Gazette* to discuss.

In the food ration it fills both the functions of a coarse food for ruminants and the cheapest available source of proteine. In the latter respect our farmers of the West cannot give clover too careful consideration. It is a machine, and not a hand labor crop like corn, roots, and grain. Grain and corn have large expense added to them for mere manual labor that adds not an ounce to the nutrients, but goes to the purely mechanical purpose of a separation of its parts, such as husking and threshing, while clover requires seeding but once for two years.

This table shows the high relative richness of clover in proteine compared with corn, timothy, and oats, approximating even to bran. If we should adopt the radically, and as I am now fully convinced, thoroughly exaggerated value put upon proteine by the German school of thinkers, clover would stand with a very high theoretical value on account of this. Avoiding a discussion of side issues, yet drawing my conclusions upon the above statement of personal views as to the value of proteine in a general way, and also upon experience in feeding clover, I venture to say that the relative theoretical value of clover as based upon its proteine elements will not be admitted, except in a more narrow field than heretofore assumed from mere analytical data. Believing and knowing that wider nutritive ratios may be successfully used than are now acknowledged by any writer known to myself—provided that they are derived from both easily digestible and palatable foods—I hold that the peculiar value of clover due to its high proportion of proteine can only be best derived by its use with foods and rations made up of materials that are radically deficient in proteine, and when fed to animals making a relatively high proteine growth, such as young animals growing muscle, or to breeding sheep, or to cows giving milk. When fed to fattening sheep, to any non-growing animal, or in connection with a proteine diet, its measure of value—palatableness for this purpose being overlooked—will be its digestibility or its relative digestibility.

While I do not believe that our present digestion tables are well taken, or anything more than rough approximations and based upon some fallacies, yet they are the best standard of comparison yet laid down, unless it be that of the heat-producing equivalent of foods, which latter standard is based first upon the digestible portions of foods. I will give the digestible pounds found in 100 pounds of the foods given in the table above.

	Proteine.	Fat.	Carbo-hydrates.	Fiber.	Total.
Clover.....	6.74	1.61	25.92	11.66	45.93
Timothy.....	3.51	1.08	28.56	17.10	50.25
Corn.....	8.58	4.08	64.92	1.80	79.38
Oats.....	9.13	3.78	44.49	2.41	60.81
Bran.....	11.72	2.44	41.53	2.33	58.02

In the above table clover hay does not

make a particularly favorable showing, and would not seem to bear out the eulogium given it at the opening of this article. Nevertheless, I am satisfied that it credits it with its full dues when fed indiscriminately. The above views are negative, yet negative views—the what not to do—are quite as important often as positive facts or right methods, as in the case in hand. How then shall we use clover hay? As before stated, its abundance of proteine makes it a valuable food for growing animals, because the basis of muscle growth is proteine. But for very young animals it must be very nicely gathered and not too coarse to secure its consumption with little waste. The second crop of clover, despite all of the bad things said of it, I have found a most excellent food for young animals, and the leaves of clover and fine clover excellent for lambs. It is as a food to feed to partially developed animals, especially steers having straw and corn fodder, that I have found its most valuable place in every day practice. The theoretical value of such a combination is seen at a glance in the following table:

	Proteine.	Fat.	Carbo-hydrates.	Fiber.
Timothy.....	3.51	1.08	28.56	17.10
Clover.....	6.74	1.61	25.92	11.66
Oats straw.....	6.34	.68	16.06	25.34
Corn fodder.....	4.46	1.24	29.15	18.13

Now if we put together 100 pounds of oats straw and 100 pounds of clover, making 200 pounds, and 200 pounds of timothy hay, we have the following results:

	Proteine.	Other materials.
200 pounds of timothy.....	7.02	93.48
200 pounds of oats straw and clover.....	8.08	81.26

So far as the proteine is concerned the oats straw and clover combined are actually richer than the timothy. Now, as the oats straw is exceedingly poor in proteine, it will be seen that a steer that is growing when fed on straw must, if ever, be short of the proper amount of proteine to build muscle, and without muscular growth there can be no growth. Theoretically the two foods are complementary to each other. The clover supplies the deficiency of proteine, either for straw or corn fodder, while each of the last two foods have more carbonaceous materials than the clover. Each food in the combination is benefited by being fed with the other. The following data from practice show that the combination sustains the expectations of reason:

	Eaten.	Gain.	Time for steer.
Clover, second crop, 1,694 lbs.....		144 lbs.	144 days.
Oats straw, 1,309 lbs.....			
Clover, second crop.....		120 lbs.	112 days.
Oats straw.....			
Clover and corn fodder.....		102 lbs.	90 days.
Clover and corn fodder.....		97 lbs.	98 days.

Timothy when fed alone has averaged 8.85 pounds of gain per steer daily in five trials. I have more trials of clover equally as favorable. The estimated nutrients I have not transcribed from the report of the trial. It will be sufficient to state that the steers were of equal weight and ate less clover and corn fodder or clover and straw than did the steers receiving timothy hay. I have placed an exceedingly high value upon such combination of clover and corn fodder or clover and oats straw, because by them these rough feeds assume the practical value of timothy. Our State of Missouri raised last year 10,000,000 tons of corn fodder, most of which must have been wasted, as in it alone was the nutrition to winter 5,000,000 head of cattle, while we wintered on all of our foods but some 2,250,000. Clover raised to supplement these foods, and used for this purpose, will greatly extend the stock capacity of a farm. From fifty acres of corn we had last year fodder enough to winter about seventy-five head of steers.—J. W. Sanborn, in *Breeder's Gazette*.

Dr. Horne says: Handsome women and handsome, good horses always did go together. I would choose a wife on her appreciation of a good, stylish, intelligent horse. The best women I have ever known were great admirers of a good horse.

About the Beef Market.

Discussing the state of the beef market, the *Northwestern Live Stock Journal* (Cheyenne), representing the stock interests of the Territories, says:

"Once upon a time a young man in a strange land asked a man about town what saddle horses were worth there. He was told that prices were governed by circumstances, and his surprise wasn't lessened much by the further explanation from the man about town that it was altogether owing to whether you wanted to buy or sell. 'What the deuce has that got to do with the value of the horse?' And the about-town urbanely replied: 'You'll find, young man, it's got a slammed sight to do with it. If you are compelled to buy a horse, he is worth \$50; if you are compelled to sell he is worth \$15.' In due time the young man found out the cast-iron truth, both ways, of the man-about-town's remarks.

"This difference of position is more noticeable with horses than any other property, but is a recognized law of trade, with various modifications, in every line. When it is known that you are compelled to sell, and show your anxiety by taking your property, commodity or product with you, hawking for a buyer, your name is Dennis. Buyers, though they be compelled that day to have that very thing, are offish, and seeing your condition take advantage of it as naturally as one fish swallows another. It is one of the ways of men, honorable though they may be, and is counted upon by every careful business man as he takes account of his affairs and circumstances. Recognized intrinsic value can only influence, not change, that law of trade and human nature.

"Once upon a time the cattle markets sent agents to the producers to purchase stock. Later it got to be the way for sellers to send forward shipments to former purchasers who had become acquaintances or friends. Gradually the commission business grew stronger and its methods recognized so that consignments were made by anybody to anybody—allowing for friendships and prejudices—until for years it has been the case that no buyer seeks the seller on his own ground. It served to fasten this custom that about the time it was growing into general use a few years of good markets prevailed, when the demand seemed unlimited, prices exceptionally good, and everything altogether lovely. Afterward as market buoyancy and the satisfactory prices took a change, the custom seemed to have become fixed, and has since been the universal rule—and most properly and with great display of good sense so far as the buyers are concerned.

"And ever since that time all things seem to have conspired against the well-being and prosperity of the stockman's industry.

"The condition of unweal certainly is not wholly attributable to the shipping custom as now in vogue; but that such custom has a great influence, in the respective attitudes of buyer and seller, cannot be controverted. And ever since the market took its downward turn as to prices, cattle have been sent forward in quantities beyond what the order or legitimate demand called for; and as prices crept down the scale, more and more, cattle have gone. The evidence before the buyers has been, not merely that the sellers were compelled to sell, but that they were crazy to do so. The beef producers of the country have been in a most sorry attitude, and one which must have precluded even the possibility of remunerative prices. A change of the position, even though it be only possible to slight extent, would, as the present supply is, bring great relief. If such stockmen as are able to do so would, during the market season of the present year, hold back their she and unfit cattle, they would almost immediately be rewarded by a change in demand and market aspects that would gladden the

countenance of the entire industry. The difference between enough cattle on the market and altogether too many is very little. When the market actually wants your cattle and is compelled to buy, the relative attitudes will be reversed—and that means wealth to you and hardship nowhere. Try it this year."

Care and Profit of Sheep.

Having had some experience in my younger days with sheep, and thinking it a very good time to buy when sheep could be had at \$2 per head, I purchased eighteen head, in the spring of 1886, for \$35. They had the reputation of being good sheep, but certainly their looks did not merit their good name. Little feed and scarcely any care had made them a shabby looking flock. Turning them into a pasture of low upland and slough, with perhaps a dozen kinds of grass and plenty of water, their appearance soon changed, and I was surprised over the great change made in them. The clipping, made about six weeks after I purchased them, sold for 22 cents per pound, and the wethers of the flock nearly paid for them, leaving me thirteen ewes. Each year they have more than doubled their number, until last spring found us with eighteen choice ewes, the clip weighing 185 pounds, some fleeces weighing from thirteen and a half to fourteen and a half pounds. Of the yearlings, ten wethers sold to butchers, and now have on hand ten ewe lambs worth \$4 per head. Those sold to butchers averaged only about eighty-five pounds, being very thin. Received 24 cents per pound. They are a cross between the Leicester and Cotswold, and have been in perfect health. To those who wish to make a start in sheep, I would advise beginning with a few, and those not younger than four years old, as young sheep are very apt not to be good mothers, often disowning their young. When this occurs, the mother sheep should be tied in warm quarters near the house, so as to be attended to in the night and held till the lamb gets sufficient nourishment. In this way she can be made to own other lambs than her own, if one will but persist in this treatment five or six days.

Much can be said in favor of February and March lambs, one advantage being that the owner has at this time of the year more time to care for them. The sheep should be kept in one place, so that no lambs are lost by sheep wandering in fields. They mature so early that they need no extra care the following winter, and nearly all raise lambs when but yearlings. One is also surprised at the amount of cold the little ones will endure. If on the south side of a building or stack, they will be playing when but a few hours old. Last winter I kept the eighteen head (at night) in a room 14x14, and found they had plenty of room, often finding the lambs in the morning curled up and lying in their mothers' soft fleeces. A sheep shelter should be tight over head and under foot, but with cracks large enough to admit the hand on the side of the building, as they must have good ventilation. Care should be taken not to allow their fleeces to get very wet just before shearing time and when the weather is quite hot, as it gives a chance for the green fly to work, and should be attended to by parting the wool and pouring in turpentine. If your sheep suddenly starts and runs away from the rest of the flock and quickly lies down, it shows that it is troubled with them.

We think putting bells on a flock a good plan, but believe the only safe way is yarding them and keeping them up until broad daylight. They are very timid, peculiar creatures about going into a yard, often coming and standing near the entrance, but refusing to go in until given the word. They should be shut in, as a sudden start in the night will so frighten them that they will run out of the inclosure, thus giving wolves and dogs a chance to run them down. Do not fail to put them in a small yard

near your cattle every night. It is but a few moments work, and then they are safe. Fine-wooled sheep do well in large flocks, and coarse-wooled sheep in small flocks. The latter are very apt to produce twins. Eight of mine last spring dropped sixteen lambs, some of them being but yearlings. All the lambs are living and doing well. By the experience of others and that of myself I find that calves running with a flock of sheep will not be troubled with vermin. Their manure will bring back a piece of land that has been run too long, quicker than any other kind, land over which they have run being especially adapted to the raising of wheat. The labor of caring for a few sheep, I think, is very little, and is principally needed in the lambing season, and then lasts but a few weeks, and you are well rewarded by the profits and beautiful sight of a flock of lambs which will vie with the kitten in their gambols and play.—*M. E. Williams, in Iowa Homestead.*

In the Dairy.

Short-horns as Milkers.

Many of us as Short-horn breeders have been so thoroughly and justly impressed with the ability of Short-horns to excel all other breeds of cattle in the production of beef that we have dwelt almost entirely upon their merits as beef producers. Beef-production, early maturity, has been the burden of all the stock papers when referring to Short-horns. Beef has been the objective point of Short-horn breeders. They have been stimulated and encouraged in this to an unusual extent by the fat stock show. Beef has been the principal feature in the showing at the fairs, in the sale ring, and in our breeding operations. When we take all these things into consideration, and in addition thereto the fact, that Short-horns in the great battles of the beef breeds have been successful in seven out of eleven contests, it is not surprising that they should be regarded by the public generally as a beef breed, and that exclusively.

Right here permit me to correct a mistaken idea that is gaining more or less currency, namely, that Short-horns are deteriorating in their milking qualities. It is a great mistake to suppose that because Short-horn breeders have been making beef their principal end that they have consequently neglected the milking characteristics of their stock. I do not believe that the milking qualities of Short-horns have been injured to the extent that many writers would have us believe. Any stock breeder of judgment knows (and Short-horn breeders as a rule are men of judgment), that there is no element in production, no factor in the problem of early maturity of so much value as an abundance of milk, and there is no question as to the economy of having this abundance of milk supplied by the dam of the calf. For these reasons, therefore, I maintain that the majority of our most intelligent and successful Short-horn breeders have persistently, but quietly and privately, perpetuated the milking qualities.

Visit and examine the herd of any successful Short-horn breeder, and you will find that he desires to retain in his herd and values most highly, other things being equal, those cows which show good milking qualities. Lewis F. Allen, a name familiar to all Short-horn breeders, and a writer of recognized authority upon all breeds of American cattle, says: "We have numerous well authenticated instances of Short-horns giving six, seven, eight, and nine gallons of milk a day on grass alone, in the height of their season, and yielding fourteen to eighteen pounds of butter per week, and holding out their milk in quantities as well as other breeds of cows through the year." Again he says: "That the inherent quality exists in the Short-horn, no intelligent breeder

of them need doubt. Our own observation in more than thirty years' experience with hundreds of them, first and last, under our own eyes, is to ourselves evidence of the fact, both in pure breeds and grades."

If necessary to prove the milking qualities of Short-horns we could give page after page of statements of noted breeders testifying to the fact. We could make out a long list of the prizes they have won from time to time, both in this country and in England, in competition with the dairy breeds. We could review the history of Short-horns from the earliest times down to the present, and we would find that they have always been used more or less for dairy purposes, and when put to the test have distinguished themselves at the pail as well as on the butcher's block. The fact that the English farmers and tenants, who are obliged to figure exceedingly close in order to pay their high rent and make ends meet, use Short-horn cows for their dairying in preference to any other breed, is certainly evidence that they are profitable for dairy purposes.

The fact—which is demonstrated every day in northern Illinois—that the cattle buyers, who gather up cows by the carload for the great dairies in the neighborhood of Chicago and Elgin, will pay more for a grade Short-horn cow showing milking indications than they will for grades of any other breed, and the more Short-horn blood the higher the price, must be accepted as proof that there is an element of profit in them, either in the milk product or the beef product afterward, which does not exist in other cows. Mr. Moninger, the famous cattle feeder of Iowa, who has been so successful at the fat stock shows with his Short-horn steers, said at the late Iowa meeting "that he did not believe that beef and milk-producing qualities were divorced, and that some of the best steers he had ever raised were from his best milkers." *Indiana Farmer.*

Salting Butter.

Before salting butter by hand, the maker should ascertain what quantity of salt will be required to produce butter with the degree of saltiness required by those who purchase it. In the ordinary way salt is used without any preparation, just, in fact, as it comes from the shop in the nearest market town, or even in the village. Such salt is coarse, often impure, and generally very moist. When directions are given that a certain weight should be used per pound of butter it is evident that there would be a great difference in the strength of the flavor of the salt as between this inferior salt and a superior salt which has been thoroughly dried and finely ground. When a maker is recommended to add half an ounce to the pound it makes all the difference whether that half ounce is composed of the fine dry or the coarse moist salt. For this reason the writer recommends the maker to use nothing but the finest salt he can buy, to dry it without variation, and to grind it as finely as he possibly can. If he does this he can depend upon making his butter with a proper degree of saltiness, always supposing the care is taken to weigh out the amount required for a given quantity of butter. In order to ascertain what quantity of salt should be added per pound, an experiment can easily be made upon a churning day by dividing the butter into two or three lots, and salting each lot with different quantities of salt, say from three to six ounces per dozen pounds. In salting with good salt it is a good plan to pass the butter through the worker a few times after it has come out of the churn, to express as much of the moisture out of it as possible, and as it were to open it to receive the salt, which may then be sprinkled over the butter by hand, a little at a time. After the first sprinkling the butter which is passed under the fluted roller may be rolled up with a Scotch hand and turned

at right angles to its former position, so that it will pass under the presser again somewhat in the form of a roll of butter. Again it is turned up and turned at right angles, passing under the presser a second time, when more salt may be sprinkled upon it, and so on until all has been used. A few further turns under the fluted roller will finish it off, and if the work has been well done the butter will be nicely amalgamated and fit for sale. If it is to be potted for future use, now is the time to commence the work. The earthenware jars, pans, or pots having been prepared by scalding and rubbing with dry salt, and lastly cooling with water and dried, will be ready to receive the butter as it is finished up on the worker. The plan which I have seen adopted, and have conducted in my own dairy with the greatest success, is that of lining the jars with pieces of butter somewhat in the form of paste, which has been rolled upon a pasteboard. The bottom of the jar is first covered, and a layer is then laid around the bottom portion of the sides. This is succeeded by a second layer upon the bottom and upon the sides, and respectively until the lower portion of the vessel is filled. If there is sufficient butter the packing may be continued in the same way until the jar is full. If not, a piece of butter-cloth should be laid over the butter in the jar and covered with salt, with sufficient care that the whole can be lifted off without spilling the salt when the next churning day comes around. The most important point in packing is to fill the interstices and to prevent the retention of air. If a mass of butter which has arrived in a firkin or a Normandy basket is examined before it is cut up, it will be found that wherever there is an interstice at the side there will, if the butter has any age, be some discoloration as well as a pronounced and disagreeable flavor, both faults penetrating into the butter as far as they are permitted by the interstice. Hence the necessity in packing of thoroughly pressing the butter in the vessel. When full the butter should be smoothed off at the surface, spaces at the sides being filled up, and then covered with a piece of fine butter cloth, upon which some perfectly dry salt is spread, thus keeping out the air as much as possible. The vessel may now be sealed down and placed in a cold apartment or cellar, until it is required for use. In the winter season butter so made, if it has been produced from sound milk, carefully prepared cream, if the cream has been well churned, and the whole process conducted with skill and cleanliness, and with the purest of water, will keep for a very long time. There is greater difficulty in keeping such butter through the summer months, the great heat from June to August penetrating everywhere, unless in apartments which are specially cooled, and therefore affecting the butter. For this reason it is unwise to pot butter in spring; on the other hand, autumn potting may be conducted with success, because as the butter becomes older the weather grows colder and therefore more suitable for its preservation.—*Prof. Long, in Farmer, London, England.*

The Busy Bee.

Moth in Hives.

EDITOR KANSAS FARMER:—What can one do when moth get in a hive? I have eight colonies of bees which I thought were in good condition, but upon taking of a box of honey last Saturday I found two moths, and this morning in another hive I found another moth. I was told to take an alder stick, split half in two, punch pith out, and place in the bottom of hive at night, remove in morning, when the moth would be in it. This I did, but when I tried to take the stick this morning the bees were too much for me and I could not get it out.

As I know nothing about bees except

what I read, and depend principally upon the KANSAS FARMER for my information, I will be very grateful if you can guide me in this matter.

E. B. McDUFF.

Atchison, Kas.

Fumes of burning sulphur will destroy the moth. The combs may be suspended or arranged on small platforms, under which sulphur is burned on live coals in an iron kettle. The work must be done in an inclosed space, so that the fumes do not escape readily. Repeat in about ten days. Before doing this, the bees must be removed to another hive.

After-Swarms.

The season having now arrived when swarming is a daily occurrence, it may not be out of place to say a few words on after-swarms. About nine days after a colony has swarmed, if left to themselves the hive usually sends out another, and frequently two or three more swarms. These after-swarms are led by a young unfertile queen, the third swarm often having with them three or four queens. The reason of this is that all the queen cells being raised in a batch, the young queens hatch at about the same time, and are either driven out or voluntarily issue out with the bees as soon as the swarming note is raised. It is a blessing to the bee-keeper when bad weather prevents the issue of these after-swarms.

Hundreds of colonies are every season left queenless after the issue of these third swarms and die out. Their stores being short, soon find out their helpless condition, or if left, taken up by the neighboring colonies who very unmolested, they puzzle their owner because they have died leaving plenty of honey in the combs. It is sometimes difficult to have these after swarms where there is more than one queen, because as soon as the original cluster is disturbed, they break up into small parties, each around a queen. Each small cluster should be taken and put into or down in front of the hive, and as soon as they are settled down in the hive, the surplus queens are quickly disposed of. The object of these notes is to point out the most profitable method of keeping bees, and bee-keepers are consequently warned that it is of no use careful wintering and looking after the bees in the spring, and thus getting the hives teeming with bees, if, as soon as the honey begins to flow in, the hives are allowed to become depopulated by after-swarms. If, therefore, it is desired to get good results from the old colonies, after-swarms must be prevented. The best way to do this is to cut out all the queen cells but one, four or five days after the first swarm has issued, leaving the one that is the most forward. There is only one danger in doing this, and that is that this one queen may be lost while flying for fertilization, and the colony will then be hopelessly queenless if left to itself. Of course the danger from this source is no greater than if the other queen cells had not been cut out, but it is a fact that a very large number of queens are lost on their wedding trip every year, more I believe than from any other cause. To provide against this and the possible loss or injury of a queen from any other cause, every bee-keeper should have one or two spare queens on hand in a nuclei colony—this is in a hive, with only one or two frames. The easiest way to get these is to take one frame that has queen cells on it, from a hive that has just swarmed, and put it in with all the adhering bees into another hive, move the old one about a foot to one side, and set the new one pretty close to it. Some of the bees returning from the fields will go into each. We do not want many in the nuclei hive—only enough to nicely cover the two frames, so that if too many take to that one, shift a few inches further away, or if there are not enough take to it, shift the old hive a little further off. In a day or two each lot of bees will fly to its own hive. These nuclei should always be kept close to another hive, so that should the queen be taken from them to take the place of one lost or injured, they may be united with the adjacent colony. Some care is necessary when giving a strange queen to a colony. They will very seldom accept her unless they have had an opportunity of becoming acquainted with her, while at the same time they are unable to do her any injury.—*John D. McNally, in Farming World.*

(Continued from page 1.)

the street. He can then engage as a laborer, perhaps disband his family or hie away to the border, where, breadless and bedless, they freeze to death in their sod house during the rigors of the first winter. This is no sketch from fancy, but a terrible fact.

Ye men of boundless greed! When will you discover that the chain which you have fastened to the neck of your victim is by the fiat of the Almighty attached also to you, and will drag you and yours down to the same level! When will you learn that He who hears the young ravens when they cry hears also the cry of those whom you have made poorer than ravens? and He will plead their cause with you. Let those who make merchandise of their fellows assuredly know that "their judgment now of a long time lingereth not, and their damnation slumbereth not. But because sentence against an evil work is not executed speedily, therefore, the heart of the sons of men is fully set in them to do evil." As a nation we may learn too late that God is a God of justice and He who for every drop of black man's blood drawn by the oppressor's lash drew one or more of the white man's blood with the sword will certainly in the end see that every dollar filched from the hard earnings of his humble poor is repaid with a terrible interest of agony and retribution. As a nation we must reform or perish for God by his holy prophet says: "But if they will not obey I will utterly pluck up and destroy that nation saith the Lord."

For historical data in the above, see National Suicide and Its Prevention by Prof. O. F. Lumry.

Correspondence.

THE MONEY QUESTION--NO 3

EDITOR KANSAS FARMER:—In treating the subject of interest I expect to advance some ideas that are not concurred in by some otherwise standard authorities, but nevertheless I believe the positions I take in regard to interest can be successfully defended. The meaning formerly applied to the word usury is identical with our word interest as applied to money. Moses the law-giver defines usury as increase—increase of victuals or the increase of money. The word interest was coined probably about the sixteenth century, possibly by Shakespeare. Prior to that time usury meant all increase given for the use of money. The change in the meaning of the word usury has had a material effect on the minds of the world.

Money does not have value within itself, but merely represents a value. It is a creation of law as a medium to facilitate exchanges and a valid tender for payments. There is no conflict upon the uses and functions of money. All reputable authorities are agreed, notwithstanding the erroneous ideas held by so many, the endeavors of the paid attorneys of Shylock and the politicians to divert the true principles of money. Now if money has no value, but merely represents a value, it is evident that interest upon money is something for nothing. It is robbery. The taking of usury was one of the crimes forbidden the children of Israel. The law as laid down by Moses is, "Thou shalt not give him (thy brother) thy money upon usury, nor lend him thy victuals for increase. The detestable practice is denounced in every place but one, where it is mentioned in the Bible. The children of Israel, as they were about to enter the land of Canaan, were granted the privilege of taking usury when dealing with the stranger, but even to the stranger they were forbidden if he was a sojourner with them that he might live with them. Why they were allowed to take usury of the stranger we are not told, but left to form our own conclusions. But it was undoubtedly a war measure, as the children of Israel had a powerful people to subdue in the land of Canaan, and Moses knew it could be more effectually done by usury than by the sword and there was not near the risk to run. England tried to subdue us once by the sword and failed, since that time she has been trying the usury plan on us. Whether she will succeed time only can tell. But if we knew how successful her plans have been I think it would astonish many of us.

Under the Jewish law they were allowed to loan, hoping for as much in return, but Christ said, "For if ye love them which love you, what thanks have ye? for sinners also love those that love them. And if ye do good to them which do good to you, what thanks have ye? for sinners also do even the same. And if ye lend to them of whom ye hope to receive, what thanks have ye?

for sinners also lend to sinners to receive as much again. But love ye your enemies, and do good, and lend, hoping for nothing."—St. Luke vi, 32-35. Now does not this doctrine permeate all the teachings and practice of Christ while on earth? Never but once did Christ use physical force to advance His teachings during His ministry upon earth, and that was when He drove the money-changers from the temple with a scourge of small cords and overthrew the tables and accursed them of making the temple "a den of thieves." Notwithstanding His teachings to the contrary, they have had the boldness to try and torture the parable of the ten talents into favoring the practice of interest, "and have had the brazen effrontery to 'revise' the word 'usury' from the New Testament and substitute the word 'interest,' although the revisers well knew that the original text of the Bible contains no word corresponding to our word 'interest.'" Now if the parable of the nobleman and the talents warrants interest, the parable of the unjust steward warrants fraud, and that of the two debtors warrants the selling of insolvent debtors as slaves. Now Christ never favored fraud or slavery, neither did He usury. And "the mysterious feature in the matter is, how the church and ministry, and those who profess to be the followers of Christ, can uphold and practice this curse that is blighting the civilized world."—Rev. Oglesby.

There may be those out of debt individually who may imagine that the interest on money does not affect them, but if there be such I will endeavor to undeceive them. Take sugar for an example, for perhaps every person uses more or less sugar. We go to our dealer to buy it, who if he is in western Kansas is probably doing business on a capital more or less of which is borrowed at a high rate of interest. In order to meet this interest he must of necessity add enough to the price of sugar to pay it. Then it is shipped in on a railroad possibly mortgaged for all it is worth; here again must be added enough to the freight to pay the interest. If the wholesale house is using borrowed money, they must add enough to their profits to pay their interest. Then the manufacturer must meet his interest, and the grower of the cane must do the same. Then each are subject to taxation which under our present system is largely for interest, so by the time sugar reaches the consumer the price paid is largely augmented by usury. What is true of sugar applies to every other article of commerce. From the swaddling clothes of the infant to the grave clothes of old age does usury levy tribute on nearly everything during life. This monster has grown to such proportions that to-day its relentless fangs are upon every productive interest, and its teeth are clinched in every sod of Columbia's soil.

But few realize the power of interest to steal at long range. It has been computed that a single dime at 5 per cent. compound interest from the birth of Christ to now would amount to over 32,000,000,000 spheres of solid gold of standard fineness, each sphere as large as this earth. Had Captain Newport, at the landing of the colony at Jamestown, placed a single dollar at 10 per cent. interest, by the present time it would amount to over \$180,000,000,000. It is estimated that Jay Gaud is worth \$200,000,000, and that the average rate per cent. paid in the United States is 7. Now suppose he could place it at interest at that rate and fund the interest at the end of each year and keep it in the family for a hundred years, at the end of that time it would amount to more than \$200,000,000,000, or over four times the value of all the property in the United States. It looks to me as though this single statement is enough to convince every thinking person of the danger of the present system of interest. The hold Shylock has upon the industries of the country is appalling. It is now claimed that the debt of the United States amounts to \$35,000,000,000, and to meet this fearful drain of usury labor has to go deeper into debt each year. We are nearing a crisis, and the result is inevitable unless there is a radical change in the financial policy of the government.

Usury engendered by contraction is the crime of the age. It is the great factor that is dividing society and building up the rich aristocracy on the one hand who live in idleness and luxury, while on the other it is reducing honest toil to perpetual drudgery and poverty. Our rich are growing richer and our poor are growing poorer at a rate that is alarming. Dr. Talmage says: "The middle classes are diminishing and we will soon have no middle classes, for all will be very rich or very poor, and the country will be divided between princes and paupers, between palaces and hovels."

Slavery is the inevitable result of poverty,

is admitted by political economists, and Shakespeare says "He that is in debt is a slave," and a greater man than he said "The borrower is servant to the lender." That our financial system if continued will reduce the toilers to a condition little if any better than chattel slavery is evident. Oh! how true were the words of Horace Greeley, that great champion and friend of labor, when he said: "We have stricken the shackles from 4,000,000 of human beings and brought all laborers to a common level, but not so much by elevating the former slaves as by practically reducing the whole population, white and black, to a state of serfdom (low wages and prices). While boasting of our noble deeds we are careful to conceal the ugly fact that by our iniquitous monetary system we have practically nationalized a system of oppression which, though more refined, is only less cruel than the old system of chattel slavery."

To show how the practice of usury was formerly viewed, we will add a few quotations. Augustine says: "If you lend money to a man and expect to receive more than you gave, you are a usurer, and in that respect reprehensible, not praiseworthy." Aristotle: "The practice of receiving usury on money is detestable." St. Chrysostom: "Nothing exceeds in barbarity the modern system of usury." Pliny: "The Roman republic fell at the hands of usury." Ibid: The colossal fortunes which ruined Italy were due to the concentration of estates through usury." Bishop Jewell: "It is a filthy gain and a work of darkness. It is a monster in nature, the overthrow of mighty kingdoms, the destruction of flourishing States, the decay of wealthy cities, the plague of the world and the misery of the people. It is theft, it is the murder of our brethren, it is the curse of God and the curse of the people. This is usury."

What is to be thought of a people which, while boasting of their intelligence, their independence and their civilization, that has allowed this system of robbery to flourish in their midst until it is threatening the very existence of our republic? Can it be that the church has forgotten the teachings of the Bible upon this subject? Is it possible that Christians expect to get to heaven through faith and their fortunes through rascality? Are we the worthy sons of noble sires if we allow this system of oppression to continue? The divine law is, "In the sweat of thy face thou shalt eat bread." But interest on money is a scheme to eat bread in the sweat of some one else's face. It is unchristian in every respect. It is contrary to every known principle of justice, contrary to the laws of nature and a violation of the laws of God.

When the constitution conferred upon Congress the right to coin money and regulate the value thereof and denied to the States the right to issue money, they made it the duty of the government to furnish the money for the people, and the general government should furnish enough to supply all the demands for money at the actual cost of production. Judge Joel Tiffany, who is considered good authority in matters of law, says: "The necessity which requires money as a medium of exchange at all, requires that this public authority should make the supply at least equal to the imperative demand of the public welfare; and the government would be as derelict in omitting this as any other duty to the public." That this duty of the government has been neglected is a sad fact. When we view the financial legislation of our country we are forced to believe that, while the woods are full of politicians, we have no statesmen in either of the old parties. "I pray you let us leave off this usury."—Nehemiah.

Harper, Kas. GEO. T. BAILEY.

Lynch Law.

EDITOR KANSAS FARMER:—As one of the farming class I appeal to the public through the farmers' paper against the barbarous methods of "lynch law." That subject is handled with care by the press, which is either silent or openly laud it. The press is the force above all others that holds the power of moulding public opinion. Witness the case of the murder of Oliphant for the murder of Rodgers in the horrible manner only practiced by savages as related through the press—dragged with a rope to the place of execution where his dead body was hung. The murder of Rodgers was awful, the murder of Oliphant was doubly so.

Lynch law is anarchy. When an individual or collection of individuals, in spite of established law, assume the place of accuser, judge and executioner, they are anarchists, and if they take life which God alone can give, they are murderers.

Lynching is becoming more frequent and

more brutal in detail. We farmers are not anarchists; we uphold law and order. Ardent spirits is not smuggled into the country and sold, gambling dens are scarce there; no houses of ill-fame there, but you inhabitants and authorities in the cities license, permit and hide these and kindred vices which drag down our children with your own to destruction. They don't get there in a day, but the end is sure. Remember you permitted the snares set for their unwary feet, and then you lynch them. Our boys are growing with a distaste for farm life, because under existing conditions few can steer clear of debt after tolling twelve to fourteen, and sometimes sixteen hours per day. Many of them are drifting to your cities where they no longer breathe the pure air of the country. There licensed vice confronts them on all sides. What wonder if many fall and sin against their country's laws—to which and the law of God alone they are amenable. And then you lynch them.

In the name of common humanity, I protest against lynch law and licensed vice, which prepares the subjects. JAY ELL. Constance, Kas.

Shall We Abandon the Old Parties?—No. 2.

EDITOR KANSAS FARMER:—This question is asked and answered, to the satisfaction of the writer undoubtedly, in the editorial columns of the KANSAS FARMER in the issue of July 10. While I heartily endorse many of the sentiments of the article, certain considerations lead me to differ from some of its conclusions; and believing that a fair discussion of any question is always in the interest of truth, I desire to submit a few thoughts in reply.

I desire to make no comment upon that part of the article relating to existing differences of opinion which have hitherto divided the two great political parties, except to question the correctness of the conclusion that these differences present an insuperable objection to harmonious action outside of the old lines. These differences of opinion in relation to "principles and methods" do not interfere with the support of existing parties; in what way may they be expected to interfere with the support of new parties? The FARMER says:

The masses want reform in directions other than those in which the great parties are going, but certain leading questions have controlled the elections, as they always will, and these special reforms which the people want are kept in the background, and will be until the people in non-partisan associations bring them forward and demand their consideration by legislative bodies.

Here is a statement of the whole question in a nut-shell: Certain "leading questions have controlled the elections," but the old parties have failed, after election, to carry out their pledges in dealing with those leading questions. In the language of the FARMER: "In 1884 Democrats, being out, made administrative reform the issue, and won the election. In 1888, being in, they made tariff the issue and were defeated. * * * Subsequent events have shown that it was a change rather than a reform which was secured by the nearly 5,000,000 voters who supported Mr. Cleveland."

I desire to say that the entire country, regardless of party, is anxiously waiting to see if anything more than a change has been secured by the more than 5,000,000 voters who supported Mr. Harrison. The great difficulty with our whole political system is that parties make issues for electioneering purposes with no intention of carrying out reforms in the interest of the masses of the people. Administrative and tariff reform were issues in the campaign of 1884, but we heard of no attempt to carry out these reforms after the election, and no serious discussion of the principles involved until such discussion could be utilized in the interest of party in a subsequent political campaign. This is true of both parties and has been so for years. If then "certain leading questions have controlled our elections," and "special reforms which the people want have been kept in the background," and if those who are elevated to positions of power and of trust in the ranks of the old parties not only continue to ignore those "reforms which the people want," but likewise utterly fail to effect those upon the issue of which they were elected, what hope have we for the future of these parties? The leading issues of political campaigns are created for the occasion, and have served their purpose on the evening of election day.

The people are beginning to learn that their interests are of small consequence in the estimation of professional politicians. Wherever the interests of capital and labor come in conflict it is invariably found that legislation has not failed to meet the necessities of the capitalist. His interests are

never known to suffer by legal restraint. Trusts and combinations for purposes of extortion continue to increase and to flourish, and politicians tell us that legislation is powerless against them. Whenever legislation of this character is attempted, as in case of the inspection laws aimed against the dressed meat combine, the courts declare the acts unconstitutional, and that is the end of the whole matter. With the United States Senate and House of Representatives composed of millionaires and capitalists, stockholders in the very trusts and combinations that are practicing systematic and legalized robbery upon the people, how long will we be likely to wait for relief through legislation? The trouble with both of the old parties is that this class of men, and practically no other class, are party leaders and are sure to fill every official position as long as those parties are tolerated. It is only by the elevation of new men chosen from among the people, men whose interests are identified with the interests of the masses, that we can hope to realize any change for the better; and this certainly cannot be hoped for through adherence to either of the old parties.

Speaking of the numerical strength of the farmers' alliance and its relation to politics, the FARMER says:

It is estimated by persons in position to be well informed, that when the alliance union is effected the grand aggregate membership will be little if any below 4,000,000. But one of the conditions of the union will be that the association will be non-partisan, for that is fundamental among all the bodies that will unite in the great unit."

Aye, non-partisan indeed, but not non-political. One of the great lessons we have to learn in the alliance is the necessity of non-partisanship in politics; and when our great union is perfected, and our great membership enrolled under one common banner, if its power, together with the power of all the labor organizations and kindred interests of the country, shall fail to be hurled with all of its irresistible force into the political arena, in a purely non-partisan spirit and for the common weal, then do I fail to read its lessons aright or correctly apprehend its purposes. When that day shall come and the edict shall go forth for the purification of our State and national legislatures and the judicial and executive departments of State and nation, the men who will be selected as the instruments of this purification will not be chosen from the list of millionaires nor their names be heralded as the standard-bearers of any party except the party of the people. S. M.

From Cheyenne County.

EDITOR KANSAS FARMER:—If the "old-est inhabitant" could see Cheyenne county to-day, I doubt whether he would not cheerfully admit that his opinions of western Kansas were wrong. In the fall of 1885 I received a letter from Senator Ingalls in which he informed me that he had a few years before passed through this county with a team, and from the route taken, passed across the half section of land upon which I am now located and writing this letter. In his letter he expressed grave doubts of our making a success of agricultural pursuits on this prairie, and that it then seemed uninhabitable for man or beast.

What a wonderful transformation would meet his eyes were he here to-day. Tens of thousands of acres of the best of golden grain, the prairie dotted with great fields of corn which in the noonday sun, clear and pure air, like a phantom rises above the horizon and appears to be forests of trees with the darkest of green foliage. In every direction the binders are leveling the grain to the earth, and in its stead rise innumerable shocks of sheaves. The year thus far has been one of great promise for the pioneer settlers. The rains have been numerous, with only a little loss from excess. In the southeast part of the county a small strip of territory was stripped of vegetation on the 19th inst. The hail was unusually severe, the buffalo grass being covered with hail twelve hours after it fell. One peculiar feature of the hail storms in this county is that they follow the same track every year. Can Professor Blake or any one else explain this atmospheric rotation?

For the past twelve hours it has been cool, with a gentle spring-like rain during that period, and now raining. Winter wheat and rye all cut. Many acres of spring wheat, and all the oats, just now ready for the reaper. The threshers reporting wheat as yielding from eighteen to twenty-five bushels per acre; eighteen to twenty bushels of wheat per acre will be our average in Cheyenne county. Nothing has suffered for want of moisture, while a few fields of oats have been hurt with too much rain. Potatoes and all kinds of garden vegetables are very prolific, and the settler who has been

"up and doing" will have well-filled granaries and plenty to eat and sell to the non-producers of the world. A. P. LOWERY.
Bird City, Cheyenne Co., Kas.

Campbell University.

Our first page illustration this week is a fair representation of the Campbell University building. It is a modern building, well arranged and supplied with every convenience, and located amidst most lovely surroundings in the beautiful, cultured and moral town of Holton, Jackson county, this State.

The Campbell University is considered one among the best educational institutions of this State. It is entirely undenominational, and its students are classed among the best of all creeds; in fact it is a school for all lovers of true education and refinement, liberal, modern, progressive and moral. The old is not discarded simply because it is old, nor the new adopted because it is new. The management is in the hands of shrewd, careful, Christian business men, who believe that true education of either sex is better and more harmoniously effected by the mutual stimulus of co-education, and that it means increase of power, and not merely the increase of knowledge; that the mind is a power to be developed, and not a granary to be filled. In the language of Prof. Macdonald, they do not believe that the education of the intellect alone will preserve our liberties; that the knowledge of the fact that six times six are thirty-six will make a student's heart any better or make him a more honest and truthful citizen; but that a complete education means the education of the body, of the mind, and that education which will place one in harmonious relations with God.

More and more are parents realizing the advantages of correct and thorough teaching in the elementary branches, without which no one can ever become scholarly. We are pleased to say that this institution of learning has made a special feature of this department, carefully planned and adapted to the needs of those who cannot take a full course. They aim to develop manhood and womanhood, and exercise great care in looking after the physical, moral and mental health of students. They claim to be unsurpassed in the thoroughness of this department, thus laying a most solid foundation for all future studies.

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The Elementary Teachers' course comprises the studies of the first year of the preparatory course, and a study of methods and school management. The completion of this course will prepare any one for a second-grade certificate.

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The teachers' professional diploma (Bachelor of Didactics) is conferred only on those having completed one of the regular courses of the University, and having carefully studied the science and history of education.

The courses of study for the four regular University courses speak for themselves. The studies selected are eminently practical, and such as will make thinking and cultured men and women.

As it is impossible for the KANSAS FARMER to do justice to this worthy and growing institution in so short an article, we can only add: For further information and catalogue, address

E. J. HOENSEL, President,
Campbell University, Holton, Kas.

Corn-Cutting Machine.

TOPEKA, KAS., July 27, 1889.

KANSAS FARMER CO:—Please say, in answer to inquiry in last week's issue, there is a practical corn-cutting machine, the invention of J. E. Peterson. It is now manufactured by H. McDonald, at Bellefontaine, Ohio. He has a sufficient stock on hand to supply the market. The machine has been indorsed wherever it has been introduced. Any correspondence addressed to the manufacturer, or Trumbull, Reynolds & Allen, Kansas City, Mo., or E. Harrington, Beloit, Kas., will receive attention.

Weather-Crop Bulletin

Of the Kansas weather service in co-operation with the United States Signal Service, for the week ending Saturday, July 27, 1889.

Precipitation.—There has been a decided excess of rain this week over the eastern half of the State, except in the counties bordering the Missouri river, where it is slightly deficient. In the north the excess continues west into Rawlins. Another excess occurs in Scott, Lane and Ness, south through Garfield, Finney, Gray, Haskell, Meade and Clark. Some fine rains have fallen in Trego and Gove. A deficiency occurs from Ellis to Comanche, in the northern portion of Ford, and in the extreme western counties. It is about normal in the western portions of Edwards and Kiowa and eastern portion of Ford. The heaviest rains for the week occurred in the contiguous portions of Lyon, Chase and Greenwood, where over six inches fell, and in the northern half of Ottawa, thence northwest through Mitchell and Jewell, in which belt over six inches fell, reaching seven and one-half inches near Burr Oak, in Jewell.

Temperature and Sunshine.—For the month of July the absolute temperature has been below the normal, on the 23d ranging from 7° to 10° below the normal, while the air has been very moist. The 22d and 26th were the warm days. A deficiency of sunshine exists.

Results.—The benefit to the corn, potato, hay and sorghum crops from the weather conditions this week is unquestioned. In the eastern and generally in the middle divisions the corn is rated at from 100 to 125 per cent. of an average crop, while the cane is nearly abreast with it. The potatoes are turning out unusually large and plentiful, and of the tame grasses a third crop of clover is being harvested in localities. In the western division, in the northern and southern counties the crops are doing very well. In Lane and Ness, where the hot winds of the 16th and 17th apparently injured the cane crop, the recent rains have revived it and it is again growing nicely; here threshing is being vigorously pushed, some of the wheat in Lane weighing as high as sixty-three pounds. In the eastern and middle divisions and northern counties of the western, threshing is generally interfered with by the wet weather, which is injuring grain still in the shock, to some extent. Lightning killed some cattle in Marshall and horses in Clay.

T. B. JENNINGS,
Signal Corps, Asst Director.

Gossip About Stock.

Our friend, Marion Brown, of Nortonville, Kansas, writes as follows: The Black Bess herd is in first-class shape with fifty-two fine pigs sporting on fine clover pasture with a daily dessert of milk. Can sell first-class pigs at former prices, guaranteeing satisfaction and safe arrival at destination in good condition. Have a good report from every pig shipped this season, and the KANSAS FARMER made nearly all the sales. Lady Duffield (3604), late of Butler county, Ohio, has eight fine pigs that are sure to make their mark in the Poland-China world.

The American Southdown Association offers as a special prize at the American Fat Stock Show, Chicago, November 12-21, a solid silver cup costing \$50 for the best Southdown wether on the following conditions: First—All competing animals to be one and under two years old; to be pure bred, the progeny of recorded sires and dams, and to have been bred by and at the time of exhibition, to be the property of the exhibitor. Second—The exhibitor to furnish at the time of the entry a written statement, verified by affidavit, giving the pedigree, age, weight, date and manner of feeding, and other important facts connected with the management of each animal during the year. Third—Competition shall be open to all, but no award shall be made except there be two or more competitors. Fourth—The party securing the prize may hold it in trust until the opening day of the first succeeding Fat Stock Show, when it shall be placed in the hands of the American Southdown Association to be again competed for. When taken the second time by the same exhibitor, the prize shall then become his actual property.

Book Notices.

THE FORUM.—With the August number *The Forum* completes its seventh volume. The leading article in this number is by Mr. John G. Carlisle, Speaker of the House of Representatives, on "The Republican Program." He explains and defends the Cleveland administration especially as regards the expenditures of public money, and predicts that the public patience will be exhausted with the extravagance of the present administration.

Dyspepsia is the bane

of the present generation. It is for its cure and its attendants, Sick Headache, Constipation and Piles, that

Tutt's Pills

have become so famous. They act speedily and gently on the digestive organs, giving them tone and vigor to assimilate food. No griping or nausea.

Sold Everywhere.

Office, 44 Murray St., New York.

before it closes. The article contains a balance sheet showing the expenditures of the Cleveland administration. In an article on "Prohibition and License," Senator Ingalls, of Kansas, concludes that license of the liquor traffic has in the main been a failure and he shows that prohibition does prohibit in Kansas. The article contains a review of a long series of experiments with both systems.

PRINTERS' INK.—There is a paper published at New York that is certainly a unique publication. It is called *Printers' Ink*, and its object is to teach its readers the art of successful advertising. Millions of dollars are annually spent in this country in advertising, much of which fails to bring satisfactory returns, because the advertising was improperly done. Perhaps the advertisement was badly written, or lacked conspicuousness; or may be it was inserted in the wrong papers, or at an unreasonable time. *Printers' Ink* aids the inexperienced advertiser by showing him how to avoid such errors, and by teaching him how to advertise so as to get the greatest returns for the least expenditure, which is the basis of successful advertising. Geo. P. Howell & Co., Publishers, New York city.

Inquiries Answered.

GRASS.—A friend sends us a sample of grass which is growing extensively in Greeley county and asks what it is. We are satisfied it is one variety of Grama grass, botanical name *Bouteloua oligostachya*. We sent a sample to the Agricultural college for identification.

PICKLED PEARS.—Make a sirup of three pints of vinegar, five pounds of sugar, one-half ounce of ground cinnamon tied in a bag, and boiled all together. Then put in the pears and cook slowly. Allow seven pounds of fruit after it is peeled. If your pears are large, cut in halves. Cook until you can put a straw through them easily, then skim out and put in cans or small stone jars. Cook the sirup a few minutes longer and pour over them.

MANGOES.—Take two dozen large green peppers, and cut off one inch from the top, take out the seeds and throw them away, put the peppers in salt brine in a jar and leave two days. Chop a head of nice white cabbage and add three tablespoonfuls of white mustard seed, a little salt and a teaspoon of grated horseradish; stir well together, and fill the peppers. Sew the tops on and put in a jar and pour hot vinegar over and cover with horseradish leaves and a plate to keep them covered. When cool tie up and let them stand four weeks before using.

PICKLED CUCUMBERS.—To one peck cucumbers, take one-half pint of salt and put it into boiling water, enough to cover the cucumbers; pour it on them hot and let them stand in the jar twenty-four hours; pour the brine off and heat and pour over them again. Let them stand a day longer, then pour boiling water over them and let stand twenty-four hours. If plump they are ready to be put in vinegar, if shriveled pour on boiling water again; then put in jars, add small pieces of horseradish root. Put in small bags cloves and black pepper and add one to each jar. Fill up the jars with boiling vinegar and seal or tie them up. If sealed they will keep a year.

Topeka Weather Report

For week ending Saturday, July 27, 1889:

Date.	Thermometer.		Rainfall.
	Max.	Min.	
July 21.....	90.2	63.0	.05
" 22.....	90.0	68.0	.83
" 23.....	74.8	63.2	2.30
" 24.....	72.2	58.0	.05
" 25.....	83.8	65.0	..
" 26.....	90.3	67.8	..
" 27.....	86.0	60.0	..

An authority on poultry-keeping says that buckwheat is stimulating in its nature, and therefore especially valuable for feeding laying hens and young chickens. It is largely used in France for fowls when they are being fattened, but is then mixed with fat and milk, which, for the purpose named, impart the elements in which it is wanting. It gives a good color to the flesh, and is in every way one of the most suitable foods for poultry.

WEAK KIDNEYS BACKACHE

Weak and Painful Kidneys, Aching Sides, Back, and Chest, Rheumatic, Sciatic, Sharp, and Muscular Pains, relieved in one minute by the CUTICURA ANTI-PAIN PLASTER. The first instantaneous pain-killing strengthening plaster. 25 cts.; five for \$1. At druggists, or of J. OTTER DRUG AND CHEMICAL CO., BOSTON.

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.

Will the Robin Sing Then?

Will the robin sing in that land,
That land so fair and so far,
That lies, as our soul fondly dreams,
In the depths of the uttermost star?

Will the violet bloom in that land,
And the mosses so sweet and so shy,
All the dear common things that we love,
In the dim, distant deeps of the sky?

Will the children sing in that land,
All the sweet, simple songs of the earth,
And shall we rejoice and be glad
In their music and frolicsome mirth?

Oh! will there be friends in that land,
Friends who love and rejoice in our love,
Will they look, will they speak, will they smile,
Like our own 'mid the strangeness above?

Oh! shall we have homes in that land,
To return to where'er we may roam?
Oh! the heart would be lonely and sad
Even in heaven if we had not a home.

I love not the new and the strange,
But a friend and the clasp of his hand,
Oh! I would that my spirit could know
That the robin will sing in that land.

—Hattie Tyng Griswold, in *Woman's Magazine*.

Beneath low hills, in the broad intervals
Through which at will our Indian rivulet
Winds mindrill still of Sannup and of squaw,
Whose pipe and arrow oft the plow unburies,
Here, in pine houses, built of new-fallen trees,
Supplanted of the tribe, the farmers dwell.
—Emerson.

Let There Be Confidence Between Mother and Daughter.

We read that the foreigner, on coming to this country, is amazed at the relation of the American mother and daughter, the attitude of the latter being so entirely different from that he has seen in any other civilized land. If we have never considered the subject before, we look about us and see that the charge is true, for neither in our homes nor in those of our friends do we find that the American girl regards her mother's word as the ultimatum; to be quite fair, we are obliged to acknowledge that the opposite is the case, and when meeting a daughter entirely obedient, deferring to her parent and, above all, reverencing her opinion, we are conscious of a feeling of surprise. In the average American home the mother, perforce, remains in the background, the ambitious and educated daughter bringing a new atmosphere about her which intimidates and often oppresses the less educated parent to such a degree that she usually retires from the drawing-room into her own private room, where a slip of grammar is not a serious matter and the conversation consists of some lighter topic than evolution and the poetry of Browning.

THE MANEUVERING MOTHER.

In the home of fashion and culture the mother has her set of acquaintances and particular fads, and is often so wearied with the demands upon her time as to leave little or no leisure to look with close attention upon the coming and going of her young daughter.

She, poor child, has made her debut and has been launched into the gay world by a grand ball; cards have been sent to all desirable people, wealth and social distinction have united in making her welcome to her share in the great scramble called "society," and now she is left to do her best, to hold her own, for she will meet many who in their eagerness for the race will push and jostle her hitherto innocent notion out of sight, and teach her that all is fair in the social war, where victory implies a rich marriage or such prestige as will open doors closed but to the favored few.

"Have I ever heard of that detestable creature called the maneuvering mother?"
O, yes, and I astonish my interlocutor by replying: "I respect her more than the careless mother, for the maneuverer betrays an interest and care for her young, and in a measure looks out for her welfare and compels the child to feel that she is still held accountable to some specified authority. My young countrywoman, feeling that she is her own mistress and a law unto herself, steps out with the freedom of a rapid pacer, who, being free of check-rein, gets off the track before he knows it, and when 'time' is called is with his jockey quite out of hearing."

It is this question of calling time with which I wish to deal. Who is to call time? How often it is needed, those who go to balls and large assemblages of any sort will agree.

My young countrywoman, as sweet as a rose—for who can compare with the American girl in her early bloom?—comes to the

ball with her partner, a young fellow. Where is her mother? Mother is at home or engaged elsewhere; perhaps her name has been mentioned to one of the patronesses, but this is not the rule, and so mademoiselle has it all her own way; she may sit all evening under a shading palm, discussing sweet nothings, or she may dance with one man simply because his step and hers agree, or, if one of the quieter sort, she may remain at the wall, sad and forlorn.

MUCH SORROW MAY BE AVOIDED.

This carries us on to the more serious occupation of courtship. When a young man visits a young lady, I hold that some of her family should at least be seen as inhabiting the same house; if he is only an occasional caller, or suitor, the necessity is equal; where there is a parlor and library adjoining why may not the parents sit in the next room, an indorsement for their daughter, their age and experience making a proper background for her youth and innocence?

No good man will shrink from a girl because she is an object of proper solicitude on the part of her natural care-takers, and he will feel that more honor is due her, from the fact that she has been jealously guarded from any evil during the period of her girlhood.

Then the parents would become acquainted with their daughter's friends, and have some knowledge of the men who frequent their house, instead of delaying the introduction, as is sometimes the case, until after the engagement, when it is too late to make objections and the contract must stand, come weal or woe, and in how many cases "woe" is the result we have but to turn to the register for divorces to learn.

Much sorrow and trouble might be avoided by perfect confidence being observed between mother and daughter—protecting love from the one, tender dependence from the other.

The parent living her youth over again in the fresh impulsiveness of her child, which recalls to her memory the dear old days when her step was light and her heart free from care. The daughter, reading in the mother's eye that sympathy and tenderness which no one on earth but a mother can give, and, guided by the larger experience, learns to shun so many of the pitfalls into which the unguarded easily fall!

We have homes for foundlings, homes for drunkards, homes for old men and women—all excellent in their several ways, and no one more grateful for them than I. But let us beware of a career like Mrs. Jelleby's in bestowing our attention upon our Booriboola Gha we come to neglect our nearest duty and so leave our young daughters to pursue their own ways, forgetful of the fact that from the time of their emancipation from the nursery they need a mother's watchfulness, whether in the ball room, the theater, or the house.

If the mother is ill and unable to go about, let the nearest relative be delegated to take charge; anything is better than the custom—now almost a common one—of young girls going into public unattended, thereby bringing upon us the just criticism that our guardians are too lax, our children too progressive, and our manners too free.—*Felicia Hall, in Ladies' Home Journal*.

Happy Husbands.

It is a man's own fault if he is unhappy with his wife, in nine cases out of ten. It is a very exceptional woman who will not be all she can be to an attentive husband, and a more exceptional one will not be very disagreeable if she finds herself willfully neglected. It would be very easy to hate a man, who, having bound a woman to him, made no effort to make her happy; hard not to love one who was constant and tender; and when a woman loves she always tries to please. The great men of this world have often been wretched in their domestic relations, while mean and common men have been exceedingly happy.

The reason is very plain. Absorbed in themselves, those who desired the world's applause were careless of the little world at home, while those who had none of that egotism strove to keep the hearts that were their own, and were happy in their tenderness. No woman will love a man better for being renowned or prominent. Though he be the first among men, she will only be prouder, not fonder; and if she loses him through this renown, as is often the case, she will not even be proud. But give her love, appreciation, kindness, and there is no sacrifice she would not make for his content and comfort. The man who loves her well is her hero and her king. No less a hero to her though he is not one to any other; no less a king though his only kingdom is her heart and home.—*Helen Fletcher, in Herald of Health*.

Ventilation.

Perhaps few who have heard of the "Black Hole of Calcutta" know the terrible facts that have rendered the place famous and made it the synonym of all that is to be dreaded from foul air and overcrowding.

At 8 o'clock on the evening of June 20, 1756, 146 prisoners, officers and men, black and white, and of different nationalities, were thrust into a room eighteen feet square—with two windows on one of the four sides, heavily barred with iron—giving to each inmate forty cubic feet of space. In ten hours 123 were found dead—only twenty-three being alive!

Another instance is where, in 1742, the high constable of Westminster, London, committed twenty-eight persons to prison, where they were thrust by the keeper into a hole six feet square and five feet ten inches high—the windows being close shut. In a very short time four of the inmates were suffocated. These facts show the poisonous effects of the human breath—or of respired air. Professor Brown-Séquard has recently made some experiments that are not only highly interesting, but show why the expired air of man and animals is so deadly. From the condensed vapor of the expired air he produced a liquid so poisonous that when injected beneath the skin of rabbits it produced almost instant death. This poison he found to be not a microbe, but an alkaloid. His conclusions are that the expired air of all animals contains a poison more fatal than carbonic acid.

It is well for the people to understand these facts. They cry aloud for better ventilation and purer air—for less crowding in home and church, and hall and school room.—*Board of Health Bulletin (Iowa)*.

Notes and Recipes.

The bottom of an old keg or butter firkin makes a good mat to set your kettle on. Have one or two hanging near the dish table. Make a hole and put a string through to hang it by.

To set delicate colors in embroidered handkerchiefs, soak them ten minutes previous to washing in a pail of tepid water, in which a dessertspoonful of turpentine has been well stirred.

Finger marks may be removed from varnished furniture by the use of a little sweet oil upon a soft rag. Patient rubbing with chloroform will remove paint from black silk or any other material.

Stains of vegetable colors, fruit, wine and red ink, may be removed from white goods by sulphur fumes. On colored cottons and woollens, wash with lukewarm soap lye, or ammonia; silk the same, but more cautiously.

For making hair-oil that is not injurious to the hair: Castor oil, one-half pint; 95 per cent. alcohol, one-half pint; tincture cantharides, one-half ounce; oil of bergamot, two drachms. Color the mixture a pale pink with alk-net root.

One of the most common causes of stomach and bowel troubles in children is the custom of feeding very young children potatoes, rice and bread before their digestive apparatus is capable of digesting these starchy ingredients.

To take creases out of drawing paper or engravings lay the paper or engraving face downward on a sheet of smooth, unsized white paper, cover it with another sheet of the same, very slightly damp, and iron with a moderately warm flatiron.

Cucumber Catsup.—For cucumber catsup grate the cucumbers and draw the water off through a colander. Chop half a dozen onions very fine and add them to a gallon of the prepared cucumbers. Add vinegar, Cayenne pepper, salt and horseradish to taste, and seal up without cooking.

Apple Jelly.—To make nice apple jelly, use fair sour apples. Slice them, skins, seeds and all, and simmer with a little water till well cooked and soft. Then strain through a cloth, add a pound of sugar to a pint of juice, boil a few minutes, skimming till clear; then pour into glasses and cover when cold.

Peach Preserves.—To make peach preserves with a real peach flavor, the peaches should be ripe but not at all soft. Allow about one pound of sugar to three of peaches. Put the sugar and a little water into the preserving kettle, and when it stews clear put in the peaches, cooking only from three to six pounds at a time. When they are clear take them up into jars, fill up with sirup and seal.

Sweet Cucumber Pickle.—Pare the cucumbers, take out the seeds, cut in rings an inch thick, then simmer in weak alum water an hour; take them out, drain and lay carefully in a jar. Then prepare a sirup of one

gallon of good vinegar, two large cups of sugar, one ounce of cinnamon, one ounce of ginger root; pour hot over the pickles. This is a delightful pickle and will keep, sealed up, a long time. Watermelon rinds can be so prepared.

It is reported of the celebrated English physician, Dr. Field, that at a time when diphtheria was raging, a few years ago, he used nothing but common flour of sulphur, a teaspoonful mixed with the finger in a wineglassful of water and given as a gargle, and in ten minutes the patient was out of danger. He never lost a case of this disease. Sulphur destroys the fungus in man and beast. In extreme cases, where a gargle could not be used, dry sulphur was blown down the throat through a quill, and sulphur burned in a shovel so that the patient could inhale it.

Powerful Drugs.

A score of years ago drugs were given in quite crude forms. The pills then used were large enough to excite apprehension of suffocation in patients obliged to take them. Until quite recently all medicines have contained more or less extraneous matter, which added bulk but not virtue to them. Gradually the chemist eliminated such unnecessary matter, until at last drugs were furnished physicians in nearly, if not quite, pure form. But he did not stop there. He next applied himself to extracting the active principles of medicinal agents, and now nearly all the powerful remedies are used in what we might term highly concentrated form. Aconite furnishes us with a ready illustration of this great change. The powdered leaves were once given in two grain doses, and the extract of the same in one-half grain doses.

At the present time we have aconitine, the real virtue of aconite in highly concentrated form, and the dose of that is from 1-400ths to 1-200ths of a grain. Of course, a pill of aconitine containing a full dose might be made exceedingly minute, and as a matter of fact it is put up in very small granules. The inference to be drawn is that, in taking medicine, one must be exceedingly careful to follow the physician's directions "to the letter." Because the pills are small, one must not assume that they can be taken recklessly. A man not long ago deceived himself in that way with most disastrous results. His physician ordered some ten granules, scarcely larger than pin-heads, which contained a very powerful drug. He was cautioned to take only one, three times a day; but, thinking to expedite matters, he took all of them at one dose and joined the "silent majority."—*Boston Herald*.

A Story of Two Novels.

Despite all that one can say or write against novel writing, I suppose the fictionists will go on and write. But the fact remains, nevertheless, that the average novel does not pay the author for his trouble, and often does not cover the typewriter's bill. I know of two recent novels upon which each of the authors spent the best part of a year in writing and revising. Both novels are, according to the popular acceptance of the term, successful—that is, they have been widely written about, paragraphed in the press from one end of the country to another, English editions have been printed of each, and to every literary person the names of both novels and authors are thoroughly familiar. Now, what have the authors received in hard cash for their year's work? I will tell you exactly. Of one 1,700 copies were sold. No royalty was paid upon the first thousand to cover manufacture, etc., and upon the remaining 700 copies the author received the regular 10 per cent. The book sold for \$1. The net revenue to the author was, therefore, \$70. His typewriter's bill was \$61.50. Net profit, \$8.50, and the book has stopped selling. The other author was a trifle more fortunate in that his novel reached a sale of 2,000, all but five copies. Like the first, he received a 10 per cent. royalty only after the first thousand copies. Unfortunately, he bought so many copies of his own book for friends, that when his publisher's statement came, it showed a credit in his favor of just \$39.50. Had he typewritten his manuscript, the novel would have thrown him into debt! And these are but two of a score of instances within my knowledge that I could cite. They are sufficient, however, for budding authors who see visions of fame and fortune between the lines of their manuscripts to ponder over. Fame they may get, perhaps; fortune, a very small one.—*Ex.*

Mrs. Jones hasn't a gray hair in her head and is over 50. She looks as young as her daughter. The secret of it is, that she uses only Hall's Hair Renewer.

BROWN'S PILLS act like magic on a weak stomach.

The Young Folks.

The Locusts' Song.

Beneath the blue of summer skies,
The mountain land in splendor lies,
So rich with yellowing fields of wheat,
With billowy pastures, clover sweet;
So fair, while o'er each cottage home
Or red, or white, the roses foam,
And in cascades of fragrance pour
Their lavish life at every door.

The robin sings at night and morn,
And clear above the growing corn,
In swift-dropped phrases, now and then
Are told the loves of thrush and wren.
Ere long the deepening dusk will bid
Awake the pensive katydid,
And echo catch from vale and hill
The sorrow of the whip-poor-will.

But now, high noon on wood and way,
And stillness, broken by a sound
That weaves within the calm profound
A rune enchanted. Spirits strange,
The bright familiar present change
Till, in the murmured monotone,
We hear an alien age and zone.

Not of to-day, nor yesterday,
The odors which around us play,
The lotus swoons within our clasp,
A near us glides the lissome asp,
The winds moan o'er the Libyan sands,
The Sphinx in steadfast silence stands,
And past us, slow and stately, file
The mighty monarchs of the Nile.

Are there, who call the locusts' cry
A mere portent of sultry sky,
Of lightning flash, or thunder gloom,
Of dreary drought, and fading bloom?
To them the easy plenitude
Of satisfaction in the mood,
Which reads alone, on sea or land,
What little thought may understand.

For, when like elfin harps astir
We list the locusts' vibrant whirr,
Untired and patient, low or loud,
And fairy visions hither crowd,
We are not vexed, although we hear
More than is breathed in every ear,
Nor sad, that dreamy fancies throng
Around us at the locusts' song.

—Margaret E. Sangster.

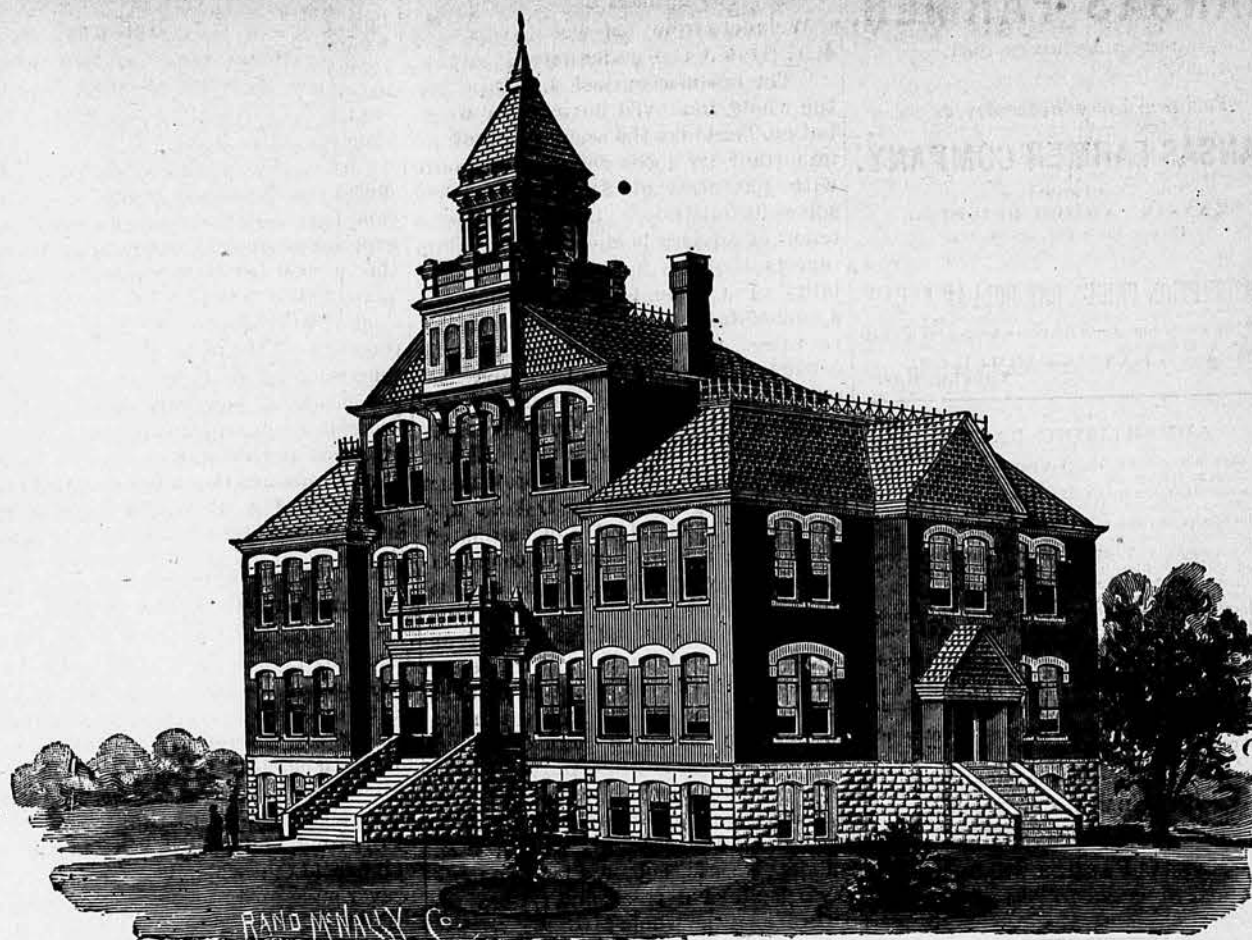
MEANS OF PRODUCING COLD.

Concerning methods of producing cold, there are three of which we shall here speak. The first is the well-known one of imparting cold to water by dissolving in it certain substances, of which there are none which in our estimation can vie with nitrate of ammonia for general efficiency and undoubted convenience. In addition to this, it is also the most economical of all saline bodies, as it is not wasted during use, but may be employed over and over again. If a thermometer is placed in a tumbler of water, at say 50 deg. Fah., and some crushed crystals of the nitrate of ammonia are then thrown into the water, the column of mercury will be found to descend with singular rapidity until it reaches 26 to 27 degs. below the freezing point, or about 5 deg. Fah. There are several mixtures which can be made by which a much greater degree of cold can be obtained, but these when once used cannot be used again. But with the ammonium nitrate it merely suffices to pour the solution out into an evaporating dish after being done with, and having driven the water off by heat, or otherwise, place the crystals into a bottle, when they are ready for future use in a similar way.

We here give an illustration of one way by which the knowledge of the above-mentioned fact may be serviceable. We had once some gelatine plates to develop in a semi-tropical country at a time when the heat was intense and the water so warm as to endanger the film during development. We placed the developing solution in a japanned tin developing tray, and placed that tray inside of another slightly larger, and in the bottom of which we scattered a few crystals of nitrate of ammonia, afterward pouring in a little water. This reduced the previously high temperature of the developer to one that could not possibly affect the too soluble gelatine of which the film was composed.

A second system for the production of cold consists in the compression of air. Thus compressed, and forced into a reservoir, it becomes heated, as every one knows who is familiar with the working of an air-gun. But when cooled down again, before it is suffered to escape, its expansion is attended by great cold. "If when compressed it is allowed to cool down to the ordinary temperature and then to escape, it will be cooled below that temperature just as much as it was heated by compression. Thus, if in being compressed it had been heated 100 deg., say from 60 deg. to 160 deg., and then allowed to cool to 60 deg., on escaping it will be cooled 100 deg. below 60 deg., or to 40 deg. below zero, which is the temperature at which mercury freezes." This is the principle of the cold air chambers now so extensively employed on shipboard for the transport of frozen provisions from Australia and New Zealand.

The ingenious photographer who dreads the preparation of gelatine plates in hot



THOROUGH PRACTICAL CENTRAL NORMAL COLLEGE PROGRESSIVE ECONOMICAL

DEPARTMENTS:

Preparatory, Business, Teachers', Scientific, Classical, Penmanship, Oratorical, Musical, Fine Arts, Shorthand, Typewriting, and Preparatory Law.

CALENDAR--FALL TERM begins September 3; WINTER TERM, November 12, 1889.

EXPENSES.--Tuition, one term, \$10; two terms, \$19; three terms, \$27; four terms, \$35. No incidental fees.

Nice rooms, well furnished and cared for, 40 cents to 62½ cen's per week, each; unfurnished 20 to 40 cents. Only two in one room. Good board, \$1.75 to \$2.00. Tuition and board for one year, forty weeks, if paid in advance, \$100. This furnishes board at the same tables with the President and his family, and will be first-class in every respect. Self-boarding and room, \$1.00 to \$1.50 per week. Books can be rented at 10 cents per term. All books can be procured here at greatly reduced rates, in many cases little more than one-half the regular retail price. Students should bring all their books with them. We guarantee everything as represented, and pay all above rates given if accommodations are not furnished. Information cheerfully and freely given. Address

WM. STRYKER, PRESIDENT, GREAT BEND, KANSAS.

A FEW REASONS FOR ATTENDING THE CENTRAL NORMAL COLLEGE.

1. Students can enter at any time, without examination, and find classes to suit them. The courses of study are elective.
2. Students are under the best Christian influence, and in one of the healthiest localities in the West.
3. The best methods of teaching; enthusiasm and love of work aroused in every exercise.
4. We have a large and well-arranged building, and are well supplied with library, apparatus, cabinets, etc.
5. Ladies and gentlemen, rich and poor, received on equal terms, and made to feel at home.
6. An excellent course in reading, penmanship, vocal music, shorthand, drawing, or German, free to all students.
7. Its growth has been the most rapid, and it is now the largest school in central or western Kansas.

8. Strong classes in all regular courses; a training class for teachers.
9. We have the LONGEST, MOST THOROUGH and COMPLETE courses of study of any normal school in the State.
10. A large faculty. None but able, experienced teachers employed. A specialist in charge of each department.
11. Students can remain as long as they wish, and return at any time, taking up the work where they left it, and complete a course.
12. Our business, shorthand and typewriting courses are as thorough and practical as any, and at much less expense.
13. The class of pupils is the very best. All the associations and influences of the school are of an elevating character. Merit is the only watchword. A better and higher education for all is the true motto.

weather will in this discover the means by which he may be enabled to keep his coating room at 50 deg. or 60 deg. during the most sultry months of the summer, aided by a small gas or petroleum engine. We have devised a most perfect means of effecting this, by manual power if desired, and that only applied at occasional intervals, but a detailed description of it would be out of place in this article.

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as previously hinted, we have seen, and that, too, in a warm room, the solidification of mercury in the vessel into which the end of the tube was dipped. One end of this tube may be called the boiler, and the other the refrigerator, and a condition of success is that the connecting pipe between the two shall be kept cool while the boiler is being heated, so that all gas passing to the refrigerator may enter it in a comparatively cool state. When this is used on a large scale, it suffices that a fire be applied for two or three hours once a day, by which the refrigeration is rendered singularly perfect. There are minor mechanical details connected with this apparatus, but the general principle is as above stated.—*British Journal of Photography.*

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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.

Will the Robin Sing Then?

Will the robin sing in that land,
That land so fair and so far,
That lies, as our soul fondly dreams,
In the depths of the uttermost star?

Will the violet bloom in that land,
And the mosses so sweet and so shy,
All the dear common things that we love,
In the dim, distant deeps of the sky?

Will the children sing in that land,
All the sweet, simple songs of the earth,
And shall we rejoice and be glad
In their music and frolicsome mirth?

Oh! will there be friends in that land,
Friends who love and rejoice in our love,
Will they look, will they speak, will they smile,
Like our own 'mid the strangeness above?

Oh! shall we have homes in that land,
To return to where'er we may roam?
Oh! the heart would be lonely and sad
E'en in heaven if we had not a home.

I love not the new and the strange,
But a friend and the clasp of his hand,
Oh! I would that my spirit could know
That the robin will sing in that land.

—Hattie Tyng Griswold, in *Woman's Magazine*.

Beneath low hills, in the broad intervals
Through which at will our Indian rivulet
Winds mindfull still of Sannup and of squaw,
Whose pipe and arrow off the plow unburies,
Here, in pine houses, built of new-fallen trees,
Supplanted of the tribe, the farmers dwell.
—Emerson.

Let There Be Confidence Between Mother and Daughter.

We read that the foreigner, on coming to this country, is amazed at the relation of the American mother and daughter, the attitude of the latter being so entirely different from that he has seen in any other civilized land. If we have never considered the subject before, we look about us and see that the charge is true, for neither in our homes nor in those of our friends do we find that the American girl regards her mother's word as the ultimatum; to be quite fair, we are obliged to acknowledge that the opposite is the case, and when meeting a daughter entirely obedient, deferring to her parent and, above all, reverencing her opinion, we are conscious of a feeling of surprise. In the average American home the mother, perforce, remains in the background, the ambitious and educated daughter bringing a new atmosphere about her which intimidates and often oppresses the less educated parent to such a degree that she usually retires from the drawing-room into her own private room, where a slip of grammar is not a serious matter and the conversation consists of some lighter topic than evolution and the poetry of Browning.

THE MANEUVERING MOTHER.

In the home of fashion and culture the mother has her set of acquaintances and particular fads, and is often so wearied with the demands upon her time as to leave little or no leisure to look with close attention upon the coming and going of her young daughter.

She, poor child, has made her debut and has been launched into the gay world by a grand ball; cards have been sent to all desirable people, wealth and social distinction have united in making her welcome to her share in the great scramble called "society," and now she is left to do her best, to hold her own, for she will meet many who in their eagerness for the race will push and jostle her hitherto innocent notion out of sight, and teach her that all is fair in the social war, where victory implies a rich marriage or such prestige as will open doors closed but to the favored few.

"Have I ever heard of that detestable creature called the maneuvering mother?" O, yes, and I astonish my interlocutor by replying: "I respect her more than the careless mother, for the maneuverer betrays an interest and care for her young, and in a measure looks out for her welfare and compels the child to feel that she is still held accountable to some specified authority. My young countrywoman, feeling that she is her own mistress and a law unto herself, steps out with the freedom of a rapid pacer, who, being free of check-rein, gets off the track before he knows it, and when 'time' is called is with his jockey quite out of hearing."

It is this question of calling time with which I wish to deal. Who is to call time? How often it is needed, those who go to balls and large assemblages of any sort will agree.

My young countrywoman, as sweet as a rose—for who can compare with the American girl in her early bloom?—comes to the

ball with her partner, a young fellow. Where is her matron? Mother is at home or engaged elsewhere; perhaps her name has been mentioned to one of the patronesses, but this is not the rule, and so mademoiselle has it all her own way; she may sit all evening under a shading palm, discussing sweet nothings, or she may dance with one man simply because his step and hers agree, or, if one of the quieter sort, she may remain at the wall, sad and forlorn.

MUCH SORROW MAY BE AVOIDED.

This carries us on to the more serious occupation of courtship. When a young man visits a young lady, I hold that some of her family should at least be seen as inhabiting the same house; if he is only an occasional caller, or suitor, the necessity is equal; where there is a parlor and library adjoining why may not the parents sit in the next room, an indorsement for their daughter, their age and experience making a proper background for her youth and innocence?

No good man will shrink from a girl because she is an object of proper solicitude on the part of her natural care-takers, and he will feel that more honor is due her, from the fact that she has been jealously guarded from any evil during the period of her girlhood.

Then the parents would become acquainted with their daughter's friends, and have some knowledge of the men who frequent their house, instead of delaying the introduction, as is sometimes the case, until after the engagement, when it is too late to make objections and the contract must stand, come weal or woe, and in how many cases "woe" is the result we have but to turn to the register for divorces to learn.

Much sorrow and trouble might be avoided by perfect confidence being observed between mother and daughter—protecting love from the one, tender dependence from the other.

The parent living her youth over again in the fresh impulsiveness of her child, which recalls to her memory the dear old days when her step was light and her heart free from care. The daughter, reading in the mother's eye that sympathy and tenderness which no one on earth but a mother can give, and, guided by the larger experience, learns to shun so many of the pitfalls into which the unguarded easily fall!

We have homes for foundlings, homes for drunkards, homes for old men and women—all excellent in their several ways, and no one more grateful for them than I. But let us beware of a career like Mrs. Jelleby lest in bestowing our attention upon our Booriboola Gha we come to neglect our nearest duty and so leave our young daughters to pursue their own ways, forgetful of the fact that from the time of their emancipation from the nursery they need a mother's watchfulness, whether in the ball room, the theater, or the house.

If the mother is ill and unable to go about, let the nearest relative be delegated to take charge; anything is better than the custom—now almost a common one—of young girls going into public unattended, thereby bringing upon us the just criticism that our guardians are too lax, our children too progressive, and our manners too free.—*Felicia Hall, in Ladies' Home Journal*.

Happy Husbands.

It is a man's own fault if he is unhappy with his wife, in nine cases out of ten. It is a very exceptional woman who will not be all she can be to an attentive husband, and a more exceptional one will not be very disagreeable if she finds herself willfully neglected. It would be very easy to hate a man, who, having bound a woman to him, made no effort to make her happy; hard not to love one who was constant and tender; and when a woman loves she always tries to please. The great men of this world have often been wretched in their domestic relations, while mean and common men have been exceedingly happy.

The reason is very plain. Absorbed in themselves, those who desired the world's applause were careless of the little world at home, while those who had none of that egotism strove to keep the hearts that were their own, and were happy in their tenderness. No woman will love a man better for being renowned or prominent. Though he be the first among men, she will only be prouder, not fonder; and if she loses him through this renown, as is often the case, she will not even be proud. But give her love, appreciation, kindness, and there is no sacrifice she would not make for his content and comfort. The man who loves her well is her hero and her king. No less a hero to her though he is not one to any other; no less a king though his only kingdom is her heart and home.—*Helen Fletcher, in Herald of Health*

Ventilation.

Perhaps few who have heard of the "Black Hole of Calcutta" know the terrible facts that have rendered the place famous and made it the synonym of all that is to be dreaded from foul air and overcrowding.

At 8 o'clock on the evening of June 20, 1756, 146 prisoners, officers and men, black and white, and of different nationalities, were thrust into a room eighteen feet square—with two windows on one of the four sides, heavily barred with iron—giving to each inmate forty cubic feet of space. In ten hours 123 were found dead—only twenty-three being alive!

Another instance is where, in 1742, the high constable of Westminster, London, committed twenty eight persons to prison, where they were thrust by the keeper into a hole six feet square and five feet ten inches high—the windows being close shut. In a very short time four of the inmates were suffocated. These facts show the poisonous effects of the human breath—or of respired air. Professor Brown-Séquard has recently made some experiments that are not only highly interesting, but show why the expired air of man and animals is so deadly. From the condensed vapor of the expired air he produced a liquid so poisonous that when injected beneath the skin of rabbits it produced almost instant death. This poison he found to be not a microbe, but an alkaloid. His conclusions are that the expired air of all animals contains a poison more fatal than carbonic acid.

It is well for the people to understand these facts. They cry aloud for better ventilation and purer air—for less crowding in home and church, and hall and school room.—*Board of Health Bulletin (Iowa)*.

Notes and Recipes.

The bottom of an old keg or butter firkin makes a good mat to set your kettle on. Have one or two hanging near the dish table. Make a hole and put a string through to hang it by.

To set delicate colors in embroidered handkerchiefs, soak them ten minutes previous to washing in a pail of tepid water, in which a dessertspoonful of turpentine has been well stirred.

Finger marks may be removed from varnished furniture by the use of a little sweet oil upon a soft rag. Patient rubbing with chloroform will remove paint from black silk or any other material.

Stains of vegetable colors, fruit, wine and red ink, may be removed from white goods by sulphur fumes. On colored cottons and woollens, wash with lukewarm soap lye, or ammonia; silk the same, but more cautiously.

For making hair-oil that is not injurious to the hair: Castor oil, one-half pint; 95 per cent. alcohol, one-half pint; tincture cantharides, one-half ounce; oil of bergamot, two drachms. Color the mixture a pale pink with alkannet root.

One of the most common causes of stomach and bowel troubles in children is the custom of feeding very young children potatoes, rice and bread before their digestive apparatus is capable of digesting these starchy ingredients.

To take creases out of drawing paper or engravings lay the paper or engraving face downward on a sheet of smooth, unsized white paper, cover it with another sheet of the same, very slightly damp, and iron with a moderately warm flatiron.

Cucumber Catsup.—For cucumber catsup grate the cucumbers and draw the water off through a colander. Chop half a dozen onions very fine and add them to a gallon of the prepared cucumbers. Add vinegar, Cayenne pepper, salt and horseradish to taste, and seal up without cooking.

Apple Jelly.—To make nice apple jelly, use fair sour apples. Slice them, skins, seeds and all, and simmer with a little water till well cooked and soft. Then strain through a cloth, add a pound of sugar to a pint of juice, boil a few minutes, skimming till clear; then pour into glasses and cover when cold.

Peach Preserves.—To make peach preserves with a real peach flavor, the peaches should be ripe but not at all soft. Allow about one pound of sugar to three of peaches. Put the sugar and a little water into the preserving kettle, and when it stews clear put in the peaches, cooking only from three to six pounds at a time. When they are clear take them up into jars, fill up with sirup and seal.

Sweet Cucumber Pickle.—Pare the cucumbers, take out the seeds, cut in rings an inch thick, then simmer in weak alum water an hour; take them out, drain and lay carefully in a jar. Then prepare a sirup of one

gallon of good vinegar, two large cups of sugar, one ounce of cinnamon, one ounce of ginger root; pour hot over the pickles. This is a delightful pickle and will keep, sealed up, a long time. Watermelon rinds can be so prepared.

It is reported of the celebrated English physician, Dr. Field, that at a time when diphtheria was raging, a few years ago, he used nothing but common flour of sulphur, a teaspoonful mixed with the finger in a wineglassful of water and given as a gargle, and in ten minutes the patient was out of danger. He never lost a case of this disease. Sulphur destroys the fungus in man and beast. In extreme cases, where a gargle could not be used, dry sulphur was blown down the throat through a quill, and sulphur burned in a shovel so that the patient could inhale it.

Powerful Drugs.

A score of years ago drugs were given in quite crude forms. The pills then used were large enough to excite apprehension of suffocation in patients obliged to take them. Until quite recently all medicines have contained more or less extraneous matter, which added bulk but not virtue to them. Gradually the chemist eliminated such unnecessary matter, until at last drugs were furnished physicians in nearly, if not quite, pure form. But he did not stop there. He next applied himself to extracting the active principles of medicinal agents, and now nearly all the powerful remedies are used in what we might term highly concentrated form. Aconite furnishes us with a ready illustration of this great change. The powdered leaves were once given in two grain doses, and the extract of the same in one-half grain doses.

At the present time we have aconitina, the real virtue of aconite in highly concentrated form, and the dose of that is from 1-400ths to 1-200ths of a grain. Of course, a pill of aconitina containing a full dose might be made exceedingly minute, and as a matter of fact it is put up in very small granules. The inference to be drawn is that, in taking medicine, one must be exceedingly careful to follow the physician's directions "to the letter." Because the pills are small, one must not assume that they can be taken recklessly. A man not long ago deceived himself in that way with most disastrous results. His physician ordered some ten granules, scarcely larger than pin-heads, which contained a very powerful drug. He was cautioned to take only one, three times a day; but, thinking to expedite matters, he took all of them at one dose and joined the "silent majority."—*Boston Herald*.

A Story of Two Novels.

Despite all that one can say or write against novel writing, I suppose the fictionists will go on and write. But the fact remains, nevertheless, that the average novel does not pay the author for his trouble, and often does not cover the typewriter's bill. I know of two recent novels upon which each of the authors spent the best part of a year in writing and revising. Both novels are, according to the popular acceptance of the term, successful—that is, they have been widely written about, paragraphed in the press from one end of the country to another, English editions have been printed of each, and to every literary person the names of both novels and authors are thoroughly familiar. Now, what have the authors received in hard cash for their year's work? I will tell you exactly. Of one 1,700 copies were sold. No royalty was paid upon the first thousand to cover manufacture, etc., and upon the remaining 700 copies the author received the regular 10 per cent. The book sold for \$1. The net revenue to the author was, therefore, \$70. His typewriter's bill was \$61.50. Net profit, \$8.50, and the book has stopped selling. The other author was a trifle more fortunate in that his novel reached a sale of 2,000, all but five copies. Like the first, he received a 10 per cent. royalty only after the first thousand copies. Unfortunately, he bought so many copies of his own book for friends, that when his publisher's statement came, it showed a credit in his favor of just \$39.50. Had he typewritten his manuscript, the novel would have thrown him into debt! And these are but two of a score of instances within my knowledge that I could cite. They are sufficient, however, for budding authors who see visions of fame and fortune between the lines of their manuscripts to ponder over. Fame they may get, perhaps; fortune, a very small one.—*Ex.*

Mrs. Jones hasn't a gray hair in her head and is over 50. She looks as young as her daughter. The secret of it is, that she uses only Hall's Hair Renewer.

BENJAMIN'S PILLS act like magic on a weak stomach.

The Young Folks.

The Locusts' Song.

Beneath the blue of summer skies,
The mountain land in splendor lies,
So rich with yellowing fields of wheat,
With billowy pastures, clover sweet;
So fair, while o'er each cottage home
Or red, or white, the roses foam,
And in cascades of fragrance pour
Their lavish life at every door.

The robin sings at night and morn,
And clear above the growing corn,
In swift-dropped phrases, now and then
Are told the loves of thrush and wren.
Ere long the deepening dusk will bid
Awake the pensive katydid,
And echo catch from vale and hill
The sorrow of the whip-poor-will.

But now, high noon on wood and way,
And stillness, broken by a sound
That weaves within the calm profound
A rune enchanted. Spirits strange,
The bright familiar present change
Till, in the murmured monotone,
We hear an alien age and zone.

Not of to-day, nor yesterday,
The odors which around us play,
The lotus swoons within our clasp,
A near us glides the llesome asp,
The winds moan o'er the Libyan sands,
The Sphinx in steadfast silence stands,
And last us, slow and stately, file
The mighty monarchs of the Nile.

Are there, who call the locusts' cry
A mere portent of sultry sky,
Of lightning flash, or thunder gloom,
Of dreary drought, and fading bloom?
To them the easy plenitude
Of satisfaction in the mood,
Which reads alone, on sea or land,
What little thought may understand.

For, when like elfin harps astir
We list the locusts' vibrant whirr,
Untired and patient, low or loud,
And fairy visions hither crowd,
We are not vexed, although we hear
More than is breathed in every ear,
Nor sad, that dreamy fancies throng
Around us at the locusts' song.

—Margaret W. Sangster.

MEANS OF PRODUCING COLD.

Concerning methods of producing cold, there are three of which we shall here speak. The first is the well-known one of imparting cold to water by dissolving in it certain substances, of which there are none which in our estimation can vie with nitrate of ammonia for general efficiency and undoubted convenience. In addition to this, it is also the most economical of all saline bodies, as it is not wasted during use, but may be employed over and over again. If a thermometer is placed in a tumbler of water, at say 50 deg. Fah., and some crushed crystals of the nitrate of ammonia are then thrown into the water, the column of mercury will be found to descend with singular rapidity until it reaches 26 to 27 degs. below the freezing point, or about 5 deg. Fah. There are several mixtures which can be made by which a much greater degree of cold can be obtained, but these when once used cannot be used again. But with the ammonium nitrate it merely suffices to pour the solution out into an evaporating dish after being done with, and having driven the water off by heat, or otherwise, place the crystals into a bottle, when they are ready for future use in a similar way.

We here give an illustration of one way by which the knowledge of the above-mentioned fact may be serviceable. We had once some gelatine plates to develop in a semi-tropical country at a time when the heat was intense and the water so warm as to endanger the film during development. We placed the developing solution in a japanned tin developing tray, and placed that tray inside of another slightly larger, and in the bottom of which we scattered a few crystals of nitrate of ammonia, afterward pouring in a little water. This reduced the previously high temperature of the developer to one that could not possibly affect the too soluble gelatine of which the film was composed.

A second system for the production of cold consists in the compression of air. Thus compressed, and forced into a reservoir, it becomes heated, as every one knows who is familiar with the working of an air-gun. But when cooled down again, before it is suffered to escape, its expansion is attended by great cold. "If when compressed it is allowed to cool down to the ordinary temperature and then to escape, it will be cooled below that temperature just as much as it was heated by compression. Thus, if in being compressed it had been heated 100 deg., say from 60 deg. to 160 deg., and then allowed to cool to 60 deg., on escaping it will be cooled 100 deg. below 60 deg., or to 40 deg. below zero, which is the temperature at which mercury freezes." This is the principle of the cold air chambers now so extensively employed on shipboard for the transport of frozen provisions from Australia and New Zealand.

The ingenious photographer who dreads the preparation of gelatine plates in hot

weather will in this discover the means by which he may be enabled to keep his coating room at 50 deg. or 60 deg. during the most sultry months of the summer, aided by a small gas or petroleum engine. We have devised a most perfect means of effecting this, by manual power if desired, and that only applied at occasional intervals, but a detailed description of it would be out of place in this article.

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13. The class of pupils is of the very best. All the associations and influences of the school are of an elevating character. Merit is the only watchword. A better and higher education for all is the true motto.

KANSAS FARMER.

ESTABLISHED IN 1893.

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SUBSCRIPTION PRICE: ONE DOLLAR A YEAR.

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Every advertiser will receive a copy of the paper free during the publication of the advertisement.
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KANSAS FARMER CO., Topeka, Kas.

The *KANSAS FARMER* will be sent on trial thirteen weeks to new subscribers for 25 cents.

It is reported that first-class oil was recently discovered in the Rocky mountains near Crow's Nest pass, British Columbia.

A good deal of oats has been damaged by rains and continued cloudy weather. The aggregate yield, however, will be very large.

The Missouri State Board of Railway Commissioners recently decided to order a general reduction of freight rates on Missouri railroads of from 10 to 15 per cent.

The St. Joseph Exposition managers are active, energetic men, and if present indications may be taken as evidence, the attendance will be large and enthusiastic.

Rev. D. L. Moody has established a permanent Bible institute at Chicago. For particulars address, inclosing stamp, Mrs. S. B. Capron, care of F. G. Ensign, 154 Madison St., Chicago, Ill.

We have received complimentary tickets to the Phillips county fair, to be held September 17 to 20; also to the Chase county fair, to be held at Cottonwood Falls, September 4 to 6.

The St. Joe Exposition folks propose to erect a corn palace which will be worth going far to see. The structure will have a frontage of 240 feet, a depth of 120 feet, and it will be 200 feet high.

President Harrison, following the excellent judgment of his last predecessor, as to this matter, is making his headquarters during the hot months at Deer Park, a delightful retreat among the mountains of West Virginia.

The Cowley County Fair Association advertises a large number of special premiums offered by individual persons, partnerships and companies, for fruit, grain, vegetables, etc. One premium is offered for the best looking pair of twin girls. Send for catalogue to J. P. Short, Secretary, Winfield, Kas. Fair to be held at Winfield, September 3 to 7, inclusive.

The Chingawasa Springs, in Marion county, Kas., are now available to the public by means of the Marion Belt and Chingawasa railroad, just completed. The waters of these springs are pronounced healthful and valuable in many cases of disease, especially rheumatism. A letter of request to Levi Billings, V. P., at Marion, will secure descriptive circular.

The Business Situation.

We quote from last weekly review of R. G. Dun & Co., under date of July 26:
"The business outlook has been, on the whole, improved during the week, but on Thursday the assignment of an important dry goods commission house with liabilities of \$4,000,000 caused some disquietude. But the general tenor of advices is encouraging. Crop reports improve and with the probability of a large foreign demand, the apprehended financial difficulties do not yet arise. Great industries seem to be getting a stronger position and the railway situation is at least no worse. All the cities, except nine, report larger bank clearings than a year ago. Latest accounts report decided improvement in the wheat prospects in Dakota and Minnesota, the yield being estimated at 80,000,000 bushels, against 60,000,000 bushels last year. The foreign reports are evidently two-faced, but appear on the whole to promise a larger yield than last year. New wheat is moving freely and begins to effect foreign exchanges and in confirmation of past estimates old wheat in large quantities continues to come forward from northwestern farms, where speculators have represented the supply as exhausted. The price has advanced only 1 cent; corn and oats 1 cent each, and hog products have declined a fraction. Cotton reports are on the whole favorable. Sugar has declined 1 cent. Oil has risen 20 cents per 100 pounds. The general average of prices is higher than a week ago. There seems to be real and steady improvement in the great branches of industry. The demand for iron has so far increased as to cause a general stiffening of prices during the past week. Bar iron is 1-10 cent higher, rails are firm at \$28, and nails stronger. The business in structural and sheet iron is very satisfactory, but the demand for plate is a shade less urgent. The official report shows the production of pig iron 3,667,767 gross tons, was the largest in any half year in the country's history, and while stocks increased about 200,000 tons the consumption was but 70,000 tons less than in the last half of 1888, and 61,000 tons more of Southern iron. But production has been in excess of the demand. The signs of improvement in the woolen business are less clear, but manufacturers have been buying more freely and there has been some increase in the orders for goods. The confidence in a large fall trade is undiminished. There is a feeling that the force of foreign competition will be less felt thereafter. The harvest season for boots and shoes has commenced well. The coal business is dull and weak. No change appears in copper tin is steady at 19 90 cents for spot and lead at 3.80 cents. The monetary supply is ample at all reporting points and complaints of slow collections are fewer than usual. The Treasury has taken in \$2,000,000 more than it has paid out during the week, but the exports of gold have been for the moment arrested and commercial bids are more freely made against cotton to go abroad. In the stock market depression has been followed by a stronger feeling, and the average of prices is better than a week ago with more hopeful prospects as to settlement of difficulties between Chicago and the seaboard. The business failures number 216, against 203 last week and 209 the week previous. For the corresponding week last year the figures were 221.

Railroad Managers Want Judge Cooley on Their Side.

A report is current in Chicago that the trunk railroad lines are making strong efforts to secure the services of Chairman T. M. Cooley, of the Inter-State Commerce Commission, as Commissioner of the Trunk Lines association, in place of Mr. Albert Fink, whose resignation was accepted about a month ago. It is believed that he is considering the advisability of accepting the \$25,000 position. He is at present on a

trip to the Pacific coast. Should Judge Cooley decide to accept, some people will be curious to know how he will harmonize such action with his previously expressed opinion that it was the height of impropriety for a man holding a place on the Inter-State Commerce Commission to accept any position from the railroads. Indeed the expression of such an opinion will, in the minds of many, argue strongly against the probability that Judge Cooley will accept any commission at the hands of the railroad people. Should they succeed in inducing him to take the position, however, they will have succeeded in capturing two of the brightest and ablest men on the Inter-State Commerce Commission—the Judge himself and A. F. Walker, now at the head of the famous "gentlemen's" association.

Down With the Option Gamblers

Something must be done to get rid of gambling in options—buying and selling without any intention to deliver or expectation to receive—the loser simply paying the difference. A great many million bushels of wheat appear to be bought on a particular day—more, many times more than there is in the country at the time, and probably not a bushel of it except that which is bought for cash is ever presumed to exist. It is simply betting on the price of grain at a particular day, and is the cause of all "corners" in the grain market, cheating farmers when the price is reduced, and cheating consumers when the price is raised beyond what legitimate trade would put it. Farmers should make this matter an issue in all coming election campaigns until this sort of gambling is utterly abolished.

The *Wichita Eagle* advises farmers to demand the enactment of a national law on the subject. This and some other grave matters will set the constitutional lawyers to discussing legal questions involved, and Congressmen will be disposed to go very slow in a proceeding which would knock the props from under the State rights doctrine; but if the farmers will present a bold and a united front when demanding a law of Congress prohibiting option gambling, it will be found that the constitution is not in the way. Since steam and electricity have been put to work disposing of distance and time, all articles of general use come within the scope of inter-State commerce, and the constitution specially authorizes Congress to regulate commerce among the several States. If in regulating foreign commerce Congress may levy duties on commodities imported from other countries, there is no good reason why it may not, in regulating commerce among the several States, prohibit any practice which injuriously interferes with free competition in the open market. If the farmers will take hold of the subject and press it on the attention of lawmakers, a remedy will be found.

Farmers and the Jute Trust

Jute is a fiber from which heavy bagging is made. It is used for making cordage—rope, twine, etc. Jute grows well in our Southern States, but duties on the foreign article are so low that our markets are supplied with that, and it is fast taking the place of cotton in the manufacture of many articles in which Southern farmers especially are interested. A jute trust was formed some time ago, and the farmers have combined to fight it. Recent advices sent out from Montgomery, Alabama, show that the fight between the Farmers' Alliance and the jute bagging trust is rapidly assuming warlike proportions in the cotton-growing States. The alliance men have resolved to use no jute bagging for wrapping the present crop, but to use cotton bagging instead. It is argued on the one side that the farmers can't hold out in the fight; that the cotton wrapped in cotton bagging will not be received at the compresses and by cotton buyers, and, as the cotton

crop is shipped abroad the farmers will be forced to give in in order to get their cotton on the market in merchantable shape. Also that many farmers who have given mortgages on their crops to advancing merchants can't hold their cotton back, but will be forced to put it on the market in merchantable shape and sell to pay their debts. On the other hand, the alliance men are determined to fight the trust for all they are worth. It is war to the knife, the knife to the hilt, the hilt to the death. They have resolved to down the trust if they have to hold the entire cotton crop from the market until the combine is bursted. They propose to work in unison and present a solid front against the trust. It is generally understood, also, that the other different farmer organizations of the country are ready to fight hand in hand, shoulder to shoulder, with the alliance men. The alliance is 85,000 strong in Alabama, and they will get heavy recruits from the wheel and the grangers. At the meeting of the National Alliance held in Birmingham recently, it was resolved to use cotton bagging exclusively and give jute the go-by, and the farmers seem determined to carry it out on that line if it takes all the summer and fall. The Farmers' Alliance of Alabama has just purchased a site for a cotton bagging factory at Florence, and propose to be making 500 yards cotton bagging per day by September 1. The threatened war will be made even more interesting by the fact that the cotton crop promises the heaviest in ten or fifteen years.

Cherokee Opposition to Opening Indian Territory.

The Cherokees are quarreling with the Creeks because the latter are willing to treat the Indian Commissioners liberally in the matter of ceding Indian lands to the government of the United States. The Cherokees will be benefited if they will act favorably on the advice which is being tendered them gratuitously by a good many persons—to act promptly, in a reasonable and friendly way, and not place obstacles in the way of the Commissioners who are sent to treat with them. The Cherokees will learn some day, if they have not already learned it, that the people of the United States will not always submit to the holding of a large territory of good farming lands by a handful of people who do not use them and have no need of them. A large sum of money will be paid for the unoccupied Indian lands if the Indians show a willingness to consent to a good natured exchange of lands for money; but if there is unfriendly treatment and contemptuous refusal to treat or even to open the way for an interview, the time will soon be present when Congress will take exclusive charge of the whole matter, surveying the lands, and after saving a reasonable area for the Indians, selling the residue to settlers the same as other Indian lands are sold, or permitting them to be taken under the homestead law, settling with the Indians afterwards. Time was when it did not matter how much territory Indians occupied; but it does matter now. White citizens are allowed only 160 acres of the public domain, many persons get along with one-fourth as much. Indians have no better right than other people to the soil which was originally free to all.

A Cincinnati Judge, a few days ago, decided that selling ice cream on Sunday is not a violation of the Sunday laws, on the ground that the use of ice cream had grown to such an extent that it was no longer to be classed as a luxury, and in the liberal view the court was inclined to take of the statute its sale Sunday could easily be regarded as a necessity. "Certainly," said his honor, "no man was ever incited by the eating of ice cream to go home and beat his wife and break up the furniture, and I have no sympathy with the efforts of saloon men to make the law against them odious by pushing the enforcement of the common labor law."

MISSOURI VALLEY HORTICULTURAL SOCIETY.

A friend sends us the following report of proceedings of the Missouri Valley Horticultural Society, held recently near Rosedale, Kas.

ROSEDALE, KAS., July 19, 1888.

EDITOR KANSAS FARMER:—The Missouri Valley Horticultural Society, now in its twenty-second year, has just held one of its characteristic meetings. For enthusiasm possibly no society west of the Missouri river equals it. The members allow nothing to interfere with their meetings. Rain or shine the stalwarts are always present. In the dissemination of horticultural knowledge and in the introduction of new and valuable varieties of fruit, no society in the country is more zealous. The meeting was held on the beautiful grounds of Major Frank Holsinger, a five minutes' walk from the street cars. These grounds comprise some six acres of splendid blue grass lawn, studded with magnificent forest trees, affording a cool refreshing shade. Not less than 150 persons were assembled at this meeting; many of the most enterprising and experienced horticulturists of the country were here gathered and a most delightful and instructive session was held. There was displayed a beautiful collection of fruits and flowers. This is the strong point of this society—to show the fruits and flowers of their season. Oh, the luscious peaches that freighted the tables; and such perfection in apples has seldom been equaled. The first question asked was where are they from? The answer comes from Olden—Olden! where is Olden, and here a chapter that would interest might be written. At this time I will only say that Olden is the outgrowth of this society. President, J. E. Evans, of Harlan, Mo.; Secretary, Frank Holsinger; Treasurer, G. F. Espenlaub, of Rosedale, Kas.; L. A. Goodman, of Westport, Mo., Secretary of Missouri State Horticultural Society; Judge J. K. Cravens, of Linwood, and W. G. Gano, of Olden, Mo., comprise this company, and all active members of this society. These men were all practical fruit-growers who had given their time to fruit development. The growth of the peach in this latitude was found to be unsatisfactory and unprofitable. At one of the meetings the question was asked can peaches be grown any place within easy reach of Kansas City? Major Z. S. Ragan (deceased), who gave his whole life to this work, said he had no doubt that peaches can be grown successfully on the Ozark mountains in south Missouri. These gentlemen being in earnest resolved to go and investigate, and in less than fifty days they had formed a company, purchased 2,200 acres of land and planted 20,000 peach trees. With their experience they had no difficulty in making selection of those varieties that were known as the most valuable sorts. This enterprise originated only five years ago. To reduce the forests and plant has been their chief ambition since, and to-day they have the finest fruit farm on the continent. They have 61,000 peach trees, 23,000 apples, 2,000 pears, with much other fruit, including forty acres in small fruit. The finest berries received in this market was from that farm, bringing frequently higher prices than any native fruits. The present crop of peaches is phenomenal. Recently it was my good fortune to visit and spend several days on the grand farm. So large and full was the crop that a force of twenty men was employed under a competent superintendent in thinning, and I would guess that not less than 10,000 bushels of peaches were thrown down to insure the development of what remained. I believe the crop of this orchard will exceed 100,000 third-bushel boxes. So rapid has been the fruit development in this section that thousands of acres have been purchased in this county and is being planted. Two firms from far-off Florida have purchased and are planting the luscious

peach. A Kansas City firm have purchased and are planting largely. I predict that in five years' time Olden will be the best known fruit center in the Southwest.

On the table, too, were splendid cherries, gooseberries, blackberries, etc. Flora was well represented. There were fine collections of hand bouquets, vase bouquets, wall bouquets, with large vases of cut flowers.

Agriculture was not neglected. Splendid vegetables were shown. Liberal premiums were offered for each variety and an intense enthusiasm is in this way maintained.

The dinner was splendid. I think there is no class of people that can equal an horticultural people in getting up a dinner. The hostess did everything that could be done to make this an attractive feature. How well she succeeded those present can attest.

Dinner over, President Evans called the meeting to order, stating that owing to the fact that some could not remain through the session who desired to hear the papers he would call for the papers first. He regretted to learn of the serious illness of our worthy Vice President, who had prepared an excellent paper, which would be read by Prof. Longstrath, of Philadelphia. Subject, "Education of the Agricultural Kid." I hope to see this paper published in full in the KANSAS FARMER [It will be.—Editor.]

The next paper read was "Our Missouri State University," by Miss Amanda Evans, a student of that institution. Prof. Geo. E. Rose had a splendid paper on the "Botany of Our Flowers." The Rev. Mr. Bonham read an instructive paper on "The Ignorance of Ben Franklin and Geo. Washington." In this paper the author showed up the improvement of the last century in his own inimitable way. I think I never heard a paper cause more merriment. Wish I could furnish a copy for your columns.

L. A. Goodman presented a paper on "Horticultural Fairs." There is no one in the West who has given this subject closer attention than the Secretary of the Missouri State Society, and I hope to see his paper published for the benefit of our agricultural and horticultural societies everywhere.

A short discussion followed the papers by Messrs. Goodman, Rose and Pratt. The latter gentleman settled in Wyandotte county in 1837. His remarks were listened to with marked attention as they concerned the development of this country during the past fifty-two years. They would be interesting reading for the FARMER circle could they be produced as given by the Major.

Of the varieties of peaches on the table I would enumerate in order of ripening: Hale, St. John, (large, showy, very fine); Troth, free, (very good, valuable); Reeves' Favorite, (very fine); Foster, (large, yellow, very fine); a new seedling free from Olden not named (of great promise).

Rosedale. OCCASIONAL

The Spring Wheat Yield in Minnesota and the Dakotas.

The Market Record contains some figures from a careful statistician relating to the probable spring wheat yield this year. They show that it will amount to more than was commonly figured a few weeks ago. The greatest trouble is in arriving at approximations of acreage that are below average. It will be about fair to offset the increase in the acreage with the amount plowed up, and that not plowed up that will not be cut, leaving the acreage about the same as last year. If Minnesota yields fifteen bushels per acre, which many think is not too high, the total would be some 47,000,000 bushels, and for both Dakotas eight bushels may not be too high or a round up of 30,000,000 bushels, making 80,000,000 bushels for both. The last crop, while called 60,000,000 bushels, total, was more than 70,000,000 bushels; perhaps not below 75,000,000 bushels of

all sorts. It is quite generally conceded that the promise is for some 10,000,000 bushels more than a year ago, which concession, if correct, would indicate 80,000,000 to 85,000,000 bushels this year. Cutting is getting quite general in the south and will begin in the north next week, although a great deal in the south is not ripe enough now and much will not be in the north next week. So far very little shrunken wheat has been discovered, but some is in a stage that might be affected yet.

Senator Ingalls on Prohibition

Senator Ingalls disappointed and mortified many of his friends by standing out long and courageously in opposition to the theory and practice of prohibition in Kansas; but he has done himself honor in a recent effort and shown that he recognizes facts even though they do not prove the correctness of his previously expressed opinions. The Senator has an article in the August Forum on "Prohibition and L'cense," from which we quote a single extract, as follows:

"Kansas has abolished the saloon. The open dramshop traffic is as extinct as the sale of indulgences. A drunkard is a phenomenon. The barkeeper has joined the troubadour, the crusader, and the mound-builder. The brewery, the distillery, and the bonded warehouse are known only to the archaeologist. It seems incredible that among a population of 1,700,000 people, extending from the Missouri river to Colorado, and from Nebraska to Oklahoma, there is not a place which the thirsty or hilarious wayfarer can enter, and laying down a coin demand his glass of beer. This does not imply that absolute drouth prevails everywhere, or that 'social irrigation' has entirely disappeared. But the habit of drinking is dying out. Temptation being removed from the young and the infirm, they have been fortified and redeemed. The liquor-seller, being proscribed, is an outlaw, and his vocation disreputable. Drinking being stigmatized, is out of fashion, and the consumption of intoxicants has enormously decreased. Intelligent and conservative observers estimate the reduction at 90 per cent.; it cannot be less than 75. Prohibition prohibits. The prediction of its opponents has not been verified; immigration has not been repelled; nor has capital been diverted from the State. The period has been one of unexampled growth and development."

A Cornstalk Cutter.

In response to a query in our last issue, Mr. Chenoweth, of Brookville, Saline county, writes that a machine was used in that county last year with which two men cut eight to ten acres of corn per day and shocked it. If dropped in bunches without shocking, as for siloing or if the stalks were sorghum and cut and thrown down in bunches for hauling away afterwards, the two men could cut probably half as much more.

It is the same machine which is being manufactured at Bellefontaine, Ohio, and will soon be advertised in the KANSAS FARMER, we suppose, as Mr. Harrington, of Mitchell county, called our attention to the machine last Saturday. It is simple, drawn by one horse, cuts two rows, and the men shock as they go, stopping the horse when an armful of stalks is gathered. It is simply a sled with wings and a straight, stationary knife in front of each wing. The men push the stalks forward, the knives cut them off, when, as soon as an armful is cut, the horse is stopped and the stalks are put in shock. When the advertisement appears the machine will be minutely described.

Some 2,000 Illinois coal miners have been idle about three months, and the people at Chicago and other places, sympathizing with them and knowing their destitute condition, sent them supplies. A few days ago, a large quantity of supplies was forwarded by

railroad to them from Chicago in charge of Mayor Cregier and Congressman Lawler. A dispatch describing the situation upon the arrival of the train at Spring Valley says it was greeted with great demonstrations of joy. Everywhere there were evidences of the most pinching poverty and destitution. Men, women and children were most scantily clad in the cheapest of materials and there was a great dearth of foot gear among them. Their faces bore unmistakable evidence of hunger. These people have been locked out nearly three months and are absolutely on the verge of starvation.

The State Reform School.

Mrs. M. J. Hunter, one of our most valued correspondents, paid a visit recently to the Reform school, near Topeka, and this is what she says of it: "It is a State institution, designed to save unruly boys. I understand there are now 200 boys in the school. They are kept under strict discipline. A practical attempt to solve the problem of enforced morality, far more honorable to our civilization than to let them grow in vice and then furnish penitentiaries to hold them at the expense of the public. It is a preventive measure. The whole institution is a credit to our civilization and our State. The boys are dressed in handsome gray uniform, neat and orderly. While we were there, their Sabbath evening exercises wound up with music, at the close of which they marched down and out to the shady grove, orderly as soldiers. The front lawn is ornamented with beautiful flower beds, also every variety of shrubbery growing in our climate. 'Lovely!' was our exclamation on looking over the grounds."

State Temperance Union.

At a meeting held at Ottawa Chautauqua assembly, it was decided to hold the annual meeting of the Kansas State Temperance Union, at Topeka, on Tuesday, August 13, at 4 o'clock p. m. All church organizations, Sunday schools and temperance societies are requested to send delegates. Each society is entitled to three delegates. All friends of prohibition are invited to attend and participate in the proceedings. Officers will be elected for the ensuing year. In view of late elections in Eastern States, it seems imperative that the friends of prohibition should meet and state to the country the facts in regard to prohibition in Kansas, and declare their increasing confidence in the law, which has done so much to redeem the State from the greatest evil of our times.

N. C. McFARLAND, President.

A. H. LIMERICK, Secretary.
State papers please copy.

Millers operating in southwest Kansas held a meeting at Wichita last week, thirty of them being in attendance. All the mills but five were represented. An association was formed, to be known as the Southern Kansas Milling Association, and officers were elected as follows: B. Martinten, of Newton, President; W. A. Barkams, Vice President; George H. Hunter, Secretary; and an Executive Committee, consisting of the President, ex-officio, E. E. Dawson, H. Emerson and George H. Hunter. By-laws and a constitution were adopted. The object of the association is to establish an office somewhere, the location not as yet being determined, to handle the flour of the entire association, and send it by the train load, as collected from the mills, to the Southern States for export. The association expects to be able to run its mills day and night, but do not hope to consume all the wheat.

Kerosene emulsion, so beneficial in destroying aphids, lice, thrips, etc., is made by churning a quarter of a pound of hard or one quart soft soap, one pint of kerosene and two quarts of water until an emulsion is formed. This is diluted with water (one to fifteen) and should be thrown on with force. A carbolic acid emulsion is recommended as a tree wash for keeping out the flat-headed borer, and for killing bark lice and perhaps other lice.

Horticulture.

Potato Rot and Potatoes.

Those farmers that have been fortunate enough to receive a copy of the Agricultural Report for 1888, and have examined the map to be found on page 403, will be struck with astonishment at the extent of country over which this dreadful disease has spread since its first introduction from South America in 1840. From Wilmington, N. C., along the southern border of Tennessee and Missouri to Colorado, and thence northward by the eastern boundary of Wyoming and Montana, and thence eastward by the northern boundary line of the United States to the Atlantic, it exists in varying proportions of from 2 to 52 per cent., and its most destructive ravages may be found to the north and east of a line drawn from the lower edge of Delaware to the Potomac at Alexandria, thence with the Maryland line to Pennsylvania, thence with the line of its southern border extended to the Ohio river, and down it to the Mississippi and up it to the Missouri, thence up it to Wither and Gore, thence to the Minnesota river, and thence across to the north boundary (leaving the northern parts of Wisconsin and Michigan nearly free from its ravages), a section raising 149,000,000 bushels in 1879. Fortunately the entire South, except a small section around Charleston, S. C., and Mobile, seems free from its ravages.

Widespread as it now is it seems possible to stamp it out, since its cause is known, and a cheap and efficient remedy been discovered to prevent its spread.

Many persons have noticed at some time or other, in their patches, pale yellowish spots on the leaves that soon turned brown, and in warm, moist weather soon blackened. These spots are the result of a white, downy coating on the under surface of the leaves, and from which the disease is spread. This is the external manifestation of the disease that has already attacked the tubers. Thus it manifests itself in a depressed spot, then a browning of the tissues, followed by either wet or dry rot, and the consequent destruction of the tuber. A potato thus infected, if stored with sound ones, soon communicates the infection to others, just as one rotten apple in a barrel will ruin the others. Such is the pathologist's symptoms of this disease, and now for his remedy:

Sulphate of copper (blue vitriol or bluestone)..... 6 pounds.
Lime..... 4 pounds.
Water..... 30 gallons.

Dissolve sulphate and lime separately before adding together. This mixture is to be sprayed on the leaves as often as necessary. To dissolve the copper use sixteen gallons of water; slake lime in six gallons of water, and stir the two constantly while mixing. He also recommends the dusting of potatoes when storing at the rate of one bushel of lime to twenty-five bushels of potatoes.

Many persons are misled as to the produce of potatoes per acre and their value. The statistician gives the average yield from 1880 to 1887, both inclusive, at 75.7 bushels, and their value at \$36.32 per acre. Annual average for preceding ten years 87.7 bushels and worth \$49.31 per acre. Wheat yielded from 1880 to 1887, inclusive, 12 bushels per acre, worth \$10.09, and for the preceding ten years 12.4 bushels, worth \$10. Corn from 1880 to 1887, as above, 23.8 bushels per acre, worth \$9.71, and for the preceding ten years 21.1 bushels, worth \$11.54.

Those familiar with the modes of planting, the manure required, and the cost of cultivation, can judge for themselves the one most profitable. The comparison will appear easier when the average price of potatoes from 1880 to 1887 was 51.9 cents per bushel; the preceding ten years 56.2 cents. Wheat, same periods, 84.3 and 104.9 cents. Corn, 40.8 and 42.6 cents.

Those who have sown much wheat

will recognize an old and familiar acquaintance in the bluestone and lime, with a difference in its application only. It suggests the feasibility of uniting the two in some combination and not using them separately as now. As rust in wheat is due to the barberry, so it seems is apple rust to the cedar apple in which the parent growth breeds.—*American Farmer.*

Flower Culture.

By Mrs. S. G. Van Ande, read at the October, 1888, meeting of the Delaware County (Iowa) Horticultural Society.

There is a legend handed down from the far past, which runs thus: When the gates of Paradise first closed on the human pair, the angel of light seeing the anguish upon the faces of the exiles, grasped a rose from Eden, threw it upon the bosom of Eve, who pressed the heavenly blossom to her lips in an ecstasy of delight, planted it, and from that have sprung all our lovely roses the world over. If this be true it is care and neglect which have made the wide, wide difference in varieties. We know that cultivation improves the rose the same as it does every other plant or root or shrub. Much as we would like it, we cannot have all the varieties of roses, neither can we have every variety of other flowering plants and shrubs, but every one may have at least one window filled with flowers, from whose sweet perfume may come the odor of Eden and the breath of heaven, and not only your own family, but the stranger passing may be wooed and won to higher purposes through their influence. East, south and west windows are the best for this purpose. The soil in which plants are grown is also very important, indeed it is the basis of success. Leaf mold mixed with good garden soil, will supply the necessities of every plant which I have had to do with. Secure good strong healthy plants to begin with; let the experienced florist manage the sickly ones. This window can be made attractive every month in the year. The care so perfectly simple and impossible to none, requiring but little time, half an hour each morning, and a little warm water will supply the daily need of a great many plants. It is cruel to allow plants to get dry enough to wilt their leaves, yet it is possible to water too much. If the soil is dry at the top we water thoroughly, if the top is moist we pass that one by for this time. Flowers will almost furnish a room themselves, and yet are always in harmony with rich and costly furniture, pictures or statuary. We were in a parlor a short time ago where an English ivy drooped, trailed and festooned itself gracefully over a lace curtain so beautifully and so took possession of my heart that when I came home I could remember nothing of the furnishings of the room but the ivy. 'Tis said that in London, smoky as it is, the streets are almost ablaze with their radiant window gardens, so filled are they with beautiful flowers and foliage, down to the poorest habitation. You see the geranium, the myrtle and the rose. The same love for flowers is displayed in nearly all parts of Europe.

If the frost insists upon creeping into your warmest room when the mercury sinks below zero, line an old trunk or box with carpet paper or some other heavy paper and stand them away there for the nights, then when spring comes you can, if you wish, turn your window garden outdoors onto the balcony, or sink the pots into the open border, where they will be ready for the next winter's decoration, much improved in size and appearance. Flowers can be and are used for many, many purposes, yet in no place are they more strikingly beautiful than on a refreshment table as a center-piece; all the elegant things to eat are passed over by the eye, which is at once arrested and refreshed by the brilliant beauty of the products of the garden or conservatory, and we wonder how any person of taste who possesses the means should ever fail to have

flowers on their table when entertaining company, and at all other times if possible. Baskets of flowers, high stands, hanging baskets, balls of flowers suspended, are all elegant and proper for the parlor; festoons of green and flowers are also much used. The demand for flowers is rapidly increasing. One florist says that ten years ago ten dollars' worth of flowers at a funeral or wedding were more rare than one hundred dollars' worth to-day, and often one funeral demands a thousand dollars' worth. Peter Henderson says that it is common for a rose bud in New York city hand bouquet to sell for from five to ten dollars, and sometimes a belle has several of these fastened to her belt; baskets of flowers sell at from five to twenty-five dollars apiece, stands from fifteen to fifty dollars, extra large from fifty to one hundred dollars, and even two and three hundred dollars have been paid. Other large cities equal or excel New York in the consumption of flowers, in proportion to its population. And each one of us have the room and opportunity to raise an abundant supply of flowers for our own use; let us see to it that we do so and keep pace with the East.

The Quince.

No, we would say to a correspondent, we do not advise growing quinces for profit. The quince is considerably neglected, but the demand is comparatively limited as compared with the demand for other fruit. Individuals might do much better with it if they took better care of it than they do, but it seems to us that any great expansion of the growing of quinces for the market would not be wise. In regard to directions for growing, a horticulturist and authority says that it must have good soil and location, which the *Rural* has just intimated. It does not like a wet soil. In planting, dig a wide hole and dig it two shovel blades deep. Fill in the top soil with rich earth, like the bottom of a poultry yard or the wash of the roads, and cover all with a wide-spread mulch. Nothing pays better than great care in the planting. Discard the old theory, says the authority above referred to, that the quince should have little pruning more than to cut out dead wood and water sprouts, with a little thinning to open the head of the tree. He says that he prunes vigorously every year from the first, cutting back from one-half to two-thirds the length of the shoots of the new wood, and thinning so as to keep the head of the tree very open. The result is vigorous shoots, and little of the fine brush that dies along the branches of nearly all the quince trees.

Be sure to feed the trees well every year. A good time is in the fall and winter, when rains are sure to carry fertility to the roots, and in the spring add a sowing of salt to season their food. Any fertilizer is good. Take it from the stable, the outhouse, the poultry yard, the street gutter, the compost heap, and all vegetable and animal remains, which includes ashes and the house slops of the chamber and wash room. In cultivating the quince do not use the plow. The cultivator often goes deep enough to injure the roots. The best feeding roots of the quince are near the surface of the ground. Clean culture will be found as beneficial in quince culture as with hoed crops of good husbandry. By keeping down all weeds and grass there is no harbor for the borer at the collar of the tree.—*Western Rural.*

The most handsome horse is not always the best for practical purposes. Very often it is the plain horse that shows the most endurance, speed and useful traits.

Farm Loans.

Loans on farms in eastern Kansas, at moderate rate of interest, and no commission. Where title is perfect and security satisfactory no person has ever had to wait a day for money. Special low rates on large loans. Purchase money mortgages bought. T. E. BOWMAN & Co., Jones Building, 116 West Sixth street, Topeka, Kas.

Kansas Fairs for 1889.

Kansas State Fair, Topeka, September 16-21.
Anderson county, Garnett, August 27-30.
Atchison District, Atchison, September 10-16.
Barber county, Kiowa, October 15-17.
Bourbon county, Fort Scott, October 1-4.
Brown county, Hiawatha, September 3-7.
Chase county, Cottonwood Falls, September 4-6.
Cheyenne county, St. Francis, September 25-28.
Clay county, Clay Center, October 1-4.
Coffey county, Burlington, September 9-13.
Cowley county, Winfield, September 8-7.
Crawford county, Girard, September 24-27.
Elk county, (Caney Valley Fair Association), Gretna, September 11-13.
Ellis county, Hays City, September 10-13.
Ford county, Ford, September 18-20.
Franklin county, Ottawa, September 3-7.
Graham county, Hill City, September 26-28.
Greeley county, Horace, September 24-26.
Harvey county, Newton, September 10-13.
Jefferson county, Manhattan, September 10-13.
Jewell county, Lincoln, September 25-27.
Lincoln county, Lincoln, September 25-27.
LaCygne District, LaCygne, September 24-27.
Linn county, Mound City, September 16-20.
Linn county, Pleasanton, September 10-13.
Marion county, Marion, October 2-4.
Morris county, Council Grove, September 23-26.
Mitchell county, Cawker City, September 24-27.
Nemaha county, Seneca, September 17-20.
Neosho county, Erie, October 1-3.
Neosho county, Burlingame, September 10-13.
Osage county, Minneapolis, October 9-11.
Osborne county, Osborne, September 17-20.
Plattville fair, Plattville, September 24-27.
Phillips county, Phillipsburg, September 17-20.
Rawlins county, Atwood, October 1-3.
Reno county, Hutchinson, September 17-20.
Rush county, LaCrosse, September 18-20.
Saline county, Salina, September 24-27.
Sheridan county, Hoxie, September 26-7.
Sherman county, Goodland, September 10-13.
Smith county, Smith Center, September 18-21.
Sumner county, Wellington, August 21-31.
Woodson county, Neosho Falls, August 20-23.

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Box 25, LA CYGNE, LINN CO., KANSAS.

The Poultry Yard.

POULTRY EXHIBITIONS.

Kansas Poultry and Pet Stock Association, Wichita, Kas., December 3, 4, 5 and 6, 1889. Harry Swift, Secretary, Marion, Kas.
Covley County Poultry Association, Winfield, Kas., November 26, 27, 28 and 29, 1889. C. W. Farr, Secretary, Winfield, Kas.

Poultry That Doesn't Pay.

A man whose wide business associations afford him fullest opportunity for such information upon the subject as is available, asserts most positively that, leaving out of the account those establishments devoted more exclusively to production of eggs and fowls for sale at fancy prices for breeding purposes, yarded poultry as a whole doesn't pay. He divides the yard poultry industry into three classes—the breeding class; the class devoted to production of eggs and fowls for the regular or periodical supply of individuals, hotels and restaurants at long retail prices; and the class which depends upon the general or open market for the sale of its products. The first is the paying class *par excellence*. But there are, nevertheless, scores of persons who embark in that specialty who do not succeed, and drop out of the business the poorer for the venture. The second class, and in the neighborhood of the large cities, much the most numerous class, and among whom are included many of the first class, are generally able to make very fair profits, and may be set down as successful as a whole, though much depends upon their individual enterprise in disposing of their products. Their success, however, depends as much upon their ability to sell as upon their merit as producers. The third class includes the greater part of villagers and country people who, with very rarely an exception, sell their products for less than the actual cost of production. The exceptions are mainly those who keep small flocks and depend chiefly upon kitchen remnants for their support, and a very few who strictly belong to the second class in having secured a select list of customers who prefer to pay an extra price for a regular supply of eggs and fowls which they know are fresh and choice to taking their chances at the stores and market places.

Of these, he asserts, he has never been able to find one, outside of these excepted, who was able to show a balance on the profit side of the account. Moreover, he asserts that he can show the country over, ten of these establishments which have not survived five years to one that has. He is confident that the losses of this class more than counterbalance the gains of the second class, thus establishing, as he believes, the correctness of the proposition enunciated. The reason he assigns for this discouraging condition of the poultry business as a specialty is that immensely the larger proportion of both eggs and fowls come from the farms where the fowls run at large and gather the greater part of their own food at no known expense to the owner, and the products are picked up by buyers at their own very low prices, and, either as fresh, "old-store" or preserved stock, supplemented by heavy importations of the same from Canada and Europe, keep the general markets so fully supplied at low cost that there is no sale for the more expensively produced yard stock at remunerative prices. If this be a fair presentation of the situation—which, in the absence of any contravening testimony, appears probable—the remedy is also suggested for such as have the tact and enterprise to seek out a retail market for their products. And for the encouragement of such, it may be added that there are few villages of any size in which there are not men who make a profitable business of buying up eggs and poultry at farmers' doors to retail in the villages, who might easily, and with perfect fairness, be supplanted by the producers themselves as entitled to the business, on the theory of the survival of the fittest. The only alternative

for them seems to be to succumb to the force of circumstances and abandon the business of production.—O. S. Bliss, in Tribune.

Poultry Notes.

Bantams should be hatched and growing this month. They should be given exercise in a shady run.

Eggs can be packed with small ends down in salt and kept fresh throughout the winter. If you lay by a supply now or a little later on you will be able to realize a good profit for your time and labor.

The farm should always be supplied with a large, well-selected stock of young, active hens. They will amply repay their cost of keeping and earn for their keeper sufficient to supply the house with many needed articles.

Meat food, though considered necessary to make up for the missing insect food, should be used sparingly and not fed too often to young chicks. In hot weather it is not necessary if the chicks have liberty, for insect food is abundant.

A barrel cut about eight inches deep from bottom and stowed away in a quiet dark corner is the most attractive nest to almost any hen, and so readily had that there is no excuse for their seeking out a nest in the meadow or other out of way place.

Cows are friendly to chickens and often protect them in times of danger. Have known of an old hen that would roost on the manger in the cow stable and never leave her perch until the cow was driven out to pasture. She would follow after it and constantly remain within a few feet of the cow all day and go to roost beside her in the cow stable.

If your hens form a practice of picking the cock's comb, it is always best to pen them up, and get some bloody pieces of meat from the slaughter house and feed with plenty of green food and milk, and give them all the exercise possible, and they may forget it. If the hens are not valuable we would kill them, as the habit becomes hereditary. It is caused by a morbid desire for blood.

In no case can one make good mature fowls of poorly-fed and badly-managed chickens. It is economy first and last to feed well, the fowls will always thrive well and be in good condition, which is always very essential to the success of the keeper. Farmers very often overlook many points of this kind and wonder why they fail to realize from their flock of fowls as does a neighbor who cares more for his flock. The secret and answer is in the care bestowed—nothing more.

Who has ever seen or heard of a crop of grain coming to the highest perfection if sowed or planted on poor land badly plowed, and cared for all through in a slipshod manner? Would not that crop be much improved by plowing, tilling and extra care from first to last? Every sane man will grant this. Everything is benefited by care—ourselves, our clothing, machinery, buildings, business, habits, education, etc. Feeding and care are important auxiliaries in stock-raising; beyond good food and proper attention all else is superfluous and of no benefit. We have often said there is no necessity for fussing, pampering or petting birds or animals—no occasion to spend hours every day coddling the chicks like cage birds, no occasion to be "rattled" over their well-being. Do your duty and no more is needed.



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For Billous and Nervous Disorders, such as Wind and Pain in the Stomach, Sick Headache, Giddiness, Fulness, and Swelling after Meals, Dizziness and Drowsiness, Cold Chills, Flushings of Heat, Loss of Appetite, Shortness of Breath, Costiveness, Scoury, Blotches on the Skin, Disturbed Sleep, Frightful Dreams, and all Nervous and Trembling Sensations, &c. THE FIRST DOSE WILL GIVE RELIEF IN TWENTY MINUTES. This is no fiction. Every sufferer is earnestly invited to try one Box of these Pills, and they will be acknowledged to be a Wonderful Medicine. "Worth a guinea a box." BEECHAM'S PILLS, taken as directed, will quickly restore females to complete health. For a WEAK STOMACH; IMPAIRED DIGESTION; DISORDERED LIVER; they ACT LIKE MAGIC—a few doses will work wonders upon the Vital Organs, Strengthening the muscular System; restoring long-lost Complexion; bringing back the keen edge of appetite, and arousing with the ROSEBUD OF HEALTH the whole physical energy of the human frame. These are "facts" admitted by thousands, in all classes of society, and one of the best guarantees to the Nervous and Debilitated is that BEECHAM'S PILLS HAVE THE LARGEST SALE OF ANY PATENT MEDICINE IN THE WORLD. Full directions with each Box. Prepared only by THOS. BEECHAM, St. Helens, Lancashire, England. Sold by Druggists generally. B. F. ALLEN & CO., 365 and 367 Canal St., New York. Sole Agents for the United States, who (inquire first), if your druggist does not keep them, WILL MAIL BEECHAM'S PILLS ON RECEIPT OF PRICE, 25 CENTS A BOX.

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Alliance Department.

This Department of the KANSAS FARMER has been designated as the authorized official State organ of the Farmers' Alliance and Co-operative Union for the State of Kansas.

It is also the official department of the District Alliance of Shawnee, Jefferson and Jackson counties.

Call For Meeting of State Alliance.

Whereas, at a conference of the officers of the Farmers' Alliance and Co-operative Union of Kansas, held at Wichita, on May 23 and 24, 1899, it was considered best, in view of the unparalleled growth of the order in the State, to hold a general meeting at an earlier date than that fixed by the constitution; and,

Whereas, the President was advised to ask unanimous consent of the sub-alliances to change the date of the annual meeting; and,

Whereas, a sufficient number of sub-alliances has granted consent to show that the desire for an earlier meeting is unanimous,

Now, therefore, I, B. H. Clover, President of the Farmers' Alliance and Co-operative Union of Kansas, do issue this my official call for a meeting to be held in the city of Newton, Harvey county, Kansas, on Wednesday, the 14th day of August, 1899, at 10 o'clock a. m., said meeting to be composed as follows: One delegate for each county alliance; one delegate for each ten subordinate alliances in organized counties; one delegate from each county having subordinate alliances but no county alliance.

The object of said meeting to be:

- 1st—Ratification of the constitution of the Farmers and Laborers Union of America.
- 2d—Organization of a State Exchange.
- 3d—Election of officers.
- 4th—Election of delegates to the annual meeting of the National Alliance at St. Louis.
- 5th—To amend the present constitution of Farmers' Alliance and Co-operative Union of Kansas.
- 6th—To transact such other business as may properly come before a regular meeting of the State Alliance.

Delegates are requested to post themselves thoroughly as to the condition of their constituents and their ability and willingness to co-operate in perfecting and executing plans before submitted to them.

B. H. CLOVER,
President F. A. and C. U. of Kas.

Objects of the Alliance.

EDITOR KANSAS FARMER:—In your issue of July 17 I noticed an article entitled "Objects of the Alliance," which just took my fancy. Every farmer and every reading, thinking man knows that the money power is forming trusts and monopolies either upon the farmer's produce or supplies until we are compelled to take what they are pleased to give us, and pay what we must for such articles as we must have.

I am a member of the "Alliance," and whatever we can do to carry out its principles should be done boldly and fearlessly. We have waited too long already for some legislative action to correct existing evils, and have learned by bitter experience that the tricky members of the legislature leave that body with promises forgotten, their pledges unredeemed. There is no other trade or occupation among the American people that does not have its self-protecting associations, and if the farmers do not take some prompt and decided action in the same direction the time is not far distant when our condition will be little better than the landless peasantry of Ireland.

Why do so many farmers wait and linger to see what the alliance will do? Do they not know that in union there is strength? Suppose that in the late war the entire north had waited to see what the first 75,000 troops could do—where would our country have been to-day? Let every farmer become enrolled on the books of the alliance, and a wave would soon sweep over the land that would bury in oblivion all those who would place the farmer in a dependent condition. I too have always been a Republican, and voted with them at the last election, but if the party now in power do not take some decided steps to break down the monopolies that are grinding the poor beneath its juggernaut wheels, they will find all too late that the labor vote of this nation wields a power that will be felt from Maine to the Gulf of Mexico. Our law-makers will do well to heed the signs of the times.

A FARMER.

Sego, Reno Co., Kas.

Farmers' Alliance Notes.

Farmers are organizing in all directions. New alliance associations are reported every week.

Mr. Tyler, State Agent of the Alliance, says

he expects the farmers of Kansas will manufacture their own twine next year.

A harvest home picnic was arranged by the farmers of McPherson county for last week, but heavy rains interfered, and it was postponed to Saturday of this week, August 3. It is expected the attendance will number thousands. The meeting will be held in the County grove in the city of McPherson.

Mary Long, Secretary, writes from Dennis, Labette county: "Our alliance, No. 294, was organized May 18, 1899, by W. W. Johnson, of Cowley county, with twenty charter members. Since then our number has increased to fifty members in good standing; also have eleven applications for membership. We have not demitted or expelled any one as yet. The attendance and behavior of the members are very good."

THE FOURTH AT ONTARIO.—The following, dated July 23, is received from Ontario, Jackson county: "The alliance men in this vicinity had a fine celebration the Fourth of July. We had a real old-time farmers' picnic. The crowd was estimated at from 3,300 to 4,000. Everything went merry as a marriage bell. Everybody was well pleased and satisfied. The President of the State Alliance was the orator of the day. I ought to have written you before about this, but better late than never."

WM. KINNE, Chairman Committee.

Patents.

Higdon & Higdon, Patent Lawyers, solicitors for American and foreign patents, office rooms 55 and 56 Hall Building, Kansas City, Mo., and room 29 St. Cloud Building, opposite United States Patent Office, Washington, D.C. report the following inventions patented for week ending July 23, 1899. [By applying to them at either office a printed copy of any patent here named can be obtained for 25 cents. Send for book of instructions, free of charge].

MISSOURI.

Nut-lock—Aymons & LaRue, St. Charles.
Hay-sling—James G. Archer, Brookfield.
Paper-sutter—Leo Ehrlich, St. Louis.
Parallel roller—John J. Hamilton, St. Louis.
Hatchway—Emile J. Herman, St. Louis.
Retary harrow—James R. Hicks, Kansas City.

Tree-protector—Herman F. Juette, Palmyra.
Stock watering tank—Matthew Lynch, Malta Bend.
Grain drill—Charles E. Lawrence, Lithium.
Galvanic shoe—John S. Mellon, St. Louis.
Exhaust ventilator—Charles T. Murray, Kansas City.

Look—Gabriel Neubrand, St. Louis.

KANSAS.

Car coupling—Frank E. Williamson, Smith Centre.
Weighing scales—William H. Stewart, Kansas City.
Truck—John W. King, Winfield.
Saw-set—Milton H. Gross, Abilene.
Railway signal—Charles A. Finley, Holton.
Abdominal supporter—Ida M. Ferris, Ossage City.

COLORADO.

Locking rail-joint—Preston C. Dockstoder, Colorado Springs.

The fall term of Pond's Business College, Topeka, Kas., will begin September 2. Those who are thinking about "where to go" will please remember that Mr. Pond will teach in the school every day this year. We have known this man and his school for years, and we cannot praise either of them too highly. Parents cannot send to a better school.

In Summer Days

You can reach the cool and charming resorts of the Northwest, in the new and elegant vestibuled, Family Compartment Sleeping Cars, recently placed in service on the Chicago, St. Paul & Kansas City railway. Round trip tickets at reduced rates. Time two and one-half hours quicker from St. Joseph to St. Paul and Minneapolis than any other line. For further information, address GEO. C. KNOCKE, Passenger Agent, 123 North Third street, St. Joseph, Mo.

Low Rates to Puget Sound Points.

The St. Joseph & Grand Island and Union Pacific railroads, and Oregon Railway & Navigation Company, via Portland, form the new short line to Tacoma, Seattle, Olympia and Port Townsend, Washington Territory, and Victoria, British Columbia.

The ticket rates to these points via the above line have just been lowered to \$60 first class, and \$35 second class, baggage checked through. For further information, call on any agent.

E. MCNEILL, General Manager.

W. P. ROBINSON, JR., G. P. & T. A., St. Joseph, Mo.

"Rally Round the Flag, Boys!"

The Grand Army Reunion to be held at Milwaukee (August 26 to 31, inclusive,) will, in many respects, be one of the most noteworthy of commemorative events. There will be no lack of distinguished speakers. But the most attractive features will be the "tie that binds" men who have fought, starved and bled for a sacred cause, the renewal of old-time associations, the rehearsal of war experiences, and the rekindling upon the altar of patriotism of undying devotion to "one flag and one country." Veterans and their friends will be pleased to know that from all stations on the Chicago, Rock Island & Pacific Railway, on its main lines and branches both east and west of the Missouri river, the price of tickets has been placed for this occasion at one fare for the round trip, while children under 12 and over 5 years of age will be charged only one-half this excursion rate, or one-quarter the regular fare for the round trip. Tickets will be for sale at all principal stations on the Rock Island Route, August 21 to August 25, 1899, inclusive, good for continuous passage to Milwaukee at any time between these dates, and good for return passage, leaving Milwaukee on any date between August 27 and September 5, 1899, inclusive. Holders of such tickets who desire to make side excursions from Milwaukee to points beyond, in any direction, can, by surrendering their return coupon tickets for safe keeping to the Joint Agent at Milwaukee, have them honored to original starting point where ticket was purchased (by proper indorsement), on any date not later than September 30, 1899.

Harvest Excursions—Low Rates.

The SANTA FE ROUTE will sell, on August 6 and 20, September 10 and 24, and October 8, 1899, round-trip excursion tickets at greatly reduced rates—about one fare for the round trip, from all points in Kansas east of a line drawn through Albert station (Barton county), Larned (Pawnee county), Macksville (Stafford county) and Springvale (Pratt county), to all points west and to all points in the Indian Territory, Oklahoma, Texas, Panhandle of Texas, Colorado, New Mexico, Utah, Wyoming, Idaho and Montana. Tickets are good for thirty days from date of sale, with stopovers allowed at pleasure on return trip. Parties desiring to make a thirty days' trip to any of the western mountain resorts, including Las Vegas Hot Springs, Colorado Springs, Cascade Canon, Manitou, Green Mountain Falls, etc., can save money by taking advantage of the low rates on the Harvest Excursion dates. For ticket rates and other information, call on any agent of the A. T. & S. F. R. R., or address, GEO. T. NICHOLSON, G. P. & T. A., A. T. & S. F. R. R., Topeka, Kas.

The Cool Resorts of the Northwest

Are most luxuriously and comfortably reached in the celebrated Vestibuled Compartment Cars recently introduced on the popular Chicago, St. Paul & Kansas City railway. The press and public are agreed that these Compartment Sleeping Cars are unequalled by any sleeping cars in the world for luxury, comfort, privacy and perfect ventilation. The berths extend crosswise instead of lengthwise of the car, thereby avoiding the oscillatory and uncomfortable motion peculiar to the old-style sleeping car. One night's ride to or from St. Joseph, St. Paul and Minneapolis, or between any other points reached by this excellent railway, including Dubuque, Des Moines, and many other towns and cities in the States of Illinois, Iowa, Minnesota and Missouri, will convince any person of the superior merits of these cars. You can do a great deal worse, but you cannot do better than to travel over the Chicago, St. Paul & Kansas City railway.—Exchange.

Choice Heifers and Bulls

For sale—A number of thoroughbred Short-horn heifers already bred, also a few choice bulls, on terms to suit purchasers. Address T. P. BABST, Dover, Kas.

THE MARKETS.

(JULY 27.)

	GRAIN.		LIVE STOCK.		
	Wheat.	Corn.	Beef Cattle.	Fat Hogs.	Sheep.
New York...	88 @84 1/2	43 @44 1/2	3 50 @41	3 20 @22 1/2	3 50 @41
Chicago.....	73 % @74	33 1/2 @33 1/2	3 57 @42	4 20 @25	3 50 @40
St. Louis.....	71 % @72	33 1/2 @33 1/2	3 57 @42	4 20 @25	3 50 @40
Kansas City..	65	28 @29 1/2	2 50 @35	3 90 @22 1/2	3 25 @36 1/2

THE STRAY LIST.

HOW TO POST A STRAY.

THE FEE, FINES AND PENALTIES FOR NOT POSTING.

BY AN ACT of the Legislature, approved February 27, 1886, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisal, to forward by mail, notice containing complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker-up, to the KANSAS FARMER, together with the sum of fifty cents for each animal contained in said notice.

And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper, free of cost, to every County Clerk in the State, to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5.00 to \$50.00 is added to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the FARMER for a violation of this law.

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

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

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

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

Any person taking up an estray, must immediately advertise the same by posting three written notices in as many places in the township giving a correct description of each stray, and he must at the same time deliver a copy of said notice to the County Clerk of his county, who shall post the same on a bill-board in his office thirty days.

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

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

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

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

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

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

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

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

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

FOR WEEK ENDING JULY 17, 1889.

Anderson county—S. Durall, clerk.

PONY—Taken up by T. A. Osborn, in Lincoln tp., June 19, 1889, one bay horse pony, sharp shod all round, about 10 years old, star in forehead, branded H on left shoulder and W on left stifle, unknown brand on left jaw, saddle marks; valued at \$85.

Wyandotte county—Frank Mapes, clerk.

MARE—Taken up by T. A. Bales, in Delaware tp., (P. O. Edwardsville), June 6, 1889, one sorrel mare, light mane and tail, blaze face, slit in right ear; valued at \$15.

HORSE—Taken up by C. F. Proebestel, in Shawnee tp., (P. O. Rosedale), June 15, 1889, one bay horse, blaze in face, left hip down, knot on left hind foot; valued at \$15.

Montgomery county—G. W. Fulmer, clerk.

MULE—Taken up by R. O. Lacy, in Drum Creek tp., June 5, 1889, one roan mare mule, 14 hands high, bad eyes, scar on left fore leg, 15 years old; valued at \$15.

Greenwood county—J. W. Kenner, clerk.

BULL—Taken up by George Felter, in Twin Groves tp., July 10, 1889, one red bull, 4 years old, white spot in forehead, three bars on right hip, horn partly broken.

FOR WEEK ENDING JULY 24, 1889.

Sherman county—O. H. Smith, clerk.

PONY—Taken up by Geo. W. Duff, in Union tp., June 17, 1889, one bay mare pony, weight 750 pounds, branded SS with bar above, both hind feet white, white on left front foot; valued at \$25.

Doniphan county—W. H. Fornerook, clerk.

MARE—Taken up by Nic Reichenberger, in Wayne tp., (P. O. Severance), July 3, 1889, one brown mare, about 3 years old, star in forehead, no other marks or brands visible.

2 COLTS—By same, two bay colts, 1 year old, star in forehead, one has four white feet; three above animals valued at \$140.

Shawnee county—D. N. Burdge, clerk.

2 COLTS—Taken up by Samuel Short, in Soldier tp., (P. O. North Topeka), June 3, 1889, two colts—a chestnut filly, 2 years old, bald face, and a gray horse colt, 1 year old, no marks or brands.

Greenwood county—J. W. Kenner, clerk.

MULE—Taken up by Henry E. Downing, in Janesville tp., June 18, 1889, one dark iron-gray mule, 4 years old, weighs about 650 pounds, slit in left ear, mane and tail reached.

Greeley county—J. U. Brown, clerk.

PONY—Taken up by John Krebs, in Colony tp., June 24, 1889, one dark mare pony, branded ON on left hip; valued at \$25.

PONY—By same, one bay mare pony with colt, white strip in face; valued at \$35.

MULE—By same, one light bay horse mule, had halter on, indistinguishable brand; valued at \$40.

FOR WEEK ENDING JULY 31, 1889.

Nemaha county—W. E. Young, clerk.

STEER—Taken up by W. O. Beeby, in Harrison tp., P. O. Goffa, November 26, 1888, one red and white steer, 2 years old, blind in right eye, both horns broken off; valued at \$20.

Marion county—E. S. Walton, clerk.

PONY—Taken up by George Blackburn, in Doyle tp., P. O. Florence, June 24, 1889, one black mare pony, four feet eight inches high; valued at \$20.

2 COLTS—Taken up by W. Gulliford, of Cedar tp., (Chase county), P. O. Florence, July 13, 1889, two

colts, one a bay mare colt, 1 year old, and one cream-colored horse colt, 2 years old; were taken up in Doyle tp., Marion county.

Shawnee county—D. N. Burdge, clerk.

HORSE—Taken up by Fred Kiesath, in Monmouth tp., one horse, 12 years old, branded G on left hip and R on left shoulder; valued at \$30.

PONY—Taken up by Geo. J. Englund, in Auburn tp., July 16, 1889, on chestnut sorrel mare pony, about 9 years old, smooth shod, no marks or brands; valued at \$20.

Seward county—Oliver Leasure, clerk.

PONY—Taken up by Miles Hamilton, in Fargo tp., June 1, 1889, one brown mare pony, about 10 years old, brand like a goblet or wineglass on left hip, scar on left hind leg; valued at \$15.

Wilson county—D. N. Willits, clerk.

MARE—Taken up by J. N. Harris, in Clifton tp., June 22, 1889, one dark brown mare, about 15 years old, small white spot on back, also white in flanks and forehead, had shoes on hind feet.

Rush county—E. L. Rush, clerk.

MARE—Taken up by Charles Woodward, in La Crosse tp., July 9, 1889, one iron gray mare, white spot on right hind foot; valued at \$25.

Notice to County Clerks!

We will regard it a personal favor if each County Clerk will mail us, at the first opportunity, a complete list of breeders (with their postoffice addresses) of thoroughbred horses, cattle, swine, sheep and poultry; also the name and location of every creamery and manufactory in his county. When we have a complete list we will favor you with the directory for the State. KANSAS FARMER CO., Topeka, Kas.

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Make a specialty of all Chronic and Surgical Diseases. We have practiced medicine and surgery here for fifteen years, and during that time have treated successfully hundreds of chronic cases which had resisted the skill of local physicians.

WE CURE ALL FORMS OF CHRONIC DISEASES.

Remove tumors, cure cancers without the knife, cure piles without knife or ligature. ALL DISEASES peculiar to women speedily and successfully treated. We remove tape worm entire in from two to four hours. If you have any chronic or private disease, you will find it to your interest to write us. Correspondence free and confidential.

Refer by permission to Bank of Topeka; John D. Knox & Co., Bankers, Topeka; Citizen's Bank, North Topeka; American Bank, North Topeka.

Send for printed list of questions.
DRS. MULVANE, MUNK & MULVANE,
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Improved and Unimproved Lands in Eastern and Central Kansas bought and sold. We invite the particular attention of all whose circumstances are such that they MUST SELL FOR CASH within the coming six months. Quick sales assured if prices named are bargains. Send us full description and plat of farm. Must have exclusive sale for four months.
C. R. SMITH, Secretary.

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The Western School Journal,

TOPEKA, KANSAS.

OFFICE STATE SUPT. OF PUBLIC INSTRUCTION, TOPEKA, KAS., January 16, 1889.

To County Superintendents:—I have this day designated the Western School Journal as the official organ of this department, through which medium, by agreement with the editor of the Journal, I shall in each issue reach Superintendents, teachers and many school officers. This designation is complete evidence of my confidence that the Journal can be safely induced by Superintendents as a paper which should be in the hands of every teacher.

Very respectfully yours, GEO. W. WINANS,
State Supt. Public Instruction.

The Western School Journal publishes monthly all the opinions and decisions of the State Superintendent, Attorney General, and Supreme Court on questions relating to our schools. These opinions and decisions will be worth much more than the cost of the Journal to any school officer. According to an opinion given by the Attorney General, school officers have the power to subscribe for an educational journal and pay for it out of the district funds. Our regular rate is \$1.25 a year, but to district boards, if three copies be taken, we can make the rate \$1.00. Please remit by money order, postal note, or registered district order. Address

WESTERN SCHOOL JOURNAL,
Topeka, Kansas.

We can send the Journal and Kansas Farmer one year for \$1.90; three subscriptions to the Journal and one to the Farmer for \$3.70.

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Low rates of Interest. Money paid when papers are accepted. Write for terms.

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Have the largest and best selected line of Nursery stock ever offered for sale in the West, and we will sell this stock

So Low that the Poorest May Have a Good Orchard or Berry Patch.

We have 800,000 Apple trees, 25,000 Peach trees, 25,000 Pear and Cherry trees, 100,000 Grape vines, and all other stock in proportion. Apple root-grafts made to order. Forest tree seeds a specialty.

In writing for prices give quantity wanted.

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We want to state here that we do not belong to any so-called "Pool" or "Trust," but stand on our own footing and sell our celebrated Oak Brand Harness at live and let live prices.

Beat these prices if you can:

Our No. 1 single buggy harness.....\$ 5.75

Our No. 4 single buggy harness..... 9.75

Our No. 16 double buggy harness..... 15.00

Our No. 18 double buggy harness..... 18.00

Our No. 21 double farm harness..... 18.50

All our harness are made from No. 1 Oak-Tanned Leather and are hand-made. Satisfaction guaranteed or money refunded. Address all orders to

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Suffering from the effects of Youthful Polls, Indiscretion, Excess or Indulgence, producing Nervousness, Debility, Dimness of Sight, Self Distrust, Failing Memory, Physical Decay, Pimples on Face, Aversion to Society, Loss of Ambition, Unfitness to Marry, Dyspepsia, Stunted Development, Pains in Back, Milky Urine, Night Losses, Unnatural Drains and Lost Manhood, you can be CURED TO STAY CURED. Relief at once, all exhausting drains stopped, weak parts strengthened and enlarged. Treatment tested 37 years and in thousands of cases, large.

Send stamp for Question List No. 1, in plain envelope. Add. JAMES WHITTIER, M. D., 215 W. Ninth St., KANSASCITY, MO.

LAWDALE HERD OF POLAND-CHINAS

J. D. ZILLER, Prop'r, Hiawatha, Kas.

All stock recorded in Standard Poland-China Record. One hundred choice spring pigs ready to ship now, from twenty registered, most all aged sows, bred to four first-class boars. Write for come. Corres. promptly answered. Prices will suit you.

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Breeder of choicest strains of POLAND-CHINA Swine. 150 pigs by such noted boars as Bravo C. 267 (S), Spartacus 8089 (A), Maryville's Best 2821 (S), Keno 824 (S), and Goldust 1st 1980 (S), and out of sows, all of gilt-edge breeding. Special express rates. Inspection invited and correspondence promptly answered.

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WM. PLUMMER, breeder and shipper of POLAND-CHINA SWINE and Light Brahma Fowls of the best strains. 25 choice sows bred to three first-class boars for the season's trade. Young stock for sale, and eggs in season. Farm three and a half miles southwest of Osgood City. WM. PLUMMER, Osgood City, Kas.

MAINS' Fountain Head and Storm Cloud Claim this Space.

Mains' Herd of Pure-bred POLAND-CHINA HOGS, of as fashionable strains as can be had. All recorded in the Ohio Poland-China Record. Fall pigs of both sexes and spring sows bred and to breed for sale. A large selected herd of sows (most of which were bought in Ohio) new bred for season of 1889 to No. 1 boars of as good royal breeding as there is in the country. Address JAMES MAINS, Oskaloosa, Jefferson Co., Kas.

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Such strains as Corwin, Gave or Take, Hoosier Tom, Duchess, Riverside Beauty, Lady Maid, I. K. L., and others represented. 75 pigs from 6 boars. Orders booked now for spring pigs. Correspondence answered promptly. Mention KANSAS FARMER.

THE GOLDEN BELT HERD OF Thoroughbred Poland-Chinas

Two hundred and fifty choice Spring Pigs now ready to ship, at prices lower than ever. Order now, and secure selections from either sex, or pairs, tries, or small herds, not akin. Stock shipped from here over either the A. T. & S. F., Mo. Pacific or St. Louis & San Francisco R. R. All breeders registered in American P.-C. Record. Pedigree with each sale. F. W. TRUESDELL, Lyons, Kas.

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I have a fine lot of early pigs farrowed January and March. I can furnish very choice pigs not akin. Pigs sired by six different boars. Write for prices or call and see stock.

Rome Park Stock Farm

T. A. HUBBARD, Rome, Sumner Co., Kansas.

Show yard of Poland-Chinas and Large English Berkshires. I am breeding the best and leading strains, including Gracefuls, U. S., Black Bess, I. X. L., Corwins, Sallies, Bella Donnas, Duchesses, Dukes and Champions. The best of blood, with extra size and individual merit. Write or come and see me. Two hundred pigs for sale. Am using thirteen extra good boars.

ENGLISH BERKSHIRES.

THE WELLINGTON HERD consists of twenty matured brood sows of the best families of home-bred and imported stock, headed by the celebrated HOPEFUL JOE 4889, and has no superior in size and quality nor in strain of Berkshire blood. Also Plymouth Rock Chickens. Your patronage solicited. Write.

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PLEASANT VALLEY HERD OF Pure-bred Berkshire Swine.

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

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Of the Royal Duchess, Sallie, Hillside Belle, Charming, Stumpy, Fashion, Queen Betsy, and other families of fine, large, fleshy qualities, with such top breeding as British Champion, Longfellow and Sovereign Duke, and the noted young show boar PERKLESS 19845 at head of herd, the property of G. W. BERRY, Berryton, Shawnee Co., Kas. Located on the K. N. & D. R. R., nine miles southeast of Topeka. Farm adjoins station. Write for prices and free catalogue. Orders taken now for spring pigs from show sows.

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I have a choice herd of these justly-celebrated cattle of all ages. Also some nice grades, for sale at reasonable prices. Personal inspection invited. Call on or address JNO. D. PRYOR, Winfield, Cowley Co., Kas.

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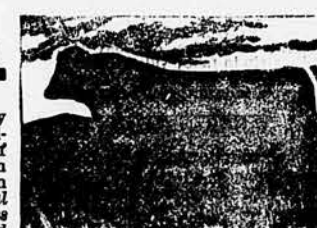
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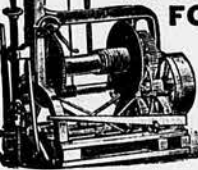
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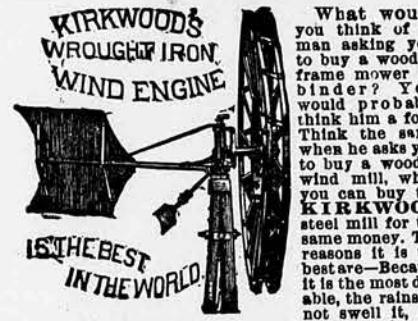


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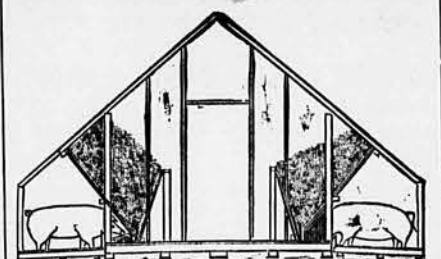


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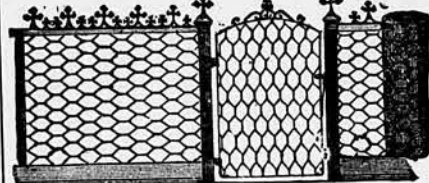
HUBBELL, NEB., May 4, 1889.—I built the Crummer Hog Sanitarium about February 1, 1889. Have fed shelled corn mixed with oats, chopped rye and small amount of oil cake. I am pleased to say that my most sanguine anticipations have been more than realized in using it. I never before had hogs fatten so evenly and rapidly as with the Sanitarium. In extra fattening, and saving of feed and labor, the first eighty head now feeding out, will more than repay the first cost of the Sanitarium complete, as we what I could have done, feeding on floors or in troughs.
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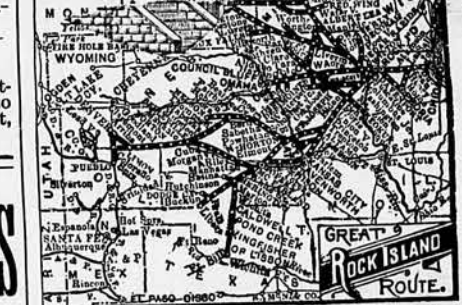
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